

NDPBA

CANTON RISK PROFILES

SUBNATIONAL ASSESSMENT RESULTS



ECUADOR

24 DE MAYO

NDPBA SUBNATIONAL PROFILE

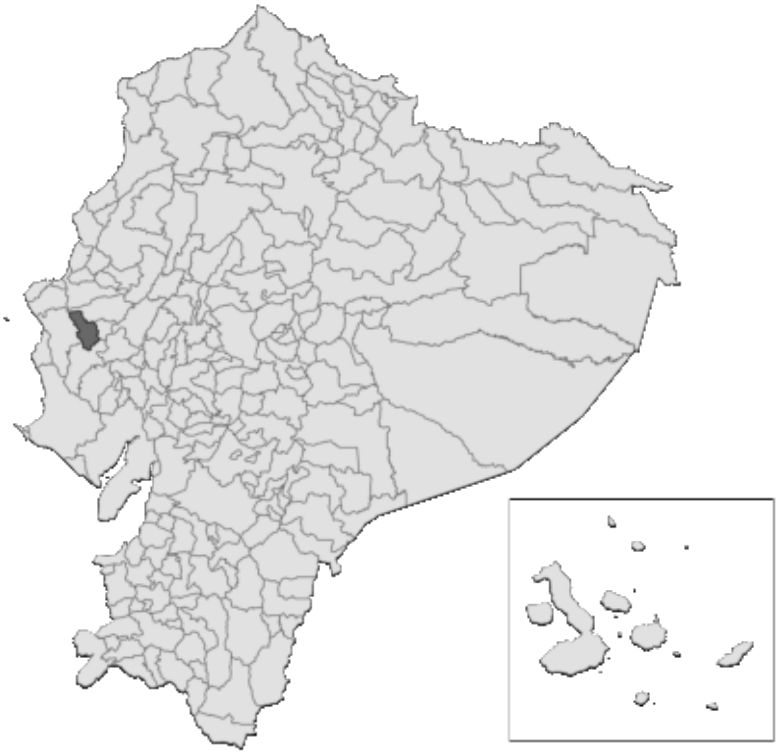
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ECUADOR

24 DE MAYO

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.607 • RANK: 17/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.602 • RANK: 16/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.380 • RANK: 196/221 CANTONS ASSESSED

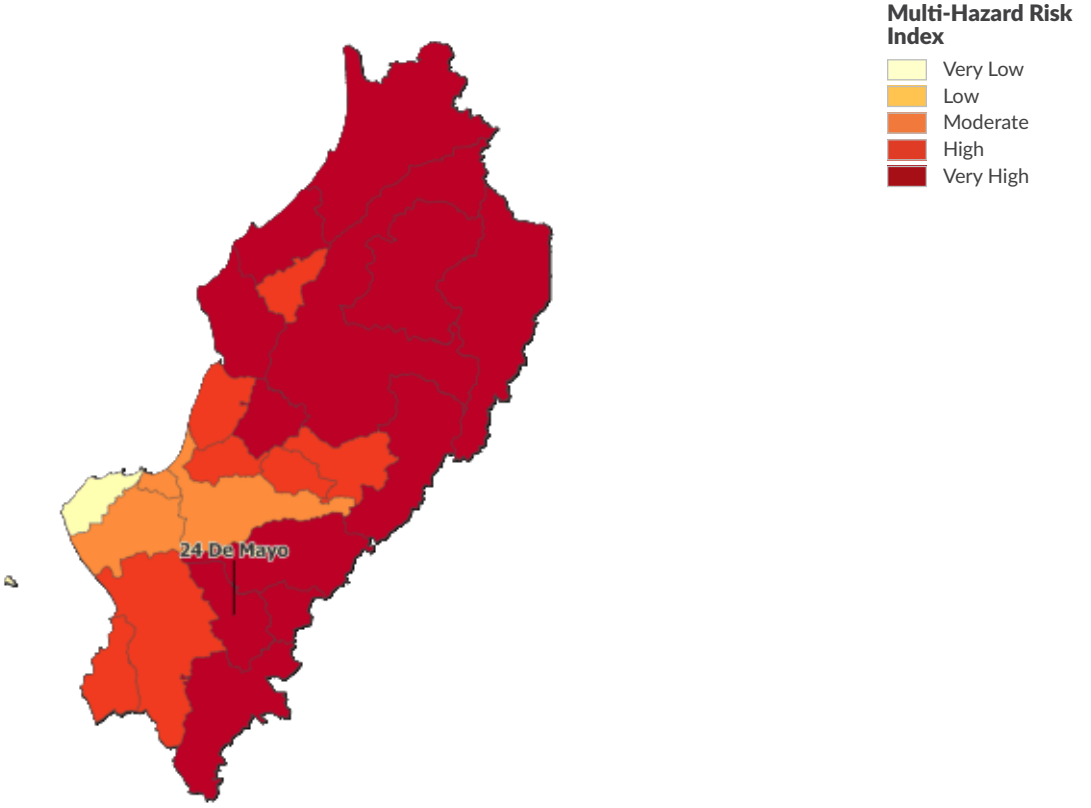
Coping Capacity (CC) - Very Low
SCORE: 0.349 • RANK: 201/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.569 • RANK: 54/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.392 • RANK: 162/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

24 DE MAYO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	**0.607**	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 54 / 221 CANTONS ASSESSED
SCORE: 0.569



MHE
0.569

Raw MHE
0.595

Relative MHE
0.543

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
39%
- **13,591** people exposed
- **8,085** structures exposed (35%)

Critical Infrastructure Exposed: 31%

Earthquake
100%
- **35,090** people exposed
- **23,410** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
75%
- **26,268** people exposed
- **18,018** structures exposed (77%)

Critical Infrastructure Exposed: 79%

Inland Flood
24%
- **8,456** people exposed
- **6,115** structures exposed (26%)

Critical Infrastructure Exposed: 39%

Landslide
36%
- **12,608** people exposed
- **8,373** structures exposed (36%)

Critical Infrastructure Exposed: 25%

Mosquito-Borne Disease
92%
- **32,311** people exposed
- **21,718** structures exposed (93%)

Critical Infrastructure Exposed: 65%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
88%
- **30,734** people exposed
- **20,792** structures exposed (89%)

Critical Infrastructure Exposed: 90%

VULNERABILITY (V)

RANK: 16 / 221 CANTONS ASSESSED **SCORE: 0.602**

Vulnerability in 24 De Mayo is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.711

- **7.9** Average Years of Schooling
- **53.9%** Population (age 24 and over) with General Basic Education Schooling
- **12.9%** Population (age 24 and over) with No Schooling
- **11.9%** Adult Illiteracy Rate
- **67.6%** Households with No Internet Access
- **85.7%** Households with No Access to Television
- **89.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.831

- **31.2%** Homes with Access to Public Water Source
- **15.1%** Homes Connected to the Public Sewage System
- **76.6%** Homes without Piped Water
- **8.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.631

- **61.4** Age Dependency Ratio
- **21.7%** Unemployment Rate
- **85.4%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.706

- **8.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.700

- **0.7** Female to Male Labor Ratio (distance from parity)
- **48.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **57.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **85.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.540

- **10.5%** Prevalence of Disability (among persons age 5 and over)
- **5.8** Perinatal Mortality Rate (per 1,000 births)
- **8.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.344

- **4.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.591

134
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

18
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

37
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

29
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.748

28.8%
Homes with Exterior Walls in Poor Condition

46.3%
Homes with Inadequate Materials Used in Outer Walls

25.9%
Homes with Roofs in Poor Condition

92%
Households with No Access to Vehicle for Private Use

8.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.445

57.6
Population Density (persons per sq km)

0.7%
Average Annual Population Change (2010-2022)

3.9
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.189

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 201 / 221 CANTONS ASSESSED **SCORE: 0.349**

24 De Mayo exhibits weaker Coping Capacity in the areas of Economic Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.267

46%
Labor Force Participation

31,568
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.270

0%
Protected Area (% of land area)

-5,520.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.395

87%
Voter Participation

44.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.412

Communications Capacity

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.368

4.3%
Household Access to Fixed Phones

79.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.416

96.8%
Homes Served by the Public Electricity Network

47.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.423

9.8
Nurses and Midwives per 10,000 persons

16.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.441

37.1
Average Distance to Airport (km)

57.7
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 162 / 221 CANTONS ASSESSED **SCORE: 0.392**

24 De Mayo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.373

3.9	6.5%	0	42
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.410

19.5	6.9	4.2	9.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 196 / 221 CANTONS ASSESSED
SCORE: 0.380

24 De Mayo's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

Economic Capacity

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

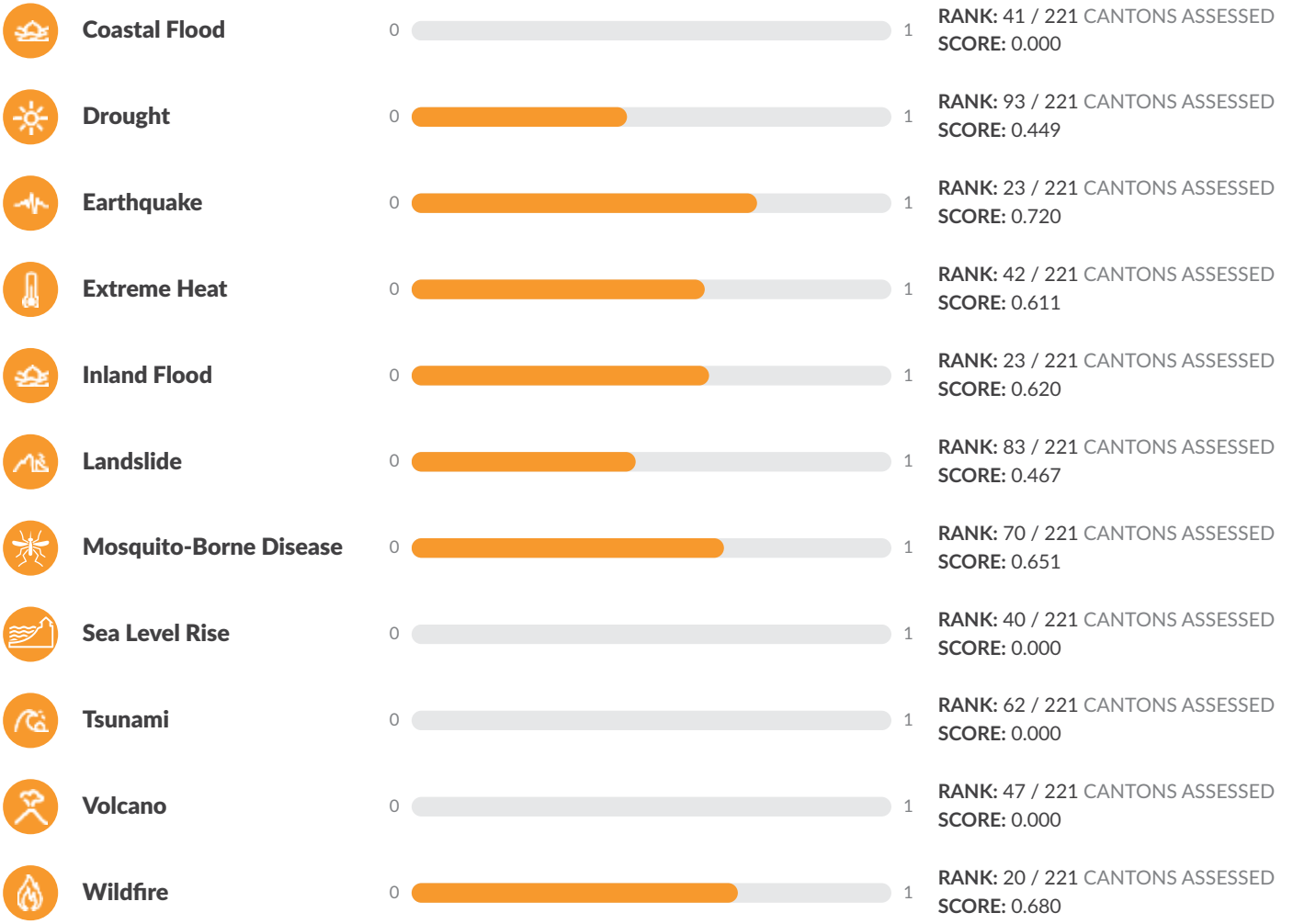
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

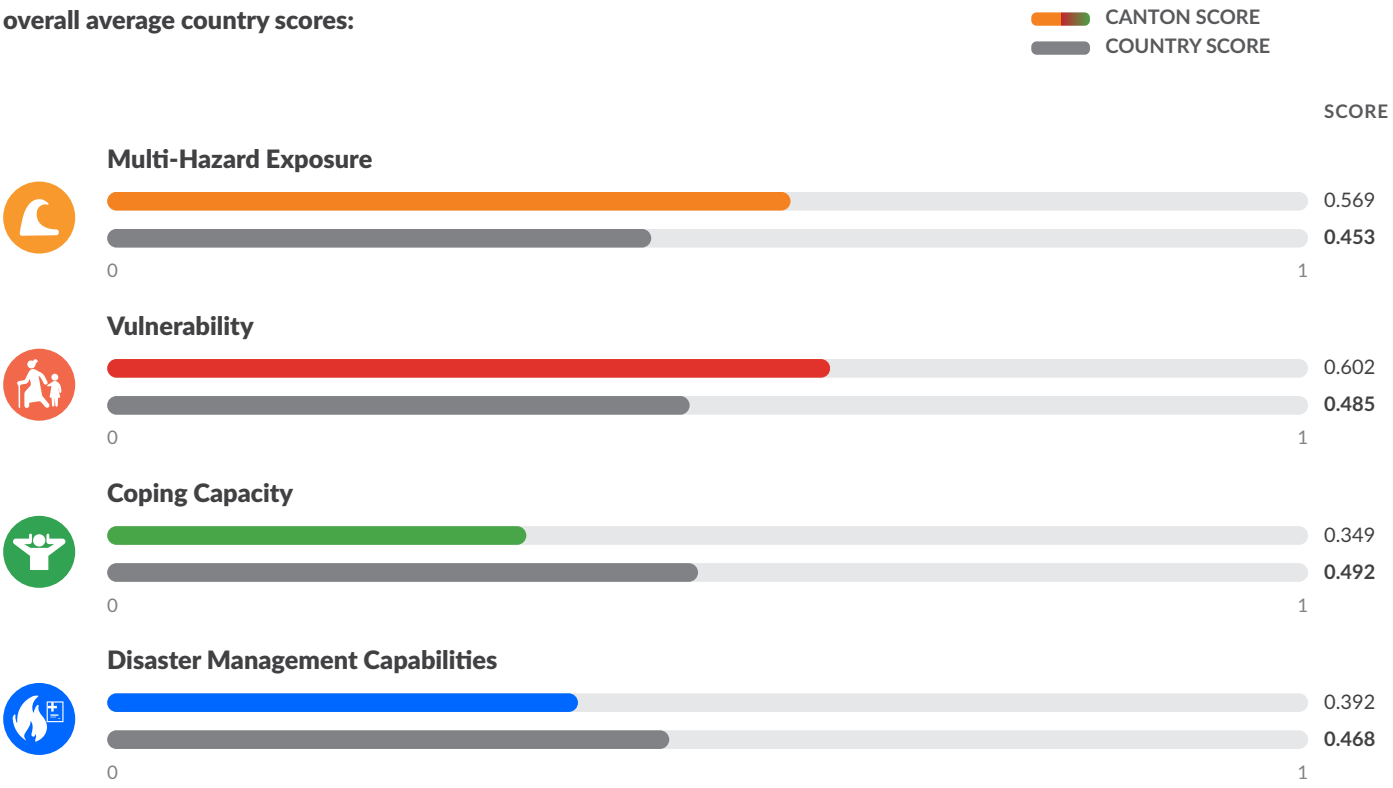


MULTI-HAZARD RISK (MHR)

RANKED
17 / 221
CANTONS ASSESSED
SCORE: 0.607

24 De Mayo's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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AGUARICO

NDPBA SUBNATIONAL PROFILE

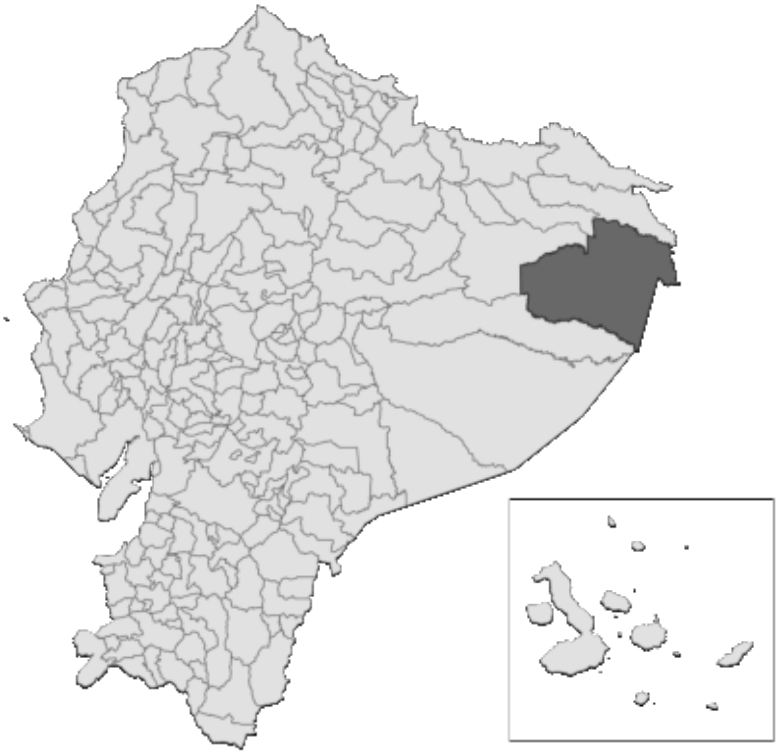
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AGUARICO

PROVINCE: ORELLANA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.588 • RANK: 25/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.570 • RANK: 36/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.357 • RANK: 209/221 CANTONS ASSESSED

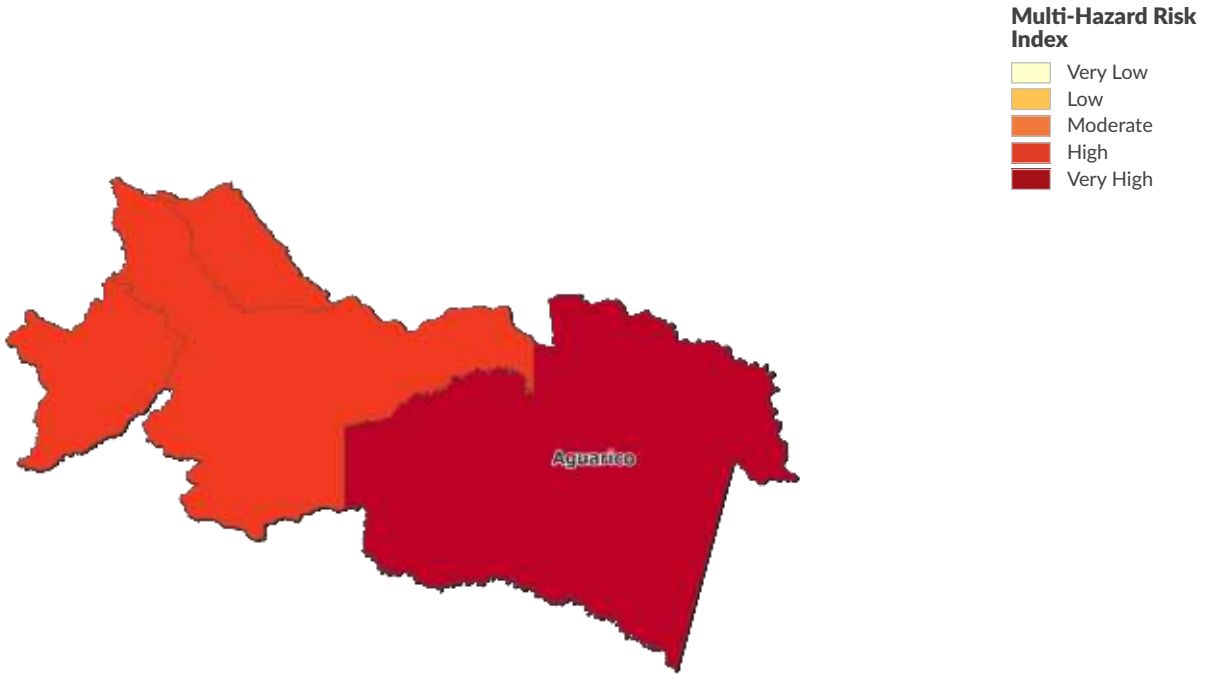
Coping Capacity (CC) - Very Low
SCORE: 0.376 • RANK: 183/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.424 • RANK: 120/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.266 • RANK: 216/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ORELLANA PROVINCE

AGUARICO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 120 / 221 CANTONS ASSESSED
SCORE: 0.424



MHE
0.424

Raw MHE
0.297

Relative MHE
0.550

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
7,982 people exposed
4,691 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
7,982 people exposed
4,691 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
53%
4,191 people exposed
2,592 structures exposed (55%)
Critical Infrastructure Exposed: 46%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
7,982 people exposed
4,615 structures exposed (98%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
73%
5,803 people exposed
3,411 structures exposed (73%)
Critical Infrastructure Exposed: 67%

VULNERABILITY (V)

RANK: 36 / 221 CANTONS ASSESSED **SCORE: 0.570**

Vulnerability in Aguarico is primarily driven by Economic Constraints and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.606

- **9.3** Average Years of Schooling
- **46.1%** Population (age 24 and over) with General Basic Education Schooling
- **8.9%** Population (age 24 and over) with No Schooling
- **6.1%** Adult Illiteracy Rate
- **85.7%** Households with No Internet Access
- **80.2%** Households with No Access to Television
- **84.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.663

- **74%** Homes with Access to Public Water Source
- **22.9%** Homes Connected to the Public Sewage System
- **35.6%** Homes without Piped Water
- **10.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.806

- **77.1** Age Dependency Ratio
- **29.4%** Unemployment Rate
- **81.3%** Poverty Rate (based on UBN)
- **1.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.143

- **0.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.617

- **0.6** Female to Male Labor Ratio (distance from parity)
- **41.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **86.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **54.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.517

- **8.8%** Prevalence of Disability (among persons age 5 and over)
- **7.2** Perinatal Mortality Rate (per 1,000 births)
- **4.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.590

- **62.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **24.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **33.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.558

19	10	92	48
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.730

25.1%	2%	25.9%	98.7%	14.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.481

0.6	2.9%	11.8	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.210

0	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 183 / 221 CANTONS ASSESSED **SCORE: 0.376**

Aguarico exhibits weaker Coping Capacity in the areas of Energy Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.421

38.3%
Labor Force Participation

977,413
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.465

70.4%
Protected Area (% of land area)

-89,405.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.240

80.2%
Voter Participation

33.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.438

Communications Capacity

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.330

10%
Household Access to Fixed Phones

48.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.112

72%
Homes Served by the Public Electricity Network

42.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.898

34.9
Nurses and Midwives per 10,000 persons

103.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.413

32.5
Average Distance to Airport (km)

18.6
Average Distance to Sea or River Port (km)

0
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 216 / 221 CANTONS ASSESSED **SCORE: 0.266**

Aguarico exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.481

16.1	45.9%	3.5	148.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.051

43.1	32.5	28.9	52
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 209 / 221 CANTONS ASSESSED
SCORE: 0.357

Aguarico's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Emergency Services **Energy Capacity** **Economic Constraints** **Governance**

KEY FACTORS INFLUENCING RESILIENCE

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

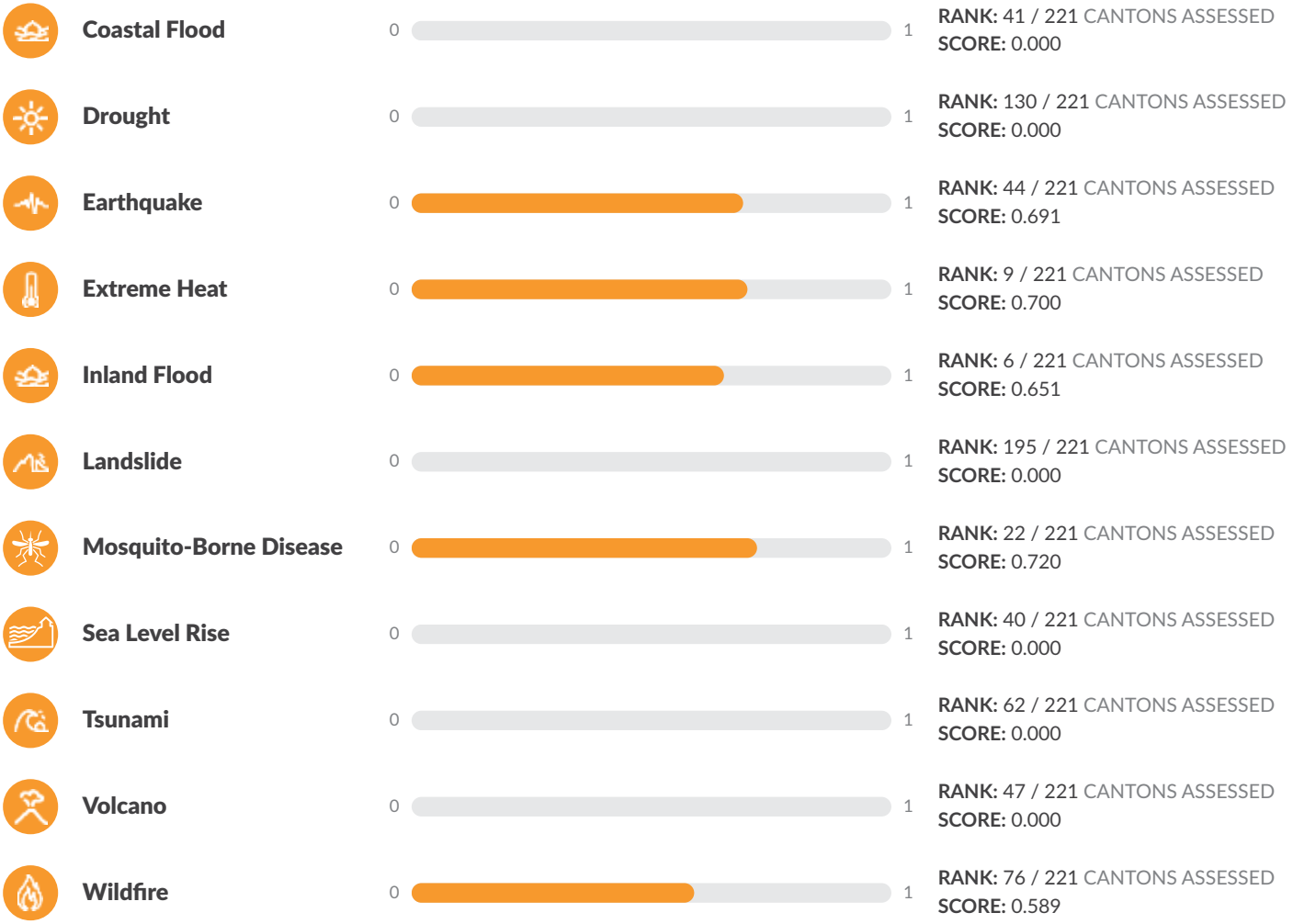
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

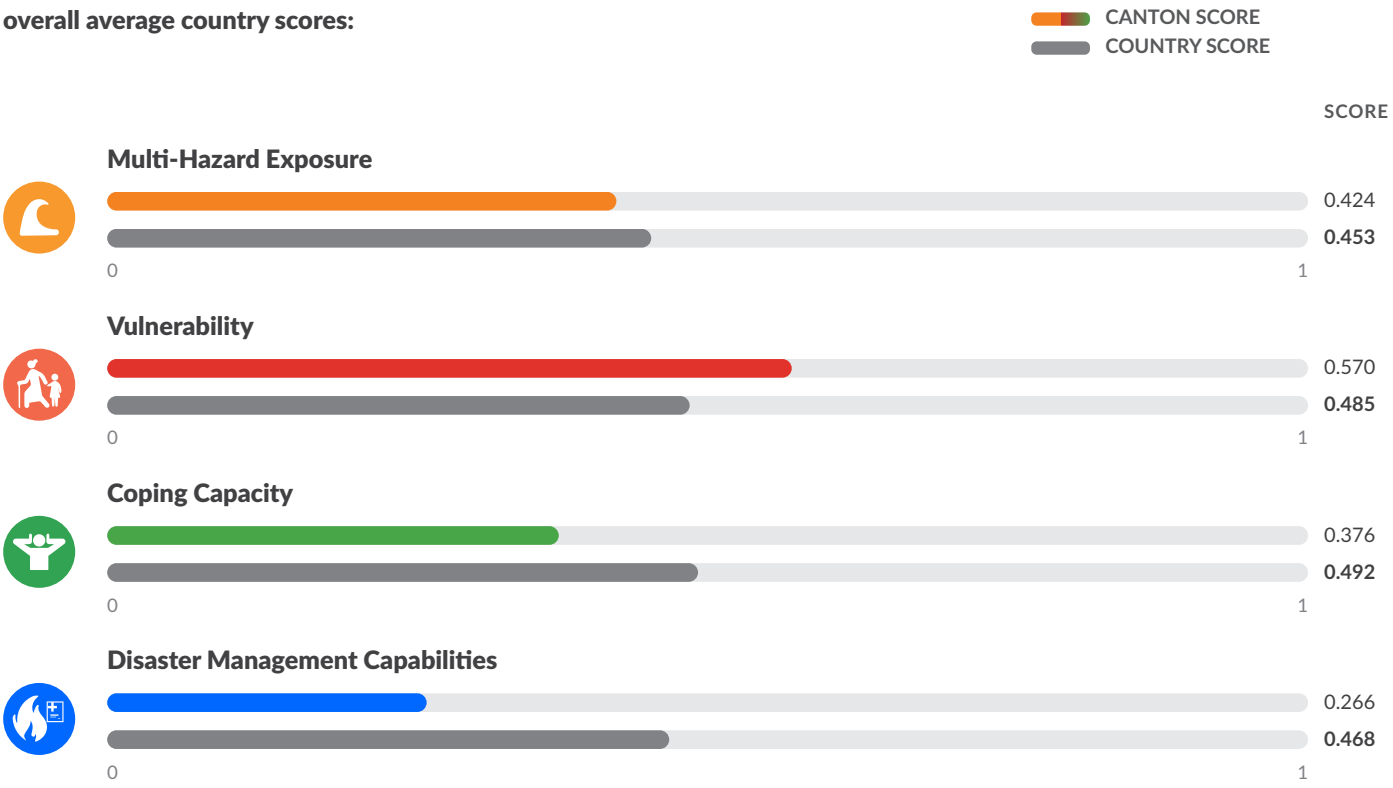


MULTI-HAZARD RISK (MHR)

RANKED
25 / 221
CANTONS ASSESSED
SCORE: 0.588

Aguarico's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

ALAUSÍ

NDPBA SUBNATIONAL PROFILE

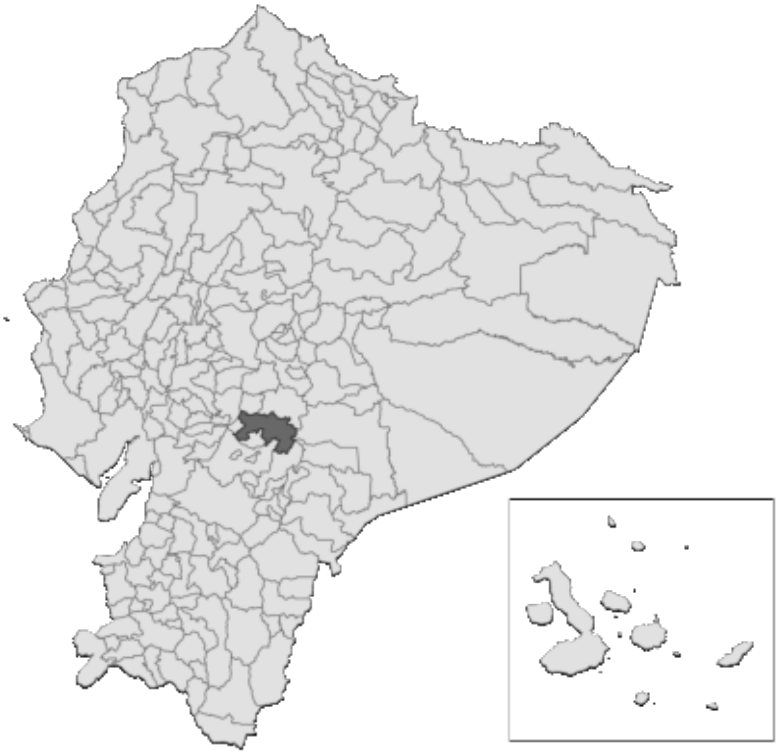
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PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.590 • RANK: 21/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.592 • RANK: 24/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.379 • RANK: 199/221 CANTONS ASSESSED

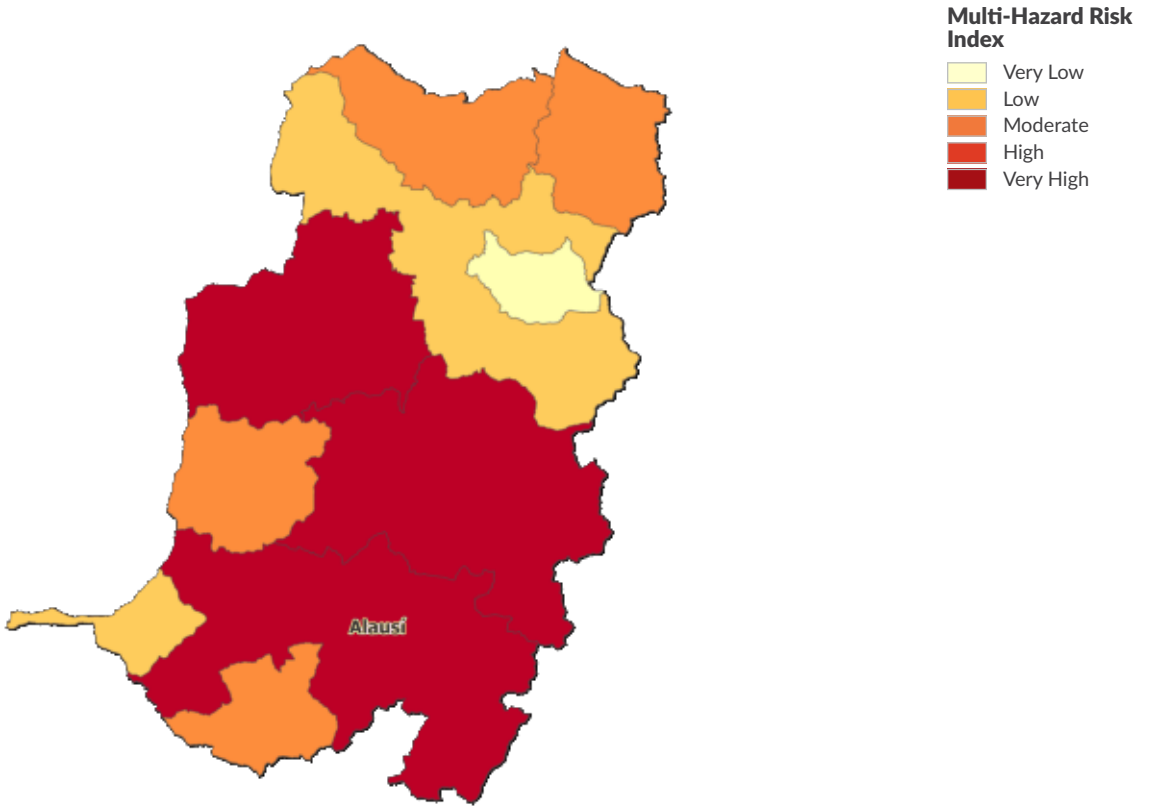
Coping Capacity (CC) - Very Low
SCORE: 0.344 • RANK: 205/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.499 • RANK: 81/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.386 • RANK: 163/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

ALAUSÍ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606		Pallatanga	0.487
Alausí	**0.590**		Chunchi	0.483
Colta	0.571		Cumandá	0.442
Guano	0.512		Riobamba	0.442
Penipe	0.500		Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 81 / 221 CANTONS ASSESSED
SCORE: 0.499



MHE
0.499

Raw MHE
0.620

Relative MHE
0.379

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
82%
- **40,695** people exposed
- **25,744** structures exposed (77%)

Critical Infrastructure Exposed: 77%

Earthquake
100%
- **49,837** people exposed
- **33,297** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **248** people exposed
- **194** structures exposed (<1%)

Critical Infrastructure Exposed: 1%

Landslide
86%
- **43,030** people exposed
- **29,202** structures exposed (88%)

Critical Infrastructure Exposed: 95%

Mosquito-Borne Disease
7%
- **3,451** people exposed
- **2,743** structures exposed (8%)

Critical Infrastructure Exposed: 6%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
91%
- **45,345** people exposed
- **29,908** structures exposed (90%)

Critical Infrastructure Exposed: 85%

VULNERABILITY (V)

RANK: 24 / 221 CANTONS ASSESSED **SCORE: 0.592**

Vulnerability in Alausí is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.718

- **6.7** Average Years of Schooling
- **43.8%** Population (age 24 and over) with General Basic Education Schooling
- **24%** Population (age 24 and over) with No Schooling
- **19.2%** Adult Illiteracy Rate
- **54.4%** Households with No Internet Access
- **86.3%** Households with No Access to Television
- **87.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.592

- **81.5%** Homes with Access to Public Water Source
- **32.4%** Homes Connected to the Public Sewage System
- **59.1%** Homes without Piped Water
- **5.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.731

- **71.5** Age Dependency Ratio
- **26.3%** Unemployment Rate
- **74.2%** Poverty Rate (based on UBN)
- **1.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.401

- **2.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.524

- **0.4** Female to Male Labor Ratio (distance from parity)
- **48.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **86.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **55.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.540

- **10.5%** Prevalence of Disability (among persons age 5 and over)
- **7.8** Perinatal Mortality Rate (per 1,000 births)
- **10.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.321

- **0.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.454

30	10	38	41
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.479

12.3%	1.1%	16.3%	91.2%	9.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.348

28.9	-1.4	-3.4	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.832

0.8	0.5	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 205 / 221 CANTONS ASSESSED **SCORE: 0.344**

Alausí exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.331

47.6%
Labor Force Participation

56,692
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.604

23.3%
Protected Area (% of land area)

-6,451
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.153

69.7%
Voter Participation

50.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.460

Communications Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.501

10.1%
Household Access to Fixed Phones

80.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.450

94.2%
Homes Served by the Public Electricity Network

65.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.530

14.2
Nurses and Midwives per 10,000 persons

23.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.359

45.5
Average Distance to Airport (km)

91.5
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 163 / 221 CANTONS ASSESSED **SCORE: 0.386**

Alausí exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.425

5	3.9%	1.2	61.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.347

10.6	9.8	9.8	9.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 199 / 221 CANTONS ASSESSED
SCORE: 0.379

Alausí's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Disaster Impacts

Economic Constraints

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

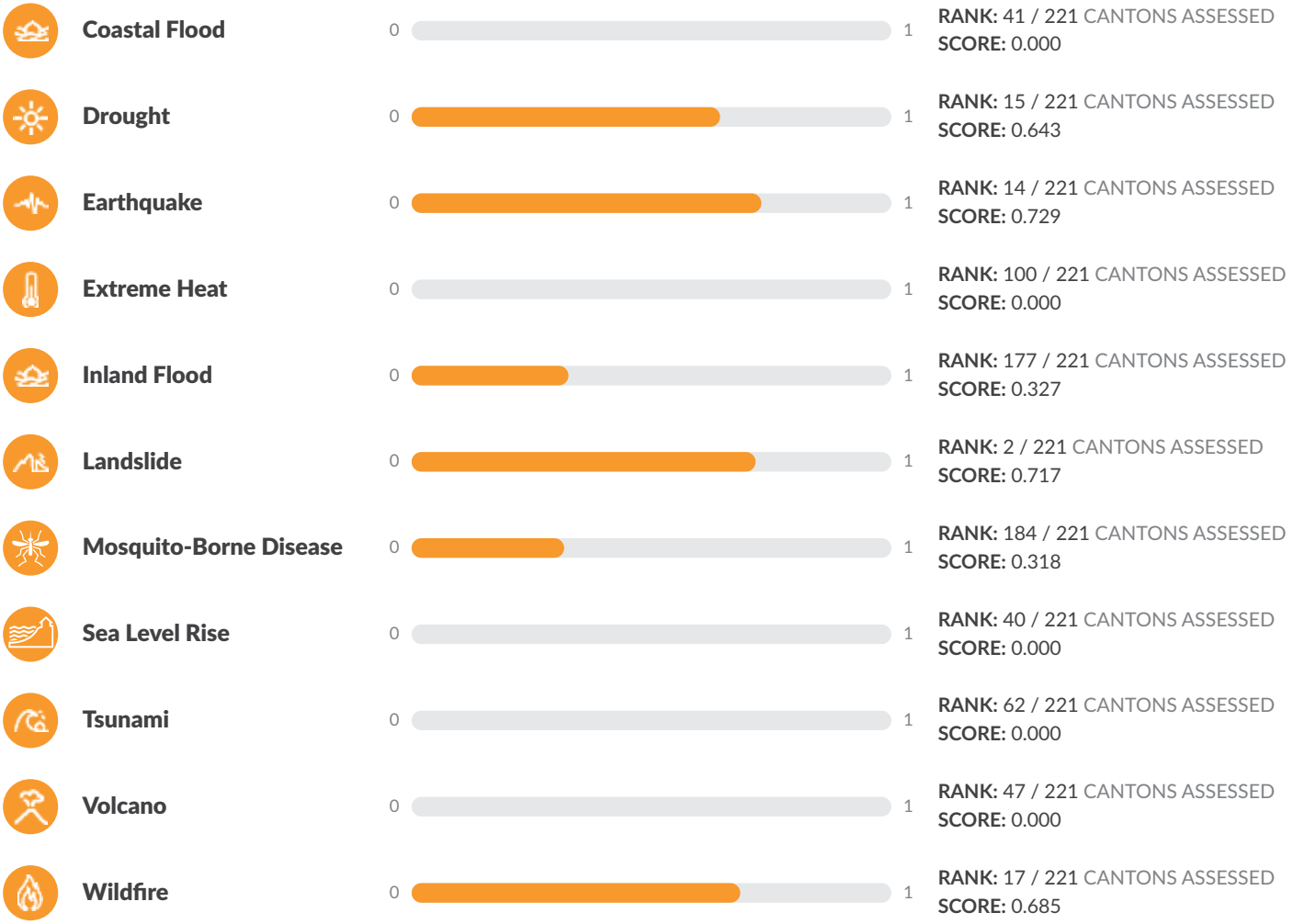
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

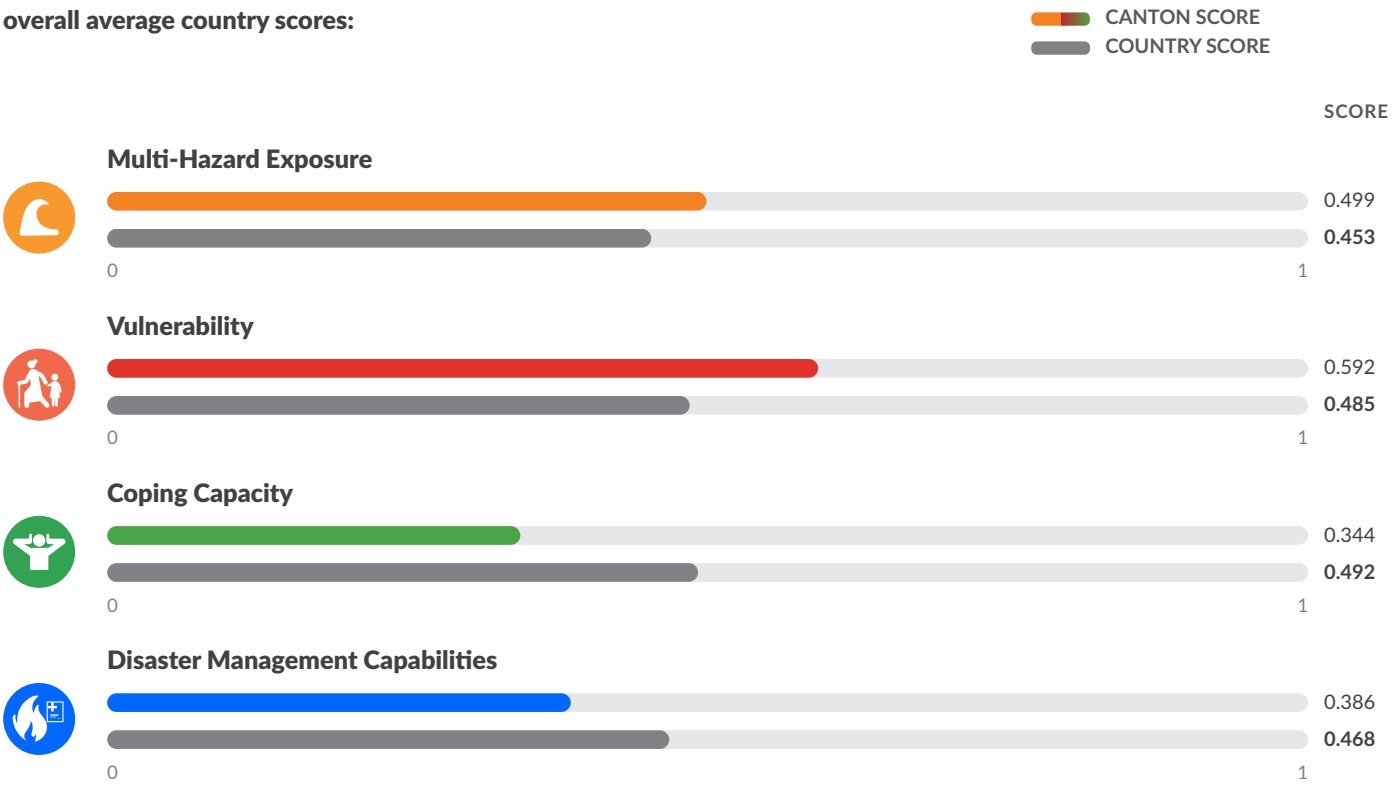


MULTI-HAZARD RISK (MHR)

RANKED
21 / 221
CANTONS ASSESSED
SCORE: 0.590

Alausí's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ALFREDO BAQUERIZO MORENO (JUJÁN)

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.590 • RANK: 21/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.596 • RANK: 20/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.395 • RANK: 191/221 CANTONS ASSESSED

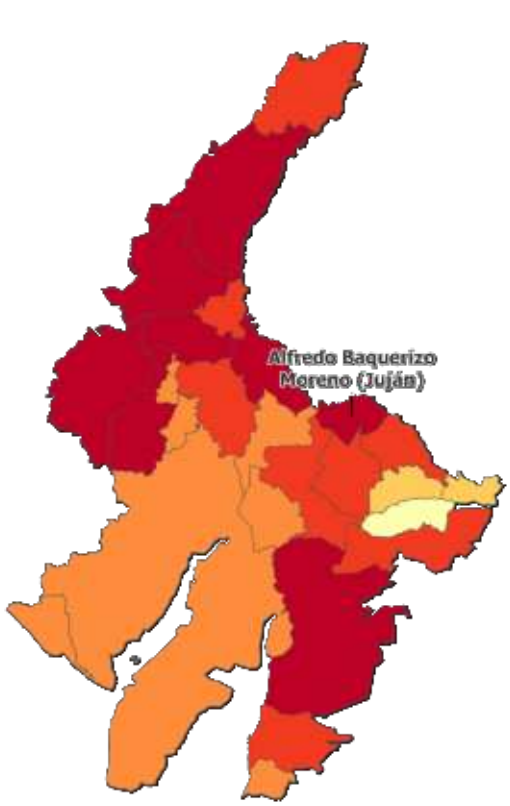
Coping Capacity (CC) - Very Low
SCORE: 0.376 • RANK: 183/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.547 • RANK: 66/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.406 • RANK: 155/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

ALFREDO BAQUERIZO MORENO (JUJÁN) • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	**0.590**
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 66 / 221 CANTONS ASSESSED
SCORE: 0.547



MHE
0.547

Raw MHE
0.521

Relative MHE
0.574

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
30,109 people exposed
10,963 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
30,109 people exposed
10,963 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
81%
24,248 people exposed
8,392 structures exposed (77%)
Critical Infrastructure Exposed: 59%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
30,109 people exposed
10,963 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
96%
28,982 people exposed
10,551 structures exposed (96%)
Critical Infrastructure Exposed: 88%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
5%
1,562 people exposed
584 structures exposed (5%)
Critical Infrastructure Exposed: <1%

VULNERABILITY (V)

RANK: 20 / 221 CANTONS ASSESSED **SCORE: 0.596**

Vulnerability in Alfredo Baquerizo Moreno (Juján) is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.670

- **8.9** Average Years of Schooling
- **53.6%** Population (age 24 and over) with General Basic Education Schooling
- **7.3%** Population (age 24 and over) with No Schooling
- **5.9%** Adult Illiteracy Rate
- **71.9%** Households with No Internet Access
- **90.4%** Households with No Access to Television
- **91.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.748

- **28.8%** Homes with Access to Public Water Source
- **3%** Homes Connected to the Public Sewage System
- **68.9%** Homes without Piped Water
- **2.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.584

- **58.5** Age Dependency Ratio
- **19.9%** Unemployment Rate
- **84.1%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.771

- **11.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.733

- **0.6** Female to Male Labor Ratio (distance from parity)
- **62.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **88.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **71.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.547

- **9.8%** Prevalence of Disability (among persons age 5 and over)
- **8.9** Perinatal Mortality Rate (per 1,000 births)
- **8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.491

- **13.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **26.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.451

32
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

13
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

31
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

42
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.725

24.8%
Homes with Exterior Walls in Poor Condition

16.4%
Homes with Inadequate Materials Used in Outer Walls

27.9%
Homes with Roofs in Poor Condition

95.1%
Households with No Access to Vehicle for Private Use

10%
Household Overcrowding

Population Pressures

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.442

111.8
Population Density (persons per sq km)

0.2%
Average Annual Population Change (2010-2022)

3.6
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.290

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 183 / 221 CANTONS ASSESSED **SCORE: 0.376**

Alfredo Baquerizo Moreno (Juján) exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.360

49.3%
Labor Force Participation

62,425
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.338

0%
Protected Area (% of land area)

-1,070.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.411

88.3%
Voter Participation

40.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.370

Communications Capacity

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.202

2.6%
Household Access to Fixed Phones

65.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.403

92.3%
Homes Served by the Public Electricity Network

64%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.181

5.9
Nurses and Midwives per 10,000 persons

5.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.695

9.5
Average Distance to Airport (km)

17
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 155 / 221 CANTONS ASSESSED **SCORE: 0.406**

Alfredo Baquerizo Moreno (Juján) exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.306

6.2	3.3%	0	40.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.506

15.2	5.9	4.1	4.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 191 / 221 CANTONS ASSESSED
SCORE: 0.395

Alfredo Baquerizo Moreno (Juján)'s score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Communications Capacity

Clean Water Access Vulnerability

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

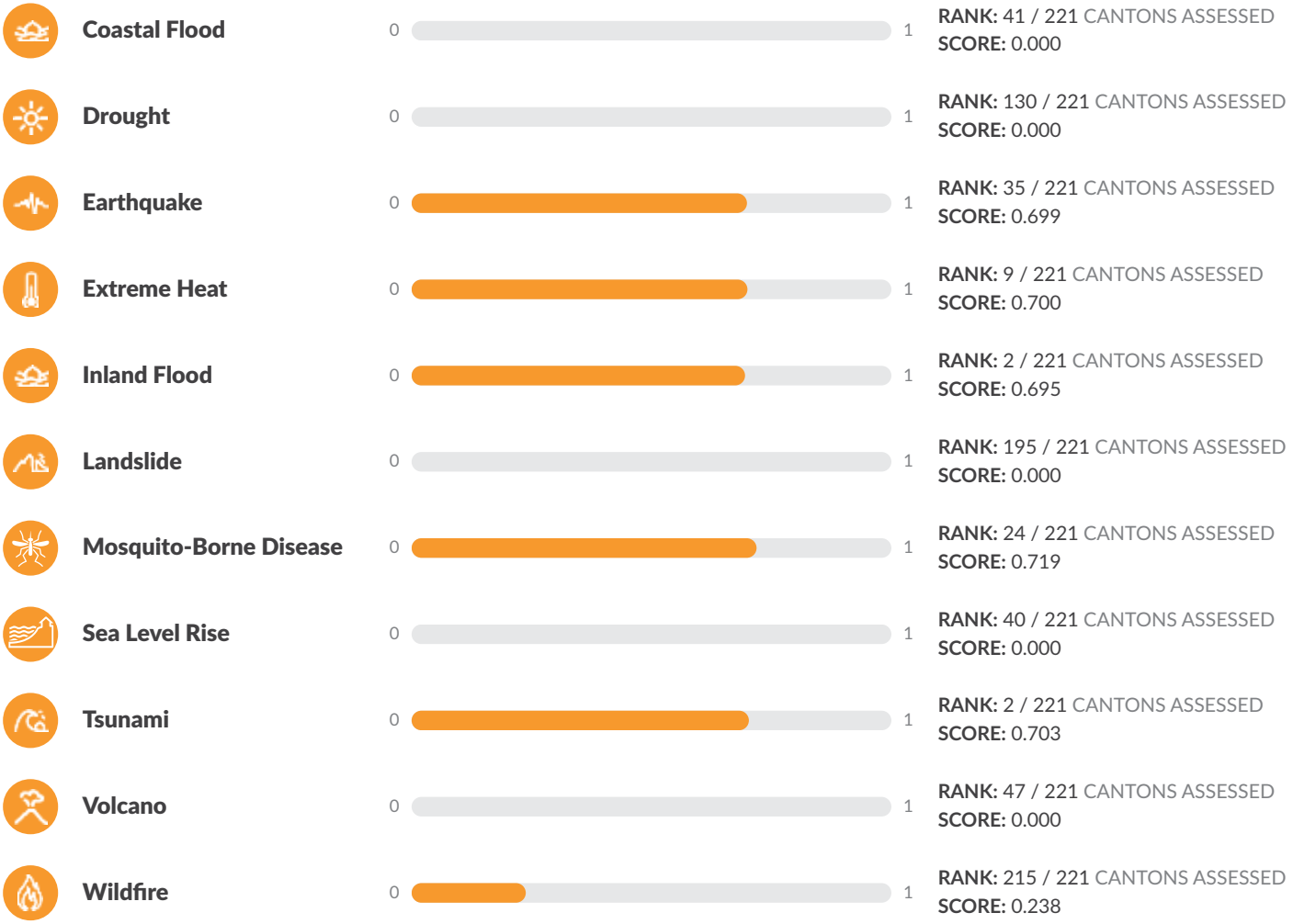
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

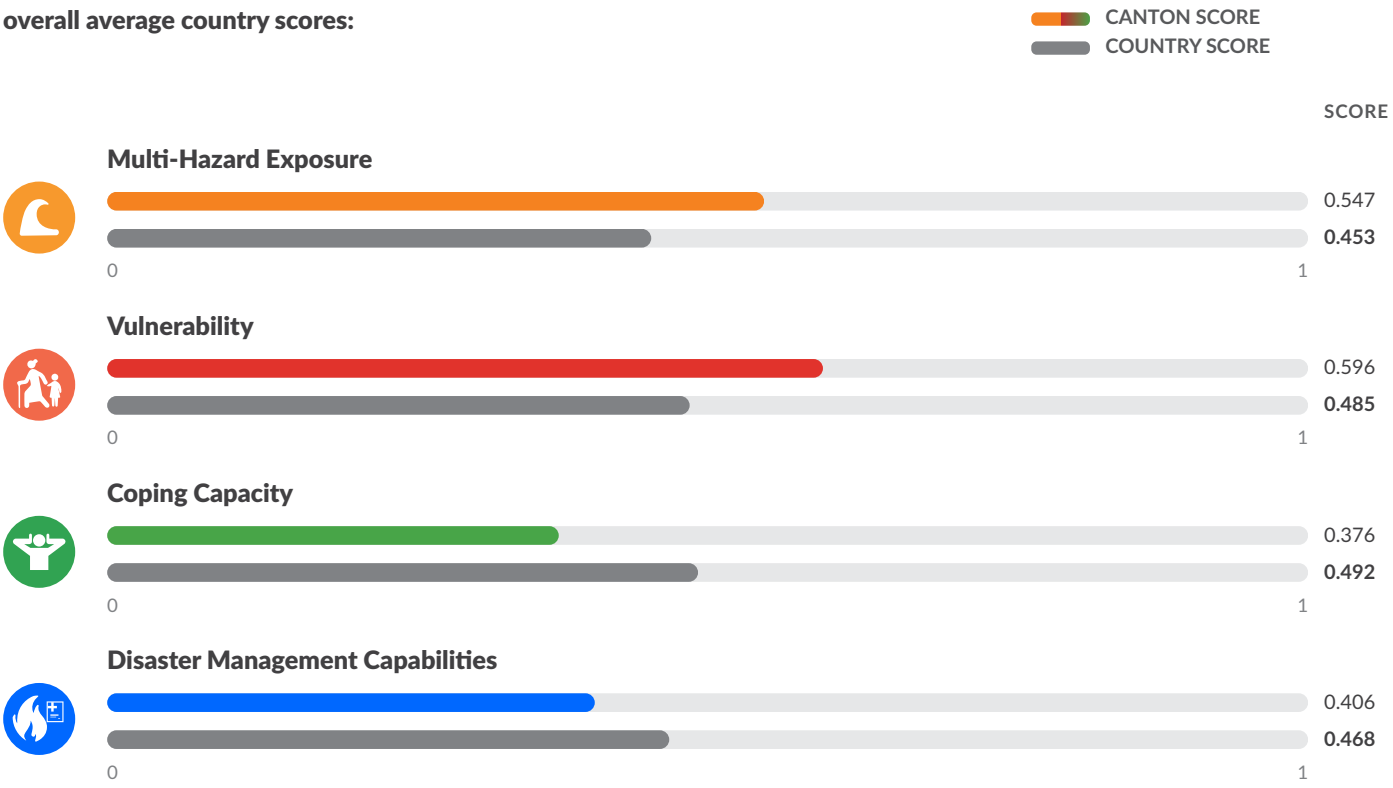


MULTI-HAZARD RISK (MHR)

RANKED
21 / 221
CANTONS ASSESSED
SCORE: 0.590

Alfredo Baquerizo Moreno (Juján)'s score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.409 • RANK: 198/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.361 • RANK: 204/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.673 • RANK: 6/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.712 • RANK: 4/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.652 • RANK: 31/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.667 • RANK: 12/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

AMBATO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454	Mocha	0.379
San Pedro De Pelileo	0.436	Baños De Agua Santa	0.364
Patate	0.431	Tisaleo	0.361
Santiago De Píllaro	0.410	Cevallos	0.340
Ambato	**0.409**		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 31 / 221 CANTONS ASSESSED
SCORE: 0.652



MHE
0.652

Raw MHE
0.953

Relative MHE
0.351

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
82%
312,930 people exposed
146,794 structures exposed (71%)
Critical Infrastructure Exposed: 76%

Earthquake
100%
382,362 people exposed
205,950 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
3%
11,062 people exposed
5,541 structures exposed (3%)
Critical Infrastructure Exposed: 1%

Landslide
40%
153,672 people exposed
80,906 structures exposed (39%)
Critical Infrastructure Exposed: 58%

Mosquito-Borne Disease
2%
6,549 people exposed
2,886 structures exposed (1%)
Critical Infrastructure Exposed: <1%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
<1%
2,595 people exposed
2,246 structures exposed (1%)
Critical Infrastructure Exposed: 2%

Wildfire
100%
381,878 people exposed
205,497 structures exposed (100%)
Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 204 / 221 CANTONS ASSESSED **SCORE: 0.361**

Vulnerability in Ambato is primarily driven by Population Pressures and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.320

- **11.6** Average Years of Schooling
- **35.8%** Population (age 24 and over) with General Basic Education Schooling
- **4.7%** Population (age 24 and over) with No Schooling
- **4.3%** Adult Illiteracy Rate
- **32.4%** Households with No Internet Access
- **74.8%** Households with No Access to Television
- **50.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.228

- **97.6%** Homes with Access to Public Water Source
- **88.1%** Homes Connected to the Public Sewage System
- **18.9%** Homes without Piped Water
- **4.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.312

- **50** Age Dependency Ratio
- **8.6%** Unemployment Rate
- **26.1%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.322

- **1.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.273

- **0.2** Female to Male Labor Ratio (distance from parity)
- **34.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **64.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **18.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.506

- **6.6%** Prevalence of Disability (among persons age 5 and over)
- **6.2** Perinatal Mortality Rate (per 1,000 births)
- **11.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.344

- **0.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **27.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.505

53
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

35
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.210

5.4%
Homes with Exterior Walls in Poor Condition

0.5%
Homes with Inadequate Materials Used in Outer Walls

7.8%
Homes with Roofs in Poor Condition

62.5%
Households with No Access to Vehicle for Private Use

4.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.523

362.6
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

21.1
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.521

0.5
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 4 / 221 CANTONS ASSESSED **SCORE: 0.712**

Ambato exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.888

66.1%
Labor Force Participation

2,130,645
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.636

22.2%
Protected Area (% of land area)

-3,967.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.565

81.4%
Voter Participation

93.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.707

Communications Capacity

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.795

32.4%
Household Access to Fixed Phones

89.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.804

99%
Homes Served by the Public Electricity Network

85.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.638

21.7
Nurses and Midwives per 10,000 persons

28.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.592

9.9
Average Distance to Airport (km)

98.6
Average Distance to Sea or River Port (km)

3.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 12 / 221 CANTONS ASSESSED **SCORE: 0.667**

Ambato exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.595

2.6	6.6%	2.4	48
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.738

4.5	4.1	1.5	2.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 6 / 221 CANTONS ASSESSED
SCORE: 0.673

Ambato's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Disaster Impacts

Vulnerable Health Status

Governance

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

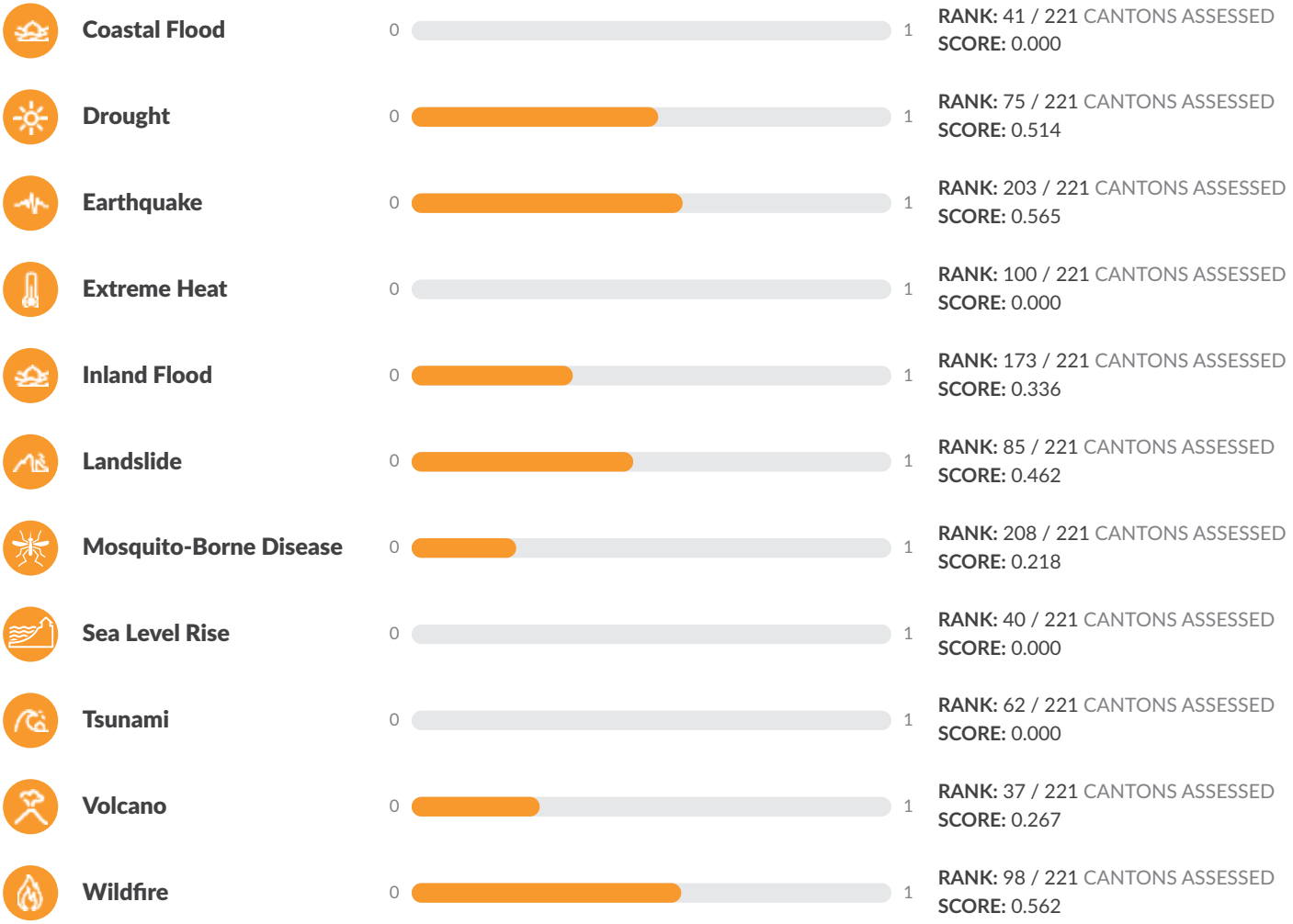
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

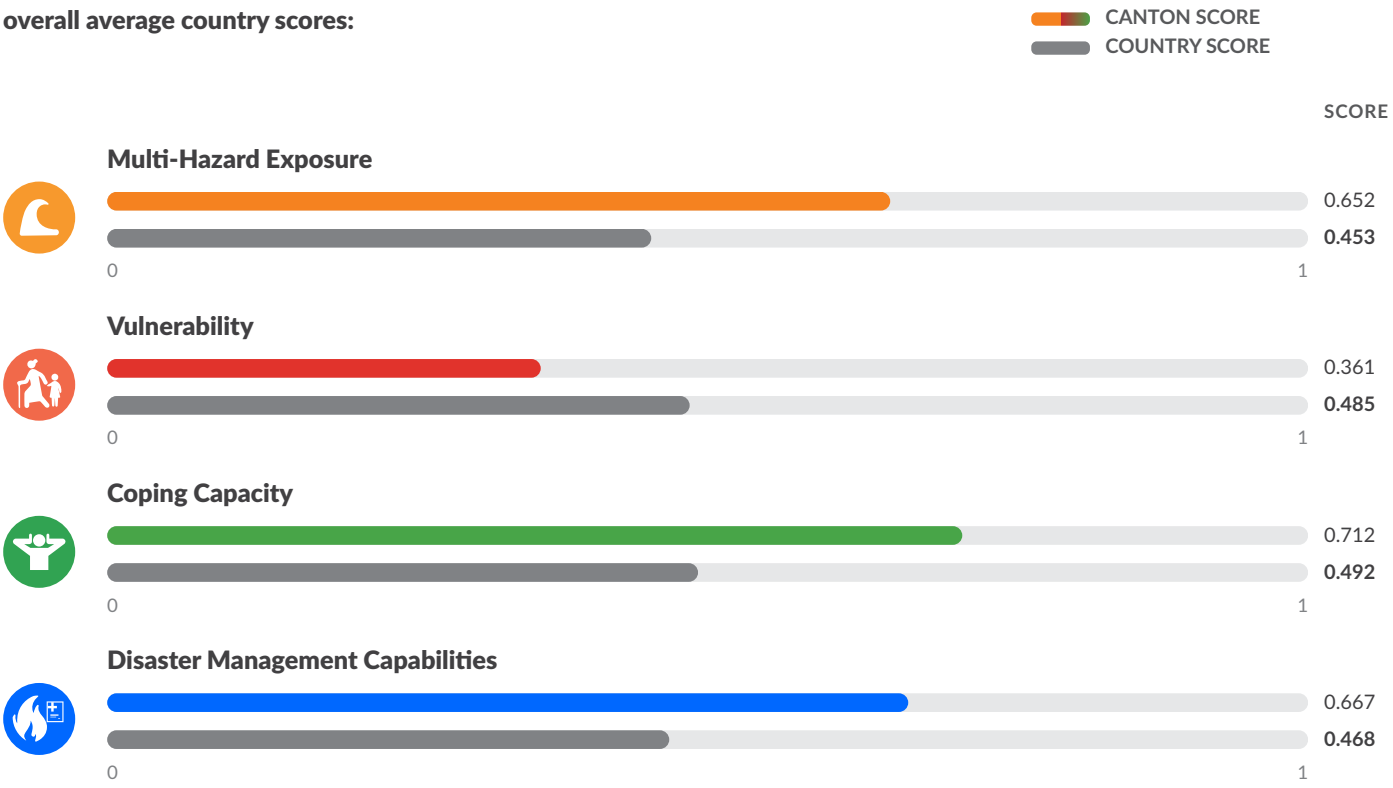


MULTI-HAZARD RISK (MHR)

RANKED
198 / 221
CANTONS ASSESSED
SCORE: 0.409

Ambato's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ANTONIO ANTE

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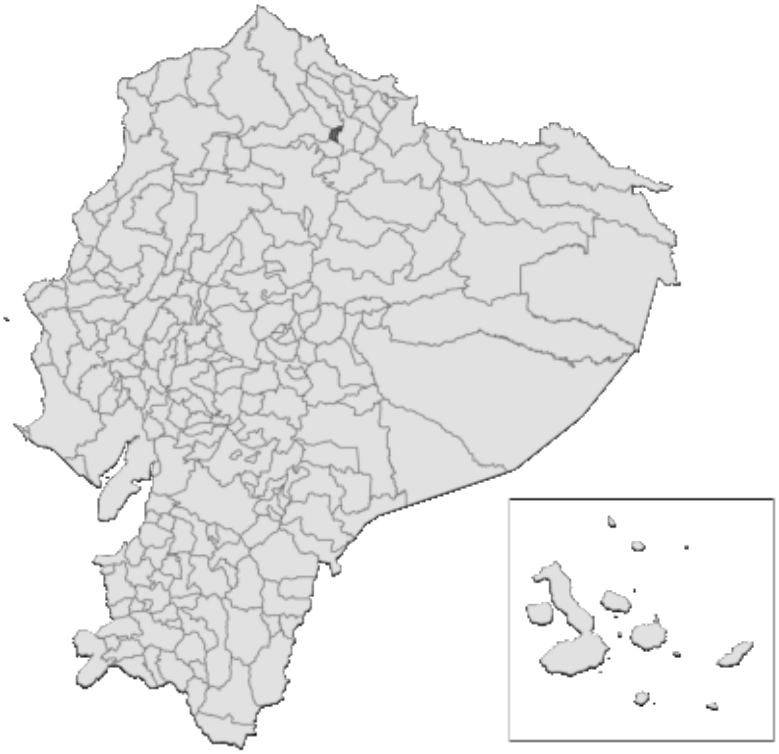
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ANTONIO ANTE

PROVINCE: IMBABURA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.367 • RANK: 212/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.360 • RANK: 205/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.659 • RANK: 10/221 CANTONS ASSESSED

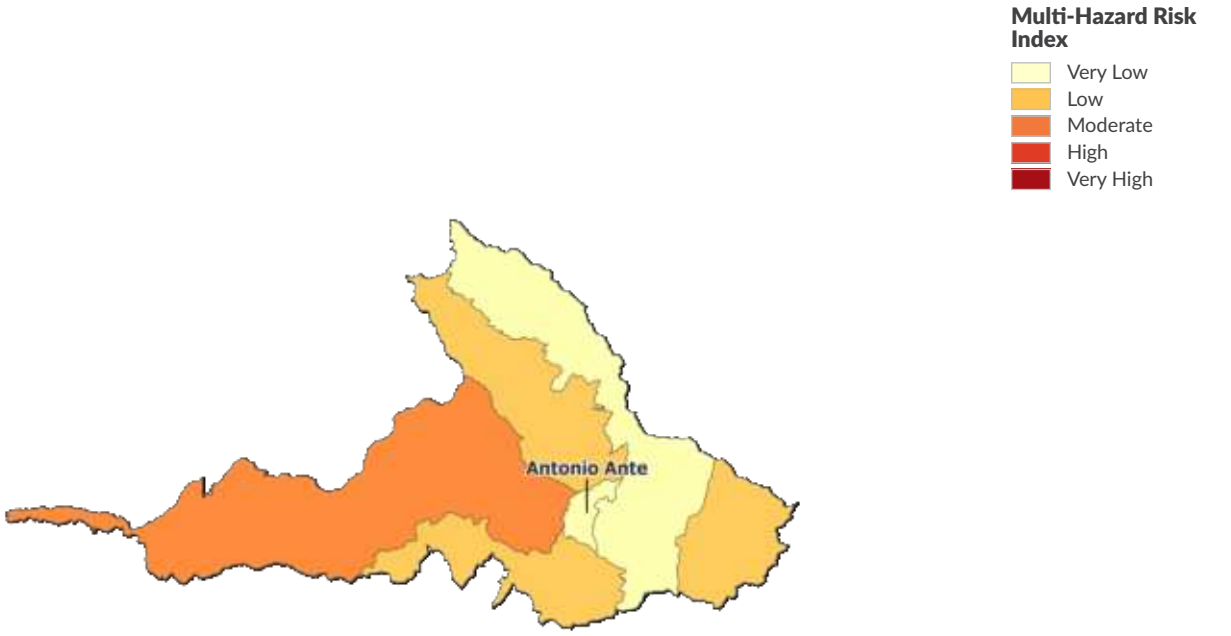
Coping Capacity (CC) - Very High
SCORE: 0.617 • RANK: 32/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.443 • RANK: 112/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.720 • RANK: 5/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN IMBABURA PROVINCE

ANTONIO ANTE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Cotacachi	0.507
Pimampiro	0.448
San Miguel De Urcuquí	0.443
Otavalo	0.440
Ibarra	0.417
Antonio Ante	**0.367**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 112 / 221 CANTONS ASSESSED
SCORE: 0.443



MHE
0.443

Raw MHE
0.590

Relative MHE
0.295

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
2%
- **1,092** people exposed
- **1,090** structures exposed (4%)

Critical Infrastructure Exposed: 6%

Earthquake
100%
- **52,337** people exposed
- **28,657** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **314** people exposed
- **132** structures exposed (<1%)

Critical Infrastructure Exposed: 5%

Landslide
17%
- **8,791** people exposed
- **5,299** structures exposed (18%)

Critical Infrastructure Exposed: 26%

Mosquito-Borne Disease
7%
- **3,570** people exposed
- **2,009** structures exposed (7%)

Critical Infrastructure Exposed: 3%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
100%
- **52,337** people exposed
- **28,657** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Wildfire
99%
- **51,749** people exposed
- **28,480** structures exposed (99%)

Critical Infrastructure Exposed: 98%

VULNERABILITY (V)

RANK: 205 / 221 CANTONS ASSESSED **SCORE: 0.360**

Vulnerability in Antonio Ante is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.399

- **10.5** Average Years of Schooling
- **43.4%** Population (age 24 and over) with General Basic Education Schooling
- **5%** Population (age 24 and over) with No Schooling
- **4.5%** Adult Illiteracy Rate
- **35.7%** Households with No Internet Access
- **80.5%** Households with No Access to Television
- **57.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.267

- **98.9%** Homes with Access to Public Water Source
- **89.4%** Homes Connected to the Public Sewage System
- **16.2%** Homes without Piped Water
- **9.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.321

- **50.4** Age Dependency Ratio
- **10.9%** Unemployment Rate
- **27.3%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.520

- **4.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.245

- **0.2** Female to Male Labor Ratio (distance from parity)
- **22.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **49.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **26.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.415

- **5.8%** Prevalence of Disability (among persons age 5 and over)
- **5.3** Perinatal Mortality Rate (per 1,000 births)
- **9.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.179

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.488

52	20	25	39
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.274

8.1%	0.1%	10.4%	73.2%	5.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.616

672.8	1.8%	20.8	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.318

0.3	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 32 / 221 CANTONS ASSESSED **SCORE: 0.617**

Antonio Ante exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.619

62.4%
Labor Force Participation

135,275
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.547

5.1%
Protected Area (% of land area)

-264.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.688

86%
Voter Participation

96%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.565

Communications Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.767

25%
Household Access to Fixed Phones

90.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.731

99%
Homes Served by the Public Electricity Network

78.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.305

7.8
Nurses and Midwives per 10,000 persons

10
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.456

30.2
Average Distance to Airport (km)

162.8
Average Distance to Sea or River Port (km)

5.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 5 / 221 CANTONS ASSESSED **SCORE: 0.720**

Antonio Ante exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.593

0.9	3.7%	0.4	10.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.847

2.5	2.6	1.6	1.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 10 / 221 CANTONS ASSESSED
SCORE: 0.659

Antonio Ante's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Population Pressures

Transportation Capacity

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

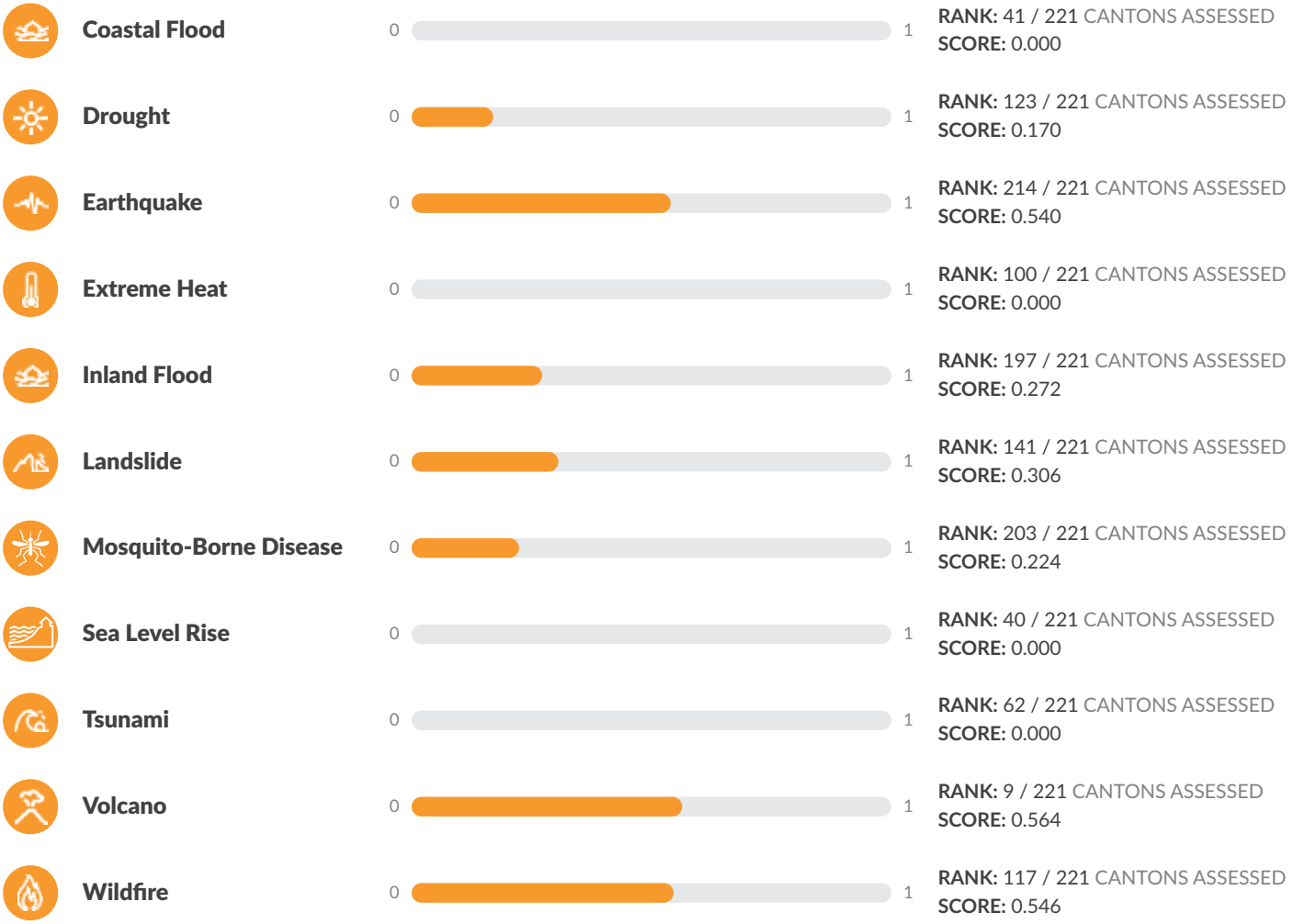
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

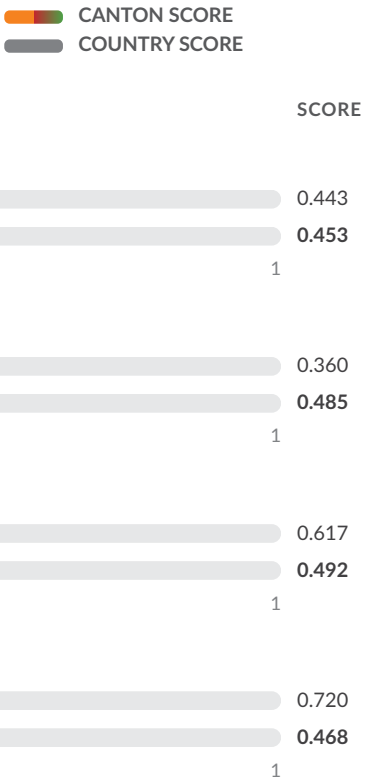


MULTI-HAZARD RISK (MHR)

RANKED
212 / 221
CANTONS ASSESSED
SCORE: 0.367

Antonio Ante's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ARAJUNO

NDPBA SUBNATIONAL PROFILE

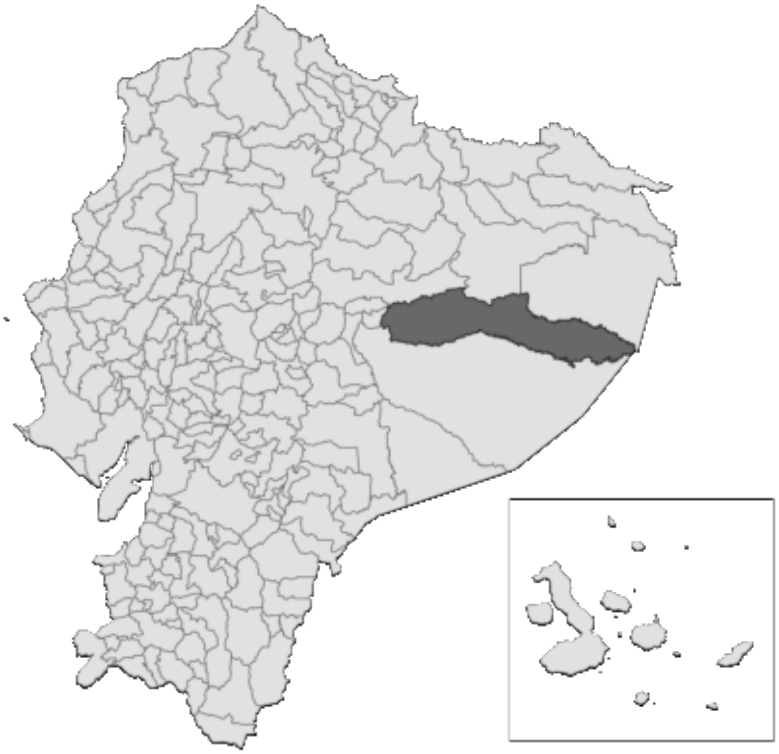
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PROVINCE: PASTAZA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.619 • RANK: 10/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.598 • RANK: 19/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.258 • RANK: 220/221 CANTONS ASSESSED

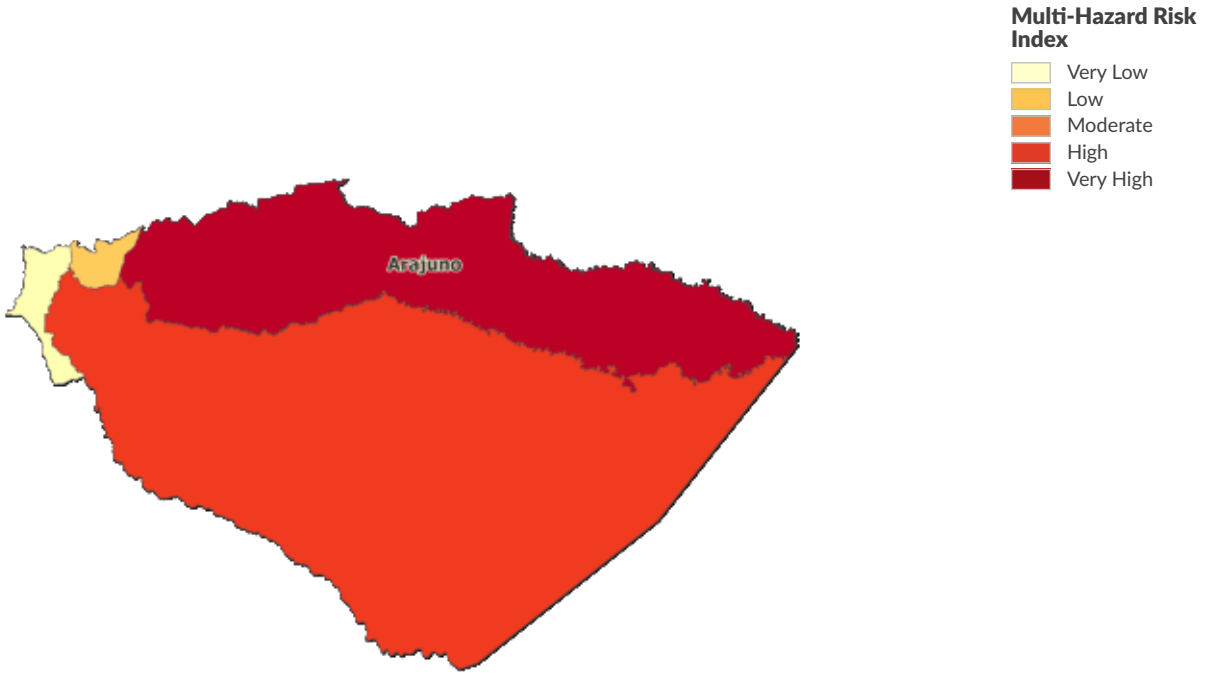
Coping Capacity (CC) - Very Low
SCORE: 0.292 • RANK: 215/221 CANTONS ASSESSED

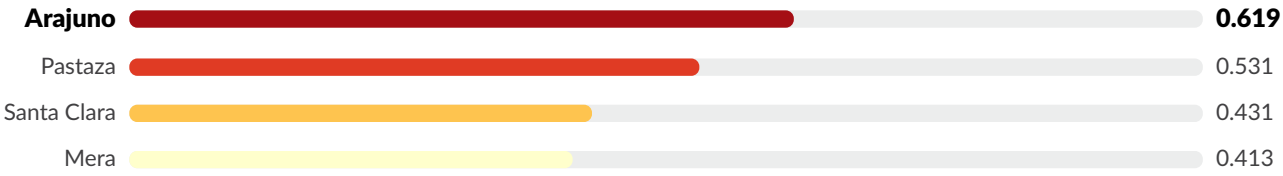
Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.252 • RANK: 192/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.080 • RANK: 221/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PASTAZA PROVINCE

ARAJUNO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 192 / 221 CANTONS ASSESSED
SCORE: 0.252



MHE
0.252

Raw MHE
0.239

Relative MHE
0.265

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
8,968 people exposed
3,676 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
26%
2,298 people exposed
999 structures exposed (27%)
Critical Infrastructure Exposed: 26%

Inland Flood
29%
2,600 people exposed
1,287 structures exposed (35%)
Critical Infrastructure Exposed: 22%

Landslide
15%
1,365 people exposed
1,163 structures exposed (32%)
Critical Infrastructure Exposed: 38%

Mosquito-Borne Disease
99%
8,884 people exposed
3,574 structures exposed (97%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
39%
3,482 people exposed
2,352 structures exposed (64%)
Critical Infrastructure Exposed: 50%

VULNERABILITY (V)

RANK: 19 / 221 CANTONS ASSESSED **SCORE: 0.598**

Vulnerability in Arajuno is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.573

- **10** Average Years of Schooling
- **43.9%** Population (age 24 and over) with General Basic Education Schooling
- **5.8%** Population (age 24 and over) with No Schooling
- **5.2%** Adult Illiteracy Rate
- **83%** Households with No Internet Access
- **83%** Households with No Access to Television
- **86.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.754

- **56%** Homes with Access to Public Water Source
- **19.8%** Homes Connected to the Public Sewage System
- **74.4%** Homes without Piped Water
- **7.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.935

- **84.5** Age Dependency Ratio
- **33.2%** Unemployment Rate
- **87.4%** Poverty Rate (based on UBN)
- **6.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.194

- **0.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.703

- **0.5** Female to Male Labor Ratio (distance from parity)
- **79.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **13.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **88.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **50%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.136

- **3.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **2.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.205

- **12.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **12.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.347

77 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**13** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**65** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.691

22.7% Homes with Exterior Walls in Poor Condition	**2%** Homes with Inadequate Materials Used in Outer Walls	**23.3%** Homes with Roofs in Poor Condition	**94.6%** Households with No Access to Vehicle for Private Use	**21%** Household Overcrowding

Population Pressures

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.535

1.1 Population Density (persons per sq km)	**3.2%** Average Annual Population Change (2010-2022)	**1.2** Net Migration Rate (per 1,000 persons)	**0.37** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.524

0.2 Hazard Susceptibility (recent events 2015-2025)	**0.2** Disaster Loss Ratio (recent events 2015-2025)	**0.2** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 215 / 221 CANTONS ASSESSED **SCORE: 0.292**

Arajuno exhibits weaker Coping Capacity in the areas of Energy Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.144

36.1%
Labor Force Participation

29,741
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.405

40.3%
Protected Area (% of land area)

-68,505.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.360

83.9%
Voter Participation

51.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.334

Communications Capacity

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.275

4.8%
Household Access to Fixed Phones

61.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.111

65.7%
Homes Served by the Public Electricity Network

47.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.619

17.8
Nurses and Midwives per 10,000 persons

31.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.333

26.6
Average Distance to Airport (km)

60.9
Average Distance to Sea or River Port (km)

0
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 221 / 221 CANTONS ASSESSED **SCORE: 0.080**

Arajuno exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.153

30.5	4.9%	0	107.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.007

69.7	60.8	34.7	23.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 220 / 221 CANTONS ASSESSED
SCORE: 0.258

Arajuno's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Emergency Services | **Economic Constraints** | **Energy Capacity** | **Economic Capacity**

KEY FACTORS INFLUENCING RESILIENCE

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

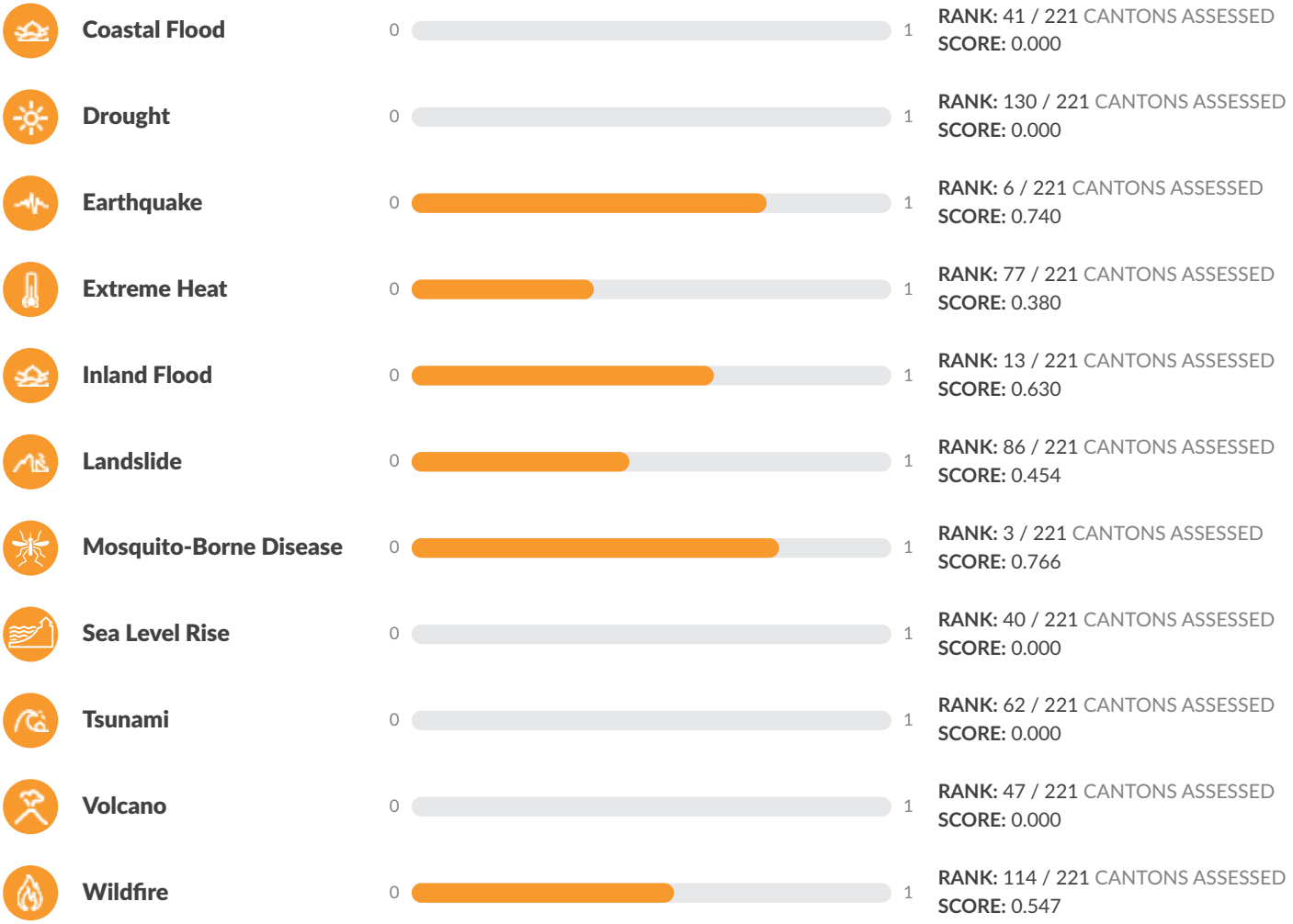
Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
10 / 221
CANTONS ASSESSED
SCORE: 0.619

Arajuno's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: NAPO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.526 • RANK: 77/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.573 • RANK: 35/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.413 • RANK: 177/221 CANTONS ASSESSED

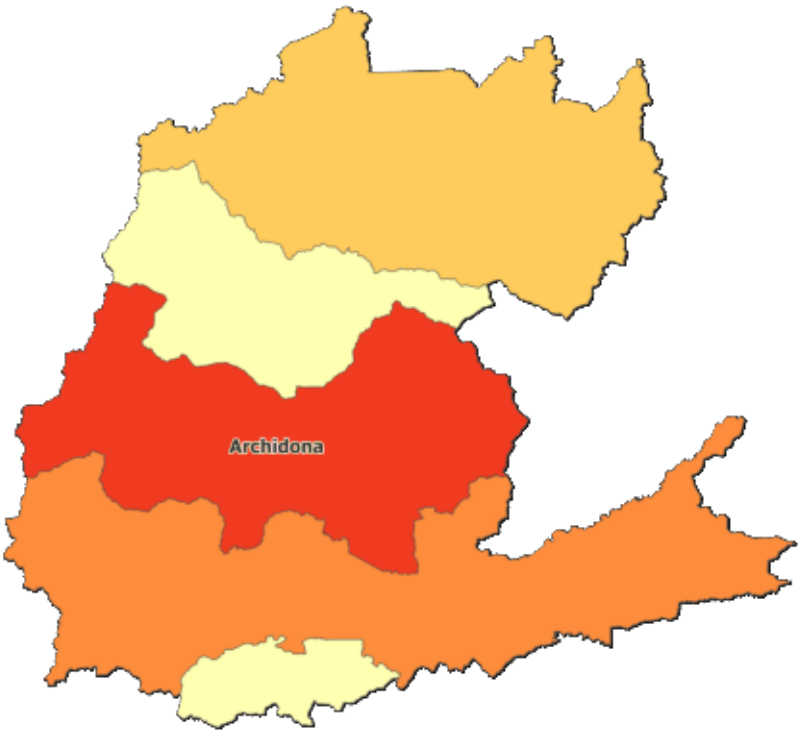
Coping Capacity (CC) - Moderate
SCORE: 0.475 • RANK: 121/221 CANTONS ASSESSED

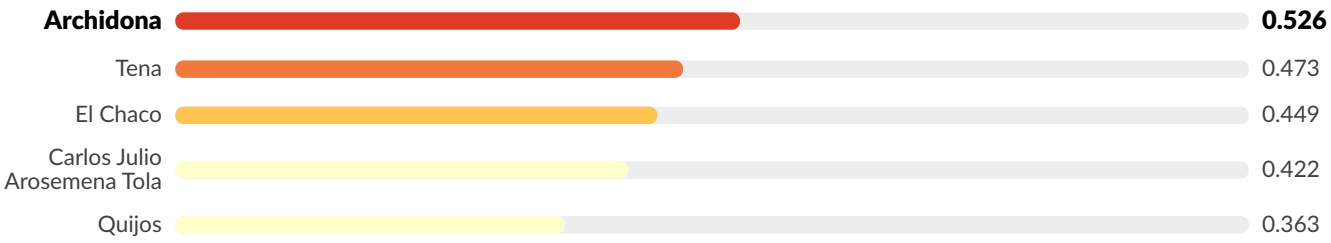
Multi-Hazard Exposure (MHE) - Low
SCORE: 0.344 • RANK: 157/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.337 • RANK: 191/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN NAPO PROVINCE

ARCHIDONA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 157 / 221 CANTONS ASSESSED
SCORE: 0.344



MHE
0.344

Raw MHE
0.501

Relative MHE
0.187

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
41,246 people exposed
18,303 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
3%
1,238 people exposed
739 structures exposed (4%)
Critical Infrastructure Exposed: 23%

Landslide
18%
7,230 people exposed
3,567 structures exposed (19%)
Critical Infrastructure Exposed: 34%

Mosquito-Borne Disease
98%
40,227 people exposed
17,725 structures exposed (97%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
<1%
253 people exposed
124 structures exposed (<1%)
Critical Infrastructure Exposed: 21%

Wildfire
63%
26,015 people exposed
12,122 structures exposed (66%)
Critical Infrastructure Exposed: 64%

VULNERABILITY (V)

RANK: 35 / 221 CANTONS ASSESSED **SCORE: 0.573**

Vulnerability in Archidona is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.497

- **10.8** Average Years of Schooling
- **35.3%** Population (age 24 and over) with General Basic Education Schooling
- **5.1%** Population (age 24 and over) with No Schooling
- **4.8%** Adult Illiteracy Rate
- **67.5%** Households with No Internet Access
- **88.3%** Households with No Access to Television
- **78.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.744

- **77.4%** Homes with Access to Public Water Source
- **33.5%** Homes Connected to the Public Sewage System
- **61.5%** Homes without Piped Water
- **16.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.694

- **64** Age Dependency Ratio
- **26.3%** Unemployment Rate
- **77.5%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.446

- **3.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.643

- **0.4** Female to Male Labor Ratio (distance from parity)
- **108.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **85.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **50.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.330

- **6.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.477

- **168** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **12.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.249

10 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**10** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**16** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**12** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.708

30% Homes with Exterior Walls in Poor Condition	**1.4%** Homes with Inadequate Materials Used in Outer Walls	**32.5%** Homes with Roofs in Poor Condition	**91.1%** Households with No Access to Vehicle for Private Use	**14.6%** Household Overcrowding

Population Pressures

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.465

10 Population Density (persons per sq km)	**1.7%** Average Annual Population Change (2010-2022)	**5.9** Net Migration Rate (per 1,000 persons)	**0.32** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.527

0.3 Hazard Susceptibility (recent events 2015-2025)	**0.1** Disaster Loss Ratio (recent events 2015-2025)	**0.2** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 121 / 221 CANTONS ASSESSED **SCORE: 0.475**

Archidona exhibits weaker Coping Capacity in the areas of Energy Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.331

48.5%
Labor Force Participation

48,476
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.584

47%
Protected Area (% of land area)

-13,281.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.669

88.1%
Voter Participation

91.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.390

Communications Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.445

10.9%
Household Access to Fixed Phones

71.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.284

90%
Homes Served by the Public Electricity Network

49%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.382

10.2
Nurses and Midwives per 10,000 persons

12.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.449

32.6
Average Distance to Airport (km)

25.5
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 191 / 221 CANTONS ASSESSED **SCORE: 0.337**

Archidona exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.332

2.7	8.1%	0	96.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.341

19.1	10.3	6.3	10
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 177 / 221 CANTONS ASSESSED
SCORE: 0.413

Archidona's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Energy Capacity

Housing and Transportation Vulnerability

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

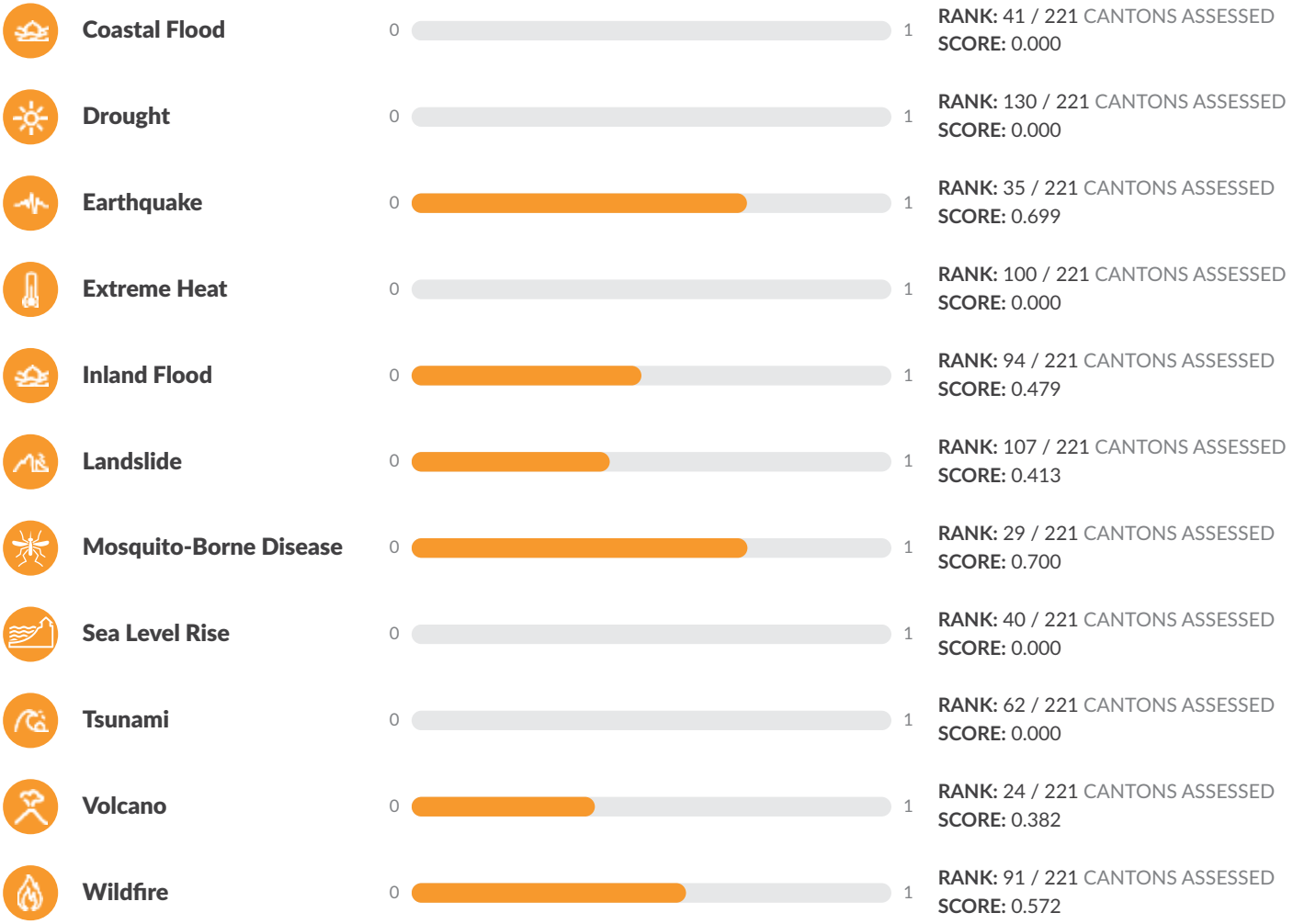
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

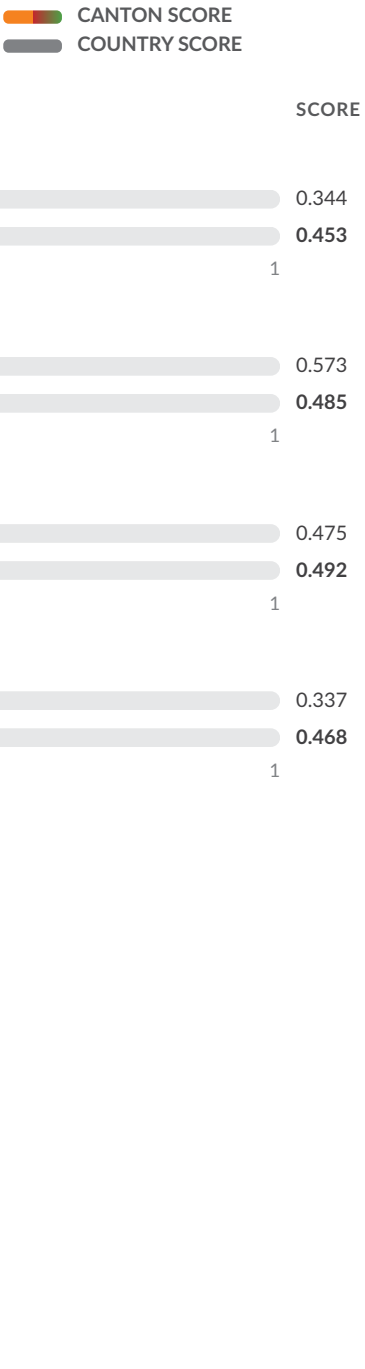


MULTI-HAZARD RISK (MHR)

RANKED
77 / 221
CANTONS ASSESSED
SCORE: 0.526

Archidona's score and ranking are due to Low Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ARENILLAS

NDPBA SUBNATIONAL PROFILE

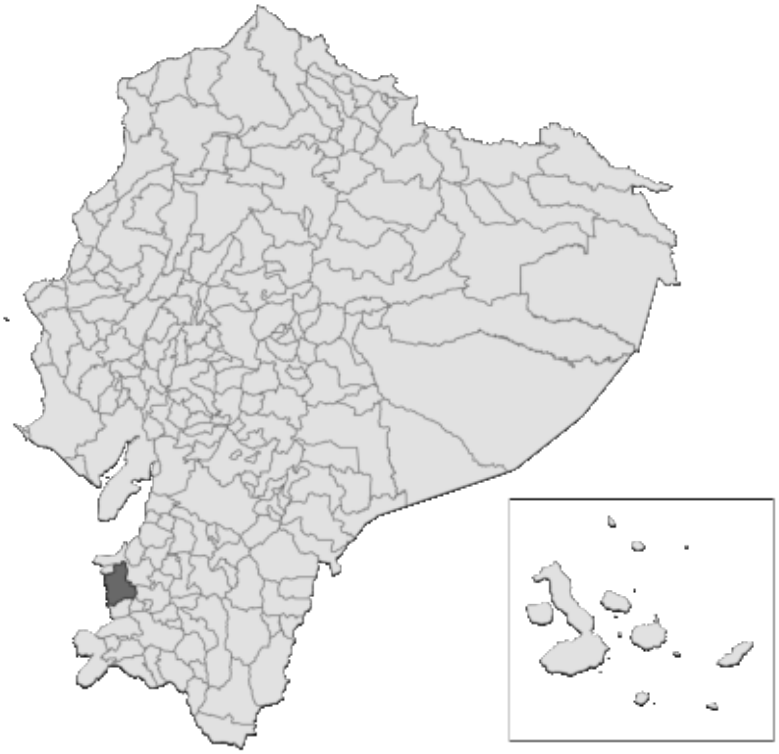
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ARENILLAS

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.496 • RANK: 110/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.431 • RANK: 160/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.549 • RANK: 61/221 CANTONS ASSESSED

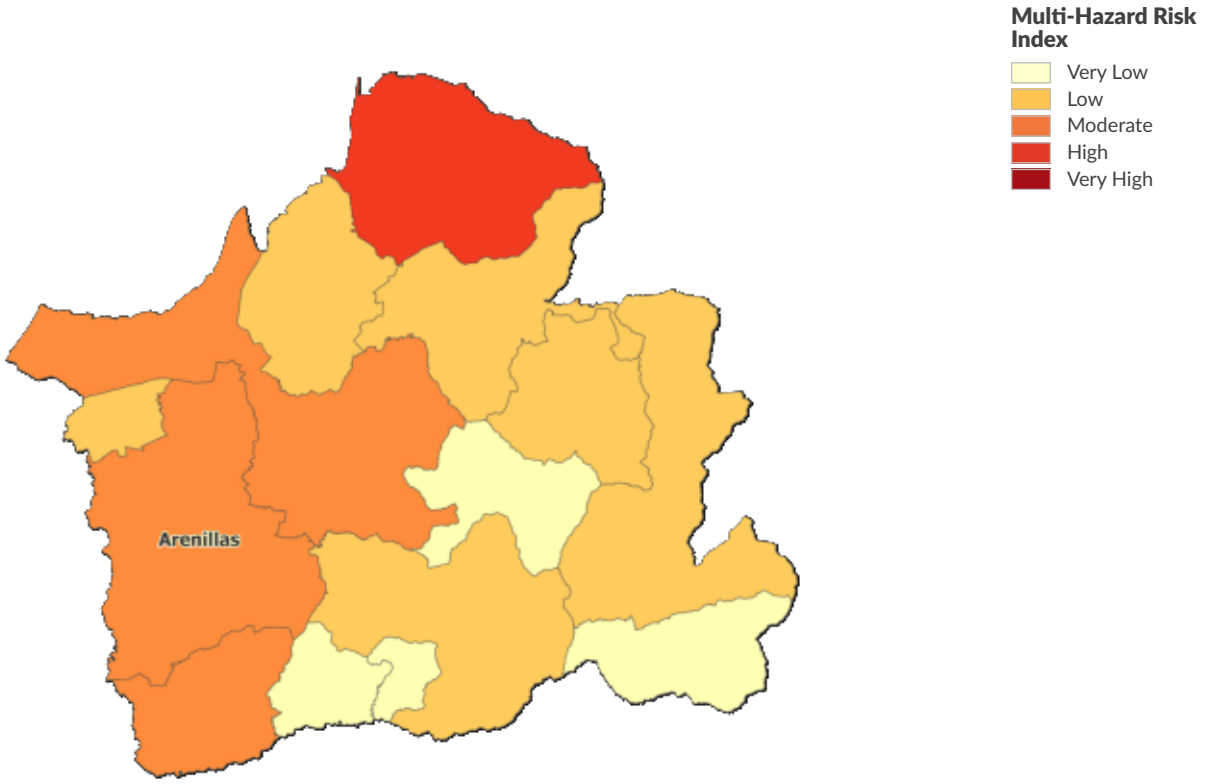
Coping Capacity (CC) - High
SCORE: 0.565 • RANK: 57/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.631 • RANK: 36/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.512 • RANK: 77/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

ARENILLAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521	Piñas	0.440
Santa Rosa	0.502	Zaruma	0.440
Arenillas	**0.496**	Huaquillas	0.435
Las Lajas	0.485	Portovelo	0.424
Machala	0.469	Balsas	0.420
Pasaje	0.454	Marcabelí	0.394
Chilla	0.453	Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 36 / 221 CANTONS ASSESSED
SCORE: 0.631



MHE
0.631

Raw MHE
0.589

Relative MHE
0.672

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **577** people exposed
- **372** structures exposed (2%)

Critical Infrastructure Exposed: <1%

Drought
100%
- **30,911** people exposed
- **23,454** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **30,942** people exposed
- **23,486** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
96%
- **29,805** people exposed
- **22,715** structures exposed (97%)

Critical Infrastructure Exposed: 97%

Inland Flood
14%
- **4,457** people exposed
- **3,447** structures exposed (15%)

Critical Infrastructure Exposed: 14%

Landslide
5%
- **1,616** people exposed
- **997** structures exposed (4%)

Critical Infrastructure Exposed: 4%

Mosquito-Borne Disease
86%
- **26,697** people exposed
- **19,633** structures exposed (84%)

Critical Infrastructure Exposed: 95%

Sea Level Rise
<1%
- **233** people exposed
- **178** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
17%
- **5,343** people exposed
- **3,450** structures exposed (15%)

Critical Infrastructure Exposed: 4%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
47%
- **14,422** people exposed
- **12,481** structures exposed (53%)

Critical Infrastructure Exposed: 54%

VULNERABILITY (V)

RANK: 160 / 221 CANTONS ASSESSED **SCORE: 0.431**

Vulnerability in Arenillas is primarily driven by Population Pressures and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.403

- **10.6** Average Years of Schooling
- **44.2%** Population (age 24 and over) with General Basic Education Schooling
- **3.2%** Population (age 24 and over) with No Schooling
- **2.7%** Adult Illiteracy Rate
- **43.3%** Households with No Internet Access
- **79.1%** Households with No Access to Television
- **76.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.358

- **93.6%** Homes with Access to Public Water Source
- **70.2%** Homes Connected to the Public Sewage System
- **23.6%** Homes without Piped Water
- **6.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.414

- **53.4** Age Dependency Ratio
- **14.1%** Unemployment Rate
- **39.7%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.516

- **4.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.411

- **0.4** Female to Male Labor Ratio (distance from parity)
- **27.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **41.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **49.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.379

- **9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.521

- **45.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **27.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.481

54
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

46
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.485

13.9%
Homes with Exterior Walls in Poor Condition

11.8%
Homes with Inadequate Materials Used in Outer Walls

15.1%
Homes with Roofs in Poor Condition

84.4%
Households with No Access to Vehicle for Private Use

6.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.500

41.1
Population Density (persons per sq km)

1.7%
Average Annual Population Change (2010-2022)

22.9
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.483

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 57 / 221 CANTONS ASSESSED **SCORE: 0.565**

Arenillas exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.504

57.2%
Labor Force Participation

92,268
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.600

13.6%
Protected Area (% of land area)

-2,983.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.616

85.2%
Voter Participation

91.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.564

Communications Capacity

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.595

9.6%
Household Access to Fixed Phones

88.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.609

97.5%
Homes Served by the Public Electricity Network

74.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.425

9.9
Nurses and Midwives per 10,000 persons

17
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.625

18
Average Distance to Airport (km)

19.4
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 77 / 221 CANTONS ASSESSED **SCORE: 0.512**

Arenillas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.485

2.2	4.9%	0.6	37.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.540

6.5	6.3	3.5	6.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 61 / 221 CANTONS ASSESSED
SCORE: 0.549

Arenillas's score and ranking are due to Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity **Mass Care Support** **Population Pressures** **Economic Capacity**

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

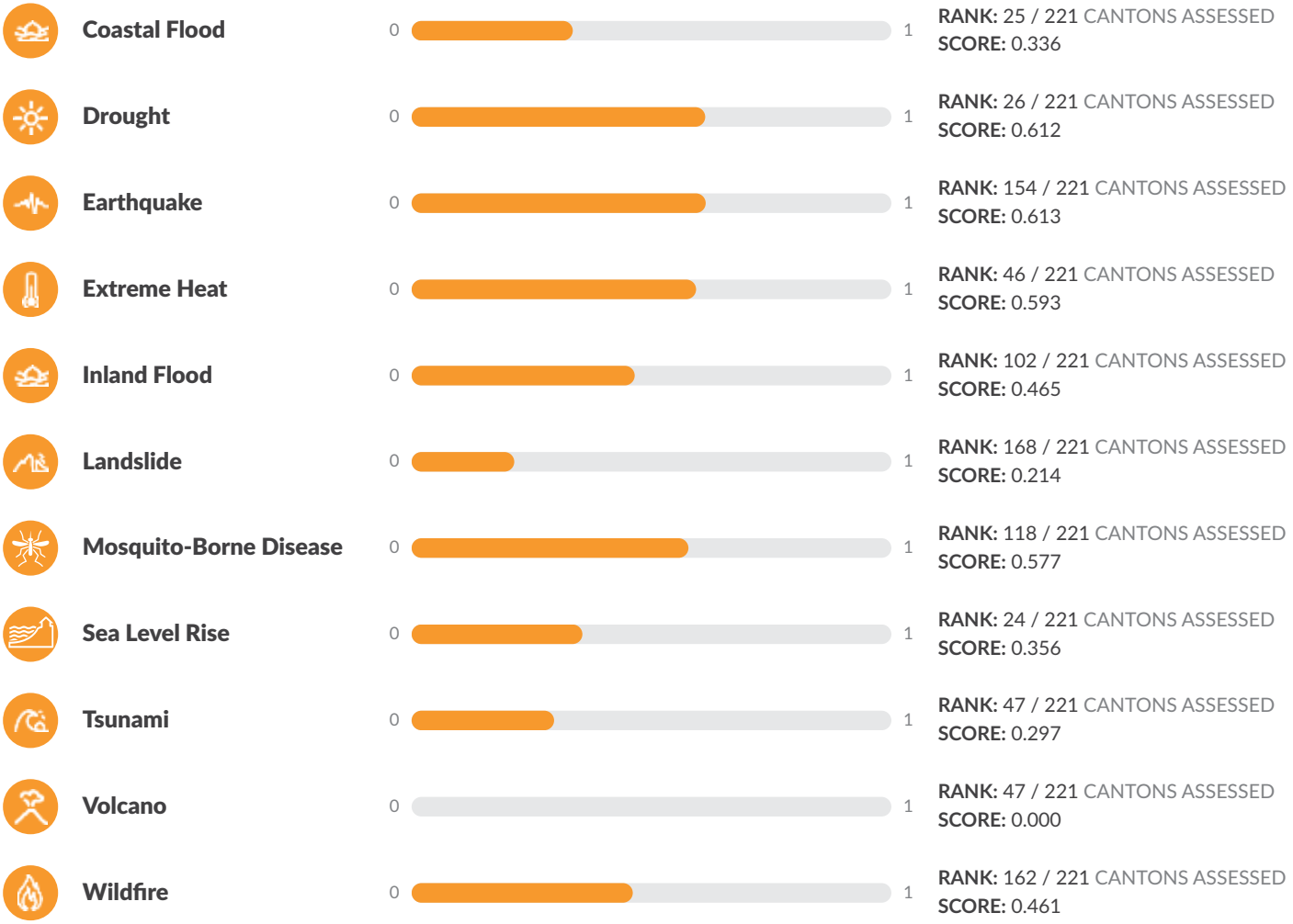
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)

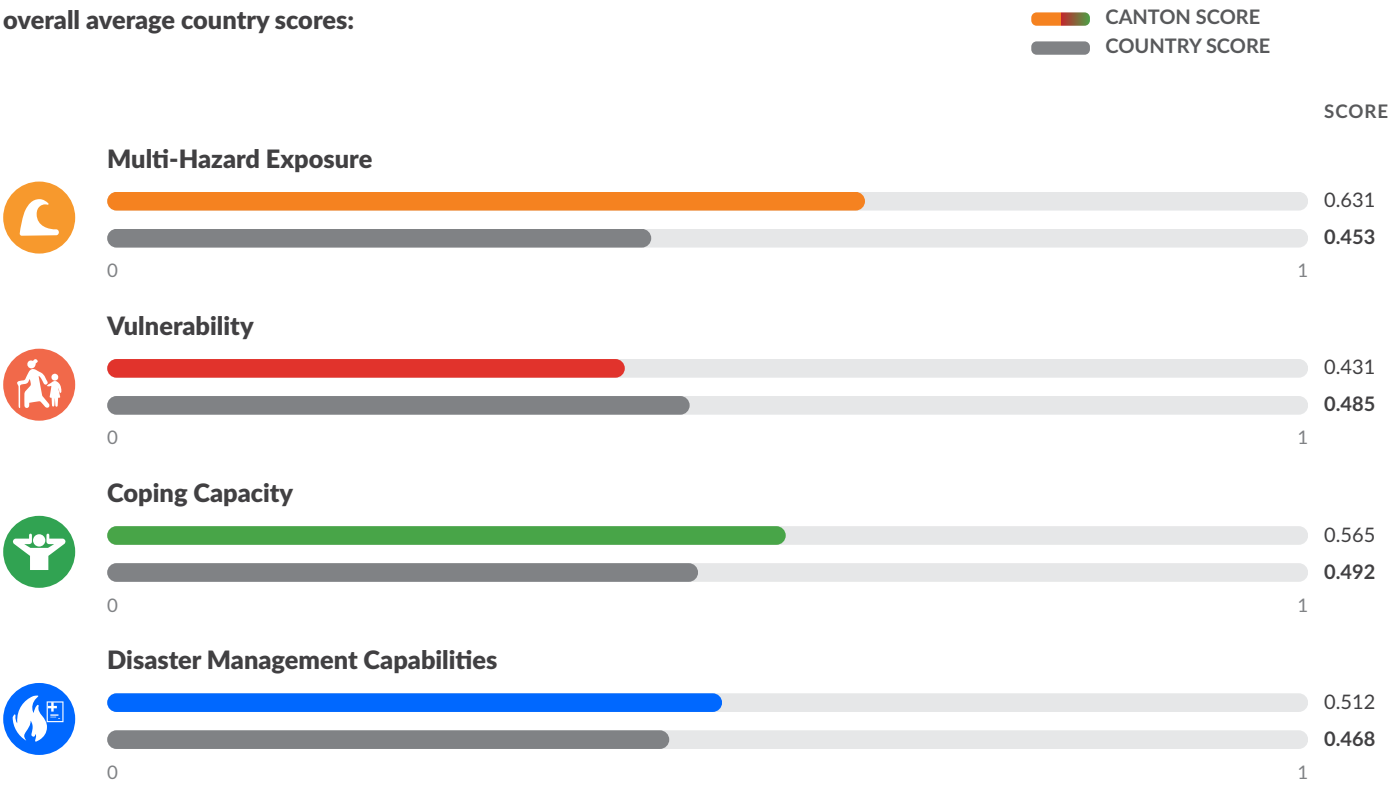


MULTI-HAZARD RISK (MHR)

RANKED
110 / 221
CANTONS ASSESSED
SCORE: 0.496

Arenillas's score and ranking are due to Very High Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ATACAMES

NDPBA SUBNATIONAL PROFILE

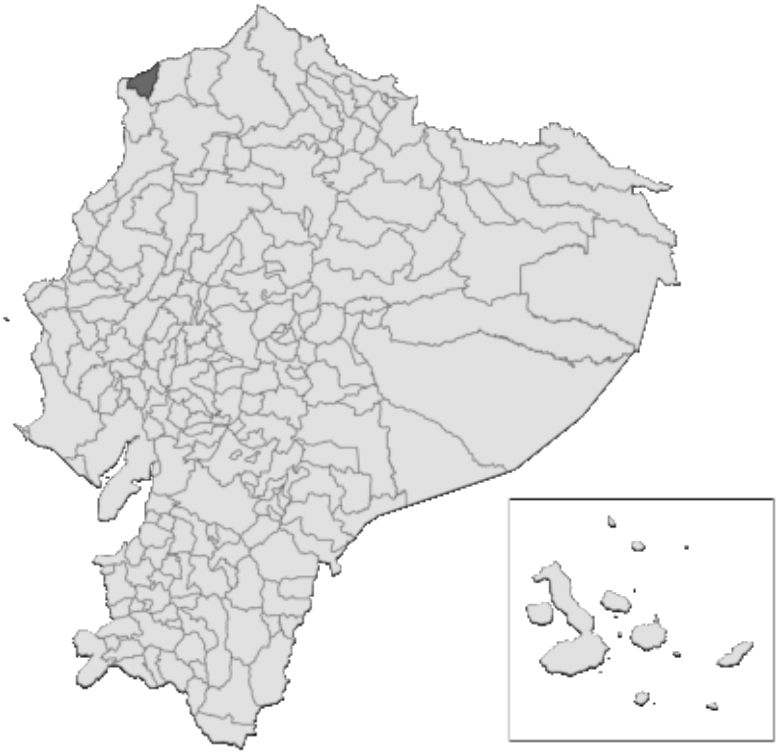
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ATACAMES

PROVINCE: ESMERALDAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.585 • RANK: 27/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.562 • RANK: 44/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.470 • RANK: 132/221 CANTONS ASSESSED

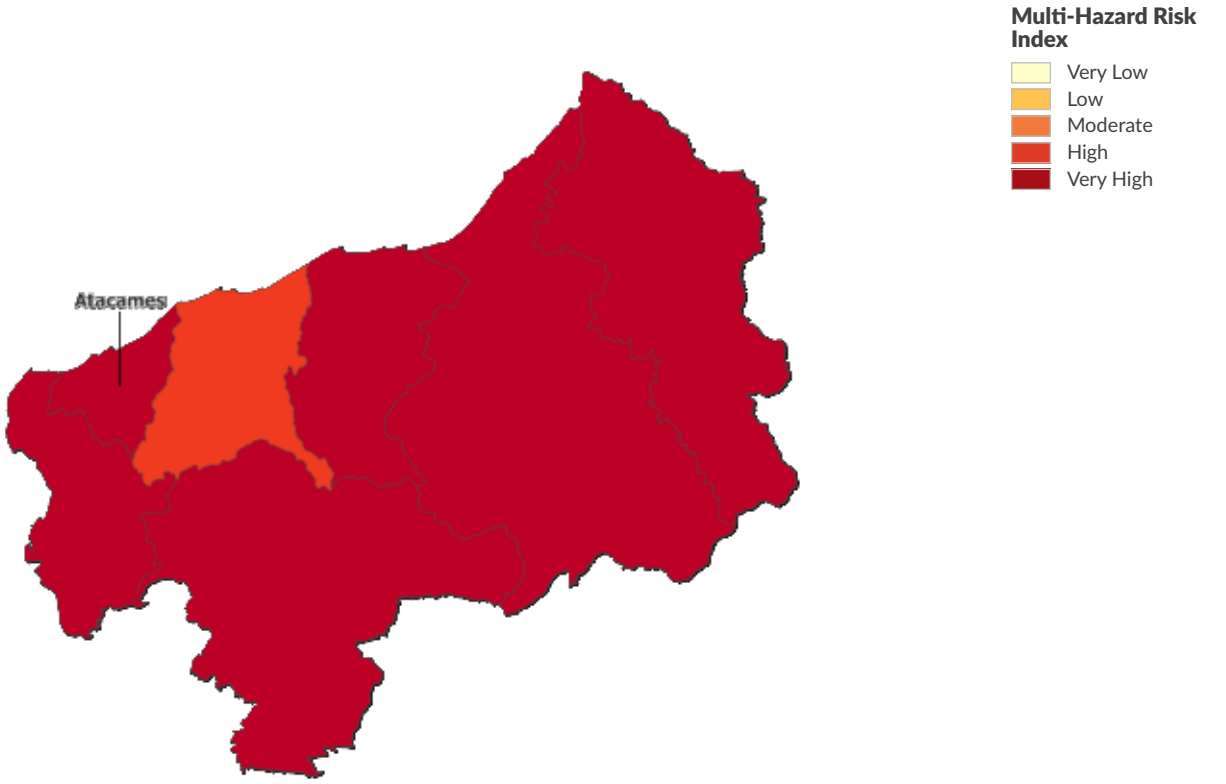
Coping Capacity (CC) - Moderate
SCORE: 0.487 • RANK: 107/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.748 • RANK: 14/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.483 • RANK: 89/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ESMERALDAS PROVINCE

ATACAMES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Rioverde	0.636
Eloy Alfaro	0.631
Muisne	0.614
Atacames	**0.585**
San Lorenzo	0.572
Quinindé	0.568
Esmeraldas	0.523

MULTI-HAZARD EXPOSURE (MHE)

RANK: 14 / 221 CANTONS ASSESSED
SCORE: 0.748



MHE
0.748

Raw MHE
0.698

Relative MHE
0.799

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
7%
- **3,876** people exposed
- **3,826** structures exposed (12%)
- **Critical Infrastructure Exposed:** 6%

Drought
75%
- **39,506** people exposed
- **24,524** structures exposed (76%)
- **Critical Infrastructure Exposed:** 69%

Earthquake
100%
- **52,743** people exposed
- **32,217** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
72%
- **37,720** people exposed
- **24,892** structures exposed (77%)
- **Critical Infrastructure Exposed:** 75%

Inland Flood
19%
- **9,926** people exposed
- **4,444** structures exposed (14%)
- **Critical Infrastructure Exposed:** 13%

Landslide
22%
- **11,797** people exposed
- **6,599** structures exposed (20%)
- **Critical Infrastructure Exposed:** 18%

Mosquito-Borne Disease
97%
- **51,399** people exposed
- **31,641** structures exposed (98%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
1%
- **593** people exposed
- **552** structures exposed (2%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
67%
- **35,302** people exposed
- **23,804** structures exposed (74%)
- **Critical Infrastructure Exposed:** 69%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
86%
- **45,375** people exposed
- **26,187** structures exposed (81%)
- **Critical Infrastructure Exposed:** 81%

VULNERABILITY (V)

RANK: 44 / 221 CANTONS ASSESSED **SCORE: 0.562**

Vulnerability in Atacames is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.550

- **9.8** Average Years of Schooling
- **43.3%** Population (age 24 and over) with General Basic Education Schooling
- **7%** Population (age 24 and over) with No Schooling
- **5.4%** Adult Illiteracy Rate
- **68.2%** Households with No Internet Access
- **79.6%** Households with No Access to Television
- **86.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.678

- **74.8%** Homes with Access to Public Water Source
- **15%** Homes Connected to the Public Sewage System
- **57.4%** Homes without Piped Water
- **6.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.623

- **66** Age Dependency Ratio
- **24%** Unemployment Rate
- **71%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.800

- **12.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.585

- **0.4** Female to Male Labor Ratio (distance from parity)
- **56.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **68%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **75.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.327

- **7.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.369

- **35.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.405

24	14	31	22
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.648

20.1%	13.7%	20.1%	93%	11.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.617

100.3	1.9%	19.4	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.428

0.3	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 107 / 221 CANTONS ASSESSED **SCORE: 0.487**

Atacames exhibits weaker Coping Capacity in the areas of Energy Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.463

54.8%
Labor Force Participation

87,355
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.482

6.3%
Protected Area (% of land area)

-5,834
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.546

83.2%
Voter Participation

88.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.454

Communications Capacity

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.408

7.1%
Household Access to Fixed Phones

75.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.386

94%
Homes Served by the Public Electricity Network

55.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.435

12.7
Nurses and Midwives per 10,000 persons

14.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.589

29.7
Average Distance to Airport (km)

28.4
Average Distance to Sea or River Port (km)

2.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 89 / 221 CANTONS ASSESSED **SCORE: 0.483**

Atacames exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.404

3.4	1.7%	0.4	28
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.563

6.4	6.6	2.7	6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 132 / 221 CANTONS ASSESSED
SCORE: 0.470

Atacames's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

Economic Constraints

Population Pressures

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

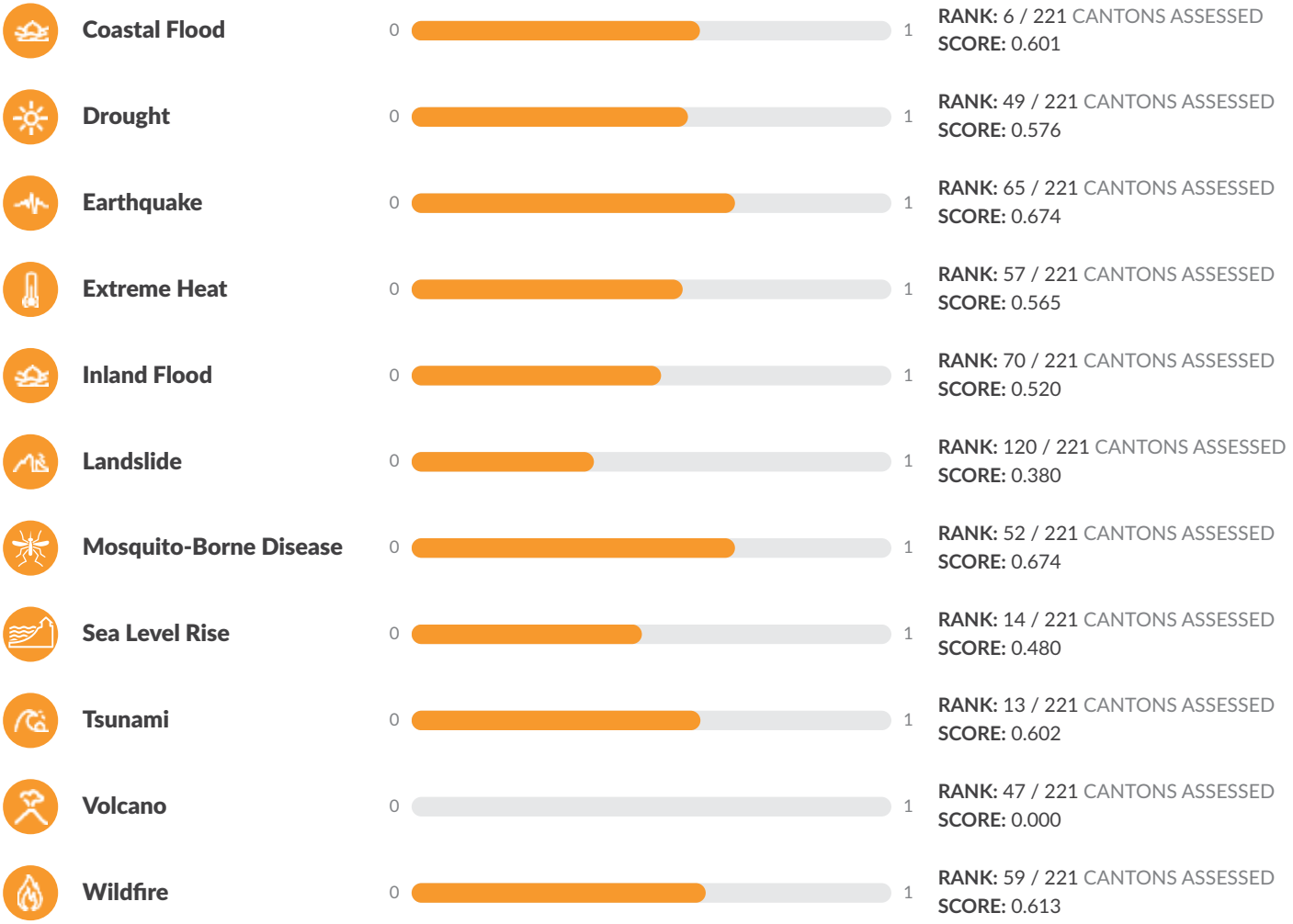
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

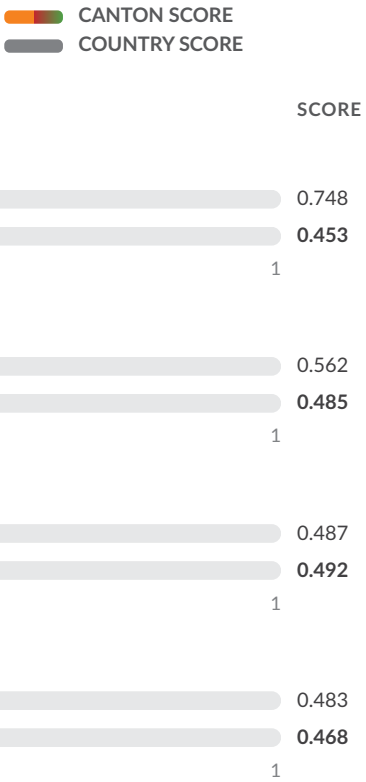


MULTI-HAZARD RISK (MHR)

RANKED
27 / 221
CANTONS ASSESSED
SCORE: 0.585

Atacames's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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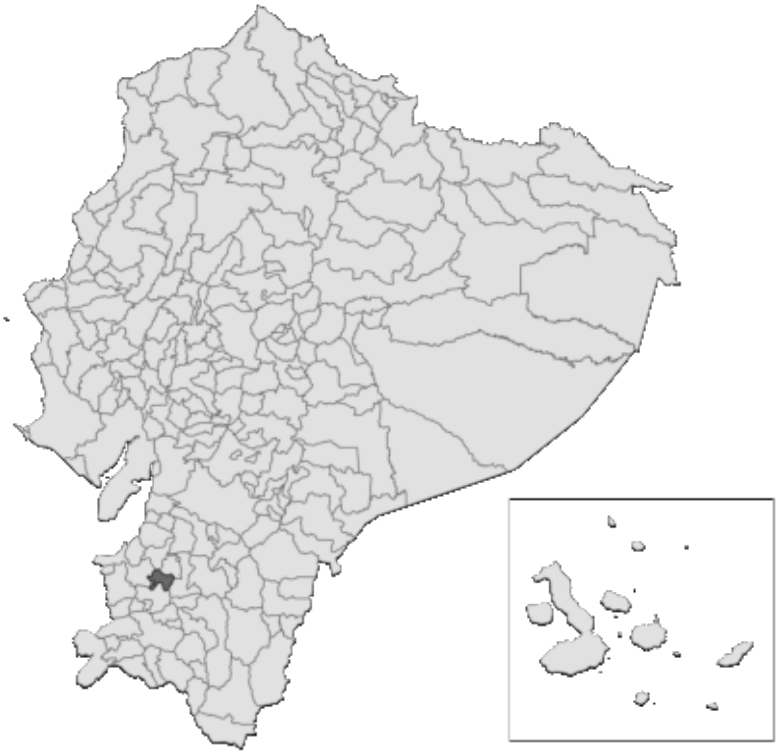
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PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.366 • RANK: 213/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.577 • RANK: 44/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.194 • RANK: 210/221 CANTONS ASSESSED

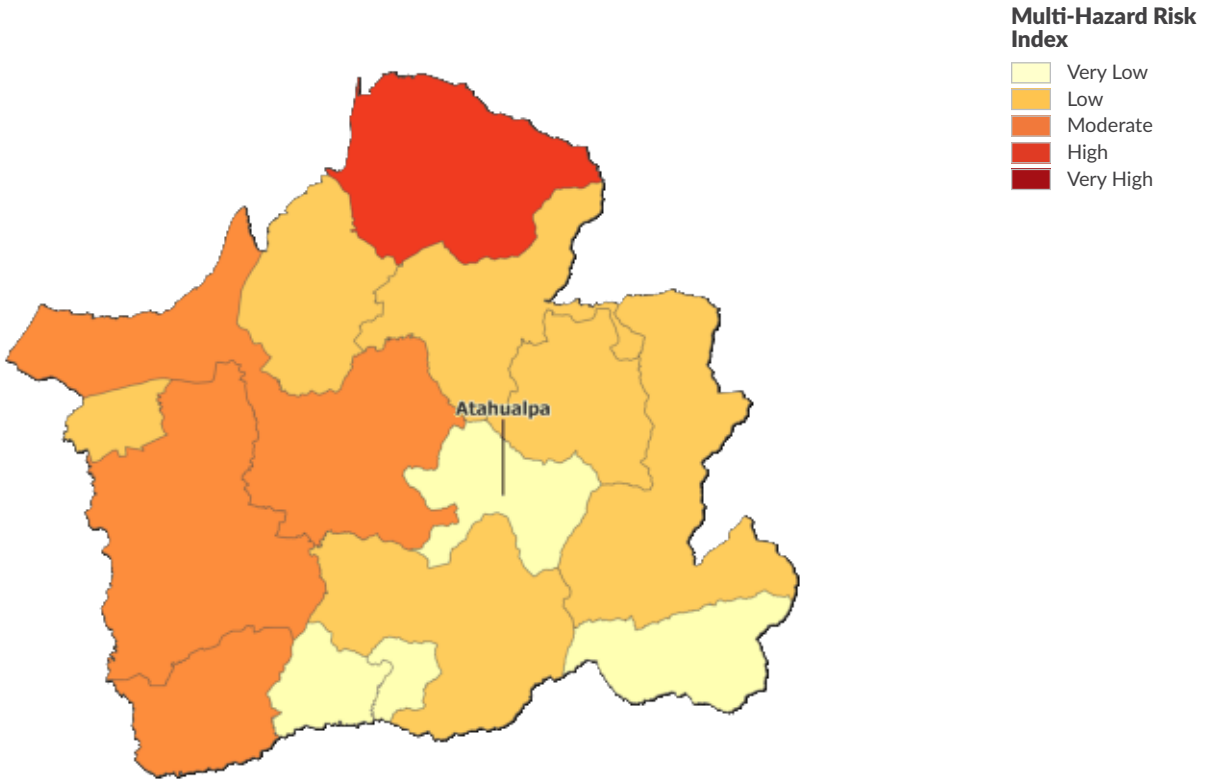
Vulnerability (V) - Very Low
SCORE: 0.353 • RANK: 210/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.552 • RANK: 69/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.532 • RANK: 68/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

ATAHUALPA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	0.435
Portovelo	0.424
Balsas	0.420
Marcabelí	0.394
Atahualpa	**0.366**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 210 / 221 CANTONS ASSESSED
SCORE: 0.194



MHE
0.194

Raw MHE
0.211

Relative MHE
0.178

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
4%
- **284** people exposed
- **259** structures exposed (6%)

Critical Infrastructure Exposed: 6%

Earthquake
100%
- **6,741** people exposed
- **4,211** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **3** people exposed
- **9** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
99%
- **6,670** people exposed
- **4,158** structures exposed (99%)

Critical Infrastructure Exposed: 99%

Mosquito-Borne Disease
56%
- **3,791** people exposed
- **2,551** structures exposed (61%)

Critical Infrastructure Exposed: 45%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
40%
- **2,683** people exposed
- **1,990** structures exposed (47%)

Critical Infrastructure Exposed: 40%

VULNERABILITY (V)

RANK: 210 / 221 CANTONS ASSESSED **SCORE: 0.353**

Vulnerability in Atahualpa is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.400

- **9.9** Average Years of Schooling
- **53.6%** Population (age 24 and over) with General Basic Education Schooling
- **2.9%** Population (age 24 and over) with No Schooling
- **2%** Adult Illiteracy Rate
- **43%** Households with No Internet Access
- **68.8%** Households with No Access to Television
- **72.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.310

- **75%** Homes with Access to Public Water Source
- **56.5%** Homes Connected to the Public Sewage System
- **5.7%** Homes without Piped Water
- **2.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.288

- **54** Age Dependency Ratio
- **11.4%** Unemployment Rate
- **40.4%** Poverty Rate (based on UBN)
- **0%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.297

- **1.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.272

- **0.5** Female to Male Labor Ratio (distance from parity)
- **8.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **0%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **50%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.393

- **12.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.204

- **5.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.542

135
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

3
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

56
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.355

13.6%
Homes with Exterior Walls in Poor Condition

0.5%
Homes with Inadequate Materials Used in Outer Walls

17.7%
Homes with Roofs in Poor Condition

72.8%
Households with No Access to Vehicle for Private Use

4.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.292

21.7
Population Density (persons per sq km)

0.5%
Average Annual Population Change (2010-2022)

3.3
Net Migration Rate (per 1,000 persons)

0.24
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.527

0.3
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 69 / 221 CANTONS ASSESSED **SCORE: 0.552**

Atahualpa exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.377

57.8%
Labor Force Participation

13,788
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.300

0%
Protected Area (% of land area)

-3,515.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.685

86.6%
Voter Participation

95%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.677

Communications Capacity

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.664

19.1%
Household Access to Fixed Phones

86.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.837

99.1%
Homes Served by the Public Electricity Network

87%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.727

26.2
Nurses and Midwives per 10,000 persons

39.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.480

31
Average Distance to Airport (km)

40.2
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 68 / 221 CANTONS ASSESSED **SCORE: 0.532**

Atahualpa exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.485

1.7	18.3%	0	46.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.580

11.1	5.1	2.6	4.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 44 / 221 CANTONS ASSESSED
SCORE: 0.577

Atahualpa's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Economic Capacity



Disaster Impacts



Transportation Capacity



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Transportation Capacity

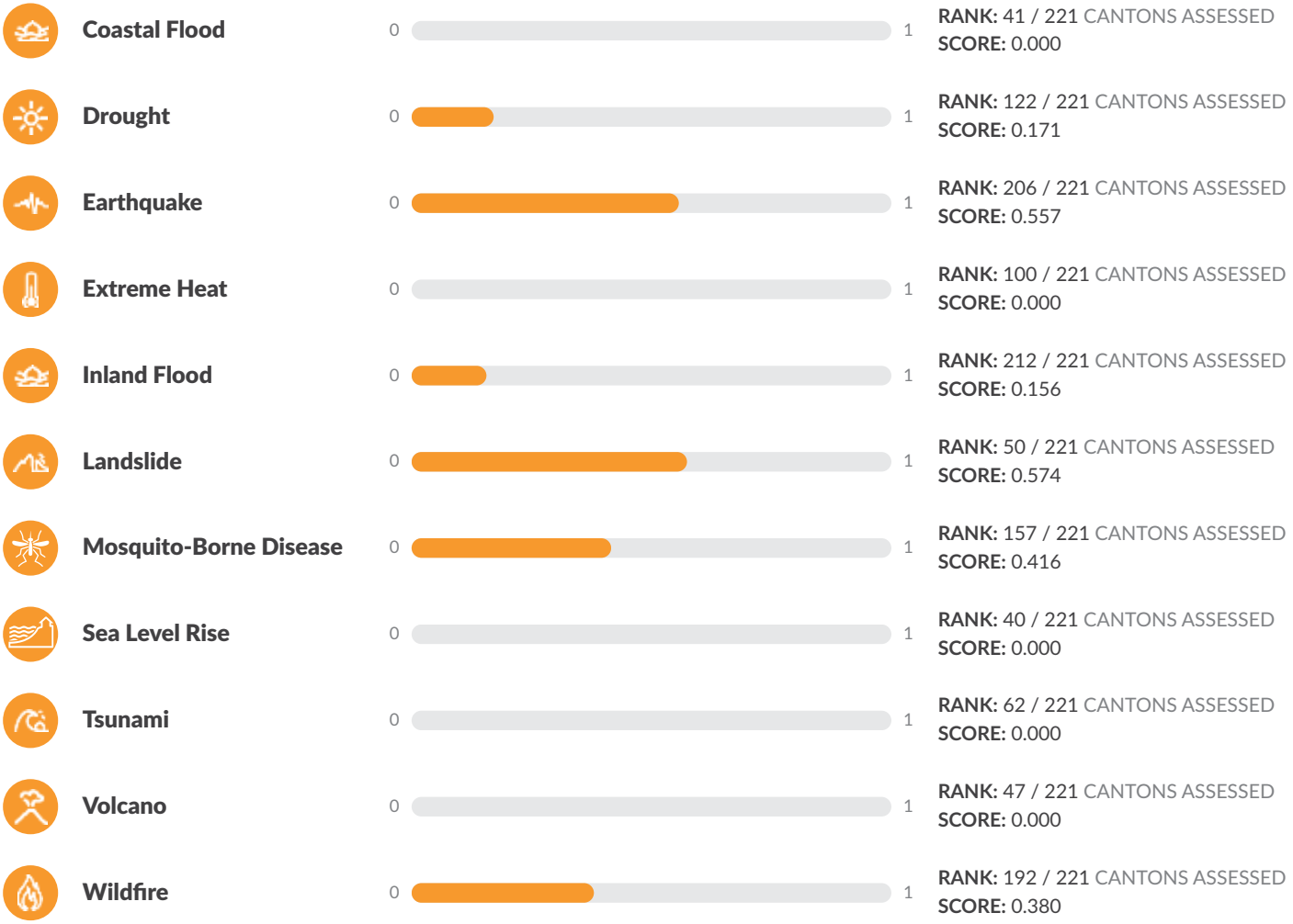
Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

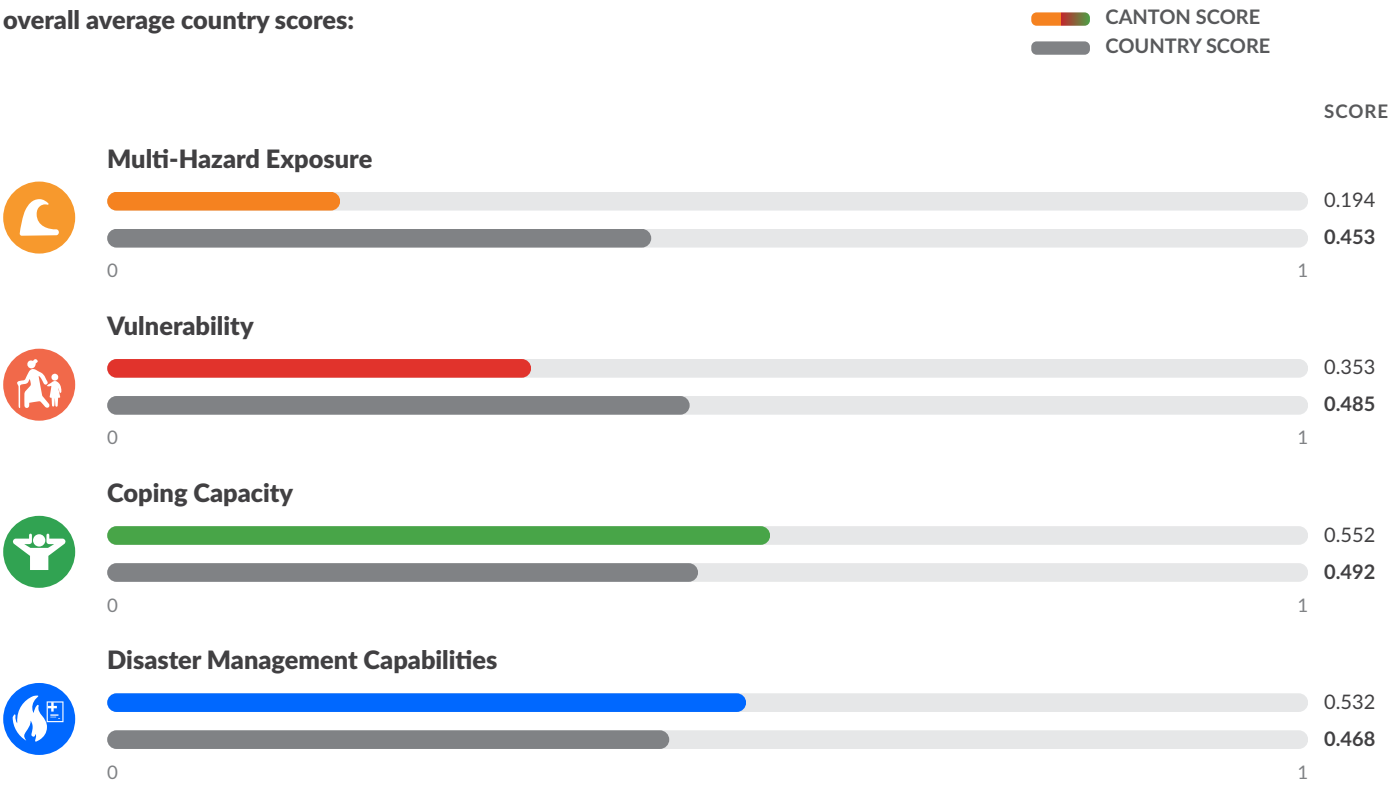


MULTI-HAZARD RISK (MHR)

RANKED
213 / 221
CANTONS ASSESSED
SCORE: 0.366

Atahualpa's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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AZOGUES

NDPBA SUBNATIONAL PROFILE

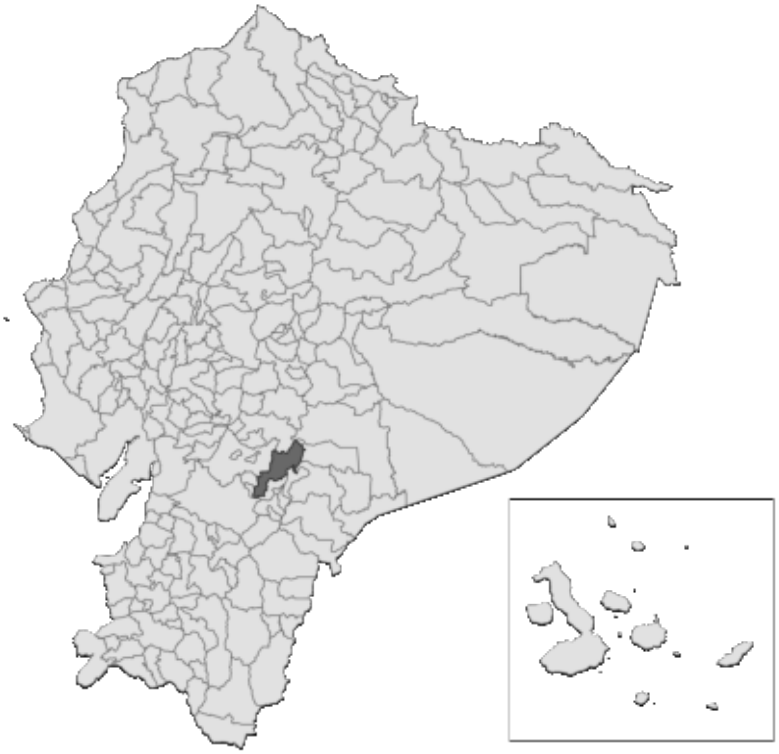
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AZOGUES

PROVINCE: CAÑAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.445 • RANK: 156/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.590 • RANK: 34/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.551 • RANK: 64/221 CANTONS ASSESSED

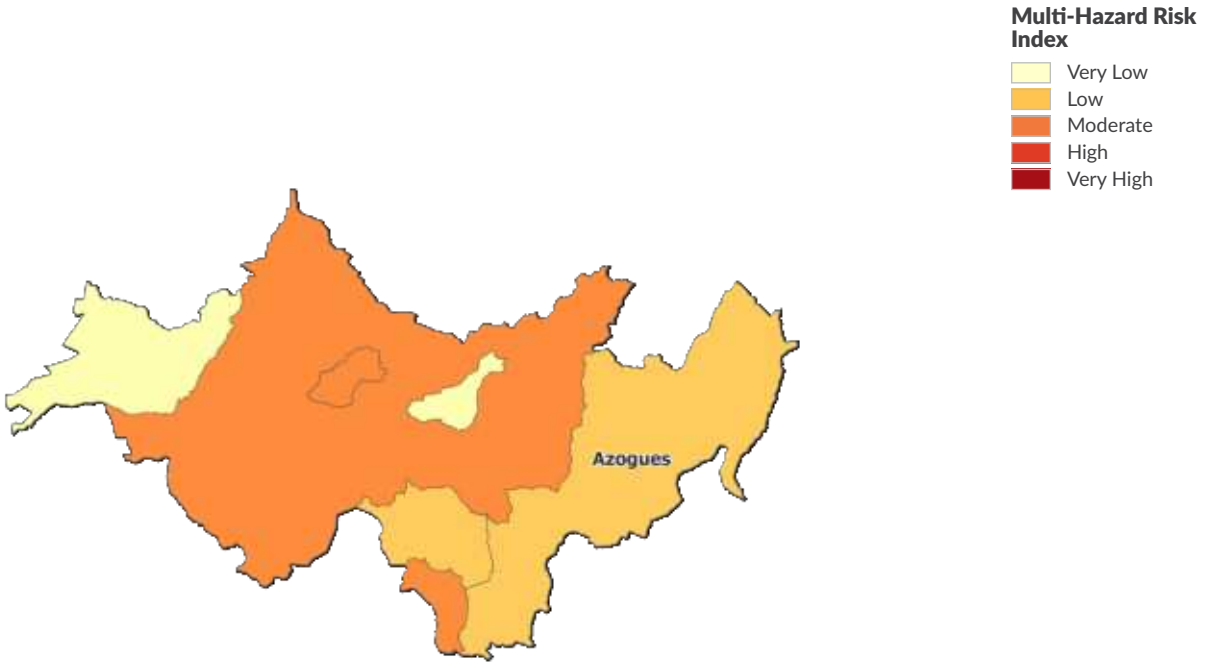
Vulnerability (V) - Very Low
SCORE: 0.396 • RANK: 189/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.586 • RANK: 47/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.581 • RANK: 39/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CAÑAR PROVINCE

AZOGUES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Suscal	0.506
Cañar	0.504
Déleg	0.479
Biblián	0.457
Azogues	**0.445**
La Troncal	0.426
El Tambo	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 64 / 221 CANTONS ASSESSED
SCORE: 0.551



MHE
0.551

Raw MHE
0.726

Relative MHE
0.375

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
84%
- **65,831** people exposed
- **56,436** structures exposed (81%)

Critical Infrastructure Exposed: 62%

Earthquake
100%
- **78,492** people exposed
- **69,342** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
3%
- **2,437** people exposed
- **1,341** structures exposed (2%)

Critical Infrastructure Exposed: 7%

Landslide
64%
- **50,206** people exposed
- **47,299** structures exposed (68%)

Critical Infrastructure Exposed: 70%

Mosquito-Borne Disease
12%
- **9,522** people exposed
- **6,522** structures exposed (9%)

Critical Infrastructure Exposed: 17%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
96%
- **75,342** people exposed
- **68,103** structures exposed (98%)

Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 189 / 221 CANTONS ASSESSED **SCORE: 0.396**

Vulnerability in Azogues is primarily driven by Disaster Impacts and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.300

- **11.2** Average Years of Schooling
- **39.4%** Population (age 24 and over) with General Basic Education Schooling
- **5.5%** Population (age 24 and over) with No Schooling
- **4.8%** Adult Illiteracy Rate
- **27.3%** Households with No Internet Access
- **55.3%** Households with No Access to Television
- **54.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.268

- **93.3%** Homes with Access to Public Water Source
- **70.3%** Homes Connected to the Public Sewage System
- **16.7%** Homes without Piped Water
- **2.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.393

- **57.6** Age Dependency Ratio
- **11.3%** Unemployment Rate
- **26.5%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.515

- **4.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.307

- **0.3** Female to Male Labor Ratio (distance from parity)
- **34.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **69.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **19.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.514

- **10.3%** Prevalence of Disability (among persons age 5 and over)
- **2.4** Perinatal Mortality Rate (per 1,000 births)
- **10.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.400

- **1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **56.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.542

70
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

10
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

37
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

68
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.237

7%
Homes with Exterior Walls in Poor Condition

1.8%
Homes with Inadequate Materials Used in Outer Walls

10.5%
Homes with Roofs in Poor Condition

59.4%
Households with No Access to Vehicle for Private Use

3.3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.422

78.1
Population Density (persons per sq km)

0.5%
Average Annual Population Change (2010-2022)

9.5
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.708

0.5
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 47 / 221 CANTONS ASSESSED **SCORE: 0.586**

Azogues exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.594

57.8%
Labor Force Participation

283,848
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.677

49.6%
Protected Area (% of land area)

-6,919.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.418

74.3%
Voter Participation

89.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.715

Communications Capacity

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.768

32%
Household Access to Fixed Phones

88.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.892

98.9%
Homes Served by the Public Electricity Network

90.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.780

28.6
Nurses and Midwives per 10,000 persons

48.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.421

24.1
Average Distance to Airport (km)

117.6
Average Distance to Sea or River Port (km)

1.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 39 / 221 CANTONS ASSESSED **SCORE: 0.581**

Azogues exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.490

4.7	0%	2.6	22.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.672

6.1	4.3	1.8	3.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 34 / 221 CANTONS ASSESSED
SCORE: 0.590

Azogues's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Governance

Transportation Capacity

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

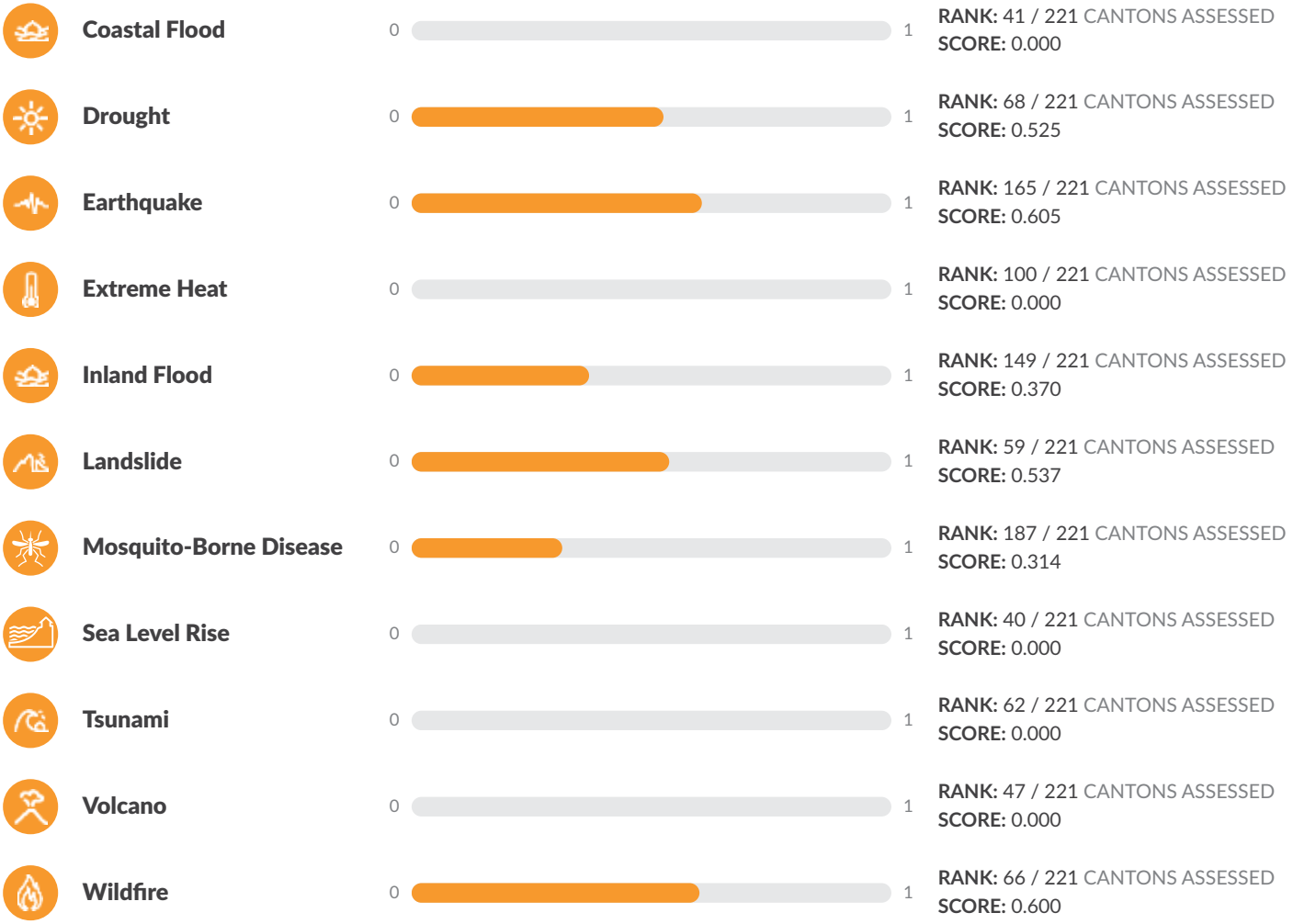
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

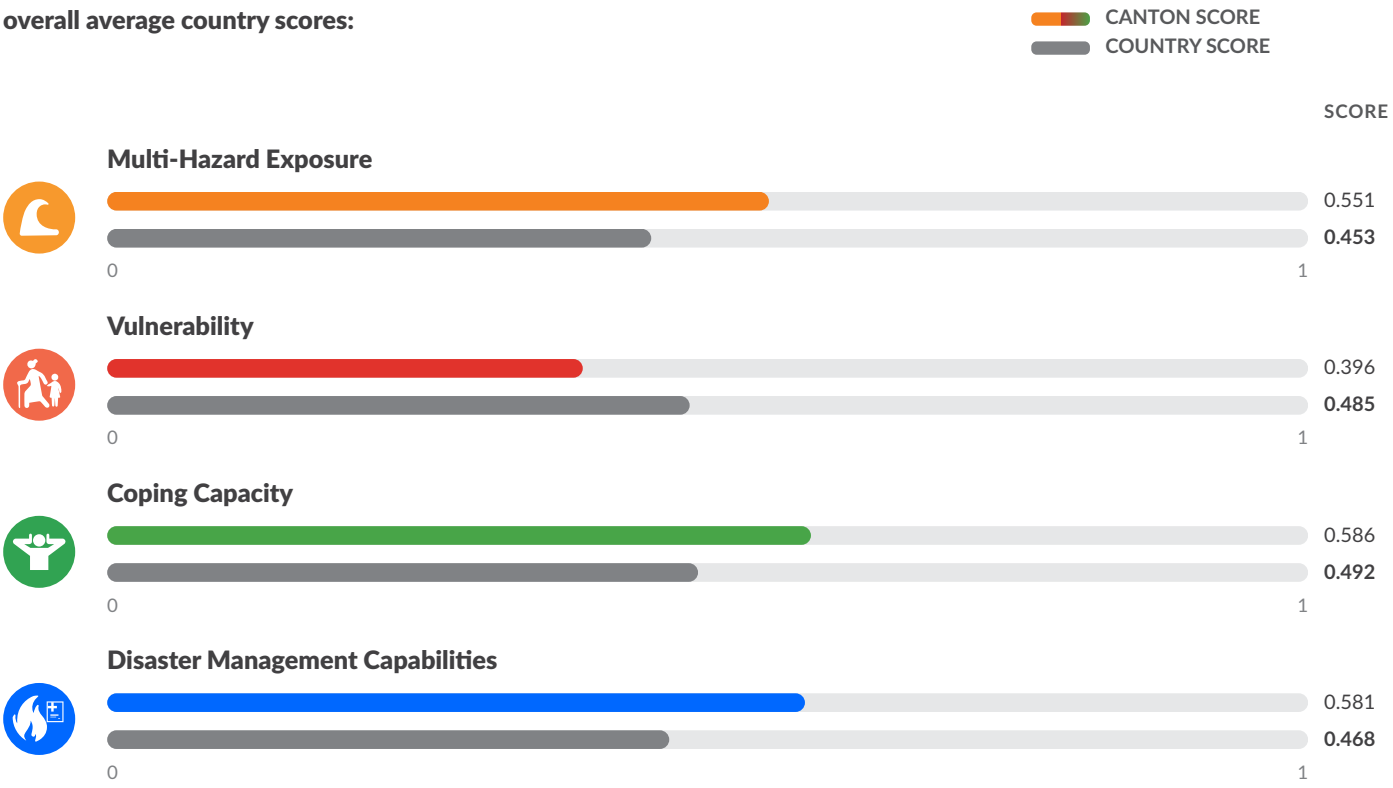


MULTI-HAZARD RISK (MHR)

RANKED
156 / 221
CANTONS ASSESSED
SCORE: 0.445

Azogues's score and ranking are due to High Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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BABA

NDPBA SUBNATIONAL PROFILE

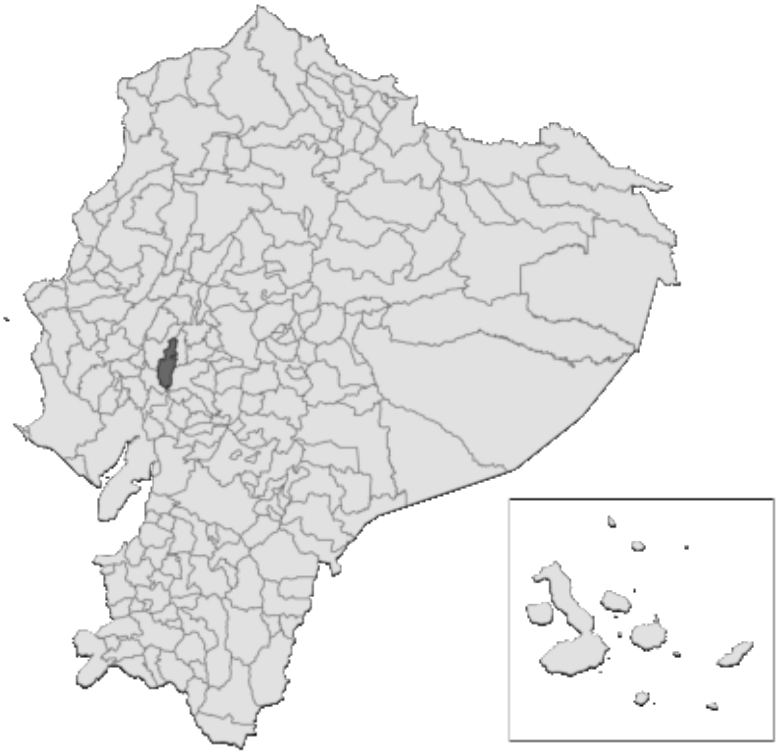
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BABA

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.577 • RANK: 30/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.599 • RANK: 18/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.446 • RANK: 152/221 CANTONS ASSESSED

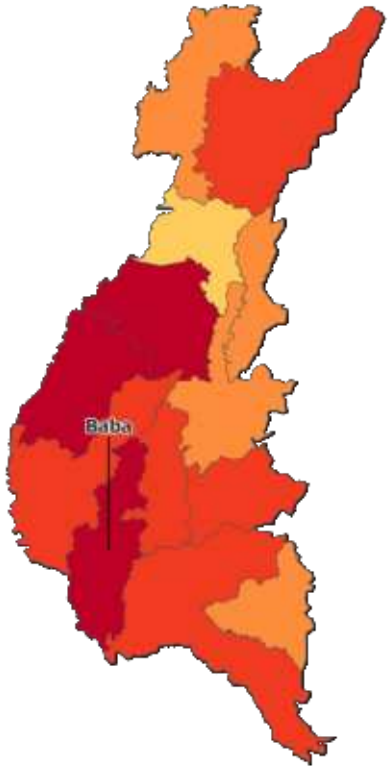
Coping Capacity (CC) - Moderate
SCORE: 0.472 • RANK: 123/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.646 • RANK: 33/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.465 • RANK: 102/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

BABA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Baba	**0.577**
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 33 / 221 CANTONS ASSESSED
SCORE: 0.646



MHE
0.646

Raw MHE
0.642

Relative MHE
0.650

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
15 people exposed
15 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
48,587 people exposed
24,993 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
48,587 people exposed
24,993 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
53%
25,973 people exposed
12,918 structures exposed (52%)
Critical Infrastructure Exposed: 26%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
48,587 people exposed
24,981 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: <1%

Tsunami
100%
48,407 people exposed
24,589 structures exposed (98%)
Critical Infrastructure Exposed: 91%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
30%
14,388 people exposed
8,370 structures exposed (33%)
Critical Infrastructure Exposed: 22%

VULNERABILITY (V)

RANK: 18 / 221 CANTONS ASSESSED **SCORE: 0.599**

Vulnerability in Baba is primarily driven by Marginalization and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.745

- **8.1** Average Years of Schooling
- **58.5%** Population (age 24 and over) with General Basic Education Schooling
- **9.4%** Population (age 24 and over) with No Schooling
- **8.3%** Adult Illiteracy Rate
- **68.5%** Households with No Internet Access
- **92.2%** Households with No Access to Television
- **92.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.742

- **56.9%** Homes with Access to Public Water Source
- **10.1%** Homes Connected to the Public Sewage System
- **64.5%** Homes without Piped Water
- **6.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.568

- **57.9** Age Dependency Ratio
- **16.1%** Unemployment Rate
- **77.7%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.771

- **11.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.779

- **0.7** Female to Male Labor Ratio (distance from parity)
- **74.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **10.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **82.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **71.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.511

- **10.1%** Prevalence of Disability (among persons age 5 and over)
- **2.9** Perinatal Mortality Rate (per 1,000 births)
- **8.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.435

- **27.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **29.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.569

34
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

24
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

71
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.700

21.9%
Homes with Exterior Walls in Poor Condition

22.4%
Homes with Inadequate Materials Used in Outer Walls

24.1%
Homes with Roofs in Poor Condition

95.5%
Households with No Access to Vehicle for Private Use

9.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.465

87.9
Population Density (persons per sq km)

1.1%
Average Annual Population Change (2010-2022)

4.2
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.256

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 123 / 221 CANTONS ASSESSED **SCORE: 0.472**

Baba exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.442

49.5%
Labor Force Participation

187,584
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.687

27%
Protected Area (% of land area)

-1,955.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.489

91%
Voter Participation

44.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.413

Communications Capacity

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.224

2%
Household Access to Fixed Phones

74.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.425

95.4%
Homes Served by the Public Electricity Network

57.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.322

9.7
Nurses and Midwives per 10,000 persons

9.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.681

9.1
Average Distance to Airport (km)

19.3
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 102 / 221 CANTONS ASSESSED **SCORE: 0.465**

Baba exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.367

3.4	1.4%	0.5	51.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.563

7.6	4.3	2.8	7.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 152 / 221 CANTONS ASSESSED
SCORE: 0.446

Baba's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Marginalization

Communications Capacity

Information Access Vulnerability

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

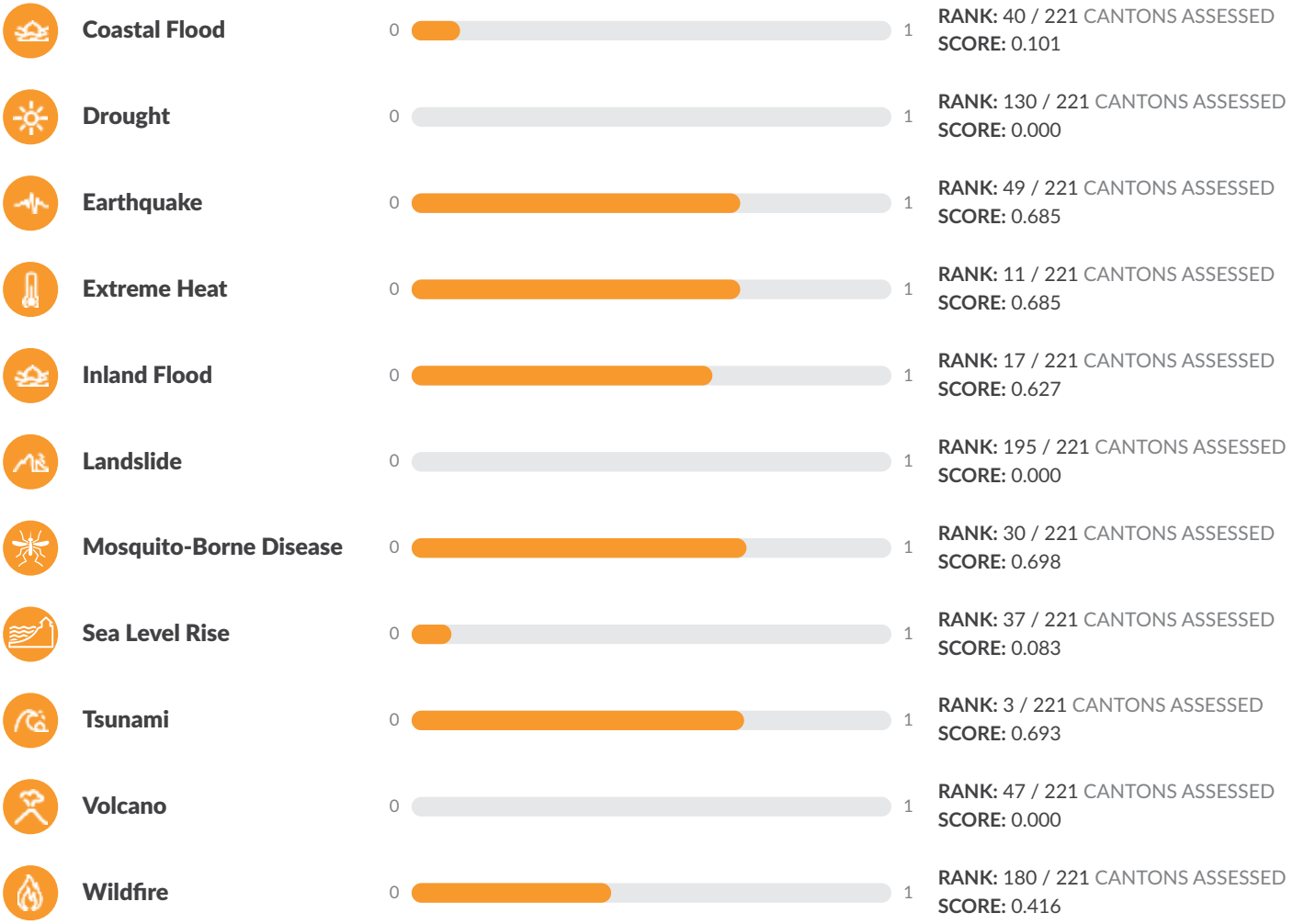
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

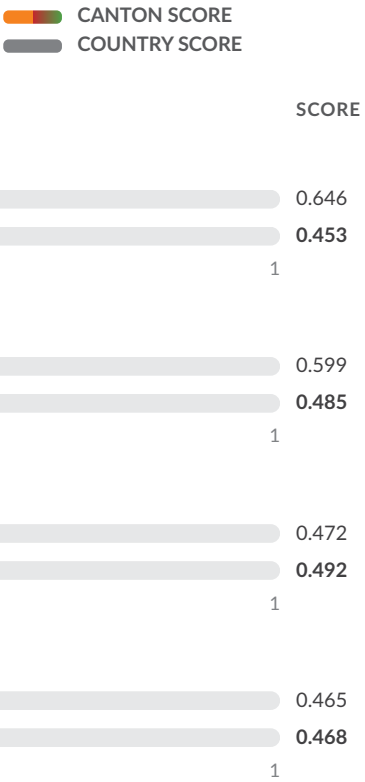


MULTI-HAZARD RISK (MHR)

RANKED
30 / 221
CANTONS ASSESSED
SCORE: 0.577

Baba's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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BABAHOYO

NDPBA SUBNATIONAL PROFILE

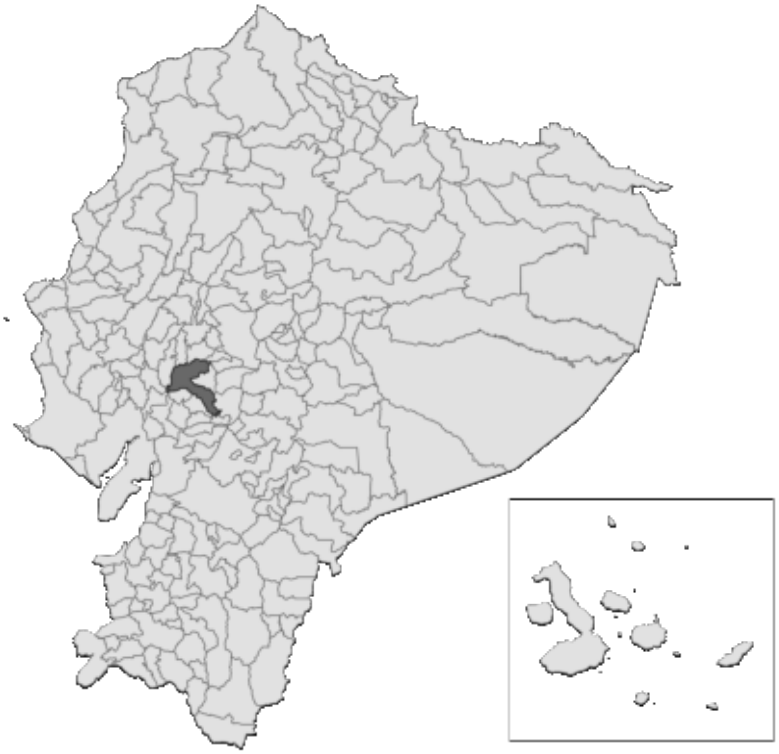
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BABAHOYO

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.525 • RANK: 79/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.495 • RANK: 103/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.538 • RANK: 69/221 CANTONS ASSESSED

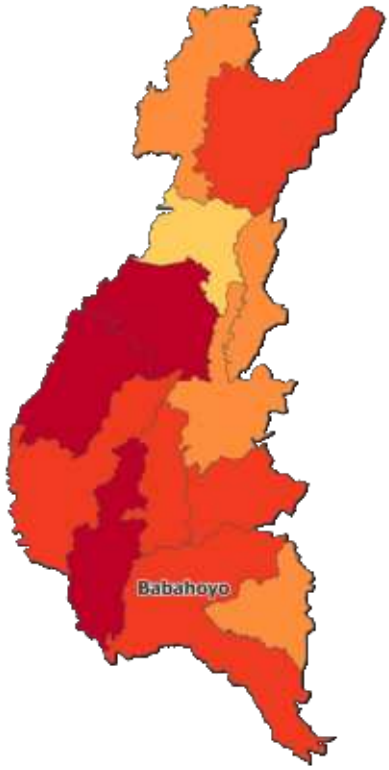
Coping Capacity (CC) - High
SCORE: 0.581 • RANK: 50/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.716 • RANK: 19/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.528 • RANK: 70/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

BABAHOYO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530

Babahoyo	**0.525**
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 19 / 221 CANTONS ASSESSED
SCORE: 0.716



MHE
0.716

Raw MHE
0.799

Relative MHE
0.634

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **20** people exposed
- **19** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **187,207** people exposed
- **43,044** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
93%
- **174,878** people exposed
- **38,281** structures exposed (89%)

Critical Infrastructure Exposed: 93%

Inland Flood
50%
- **93,146** people exposed
- **24,844** structures exposed (58%)

Critical Infrastructure Exposed: 45%

Landslide
<1%
- **165** people exposed
- **53** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
100%
- **187,207** people exposed
- **43,044** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **2** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
89%
- **167,340** people exposed
- **34,890** structures exposed (81%)

Critical Infrastructure Exposed: 86%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
4%
- **8,053** people exposed
- **3,519** structures exposed (8%)

Critical Infrastructure Exposed: 7%

VULNERABILITY (V)

RANK: 103 / 221 CANTONS ASSESSED **SCORE: 0.495**

Vulnerability in Babahoyo is primarily driven by Housing and Transportation Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.421

- **11.2** Average Years of Schooling
- **38.2%** Population (age 24 and over) with General Basic Education Schooling
- **4.6%** Population (age 24 and over) with No Schooling
- **3.7%** Adult Illiteracy Rate
- **52.7%** Households with No Internet Access
- **78.5%** Households with No Access to Television
- **76.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.525

- **72.6%** Homes with Access to Public Water Source
- **37.6%** Homes Connected to the Public Sewage System
- **34.4%** Homes without Piped Water
- **4.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.453

- **54** Age Dependency Ratio
- **15.8%** Unemployment Rate
- **54.1%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.825

- **13.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.536

- **0.5** Female to Male Labor Ratio (distance from parity)
- **49.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **65.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **57.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.521

- **8.4%** Prevalence of Disability (among persons age 5 and over)
- **3.9** Perinatal Mortality Rate (per 1,000 births)
- **9.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.552

- **53.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **35.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.500

31
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

49
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.563

15.7%
Homes with Exterior Walls in Poor Condition

11.7%
Homes with Inadequate Materials Used in Outer Walls

18.3%
Homes with Roofs in Poor Condition

88.8%
Households with No Access to Vehicle for Private Use

9.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.484

166.7
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

7.3
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.402

0.4
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 50 / 221 CANTONS ASSESSED **SCORE: 0.581**

Babahoyo exhibits weaker Coping Capacity in the areas of Communications Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.620

55.5%
Labor Force Participation

672,177
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.395

2%
Protected Area (% of land area)

-5,189.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.585

87.6%
Voter Participation

82.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.601

Communications Capacity

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.502

9%
Household Access to Fixed Phones

82%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.602

97%
Homes Served by the Public Electricity Network

75.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.603

19.9
Nurses and Midwives per 10,000 persons

25.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.697

11.2
Average Distance to Airport (km)

12.5
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 70 / 221 CANTONS ASSESSED **SCORE: 0.528**

Babahoyo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.516

2.9	2.3%	2.2	53
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.540

10	4.6	2.7	7.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 69 / 221 CANTONS ASSESSED
SCORE: 0.538

Babahoyo's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Housing and Transportation Vulnerability

Marginalization

Clean Water Access Vulnerability

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

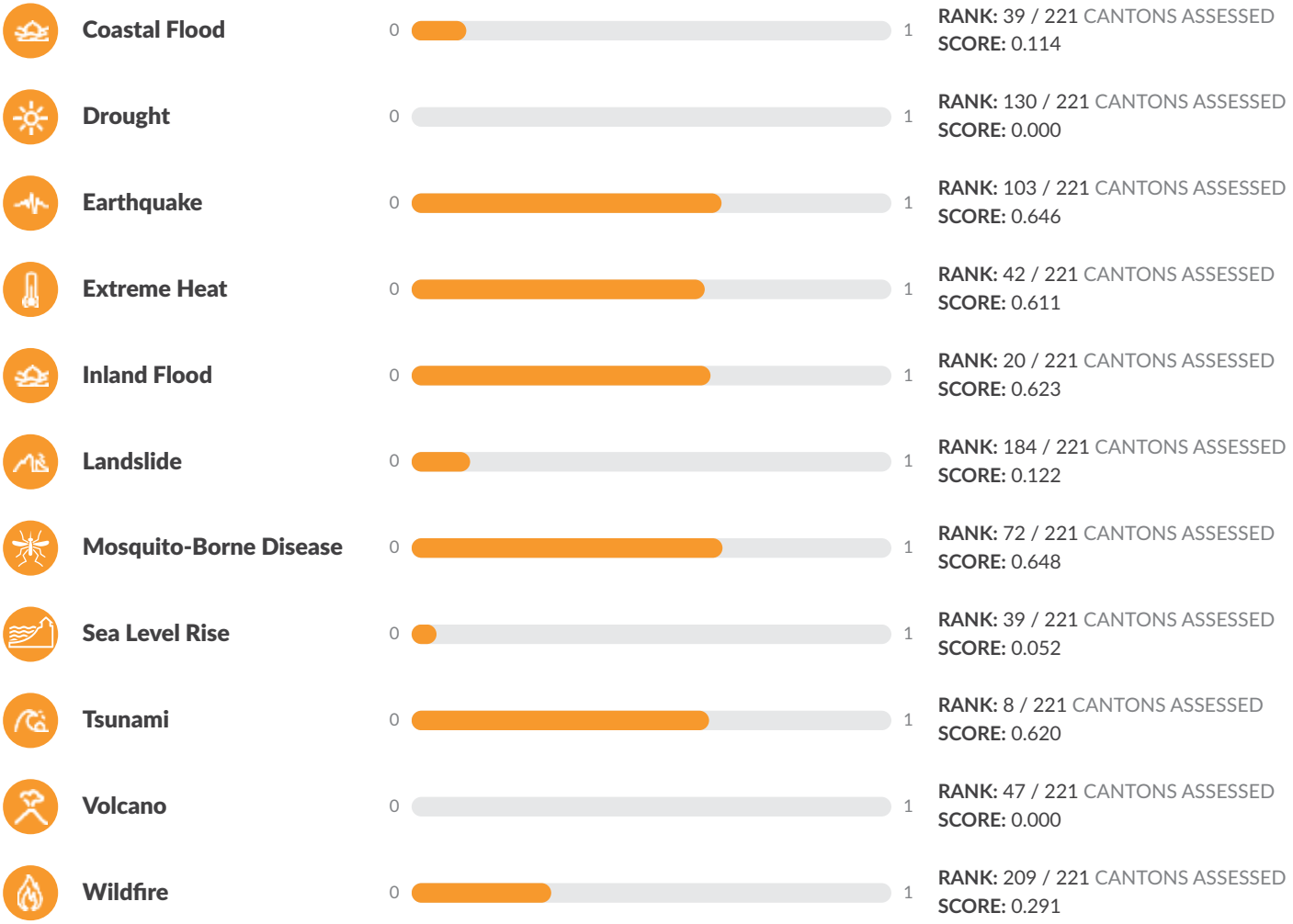
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

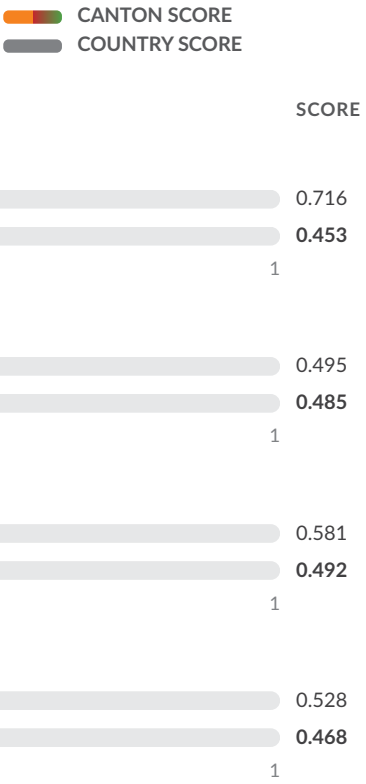


MULTI-HAZARD RISK (MHR)

RANKED
79 / 221
CANTONS ASSESSED
SCORE: 0.525

Babahoyo's score and ranking are due to Very High Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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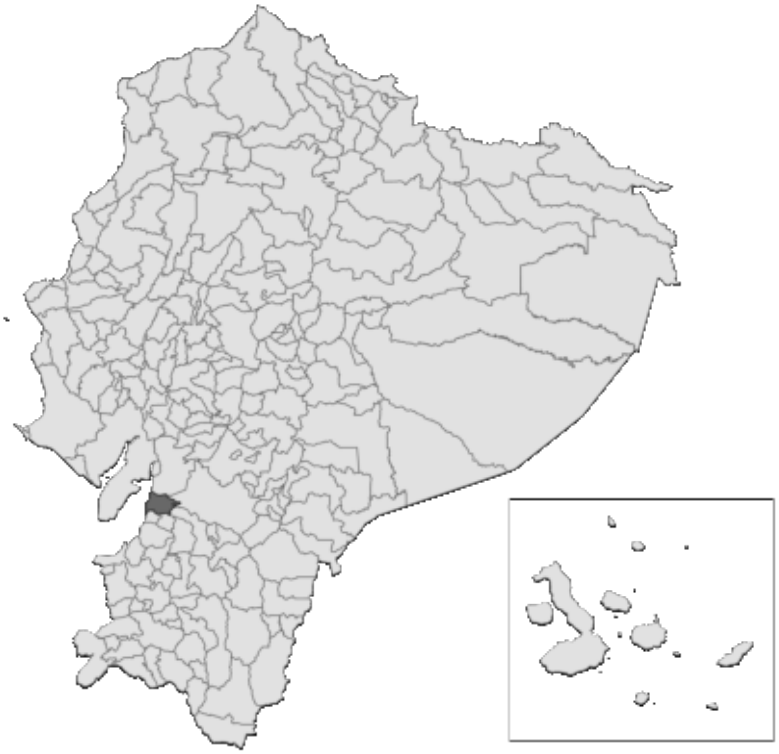
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PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.539 • RANK: 62/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.490 • RANK: 106/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.479 • RANK: 115/221 CANTONS ASSESSED

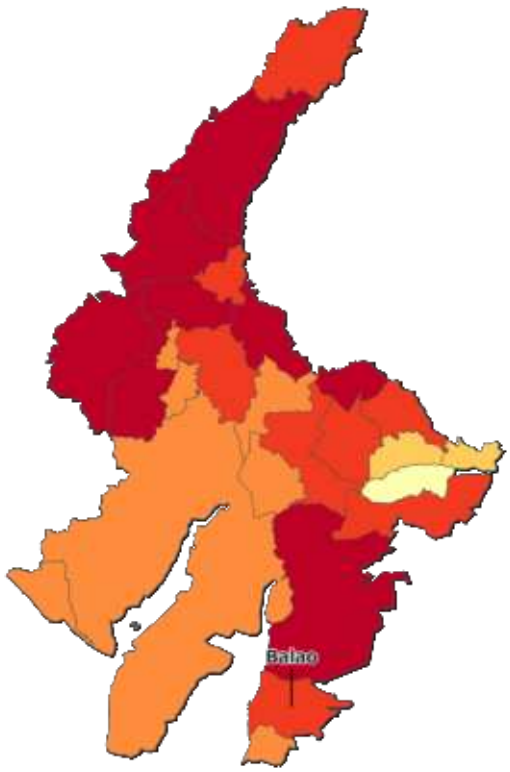
Coping Capacity (CC) - Moderate
SCORE: 0.511 • RANK: 92/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.591 • RANK: 48/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.416 • RANK: 151/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

BALAO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	**0.539**
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 48 / 221 CANTONS ASSESSED
SCORE: 0.591



MHE
0.591

Raw MHE
0.509

Relative MHE
0.674

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
9%
- **2,167** people exposed
- **749** structures exposed (7%)
- **Critical Infrastructure Exposed:** 17%

Drought
100%
- **24,835** people exposed
- **10,846** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **24,835** people exposed
- **10,846** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
82%
- **20,377** people exposed
- **8,965** structures exposed (83%)
- **Critical Infrastructure Exposed:** 88%

Inland Flood
50%
- **12,492** people exposed
- **5,752** structures exposed (53%)
- **Critical Infrastructure Exposed:** 51%

Landslide
<1%
- **10** people exposed
- **27** structures exposed (<1%)
- **Critical Infrastructure Exposed:** <1%

Mosquito-Borne Disease
98%
- **24,263** people exposed
- **10,691** structures exposed (99%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
4%
- **870** people exposed
- **316** structures exposed (3%)
- **Critical Infrastructure Exposed:** 7%

Tsunami
44%
- **10,805** people exposed
- **4,208** structures exposed (39%)
- **Critical Infrastructure Exposed:** 43%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
11%
- **2,631** people exposed
- **1,876** structures exposed (17%)
- **Critical Infrastructure Exposed:** 20%

VULNERABILITY (V)

RANK: 106 / 221 CANTONS ASSESSED **SCORE: 0.490**

Vulnerability in Balao is primarily driven by Marginalization and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.542

- **8.9** Average Years of Schooling
- **57.9%** Population (age 24 and over) with General Basic Education Schooling
- **4.7%** Population (age 24 and over) with No Schooling
- **4%** Adult Illiteracy Rate
- **48.5%** Households with No Internet Access
- **73.1%** Households with No Access to Television
- **87.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.441

- **83.1%** Homes with Access to Public Water Source
- **58.1%** Homes Connected to the Public Sewage System
- **17.4%** Homes without Piped Water
- **7.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.378

- **58.7** Age Dependency Ratio
- **7.6%** Unemployment Rate
- **46.7%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.837

- **14.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.584

- **0.6** Female to Male Labor Ratio (distance from parity)
- **62.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **38.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **50.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.494

- **7.1%** Prevalence of Disability (among persons age 5 and over)
- **5.9** Perinatal Mortality Rate (per 1,000 births)
- **8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.458

- **11.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.531

75	14	25	72
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.561

11.7%	3.9%	16.6%	93%	15.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.541

58.5	2%	13.2	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.321

0.1	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 92 / 221 CANTONS ASSESSED **SCORE: 0.511**

Balao exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.480

56.5%
Labor Force Participation

76,751
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.327

0%
Protected Area (% of land area)

-1,789.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.666

85.6%
Voter Participation

95%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.450

Communications Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.400

3%
Household Access to Fixed Phones

86.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.577

97.6%
Homes Served by the Public Electricity Network

69.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.144

3.5
Nurses and Midwives per 10,000 persons

6.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.678

4
Average Distance to Airport (km)

28.4
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 151 / 221 CANTONS ASSESSED **SCORE: 0.416**

Balao exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.446

3.4	24.8%	0	47.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.386

28.4	10.6	2.5	11
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 115 / 221 CANTONS ASSESSED
SCORE: 0.479

Balao's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Emergency Services



Communications Capacity



Marginalization

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Communications Capacity

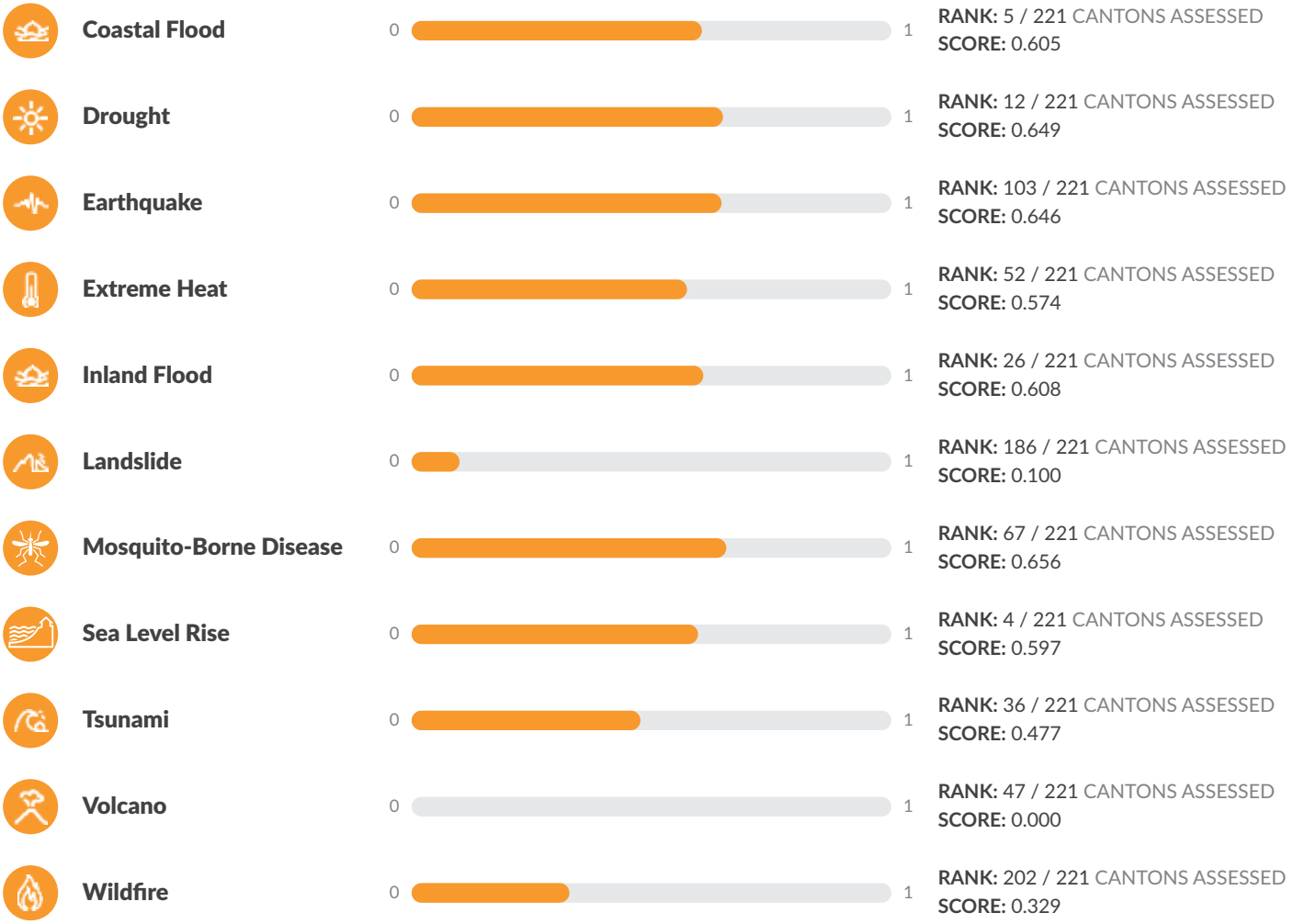
The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
62 / 221
CANTONS ASSESSED
SCORE: 0.539

Balao's score and ranking are due to High Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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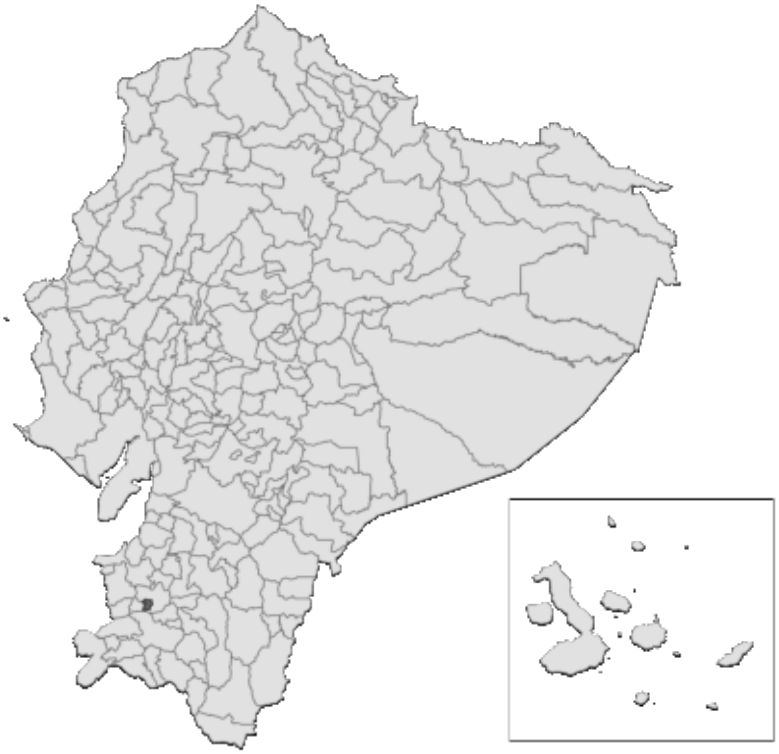
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BALSAS

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.420 • RANK: 188/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.365 • RANK: 202/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.573 • RANK: 46/221 CANTONS ASSESSED

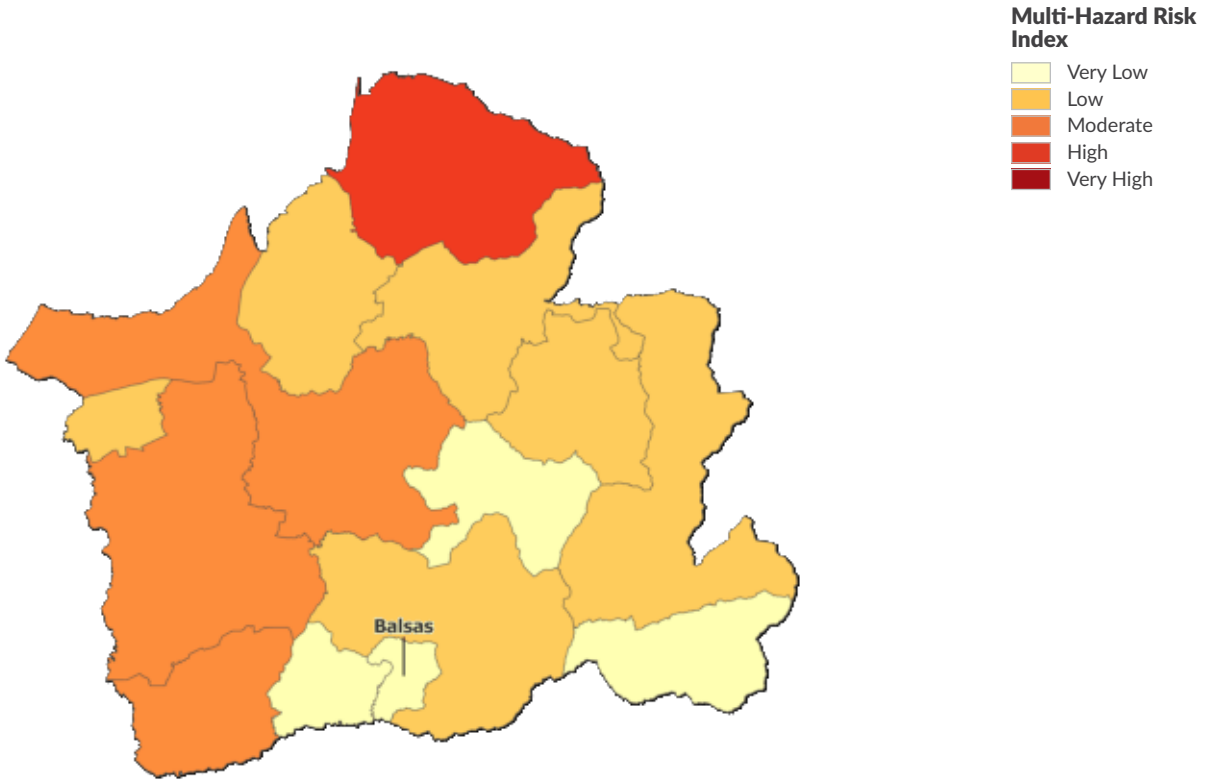
Coping Capacity (CC) - High
SCORE: 0.533 • RANK: 78/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.399 • RANK: 130/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.552 • RANK: 60/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

BALSAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	0.435
Portovelo	0.424
Balsas	**0.420**
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 130 / 221 CANTONS ASSESSED
SCORE: 0.399



MHE
0.399

Raw MHE
0.324

Relative MHE
0.473

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
81%
6,479 people exposed
4,699 structures exposed (79%)
Critical Infrastructure Exposed: 70%

Earthquake
100%
7,960 people exposed
5,957 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
2%
167 people exposed
164 structures exposed (3%)
Critical Infrastructure Exposed: 14%

Landslide
57%
4,563 people exposed
3,516 structures exposed (59%)
Critical Infrastructure Exposed: 24%

Mosquito-Borne Disease
97%
7,752 people exposed
5,873 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
7,942 people exposed
5,912 structures exposed (99%)
Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 202 / 221 CANTONS ASSESSED **SCORE: 0.365**

Vulnerability in Balsas is primarily driven by Population Pressures and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.336

- **10.6** Average Years of Schooling
- **45.4%** Population (age 24 and over) with General Basic Education Schooling
- **2.3%** Population (age 24 and over) with No Schooling
- **2%** Adult Illiteracy Rate
- **34.2%** Households with No Internet Access
- **72.7%** Households with No Access to Television
- **71.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.280

- **80.5%** Homes with Access to Public Water Source
- **54%** Homes Connected to the Public Sewage System
- **4.8%** Homes without Piped Water
- **1.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.382

- **52.4** Age Dependency Ratio
- **12.4%** Unemployment Rate
- **51.5%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.501

- **4.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.394

- **0.5** Female to Male Labor Ratio (distance from parity)
- **18.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **52.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **55.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.327

- **7.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.376

- **24.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **18.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.340

51	13	27	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.331

9.3%	0.6%	12.9%	77%	5.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.469

114.5	1.1%	15.4	0.26
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.380

0.2	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 78 / 221 CANTONS ASSESSED **SCORE: 0.533**

Balsas exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.461

60.1%
Labor Force Participation

26,402
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.343

0%
Protected Area (% of land area)

-722.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.594

84.3%
Voter Participation

91.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.609

Communications Capacity

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.772

11.2%
Household Access to Fixed Phones

94.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.885

99.5%
Homes Served by the Public Electricity Network

87.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.277

8.9
Nurses and Midwives per 10,000 persons

7.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.501

40.4
Average Distance to Airport (km)

43.5
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 60 / 221 CANTONS ASSESSED **SCORE: 0.552**

Balsas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.442

1.4	8.8%	0	57.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.662

19.2	2.3	2.6	2.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 46 / 221 CANTONS ASSESSED
SCORE: 0.573

Balsas's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Economic Capacity

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

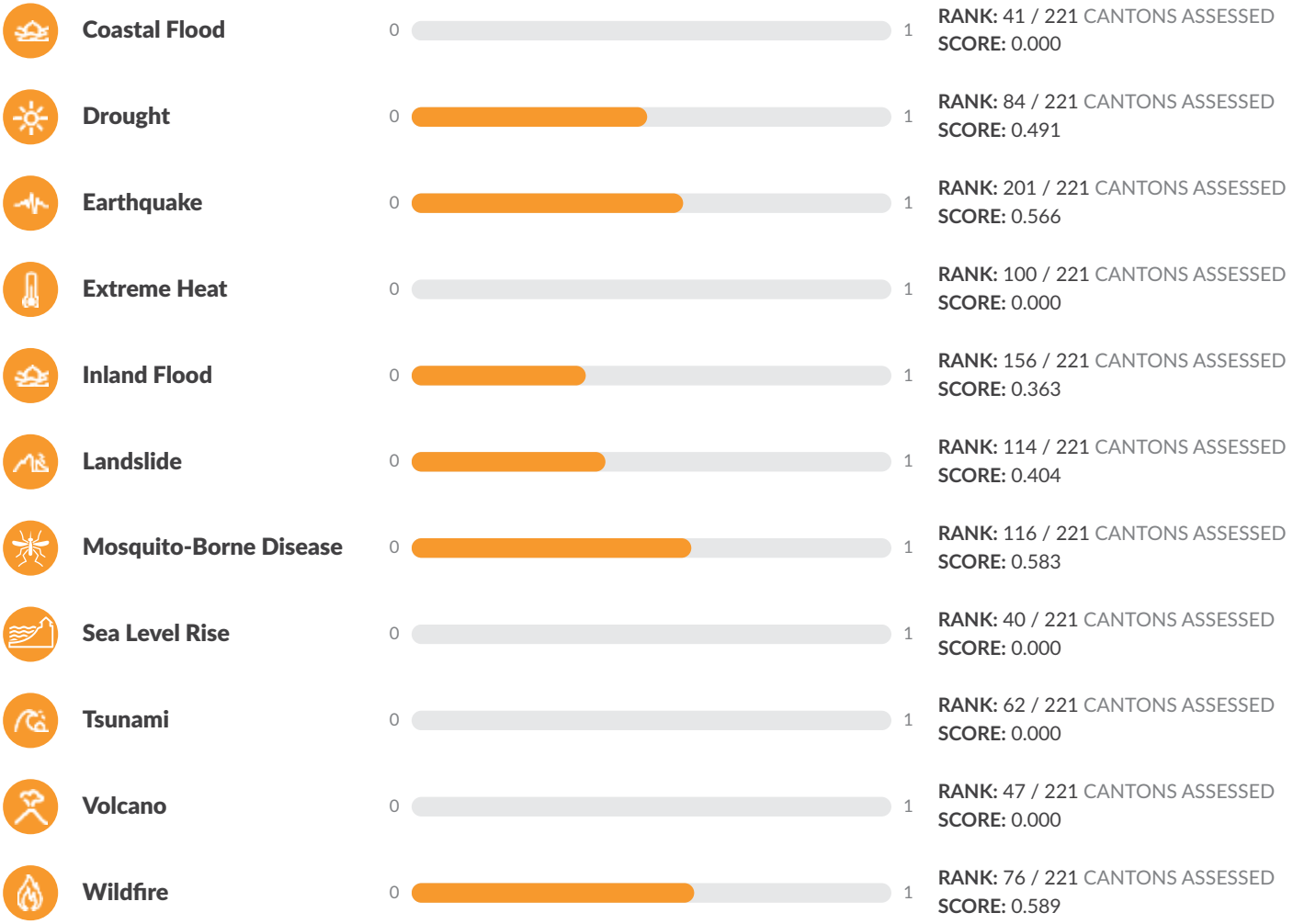
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

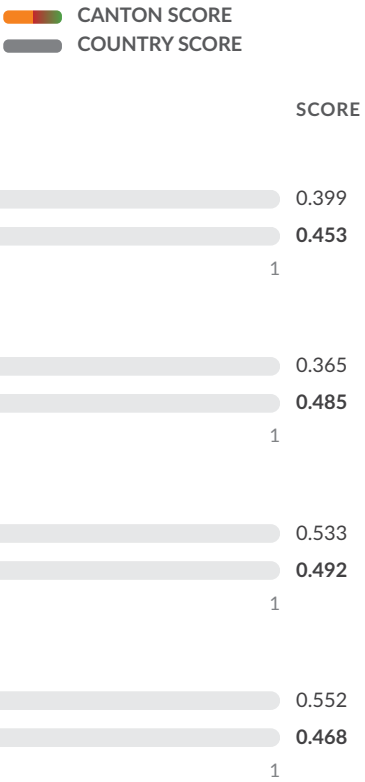


MULTI-HAZARD RISK (MHR)

RANKED
188 / 221
CANTONS ASSESSED
SCORE: 0.420

Balsas's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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BALZAR

NDPBA SUBNATIONAL PROFILE

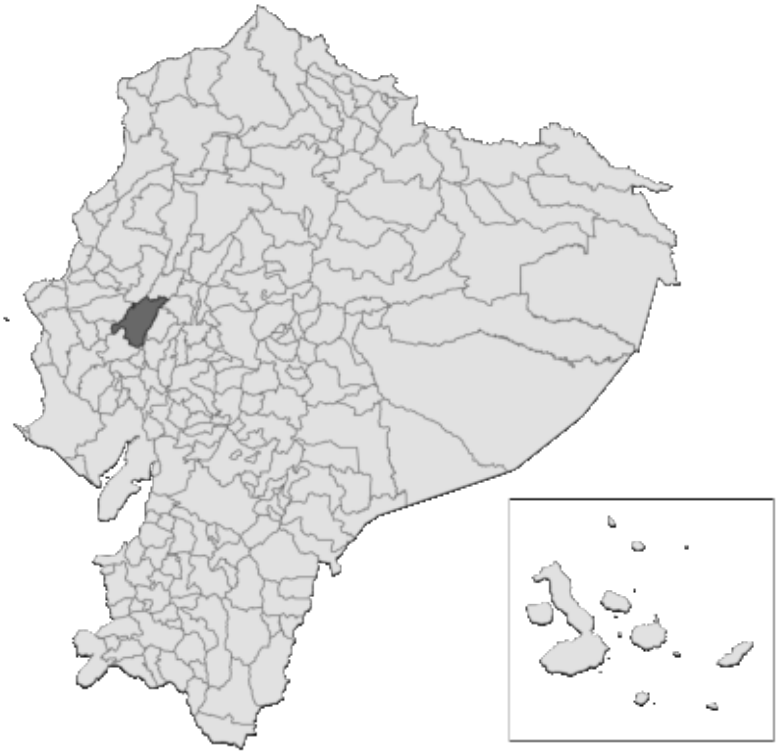
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ECUADOR

BALZAR

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.576 • RANK: 33/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.579 • RANK: 30/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.402 • RANK: 184/221 CANTONS ASSESSED

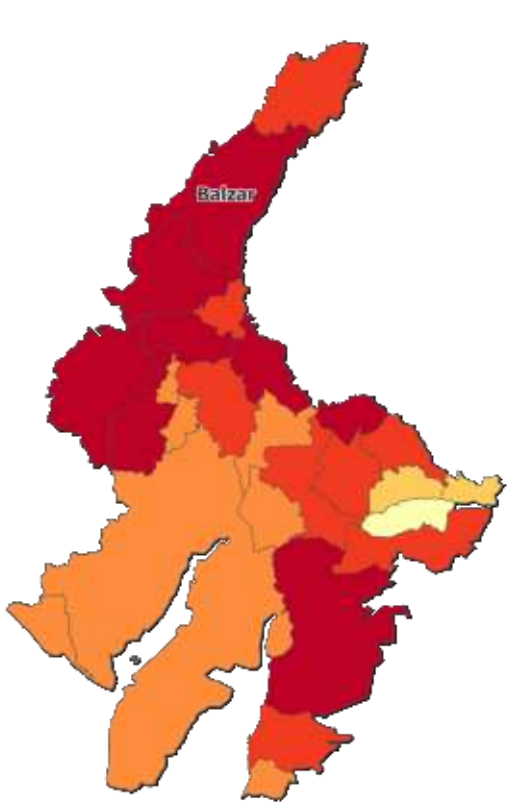
Coping Capacity (CC) - Low
SCORE: 0.410 • RANK: 168/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.511 • RANK: 77/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.374 • RANK: 177/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

BALZAR • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	**0.576**
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 77 / 221 CANTONS ASSESSED
SCORE: 0.511



MHE
0.511

Raw MHE
0.614

Relative MHE
0.407

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
5%
- **3,087** people exposed
- **846** structures exposed (4%)

Critical Infrastructure Exposed: 3%

Earthquake
100%
- **64,115** people exposed
- **23,535** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **64,115** people exposed
- **23,535** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
14%
- **9,160** people exposed
- **3,077** structures exposed (13%)

Critical Infrastructure Exposed: 16%

Landslide
<1%
- **234** people exposed
- **59** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
100%
- **63,800** people exposed
- **23,450** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
4%
- **2,335** people exposed
- **903** structures exposed (4%)

Critical Infrastructure Exposed: 3%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
52%
- **33,331** people exposed
- **11,423** structures exposed (49%)

Critical Infrastructure Exposed: 46%

VULNERABILITY (V)

RANK: 30 / 221 CANTONS ASSESSED **SCORE: 0.579**

Vulnerability in Balzar is primarily driven by Housing and Transportation Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.651

- **8.5** Average Years of Schooling
- **50.8%** Population (age 24 and over) with General Basic Education Schooling
- **10.8%** Population (age 24 and over) with No Schooling
- **9.3%** Adult Illiteracy Rate
- **69.3%** Households with No Internet Access
- **78.7%** Households with No Access to Television
- **89.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.693

- **54.2%** Homes with Access to Public Water Source
- **32.6%** Homes Connected to the Public Sewage System
- **66.3%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.627

- **61** Age Dependency Ratio
- **24.5%** Unemployment Rate
- **79.3%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.774

- **11.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.676

- **0.6** Female to Male Labor Ratio (distance from parity)
- **74.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **40%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **83.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.478

- **10.9%** Prevalence of Disability (among persons age 5 and over)
- **2** Perinatal Mortality Rate (per 1,000 births)
- **6.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.454

- **15.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.566

23
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

13
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

188
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.745

25%
Homes with Exterior Walls in Poor Condition

24.4%
Homes with Inadequate Materials Used in Outer Walls

25.5%
Homes with Roofs in Poor Condition

92.3%
Households with No Access to Vehicle for Private Use

14.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.445

49.2
Population Density (persons per sq km)

0.6%
Average Annual Population Change (2010-2022)

5.5
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.282

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 168 / 221 CANTONS ASSESSED **SCORE: 0.410**

Balzar exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.436

51.2%
Labor Force Participation

124,693
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.175

0%
Protected Area (% of land area)

-12,302.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.447

86%
Voter Participation

63.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.424

Communications Capacity

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.408

5.7%
Household Access to Fixed Phones

79.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.411

94.9%
Homes Served by the Public Electricity Network

56.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.332

8.3
Nurses and Midwives per 10,000 persons

11.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.546

12.6
Average Distance to Airport (km)

49.2
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 177 / 221 CANTONS ASSESSED **SCORE: 0.374**

Balzar exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.324

5.2	2.1%	0.7	82.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.424

8.8	9.2	6	8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 184 / 221 CANTONS ASSESSED
SCORE: 0.402

Balzar's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Housing and Transportation Vulnerability

Clean Water Access Vulnerability

Marginalization

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

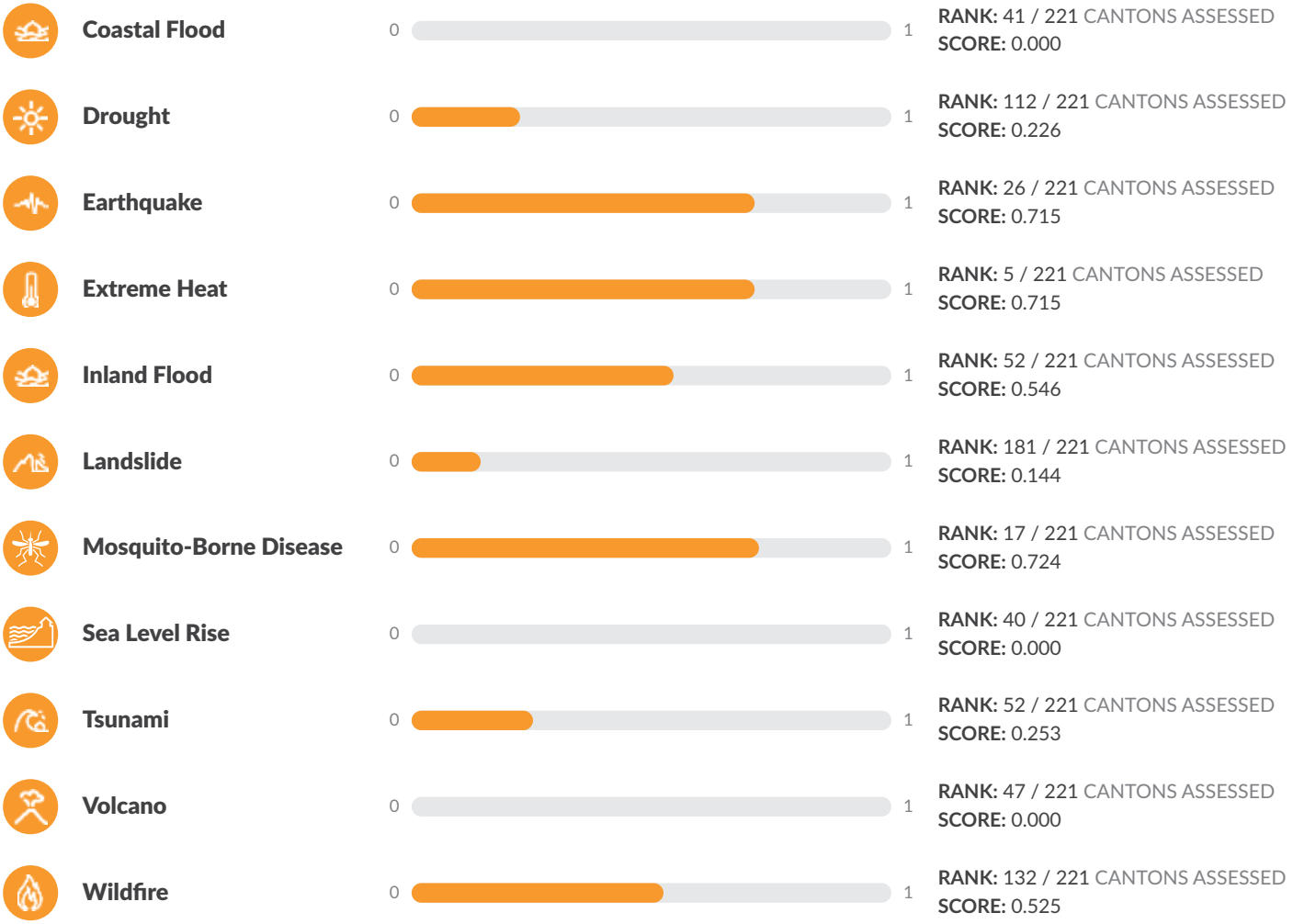
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

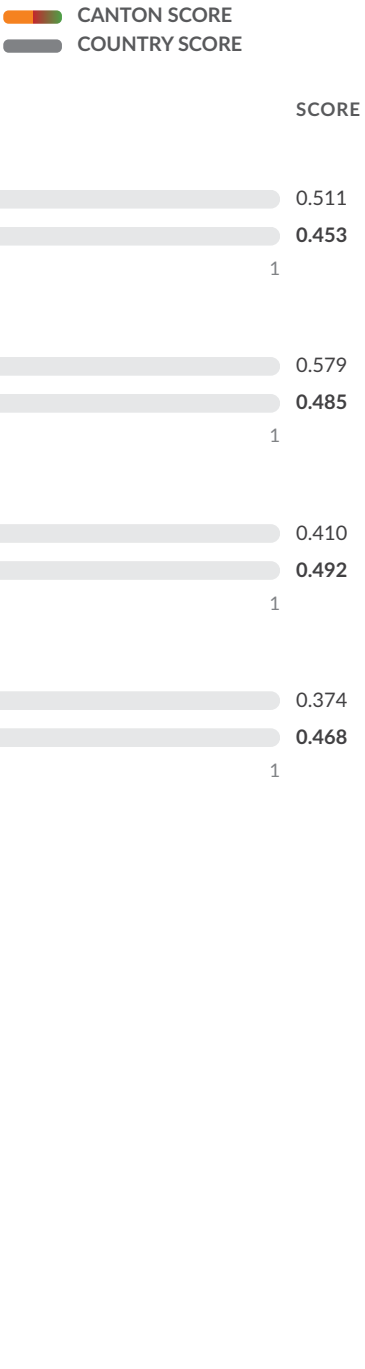


MULTI-HAZARD RISK (MHR)

RANKED
33 / 221
CANTONS ASSESSED
SCORE: 0.576

Balzar's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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BAÑOS DE AGUA SANTA

PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.364 • RANK: 214/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.670 • RANK: 7/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.468 • RANK: 97/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.342 • RANK: 213/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.683 • RANK: 11/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.670 • RANK: 10/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

BAÑOS DE AGUA SANTA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454
San Pedro De Pelileo	0.436
Patate	0.431
Santiago De Píllaro	0.410
Ambato	0.409
Mocha	0.379
Baños De Agua Santa	**0.364**
Tisaleo	0.361
Cevallos	0.340

MULTI-HAZARD EXPOSURE (MHE)

RANK: 97 / 221 CANTONS ASSESSED
SCORE: 0.468



MHE
0.468

Raw MHE
0.482

Relative MHE
0.454

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
23,205 people exposed
14,172 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
24 people exposed
86 structures exposed (<1%)
Critical Infrastructure Exposed: 1%

Landslide
100%
23,195 people exposed
14,156 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Mosquito-Borne Disease
19%
4,462 people exposed
3,312 structures exposed (23%)
Critical Infrastructure Exposed: 22%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
88%
20,505 people exposed
11,938 structures exposed (84%)
Critical Infrastructure Exposed: 71%

Wildfire
85%
19,624 people exposed
11,203 structures exposed (79%)
Critical Infrastructure Exposed: 71%

VULNERABILITY (V)

RANK: 213 / 221 CANTONS ASSESSED **SCORE: 0.342**

Vulnerability in Baños De Agua Santa is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.207

- **11.9** Average Years of Schooling
- **34.9%** Population (age 24 and over) with General Basic Education Schooling
- **2.2%** Population (age 24 and over) with No Schooling
- **1.8%** Adult Illiteracy Rate
- **31.1%** Households with No Internet Access
- **56.7%** Households with No Access to Television
- **52.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.217

- **93%** Homes with Access to Public Water Source
- **87.8%** Homes Connected to the Public Sewage System
- **10.6%** Homes without Piped Water
- **3.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.256

- **46.8** Age Dependency Ratio
- **6.9%** Unemployment Rate
- **22.4%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.125

- **0.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.262

- **0.2** Female to Male Labor Ratio (distance from parity)
- **38** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **47.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **26.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.347

- **7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.466

- **2.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **45.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.515

40
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

21
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

34
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

43
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.166

3.9%
Homes with Exterior Walls in Poor Condition

0.3%
Homes with Inadequate Materials Used in Outer Walls

5.4%
Homes with Roofs in Poor Condition

67%
Households with No Access to Vehicle for Private Use

3.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.485

20.5
Population Density (persons per sq km)

0.9%
Average Annual Population Change (2010-2022)

43.9
Net Migration Rate (per 1,000 persons)

0.24
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.834

0.6
Hazard Susceptibility (recent events 2015-2025)

0.4
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 11 / 221 CANTONS ASSESSED **SCORE: 0.683**

Baños De Agua Santa exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.731

67.3%
Labor Force Participation

167,107
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.702

59.4%
Protected Area (% of land area)

-6,518
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.633

83.6%
Voter Participation

95.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.678

Communications Capacity

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.799

24.2%
Household Access to Fixed Phones

91.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.881

99.5%
Homes Served by the Public Electricity Network

87.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.656

23.7
Nurses and Midwives per 10,000 persons

28.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.374

26.4
Average Distance to Airport (km)

91.2
Average Distance to Sea or River Port (km)

0.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 10 / 221 CANTONS ASSESSED **SCORE: 0.670**

Baños De Agua Santa exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.617

1.4	11.4%	1.3	41.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.722

4.5	3.6	2.4	2.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 7 / 221 CANTONS ASSESSED
SCORE: 0.670

Baños De Agua Santa's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Transportation Capacity

Population Pressures

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

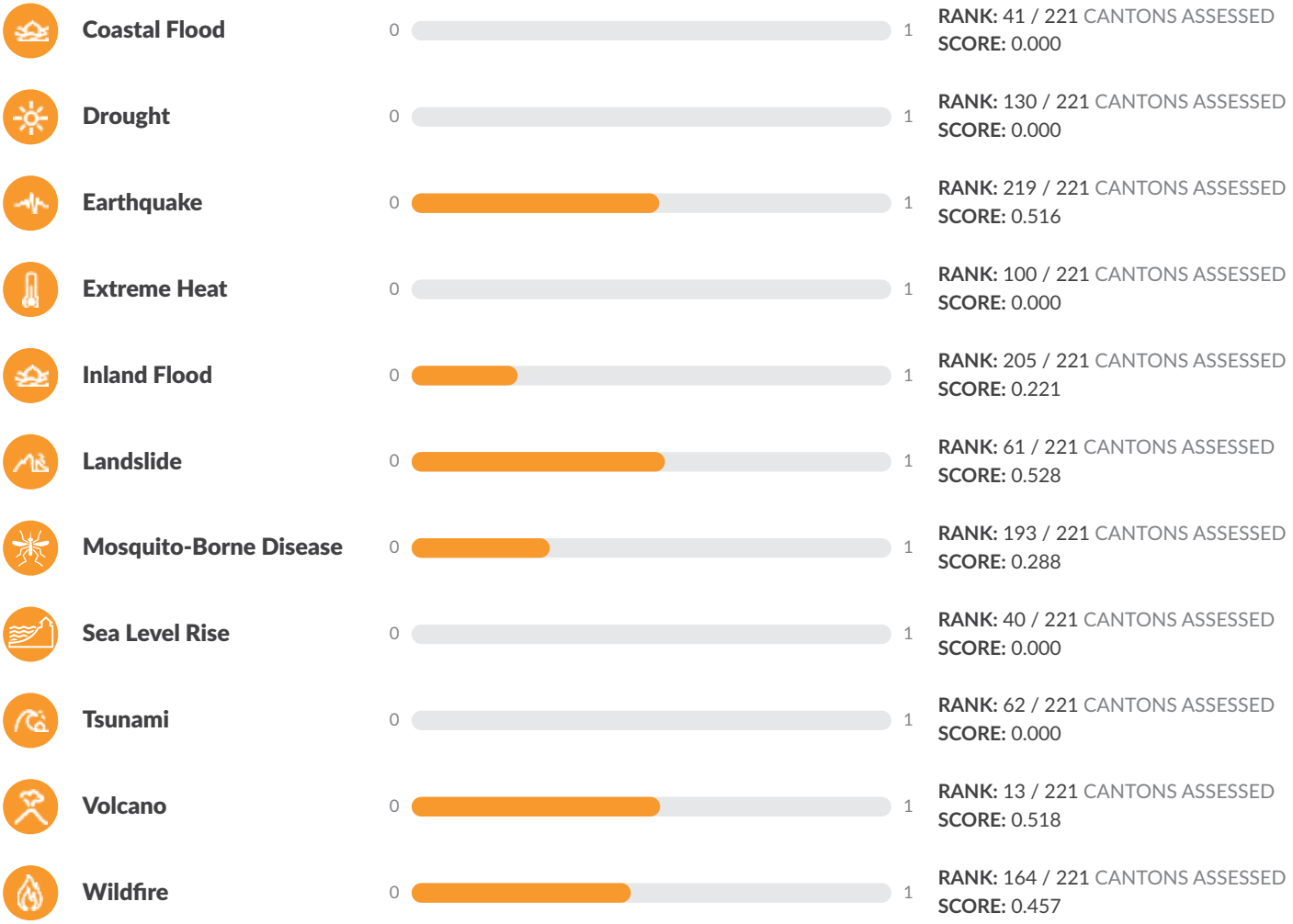
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

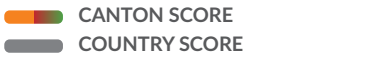


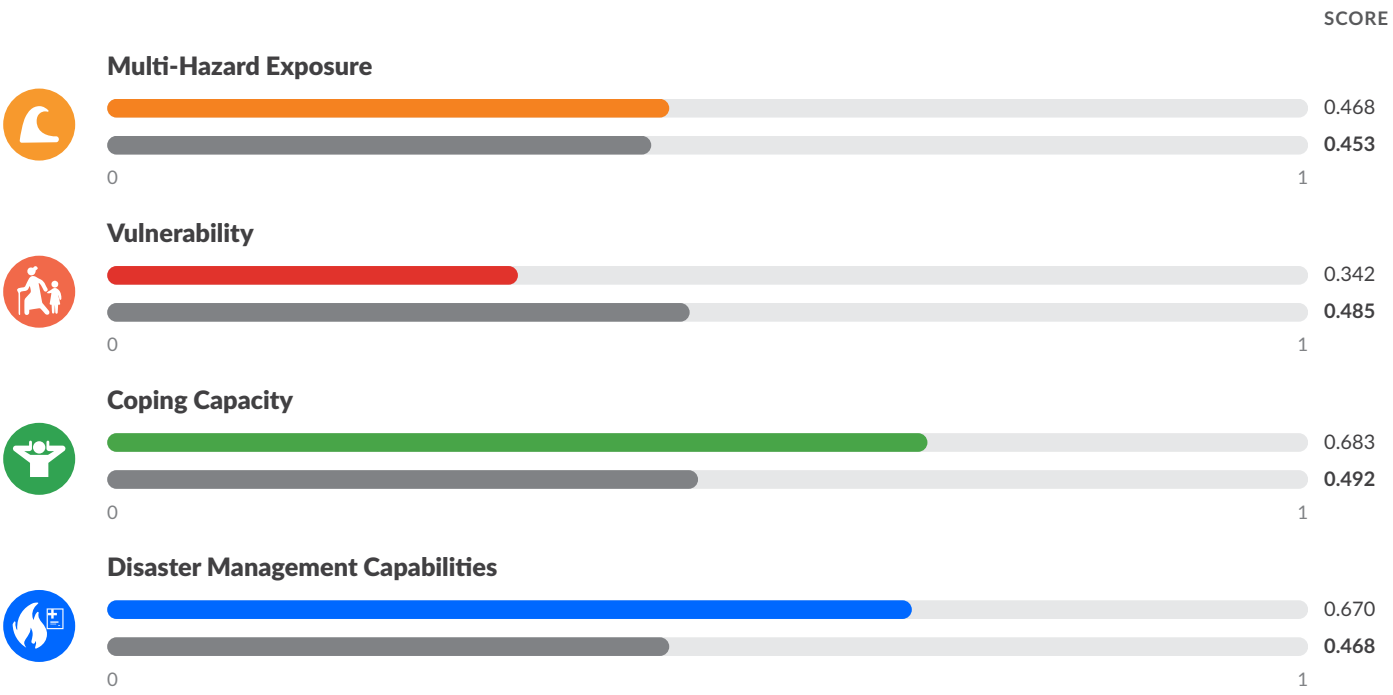
MULTI-HAZARD RISK (MHR)

RANKED
214 / 221
CANTONS ASSESSED
SCORE: 0.364

Baños De Agua Santa's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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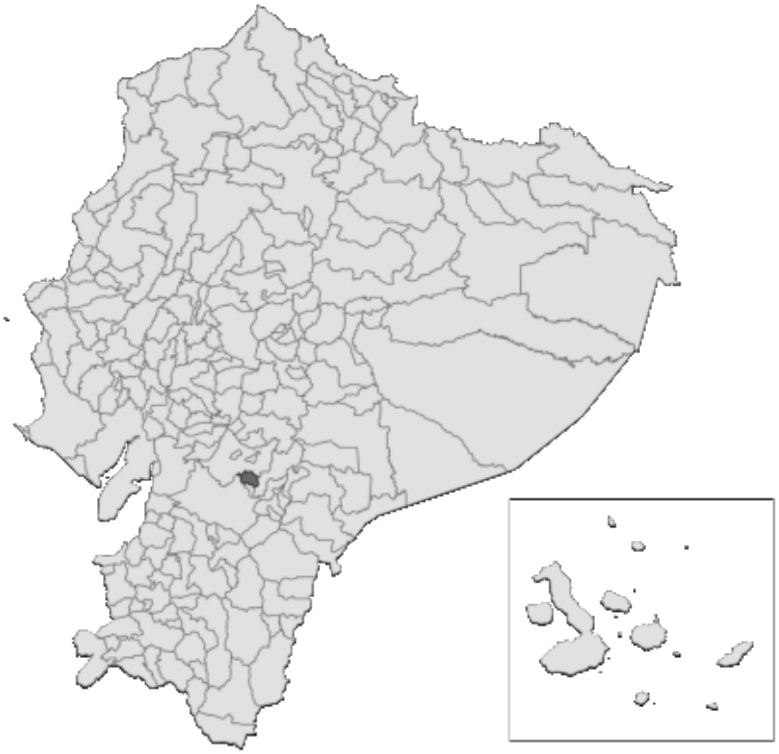
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BIBLIÁN

PROVINCE: CAÑAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.457 • RANK: 145/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.531 • RANK: 74/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.421 • RANK: 121/221 CANTONS ASSESSED

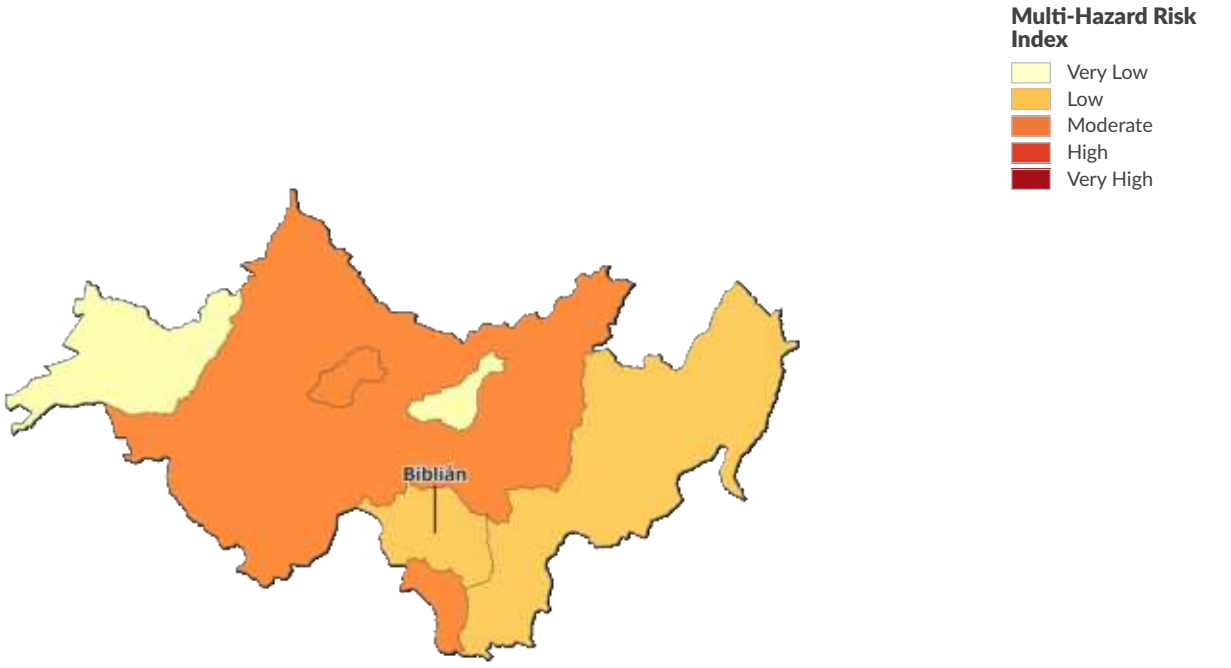
Vulnerability (V) - Low
SCORE: 0.427 • RANK: 164/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.456 • RANK: 137/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.563 • RANK: 49/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CAÑAR PROVINCE

BIBLIÁN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Suscal	0.506	Azogues	0.445
Cañar	0.504	La Troncal	0.426
Déleg	0.479	El Tambo	0.399
Biblián	**0.457**		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 121 / 221 CANTONS ASSESSED
SCORE: 0.421



MHE
0.421

Raw MHE
0.511

Relative MHE
0.330

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
55%
11,895 people exposed
13,513 structures exposed (54%)
Critical Infrastructure Exposed: 52%

Earthquake
100%
21,742 people exposed
25,217 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
5%
1,113 people exposed
902 structures exposed (4%)
Critical Infrastructure Exposed: 9%

Landslide
87%
18,890 people exposed
22,255 structures exposed (88%)
Critical Infrastructure Exposed: 84%

Mosquito-Borne Disease
6%
1,323 people exposed
1,928 structures exposed (8%)
Critical Infrastructure Exposed: 6%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
21,742 people exposed
25,217 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 164 / 221 CANTONS ASSESSED **SCORE: 0.427**

Vulnerability in Biblián is primarily driven by Vulnerable Health Status and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.494

- **8.8** Average Years of Schooling
- **50.7%** Population (age 24 and over) with General Basic Education Schooling
- **11.5%** Population (age 24 and over) with No Schooling
- **9.5%** Adult Illiteracy Rate
- **32.7%** Households with No Internet Access
- **68.1%** Households with No Access to Television
- **66.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.311

- **92.4%** Homes with Access to Public Water Source
- **54%** Homes Connected to the Public Sewage System
- **23.4%** Homes without Piped Water
- **1.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.511

- **68.2** Age Dependency Ratio
- **11.7%** Unemployment Rate
- **43.3%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.474

- **3.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.376

- **0.3** Female to Male Labor Ratio (distance from parity)
- **37.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **61.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **36.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.615

- **12.3%** Prevalence of Disability (among persons age 5 and over)
- **5.8** Perinatal Mortality Rate (per 1,000 births)
- **13.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.397

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **49.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.527

60	12	41	47
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.275

8.2%	1.5%	14.5%	61.8%	3.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.350

103.5	-0.8	0.8	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.479

0.2	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 137 / 221 CANTONS ASSESSED **SCORE: 0.456**

Biblián exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.353

51.3%
Labor Force Participation

38,912
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.621

13.6%
Protected Area (% of land area)

-1,638.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.332

68.4%
Voter Participation

87.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.629

Communications Capacity

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.762

28.1%
Household Access to Fixed Phones

89.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.863

99.2%
Homes Served by the Public Electricity Network

88.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.414

9.5
Nurses and Midwives per 10,000 persons

16.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.477

23.4
Average Distance to Airport (km)

112.1
Average Distance to Sea or River Port (km)

2.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 49 / 221 CANTONS ASSESSED **SCORE: 0.563**

Biblián exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.437

1.8	3.1%	0	22.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.689

7.4	3.2	2.1	3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 74 / 221 CANTONS ASSESSED
SCORE: 0.531

Biblián's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Economic Capacity

Vulnerable Health Status

Healthcare Capacity

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

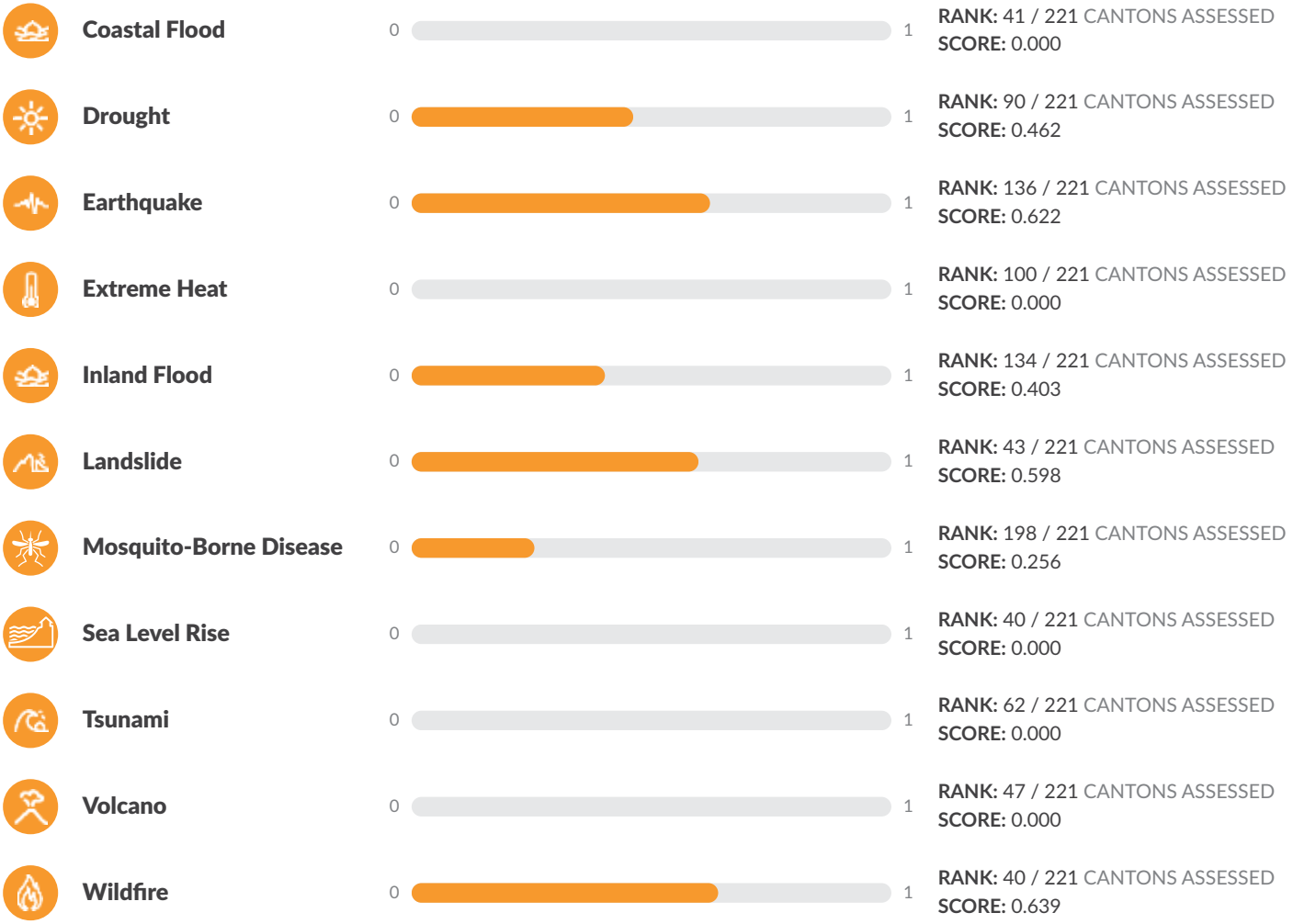
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)

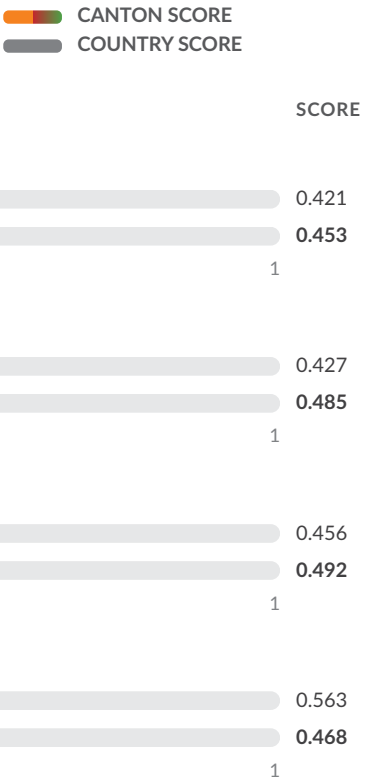


MULTI-HAZARD RISK (MHR)

RANKED
145 / 221
CANTONS ASSESSED
SCORE: 0.457

Biblián's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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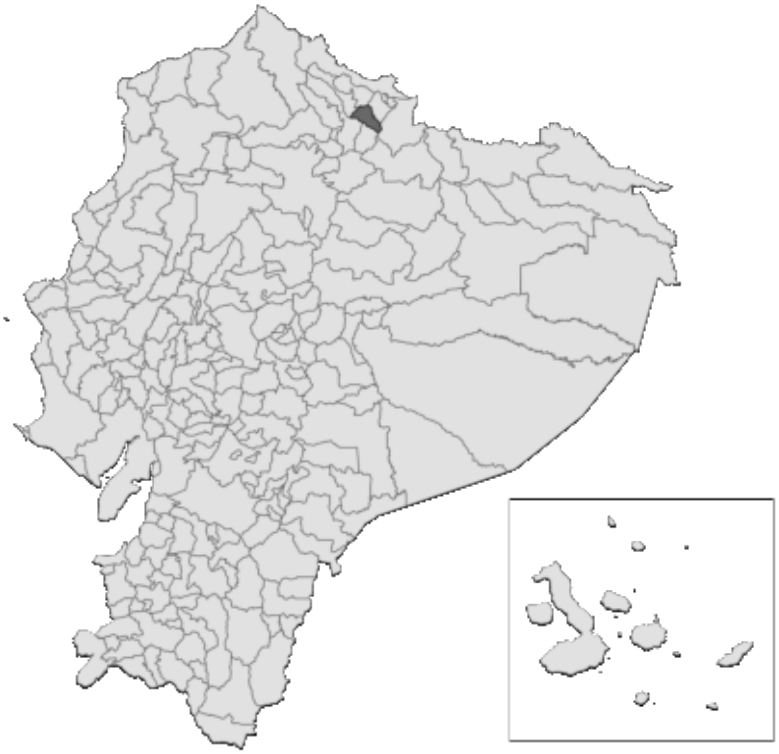
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BOLÍVAR

PROVINCE: CARCHI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.438 • RANK: 169/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.530 • RANK: 75/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.343 • RANK: 159/221 CANTONS ASSESSED

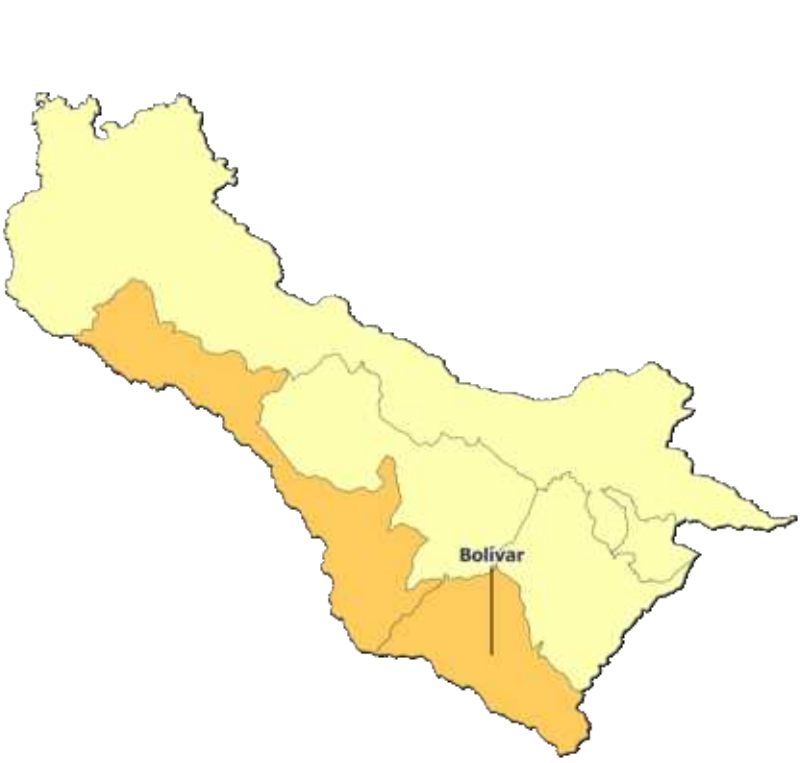
Vulnerability (V) - Low
SCORE: 0.455 • RANK: 143/221 CANTONS ASSESSED

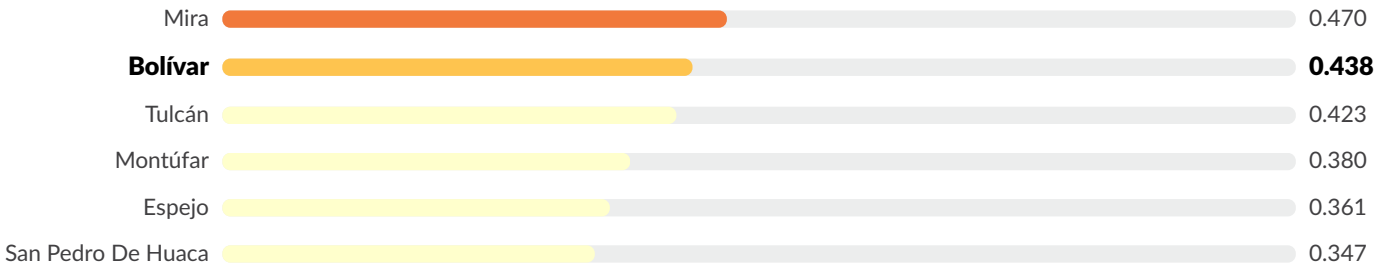
Coping Capacity (CC) - High
SCORE: 0.564 • RANK: 60/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.481 • RANK: 90/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CARCHI PROVINCE

BOLÍVAR • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 159 / 221 CANTONS ASSESSED
SCORE: 0.343



MHE
0.343

Raw MHE
0.396

Relative MHE
0.291

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
73%
- **11,349** people exposed
- **8,422** structures exposed (77%)

Critical Infrastructure Exposed: 75%

Earthquake
100%
- **15,529** people exposed
- **10,997** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **72** people exposed
- **68** structures exposed (<1%)

Critical Infrastructure Exposed: 4%

Landslide
67%
- **10,347** people exposed
- **7,135** structures exposed (65%)

Critical Infrastructure Exposed: 62%

Mosquito-Borne Disease
4%
- **655** people exposed
- **409** structures exposed (4%)

Critical Infrastructure Exposed: 10%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
93%
- **14,439** people exposed
- **10,580** structures exposed (96%)

Critical Infrastructure Exposed: 96%

VULNERABILITY (V)

RANK: 143 / 221 CANTONS ASSESSED **SCORE: 0.455**

Vulnerability in Bolívar is primarily driven by Population Pressures and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.579

- **8.7** Average Years of Schooling
- **61%** Population (age 24 and over) with General Basic Education Schooling
- **4%** Population (age 24 and over) with No Schooling
- **4%** Adult Illiteracy Rate
- **54.1%** Households with No Internet Access
- **85.9%** Households with No Access to Television
- **79.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.364

- **96.9%** Homes with Access to Public Water Source
- **76.9%** Homes Connected to the Public Sewage System
- **30%** Homes without Piped Water
- **8.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.398

- **56.1** Age Dependency Ratio
- **7.7%** Unemployment Rate
- **40.4%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.433

- **3.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.330

- **0.4** Female to Male Labor Ratio (distance from parity)
- **23** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **41.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **47.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.572

- **9.9%** Prevalence of Disability (among persons age 5 and over)
- **7** Perinatal Mortality Rate (per 1,000 births)
- **12%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.148

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **27.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.749

49
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

67
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

42
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

158
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.356

10.1%
Homes with Exterior Walls in Poor Condition

0.2%
Homes with Inadequate Materials Used in Outer Walls

13.7%
Homes with Roofs in Poor Condition

84.6%
Households with No Access to Vehicle for Private Use

6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.598

43.6
Population Density (persons per sq km)

0.8%
Average Annual Population Change (2010-2022)

50.5
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.445

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 60 / 221 CANTONS ASSESSED **SCORE: 0.564**

Bolívar exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.565

62.3%
Labor Force Participation

66,064
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.638

15.8%
Protected Area (% of land area)

-1,546.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.589

85.8%
Voter Participation

88.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.515

Communications Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.591

16.4%
Household Access to Fixed Phones

82.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.659

98.3%
Homes Served by the Public Electricity Network

75.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.480

14.7
Nurses and Midwives per 10,000 persons

16.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.328

44.5
Average Distance to Airport (km)

150.8
Average Distance to Sea or River Port (km)

2.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 90 / 221 CANTONS ASSESSED **SCORE: 0.481**

Bolívar exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.394

3.2	3.6%	0	26.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.568

14.9	5.1	2.3	4.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 75 / 221 CANTONS ASSESSED
SCORE: 0.530

Bolívar's score and ranking are due to Low Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Mass Care Support

Population Pressures

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

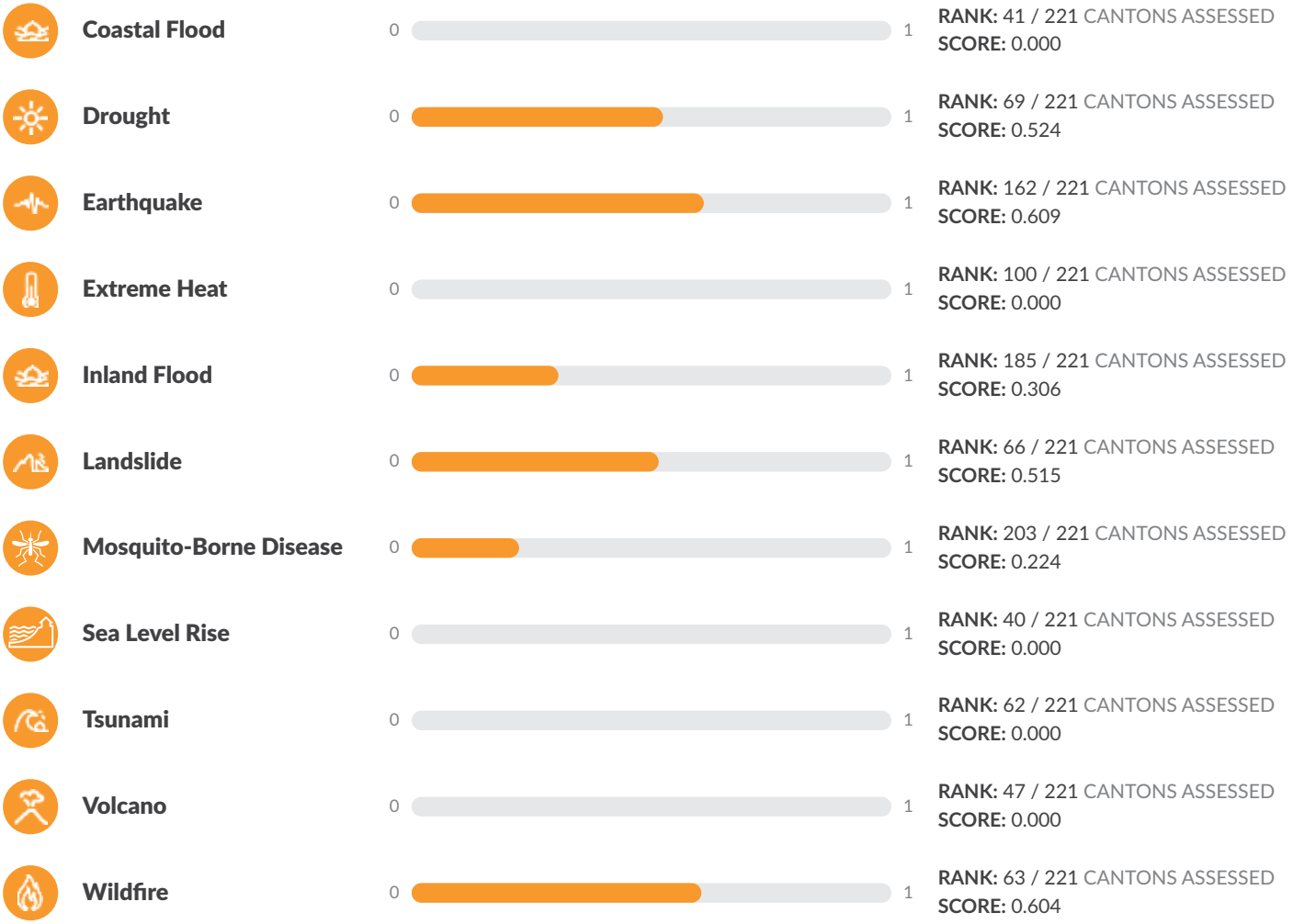
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

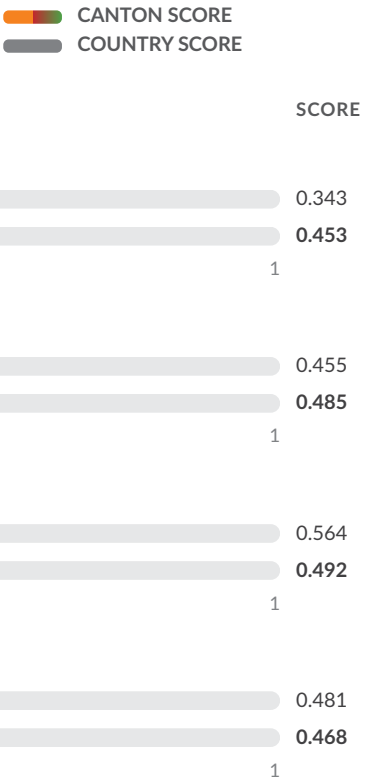


MULTI-HAZARD RISK (MHR)

RANKED
169 / 221
CANTONS ASSESSED
SCORE: 0.438

Bolívar's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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BOLÍVAR

NDPBA SUBNATIONAL PROFILE

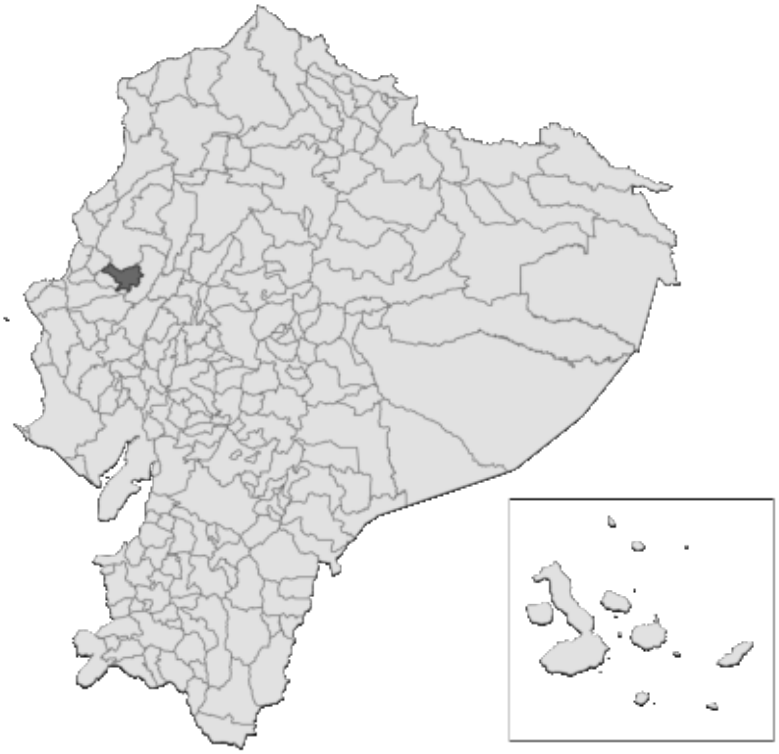
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BOLÍVAR

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.562 • RANK: 47/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.560 • RANK: 47/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.440 • RANK: 156/221 CANTONS ASSESSED

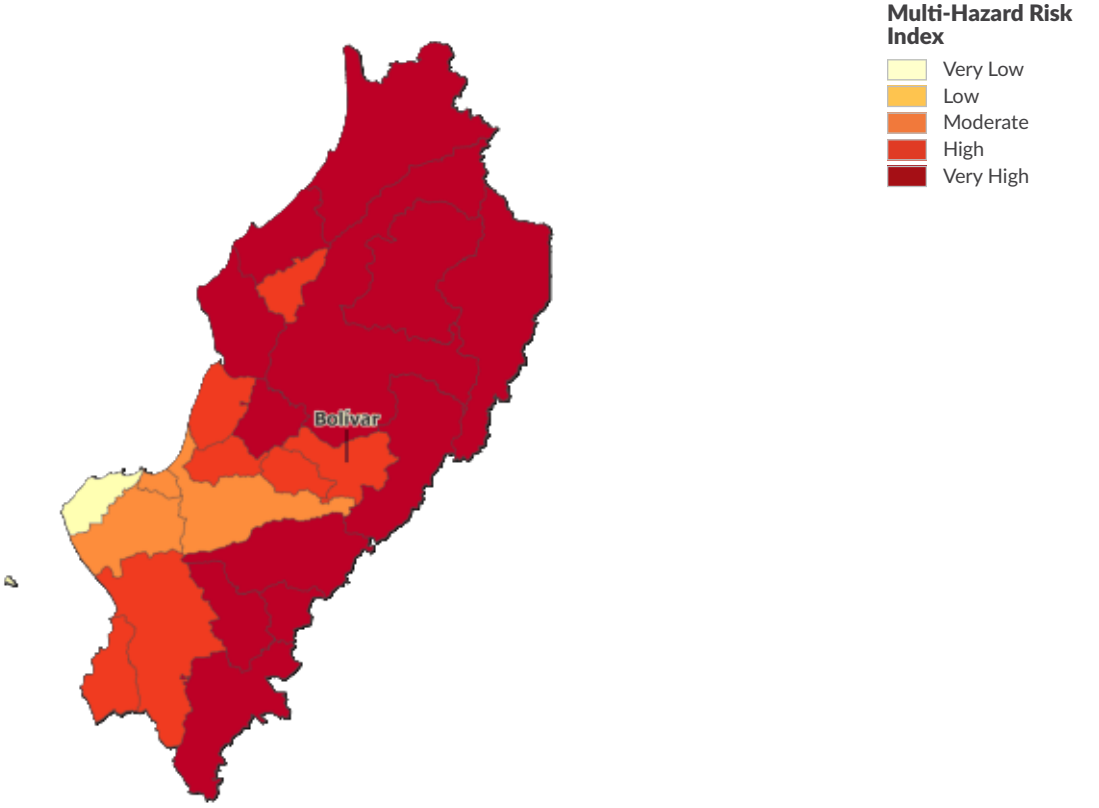
Coping Capacity (CC) - Low
SCORE: 0.438 • RANK: 155/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.567 • RANK: 57/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.443 • RANK: 132/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

BOLÍVAR • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	**Bolívar**	**0.562**		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 57 / 221 CANTONS ASSESSED
SCORE: 0.567



MHE
0.567

Raw MHE
0.592

Relative MHE
0.543

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
47%
- **20,860** people exposed
- **8,900** structures exposed (45%)

Critical Infrastructure Exposed: 44%

Earthquake
100%
- **44,171** people exposed
- **19,717** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **44,171** people exposed
- **19,717** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
33%
- **14,431** people exposed
- **6,540** structures exposed (33%)

Critical Infrastructure Exposed: 26%

Landslide
36%
- **15,956** people exposed
- **7,426** structures exposed (38%)

Critical Infrastructure Exposed: 39%

Mosquito-Borne Disease
97%
- **43,053** people exposed
- **19,361** structures exposed (98%)

Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
5%
- **2,407** people exposed
- **535** structures exposed (3%)

Critical Infrastructure Exposed: 2%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
16%
- **7,232** people exposed
- **3,032** structures exposed (15%)

Critical Infrastructure Exposed: 10%

VULNERABILITY (V)

RANK: 47 / 221 CANTONS ASSESSED **SCORE: 0.560**

Vulnerability in Bolívar is primarily driven by Disaster Impacts and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.516

- **9.7** Average Years of Schooling
- **47.3%** Population (age 24 and over) with General Basic Education Schooling
- **6.8%** Population (age 24 and over) with No Schooling
- **6.2%** Adult Illiteracy Rate
- **55.2%** Households with No Internet Access
- **73.9%** Households with No Access to Television
- **81.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.609

- **34.3%** Homes with Access to Public Water Source
- **42.5%** Homes Connected to the Public Sewage System
- **49.1%** Homes without Piped Water
- **3.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.549

- **54** Age Dependency Ratio
- **18.2%** Unemployment Rate
- **77.4%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.611

- **6.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.598

- **0.5** Female to Male Labor Ratio (distance from parity)
- **41.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **61.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **73.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.536

- **9.9%** Prevalence of Disability (among persons age 5 and over)
- **3.5** Perinatal Mortality Rate (per 1,000 births)
- **9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.401

- **21.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **35.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.671

84	18	62	75
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.621

21.7%	23.9%	20.9%	88.5%	7.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.416

79.9	0.3%	3.5	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.626

0.6	0.3	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 155 / 221 CANTONS ASSESSED **SCORE: 0.438**

Bolívar exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.429

52.6%
Labor Force Participation

86,022
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.264

0%
Protected Area (% of land area)

-5,954.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.491

86.5%
Voter Participation

70.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.452

Communications Capacity

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.466

6.3%
Household Access to Fixed Phones

83.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.501

96.1%
Homes Served by the Public Electricity Network

66.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.368

9.3
Nurses and Midwives per 10,000 persons

12.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.475

38.1
Average Distance to Airport (km)

48.2
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 132 / 221 CANTONS ASSESSED **SCORE: 0.443**

Bolívar exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.447

3.6	4.3%	1.1	62.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.440

9.1	10.1	4.1	8.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 156 / 221 CANTONS ASSESSED
SCORE: 0.440

Bolívar's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Disaster Impacts

Housing and Transportation Vulnerability

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

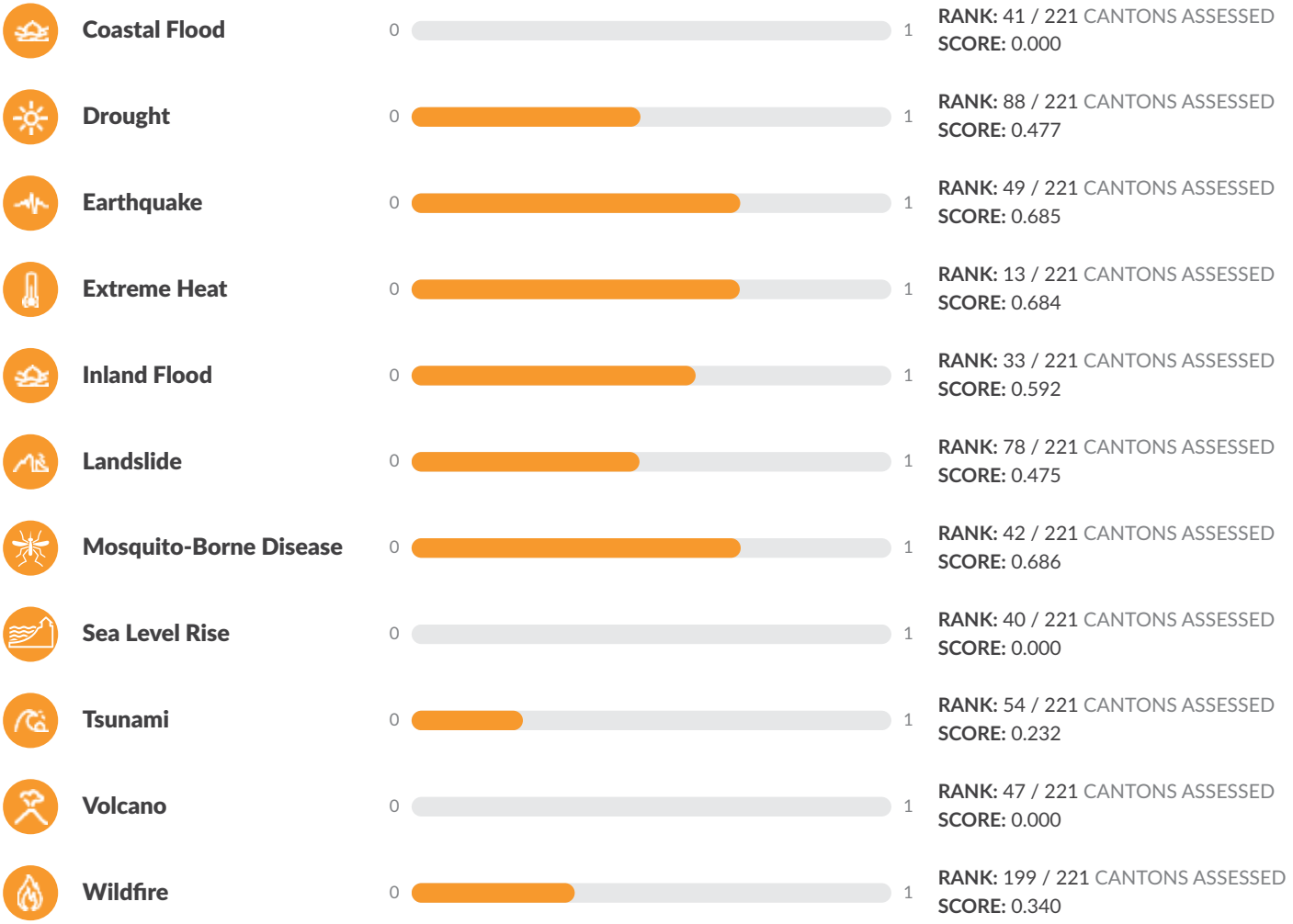
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

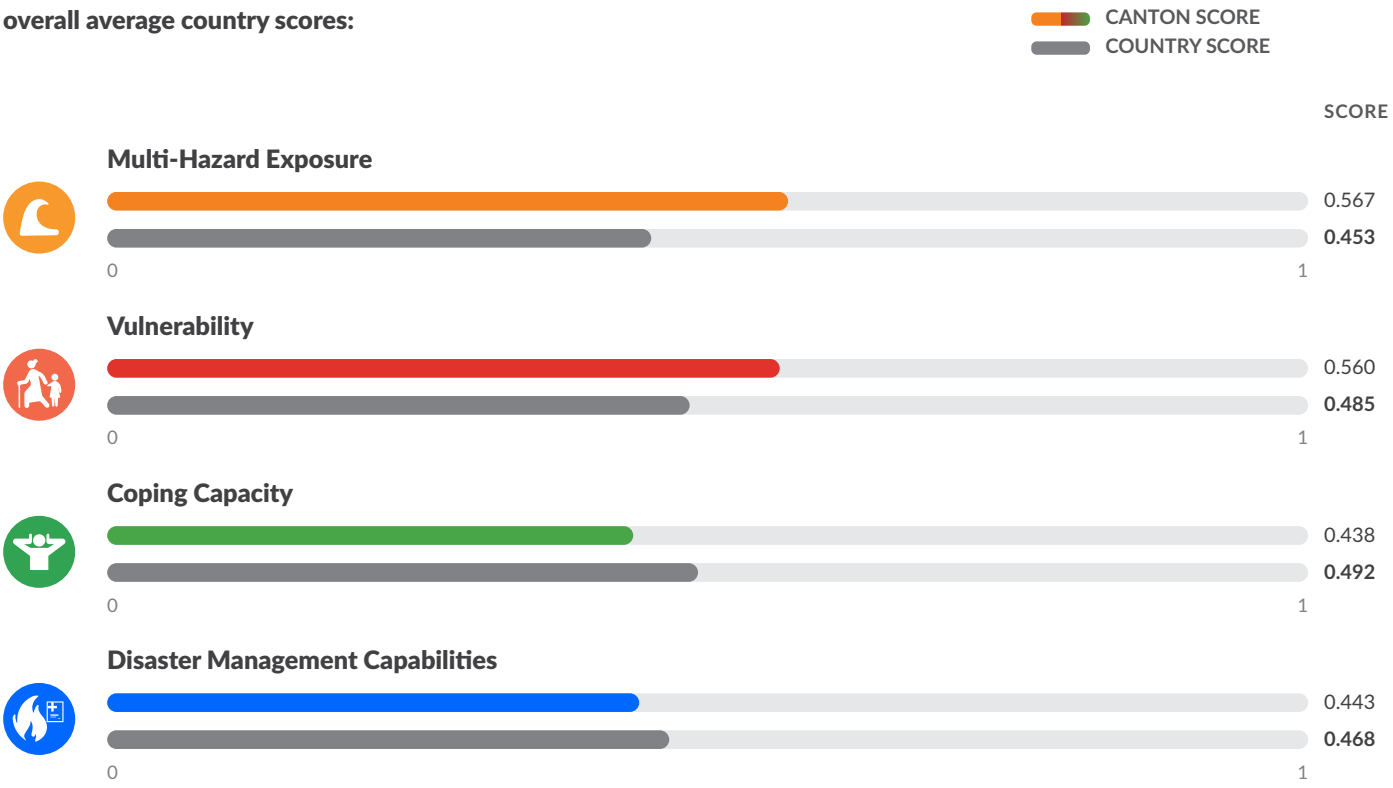


MULTI-HAZARD RISK (MHR)

RANKED
47 / 221
CANTONS ASSESSED
SCORE: 0.562

Bolívar's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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BUENA FE

NDPBA SUBNATIONAL PROFILE

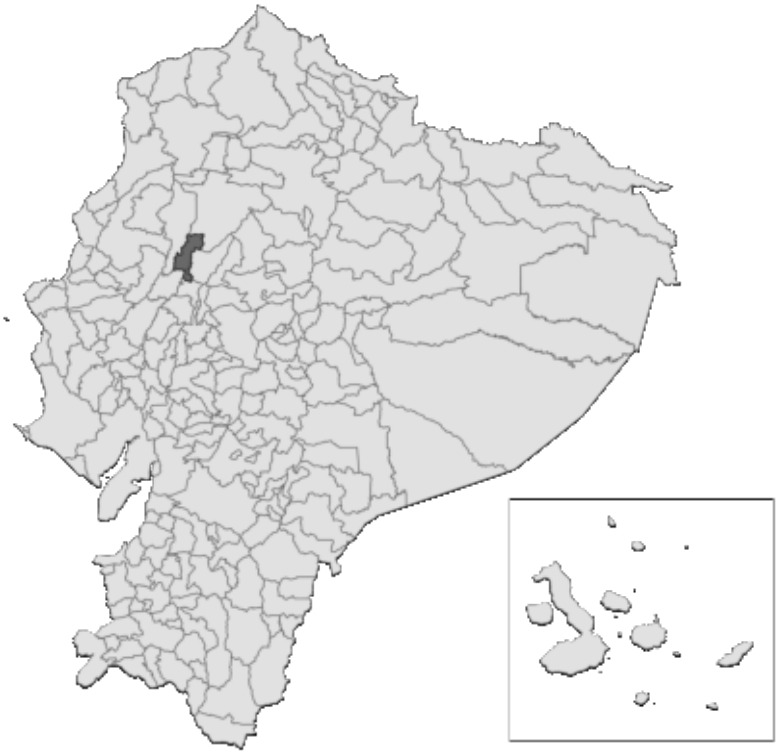
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BUENA FE

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.510 • RANK: 93/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.511 • RANK: 86/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.478 • RANK: 117/221 CANTONS ASSESSED

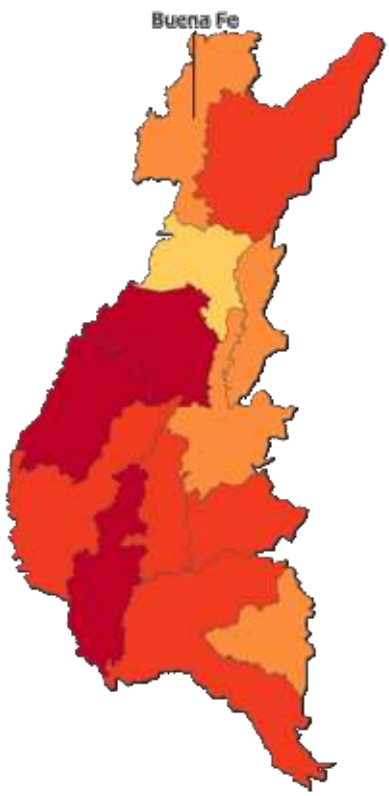
Coping Capacity (CC) - High
SCORE: 0.522 • RANK: 85/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.474 • RANK: 92/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.423 • RANK: 146/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

BUENA FE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	**0.510**
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 92 / 221 CANTONS ASSESSED
SCORE: 0.474



MHE
0.474

Raw MHE
0.618

Relative MHE
0.330

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
76,970 people exposed
25,473 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
76,812 people exposed
25,460 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
10%
7,742 people exposed
2,040 structures exposed (8%)
Critical Infrastructure Exposed: 20%

Landslide
<1%
17 people exposed
5 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
100%
76,970 people exposed
25,473 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
23%
17,693 people exposed
6,817 structures exposed (27%)
Critical Infrastructure Exposed: 15%

VULNERABILITY (V)

RANK: 86 / 221 CANTONS ASSESSED **SCORE: 0.511**

Vulnerability in Buena Fe is primarily driven by Marginalization and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.539

- **9.4** Average Years of Schooling
- **46.7%** Population (age 24 and over) with General Basic Education Schooling
- **7.5%** Population (age 24 and over) with No Schooling
- **5.7%** Adult Illiteracy Rate
- **55.7%** Households with No Internet Access
- **78%** Households with No Access to Television
- **84.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.503

- **86.8%** Homes with Access to Public Water Source
- **35.8%** Homes Connected to the Public Sewage System
- **29%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.500

- **59.4** Age Dependency Ratio
- **16.3%** Unemployment Rate
- **51.3%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.795

- **12.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.640

- **0.6** Female to Male Labor Ratio (distance from parity)
- **68.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **57.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **64.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.485

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **5.1** Perinatal Mortality Rate (per 1,000 births)
- **8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.514

- **59.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **28.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.425

19 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**16** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**33** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**27** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.571

15.6% Homes with Exterior Walls in Poor Condition	**6%** Homes with Inadequate Materials Used in Outer Walls	**18.7%** Homes with Roofs in Poor Condition	**89.5%** Households with No Access to Vehicle for Private Use	**12.5%** Household Overcrowding

Population Pressures

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.572

128 Population Density (persons per sq km)	**1.4%** Average Annual Population Change (2010-2022)	**14.2** Net Migration Rate (per 1,000 persons)	**0.32** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.235

0.2 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 85 / 221 CANTONS ASSESSED **SCORE: 0.522**

Buena Fe exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.547

53.8%
Labor Force Participation

343,398
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.225

0%
Protected Area (% of land area)

-8,716.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.638

88.6%
Voter Participation

87%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.481

Communications Capacity

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.414

4%
Household Access to Fixed Phones

84.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.499

97%
Homes Served by the Public Electricity Network

60.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.314

7.5
Nurses and Midwives per 10,000 persons

10.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.695

8
Average Distance to Airport (km)

18
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 146 / 221 CANTONS ASSESSED **SCORE: 0.423**

Buena Fe exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.344

4.4	1.4%	1.4	106
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.503

12.7	5.3	2.6	9.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 117 / 221 CANTONS ASSESSED
SCORE: 0.478

Buena Fe's score and ranking are due to High Vulnerability combined with High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Mass Care Support



Marginalization



Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Marginalization

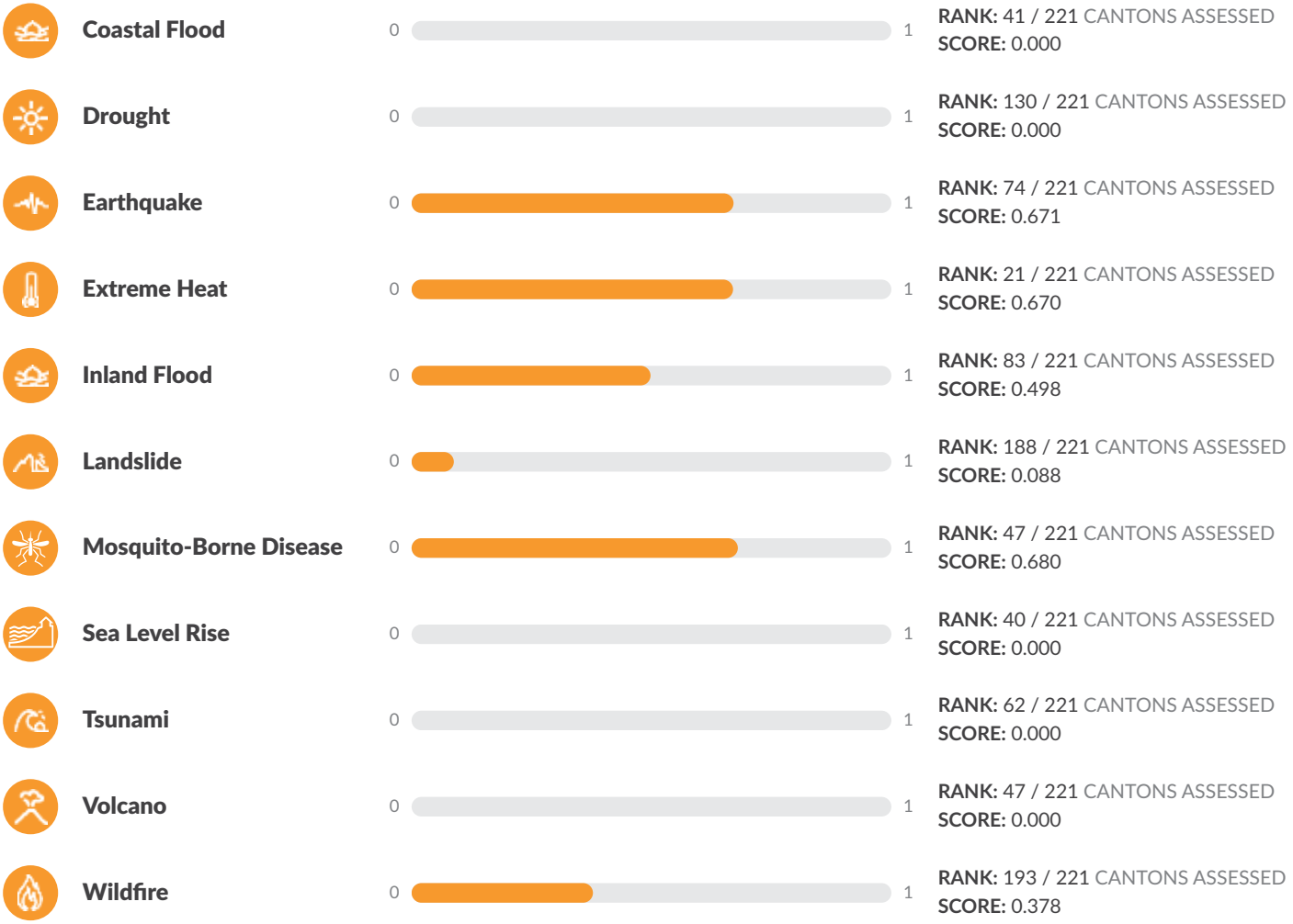
Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

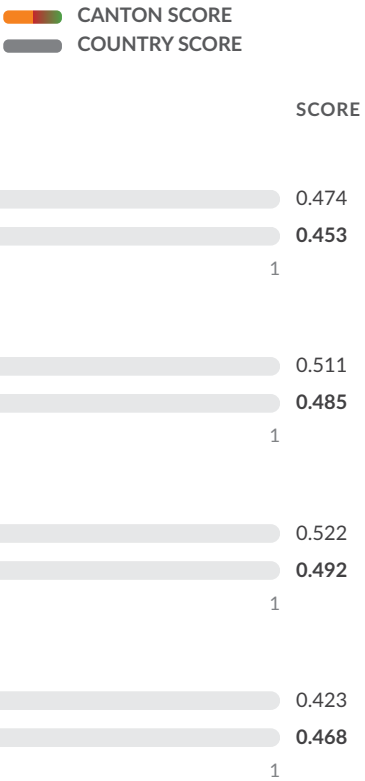


MULTI-HAZARD RISK (MHR)

RANKED
93 / 221
CANTONS ASSESSED
SCORE: 0.510

Buena Fe's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CALUMA

NDPBA SUBNATIONAL PROFILE

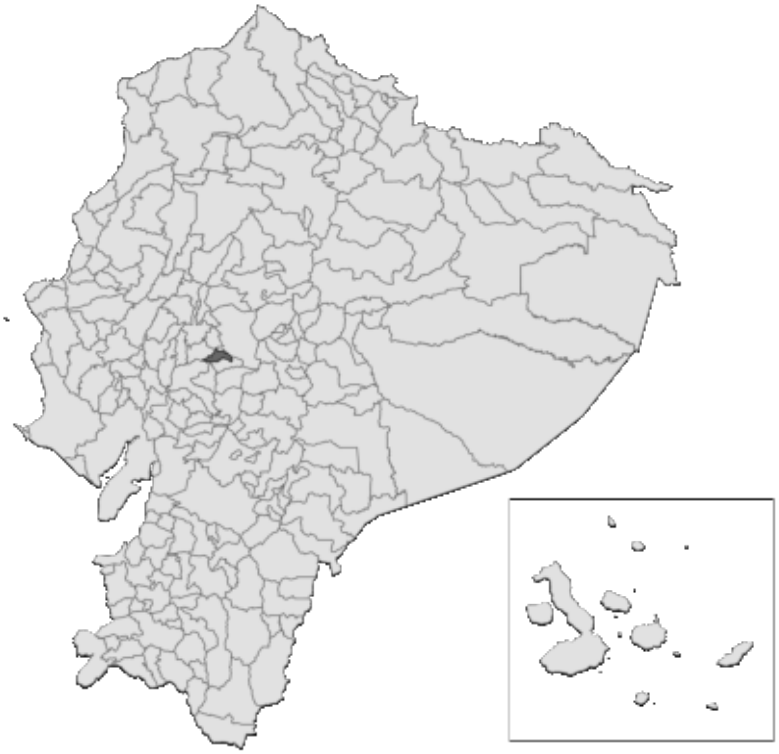
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ECUADOR

CALUMA

PROVINCE: BOLÍVAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.427 • RANK: 179/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.427 • RANK: 164/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.502 • RANK: 93/221 CANTONS ASSESSED

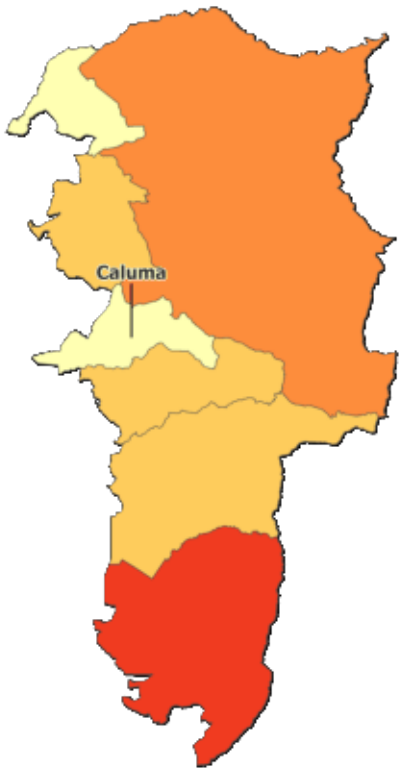
Coping Capacity (CC) - Moderate
SCORE: 0.486 • RANK: 111/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.217 • RANK: 205/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.448 • RANK: 124/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN BOLÍVAR PROVINCE

CALUMA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Chillanes	0.522
Guaranda	0.505
San Miguel	0.462
Echeandía	0.445
Chimbo	0.443
Caluma	**0.427**
Las Naves	0.421

MULTI-HAZARD EXPOSURE (MHE)

RANK: 205 / 221 CANTONS ASSESSED
SCORE: 0.217



MHE
0.217

Raw MHE
0.275

Relative MHE
0.158

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **14,270** people exposed
- **4,386** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
<1%
- **7** people exposed
- **3** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Inland Flood
21%
- **2,976** people exposed
- **876** structures exposed (20%)

Critical Infrastructure Exposed: 19%

Landslide
58%
- **8,223** people exposed
- **2,683** structures exposed (61%)

Critical Infrastructure Exposed: 28%

Mosquito-Borne Disease
91%
- **13,039** people exposed
- **3,932** structures exposed (90%)

Critical Infrastructure Exposed: 97%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
23%
- **3,211** people exposed
- **983** structures exposed (22%)

Critical Infrastructure Exposed: 11%

VULNERABILITY (V)

RANK: 164 / 221 CANTONS ASSESSED **SCORE: 0.427**

Vulnerability in Caluma is primarily driven by Vulnerable Health Status and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.434

- **10.7** Average Years of Schooling
- **40.6%** Population (age 24 and over) with General Basic Education Schooling
- **4.8%** Population (age 24 and over) with No Schooling
- **4.5%** Adult Illiteracy Rate
- **54.3%** Households with No Internet Access
- **69.7%** Households with No Access to Television
- **79.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.457

- **75.5%** Homes with Access to Public Water Source
- **53%** Homes Connected to the Public Sewage System
- **19.8%** Homes without Piped Water
- **5.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.469

- **54.5** Age Dependency Ratio
- **14.9%** Unemployment Rate
- **40.4%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.218

- **1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.361

- **0.4** Female to Male Labor Ratio (distance from parity)
- **25.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **59.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **28.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.491

- **7.9%** Prevalence of Disability (among persons age 5 and over)
- **5.3** Perinatal Mortality Rate (per 1,000 births)
- **7.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.379

- **9.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **5.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **12.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.587

78	10	41	99
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.375

12%	1%	15.3%	84.7%	4.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.485

88.9	1.4%	9.4	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.376

0.3	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 111 / 221 CANTONS ASSESSED **SCORE: 0.486**

Caluma exhibits weaker Coping Capacity in the areas of Economic Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.408

54.8%
Labor Force Participation

40,404
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.320

0%
Protected Area (% of land area)

-2,292.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.582

86.2%
Voter Participation

86.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.525

Communications Capacity

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.542

12.2%
Household Access to Fixed Phones

81.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.530

96.5%
Homes Served by the Public Electricity Network

68.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.421

14.7
Nurses and Midwives per 10,000 persons

11.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.605

18.4
Average Distance to Airport (km)

26.2
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.448**

Caluma exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.417

3.5	7.4%	0	27.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.479

21.7	5.2	4.2	5.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 93 / 221 CANTONS ASSESSED
SCORE: 0.502

Caluma's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity | **Mass Care Support** | **Healthcare Capacity** | **Emergency Services**

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

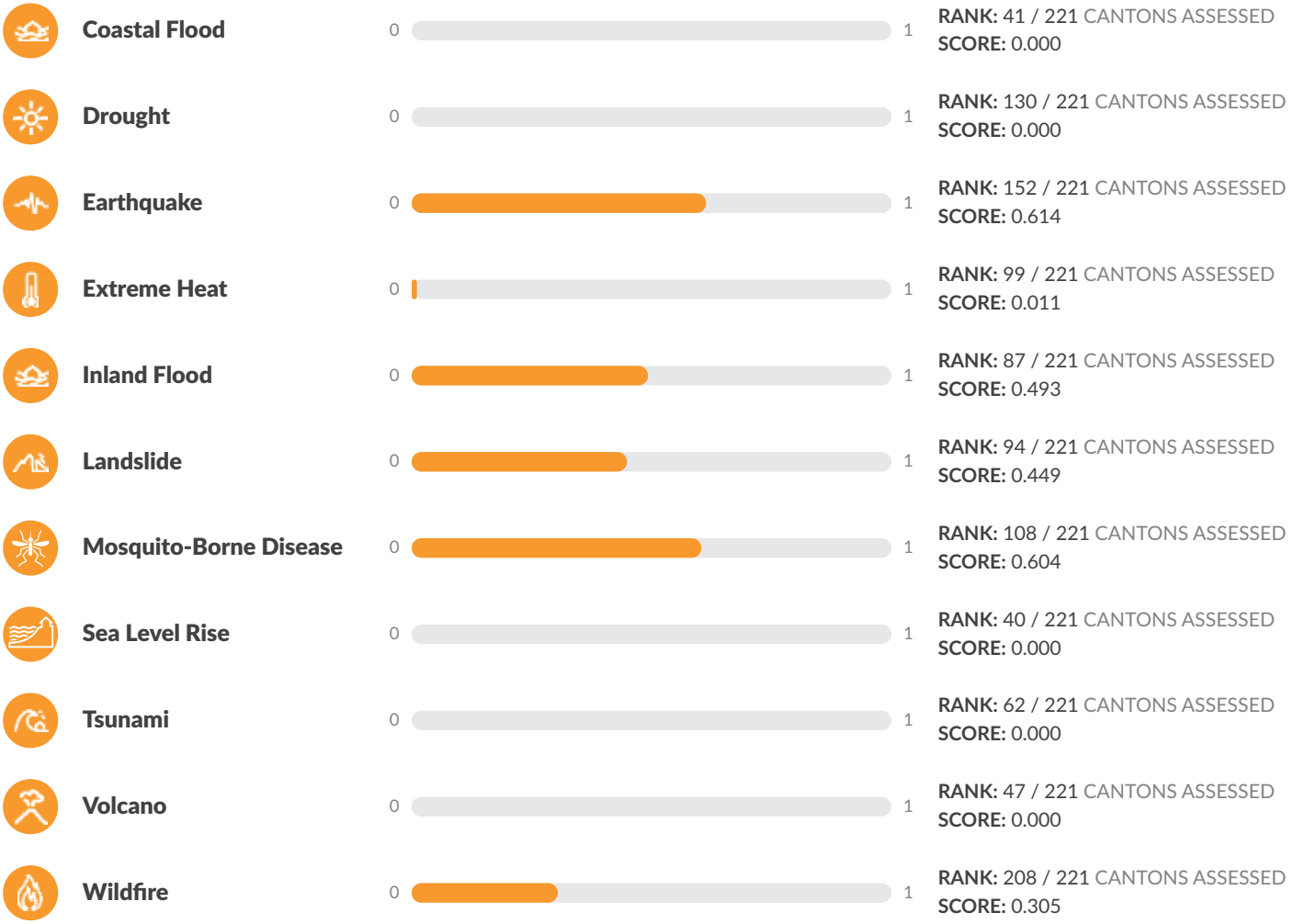
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

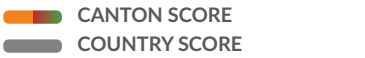


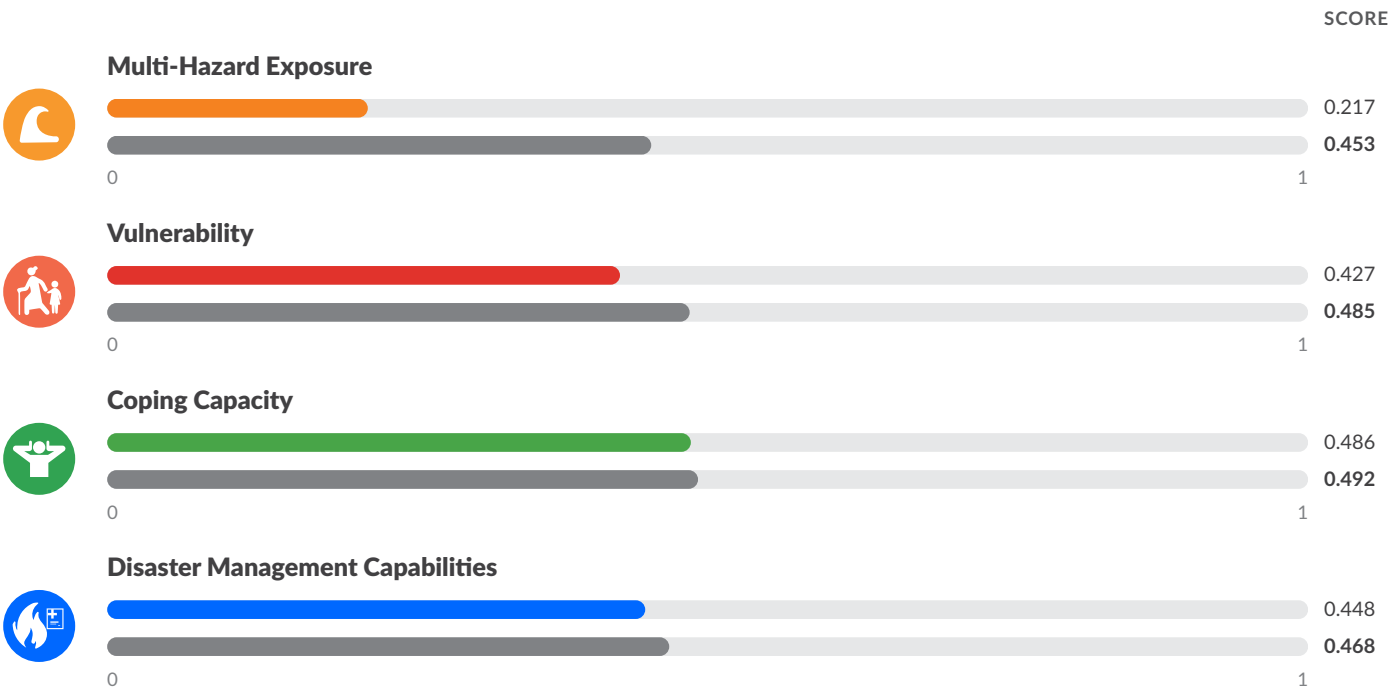
MULTI-HAZARD RISK (MHR)

RANKED
179 / 221
CANTONS ASSESSED
SCORE: 0.427

Caluma's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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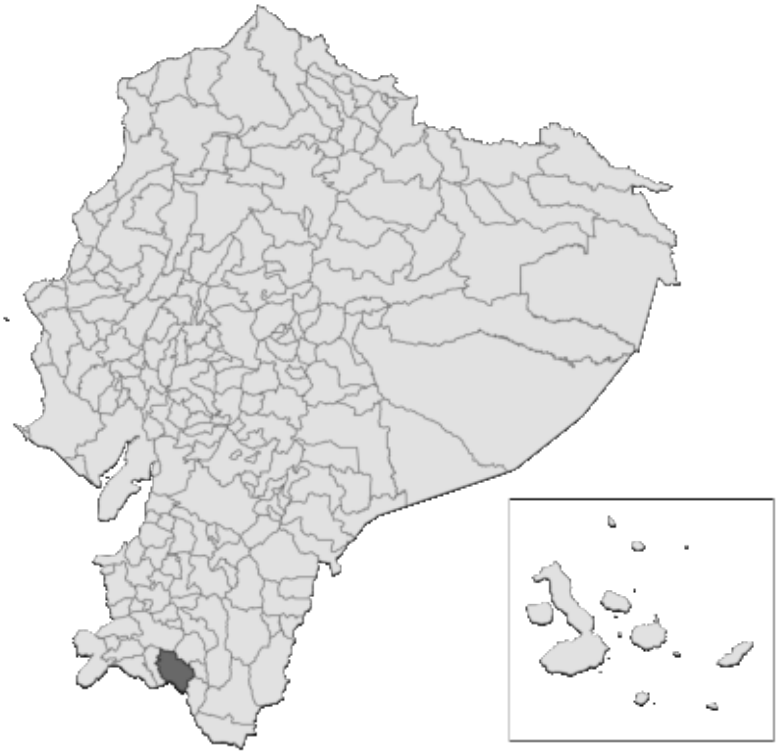
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ECUADOR

CALVAS

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.536 • RANK: 66/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.447 • RANK: 148/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.485 • RANK: 83/221 CANTONS ASSESSED

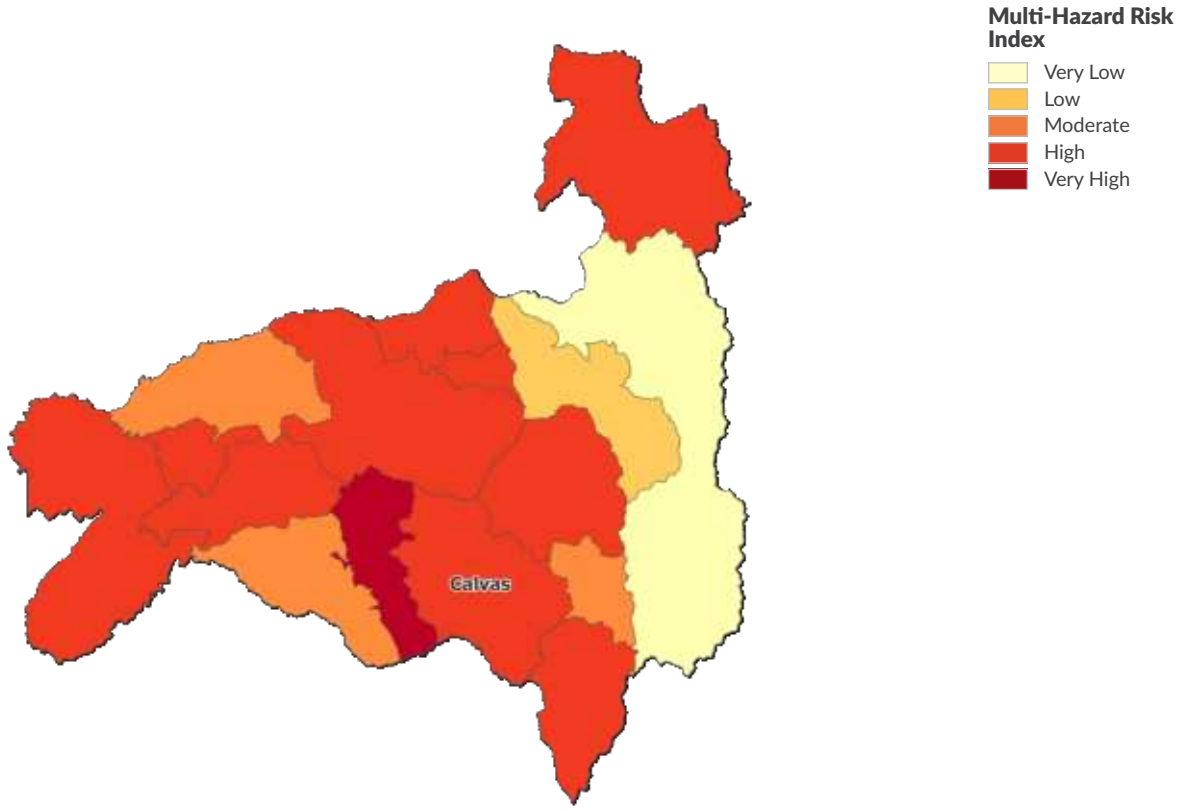
Vulnerability (V) - Moderate
SCORE: 0.483 • RANK: 116/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.360 • RANK: 195/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.463 • RANK: 105/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

CALVAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	**0.536**
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 83 / 221 CANTONS ASSESSED
SCORE: 0.485



MHE
0.485

Raw MHE
0.528

Relative MHE
0.441

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
61%
- **19,454** people exposed
- **10,598** structures exposed (62%)

Critical Infrastructure Exposed: 54%

Earthquake
100%
- **31,939** people exposed
- **16,965** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **185** people exposed
- **160** structures exposed (<1%)

Critical Infrastructure Exposed: 7%

Landslide
85%
- **27,046** people exposed
- **14,529** structures exposed (86%)

Critical Infrastructure Exposed: 83%

Mosquito-Borne Disease
55%
- **17,645** people exposed
- **9,197** structures exposed (54%)

Critical Infrastructure Exposed: 82%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
88%
- **28,091** people exposed
- **14,735** structures exposed (87%)

Critical Infrastructure Exposed: 82%

VULNERABILITY (V)

RANK: 116 / 221 CANTONS ASSESSED **SCORE: 0.483**

Vulnerability in Calvas is primarily driven by Economic Constraints and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.420

- **10.2** Average Years of Schooling
- **49.6%** Population (age 24 and over) with General Basic Education Schooling
- **3.9%** Population (age 24 and over) with No Schooling
- **3.1%** Adult Illiteracy Rate
- **48.4%** Households with No Internet Access
- **68.4%** Households with No Access to Television
- **73.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.471

- **87.6%** Homes with Access to Public Water Source
- **54.9%** Homes Connected to the Public Sewage System
- **33.4%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.628

- **66** Age Dependency Ratio
- **16.9%** Unemployment Rate
- **49.7%** Poverty Rate (based on UBN)
- **2.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.514

- **4.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.399

- **0.4** Female to Male Labor Ratio (distance from parity)
- **45.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **46.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **44.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.497

- **9.6%** Prevalence of Disability (among persons age 5 and over)
- **3.7** Perinatal Mortality Rate (per 1,000 births)
- **7.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.398

- **2.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.569

70	23	36	42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.472

16.1%	0.9%	19.1%	82%	9.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.380

30.6	-0.7	9.3	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.592

0.3	0.1	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 195 / 221 CANTONS ASSESSED **SCORE: 0.360**

Calvas exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.350

49.2%
Labor Force Participation

55,216
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.267

0%
Protected Area (% of land area)

-5,730.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.231

72.5%
Voter Participation

62.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.531

Communications Capacity

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.712

27.4%
Household Access to Fixed Phones

86.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.579

97.9%
Homes Served by the Public Electricity Network

67.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.462

10
Nurses and Midwives per 10,000 persons

21.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.370

40.1
Average Distance to Airport (km)

104.4
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 105 / 221 CANTONS ASSESSED **SCORE: 0.463**

Calvas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.441

3.8	2.1%	1.4	57.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.484

8.2	7.4	4.4	6.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 148 / 221 CANTONS ASSESSED
SCORE: 0.447

Calvas's score and ranking are due to Moderate Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Governance
- Economic Capacity
- Transportation Capacity
- Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

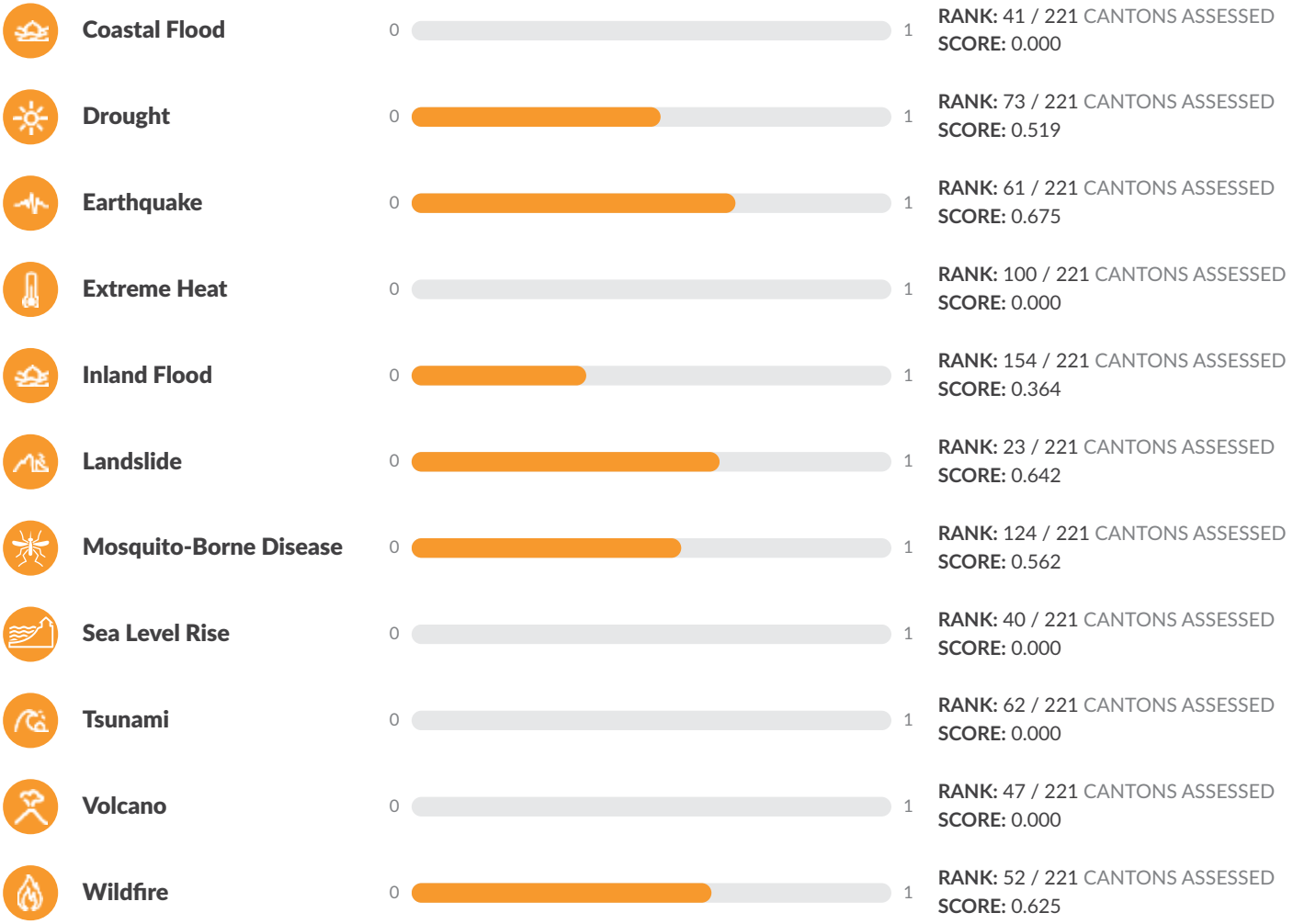
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
66 / 221
CANTONS ASSESSED
SCORE: 0.536

Calvas's score and ranking are due to High Multi-Hazard Exposure combined with Moderate Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CAMILO PONCE ENRÍQUEZ

NDPBA SUBNATIONAL PROFILE

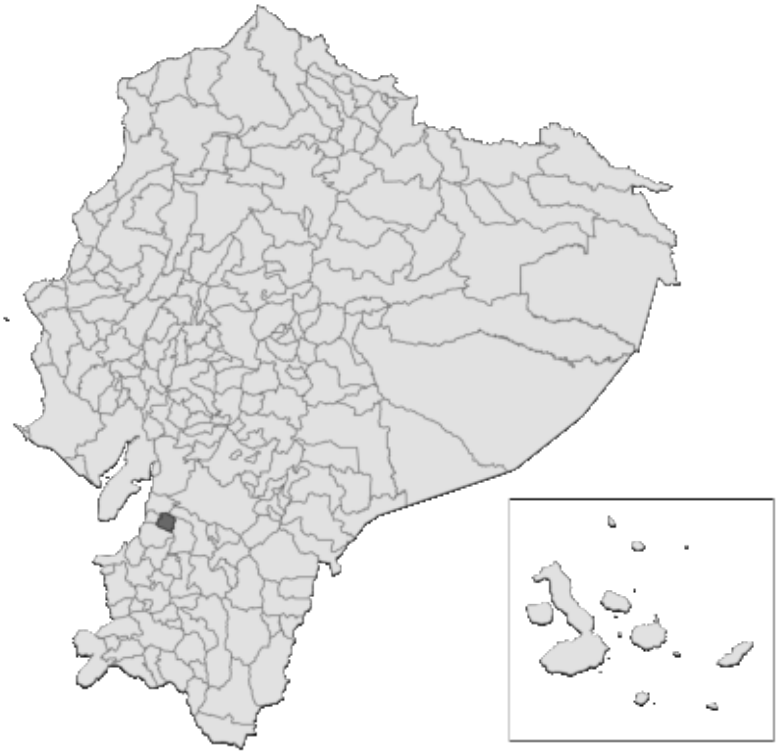
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CAMILO PONCE ENRÍQUEZ

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.455 • RANK: 147/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.488 • RANK: 109/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.514 • RANK: 85/221 CANTONS ASSESSED

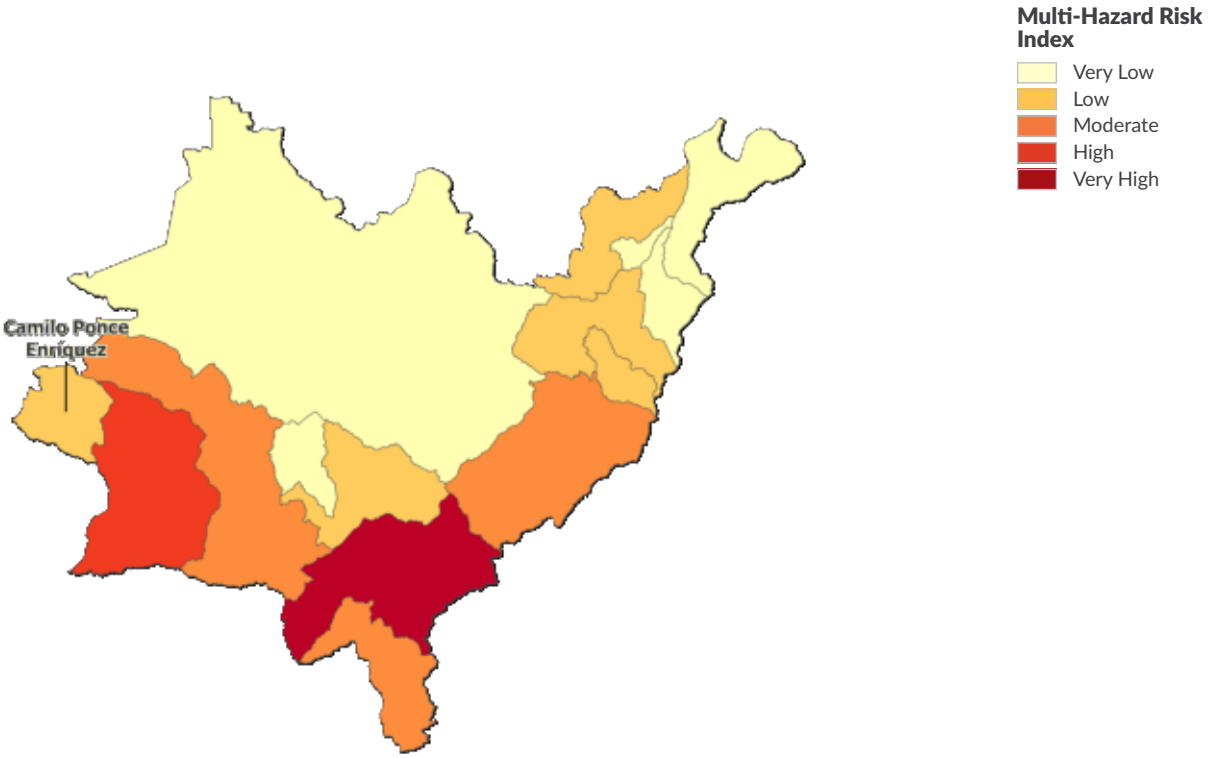
Coping Capacity (CC) - Very High
SCORE: 0.599 • RANK: 39/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.363 • RANK: 143/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.432 • RANK: 139/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

CAMILO PONCE ENRÍQUEZ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457

Camilo Ponce Enríquez	**0.455**
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 143 / 221 CANTONS ASSESSED
SCORE: 0.363



MHE
0.363

Raw MHE
0.399

Relative MHE
0.327

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
70%
- **13,729** people exposed
- **5,422** structures exposed (69%)

Critical Infrastructure Exposed: 66%

Earthquake
100%
- **19,487** people exposed
- **7,855** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
24%
- **4,624** people exposed
- **1,871** structures exposed (24%)

Critical Infrastructure Exposed: 22%

Inland Flood
7%
- **1,390** people exposed
- **652** structures exposed (8%)

Critical Infrastructure Exposed: 13%

Landslide
40%
- **7,701** people exposed
- **3,014** structures exposed (38%)

Critical Infrastructure Exposed: 38%

Mosquito-Borne Disease
85%
- **16,593** people exposed
- **6,821** structures exposed (87%)

Critical Infrastructure Exposed: 92%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
2%
- **397** people exposed
- **167** structures exposed (2%)

Critical Infrastructure Exposed: 4%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
37%
- **7,155** people exposed
- **2,916** structures exposed (37%)

Critical Infrastructure Exposed: 38%

VULNERABILITY (V)

RANK: 109 / 221 CANTONS ASSESSED **SCORE: 0.488**

Vulnerability in Camilo Ponce Enríquez is primarily driven by Population Pressures and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.435

- **9.8** Average Years of Schooling
- **47.2%** Population (age 24 and over) with General Basic Education Schooling
- **5%** Population (age 24 and over) with No Schooling
- **3.6%** Adult Illiteracy Rate
- **37.5%** Households with No Internet Access
- **71.3%** Households with No Access to Television
- **80.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.435

- **89%** Homes with Access to Public Water Source
- **69.1%** Homes Connected to the Public Sewage System
- **15.3%** Homes without Piped Water
- **12.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.329

- **54.2** Age Dependency Ratio
- **7.3%** Unemployment Rate
- **39.2%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.535

- **4.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.572

- **0.5** Female to Male Labor Ratio (distance from parity)
- **54.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **67.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **59.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.406

- **7.3%** Prevalence of Disability (among persons age 5 and over)
- **4.9** Perinatal Mortality Rate (per 1,000 births)
- **7.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.227

- **3.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.371

37 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**7** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**20** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**39** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.468

9.9% Homes with Exterior Walls in Poor Condition	**1.5%** Homes with Inadequate Materials Used in Outer Walls	**14.6%** Homes with Roofs in Poor Condition	**87.1%** Households with No Access to Vehicle for Private Use	**12.9%** Household Overcrowding

Population Pressures

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.785

106.5 Population Density (persons per sq km)	**2.7%** Average Annual Population Change (2010-2022)	**65.1** Net Migration Rate (per 1,000 persons)	**0.32** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.468

0.3 Hazard Susceptibility (recent events 2015-2025)	**0.2** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 39 / 221 CANTONS ASSESSED **SCORE: 0.599**

Camilo Ponce Enríquez exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.664

61.5%
Labor Force Participation

315,845
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.318

0%
Protected Area (% of land area)

-2,381.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.632

82.8%
Voter Participation

96.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.595

Communications Capacity

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.544

4.2%
Household Access to Fixed Phones

91.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.656

98.9%
Homes Served by the Public Electricity Network

69.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.563

17.5
Nurses and Midwives per 10,000 persons

22.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.618

11.8
Average Distance to Airport (km)

39.2
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 139 / 221 CANTONS ASSESSED **SCORE: 0.432**

Camilo Ponce Enríquez exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.352

3.9	3.5%	0	37.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.512

27.3	6.6	1.9	5.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 85 / 221 CANTONS ASSESSED
SCORE: 0.514

Camilo Ponce Enríquez's score and ranking are due to Moderate Vulnerability combined with Very High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Population Pressures


Mass Care Support


Marginalization


Emergency Services

KEY FACTORS INFLUENCING RESILIENCE



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Marginalization

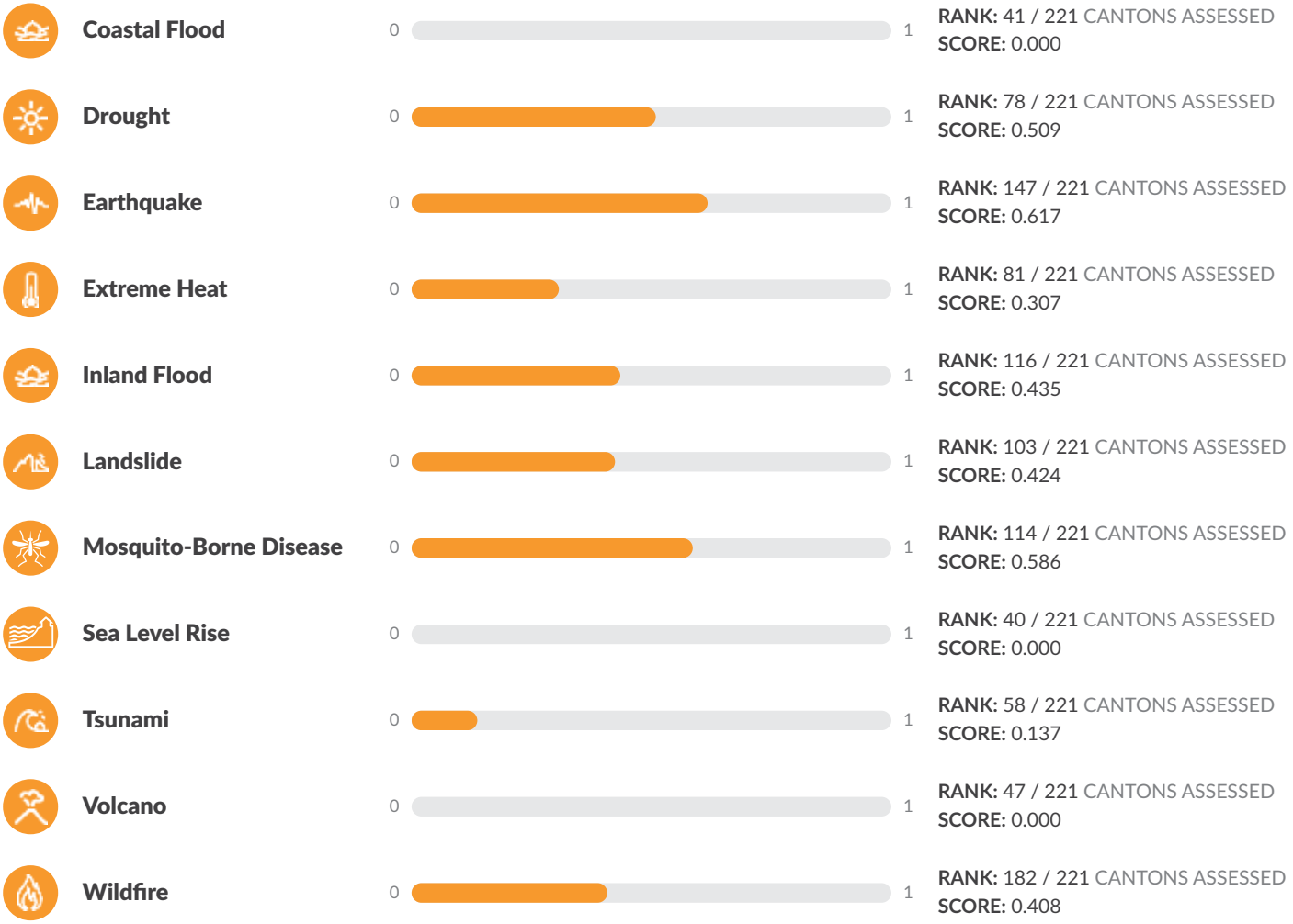
Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

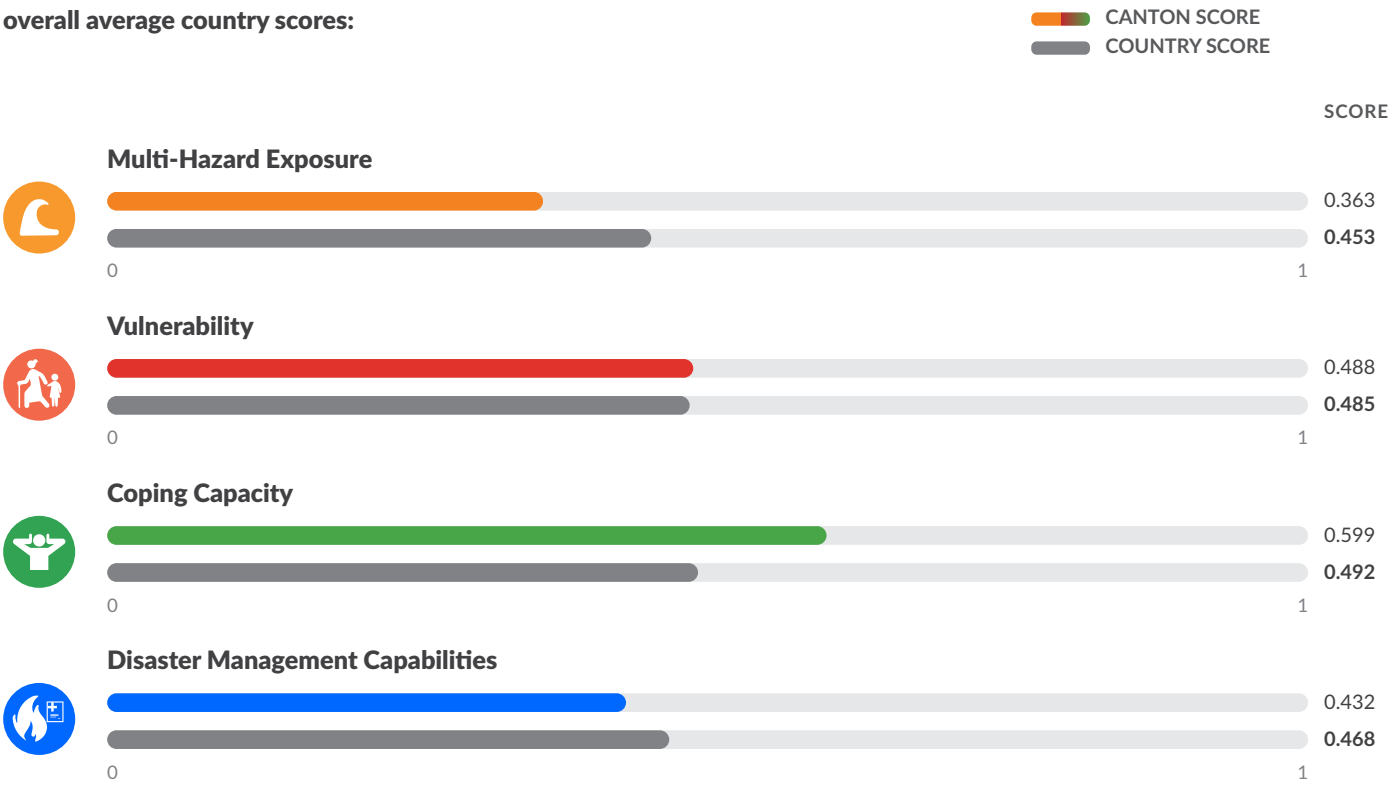


MULTI-HAZARD RISK (MHR)

RANKED
147 / 221
CANTONS ASSESSED
SCORE: 0.455

Camilo Ponce Enríquez's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Very High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CAÑAR

NDPBA SUBNATIONAL PROFILE

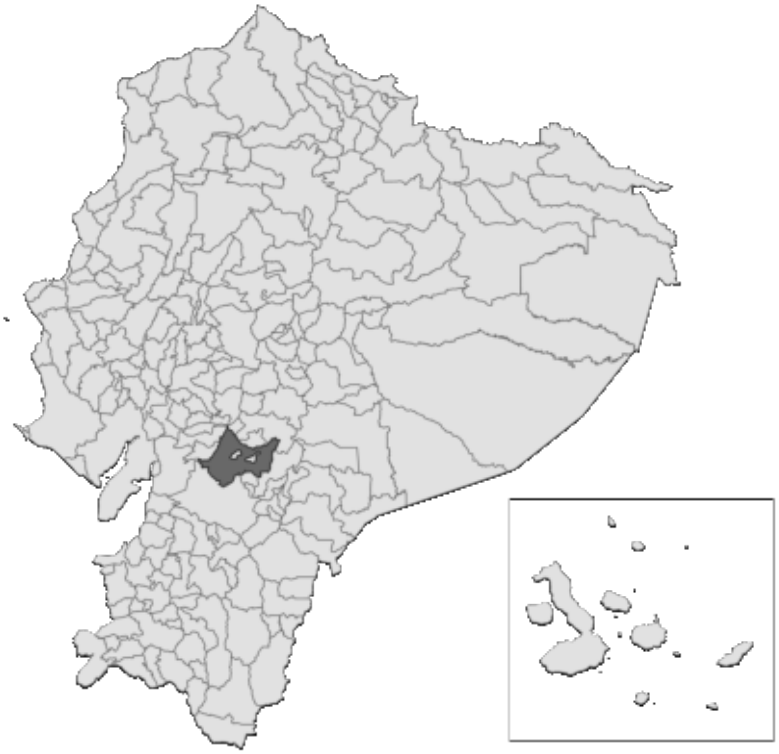
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CAÑAR

PROVINCE: CAÑAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.504 • RANK: 98/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.467 • RANK: 133/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.485 • RANK: 110/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.457 • RANK: 136/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.473 • RANK: 93/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.467 • RANK: 100/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CAÑAR PROVINCE

CAÑAR • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE

Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High



Suscal	0.506
Cañar	**0.504**
Déleg	0.479
Biblián	0.457
Azogues	0.445
La Troncal	0.426
El Tambo	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 93 / 221 CANTONS ASSESSED
SCORE: 0.473



MHE
0.473

Raw MHE
0.660

Relative MHE
0.286

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
53%
34,866 people exposed
26,692 structures exposed (51%)
Critical Infrastructure Exposed: 49%

Earthquake
100%
65,649 people exposed
51,966 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
8%
5,549 people exposed
4,556 structures exposed (9%)
Critical Infrastructure Exposed: 5%

Landslide
75%
49,514 people exposed
41,273 structures exposed (79%)
Critical Infrastructure Exposed: 84%

Mosquito-Borne Disease
16%
10,564 people exposed
7,708 structures exposed (15%)
Critical Infrastructure Exposed: 10%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
60%
39,668 people exposed
34,095 structures exposed (66%)
Critical Infrastructure Exposed: 57%

VULNERABILITY (V)

RANK: 133 / 221 CANTONS ASSESSED **SCORE: 0.467**

Vulnerability in Cañar is primarily driven by Economic Constraints and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.552

- **8.5** Average Years of Schooling
- **47.5%** Population (age 24 and over) with General Basic Education Schooling
- **14%** Population (age 24 and over) with No Schooling
- **11.8%** Adult Illiteracy Rate
- **39.8%** Households with No Internet Access
- **75.4%** Households with No Access to Television
- **73.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.434

- **86.6%** Homes with Access to Public Water Source
- **45.8%** Homes Connected to the Public Sewage System
- **29.3%** Homes without Piped Water
- **3.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.576

- **65.5** Age Dependency Ratio
- **14.1%** Unemployment Rate
- **46.7%** Poverty Rate (based on UBN)
- **1.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.478

- **3.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.485

- **0.4** Female to Male Labor Ratio (distance from parity)
- **50.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **63.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **52.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.457

- **10%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **14.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.276

- **1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **34.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.580

69	14	43	65
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.396

11.4%	3.5%	17.2%	73.9%	5.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.309

26.7	-1.1	-0.5	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.527

0.3	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 136 / 221 CANTONS ASSESSED **SCORE: 0.457**

Cañar exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.419

50.4%
Labor Force Participation

113,413
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.497

24.1%
Protected Area (% of land area)

-14,514
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.359

72%
Voter Participation

85.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.579

Communications Capacity

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.601

12%
Household Access to Fixed Phones

86.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.731

97.5%
Homes Served by the Public Electricity Network

86%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.589

18.8
Nurses and Midwives per 10,000 persons

24.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.394

31.9
Average Distance to Airport (km)

97.1
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 100 / 221 CANTONS ASSESSED **SCORE: 0.467**

Cañar exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.456

3.4	3.2%	1	44.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.477

11.3	7.1	4	6.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 110 / 221 CANTONS ASSESSED
SCORE: 0.485

Cañar's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Transportation Capacity

Economic Capacity

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

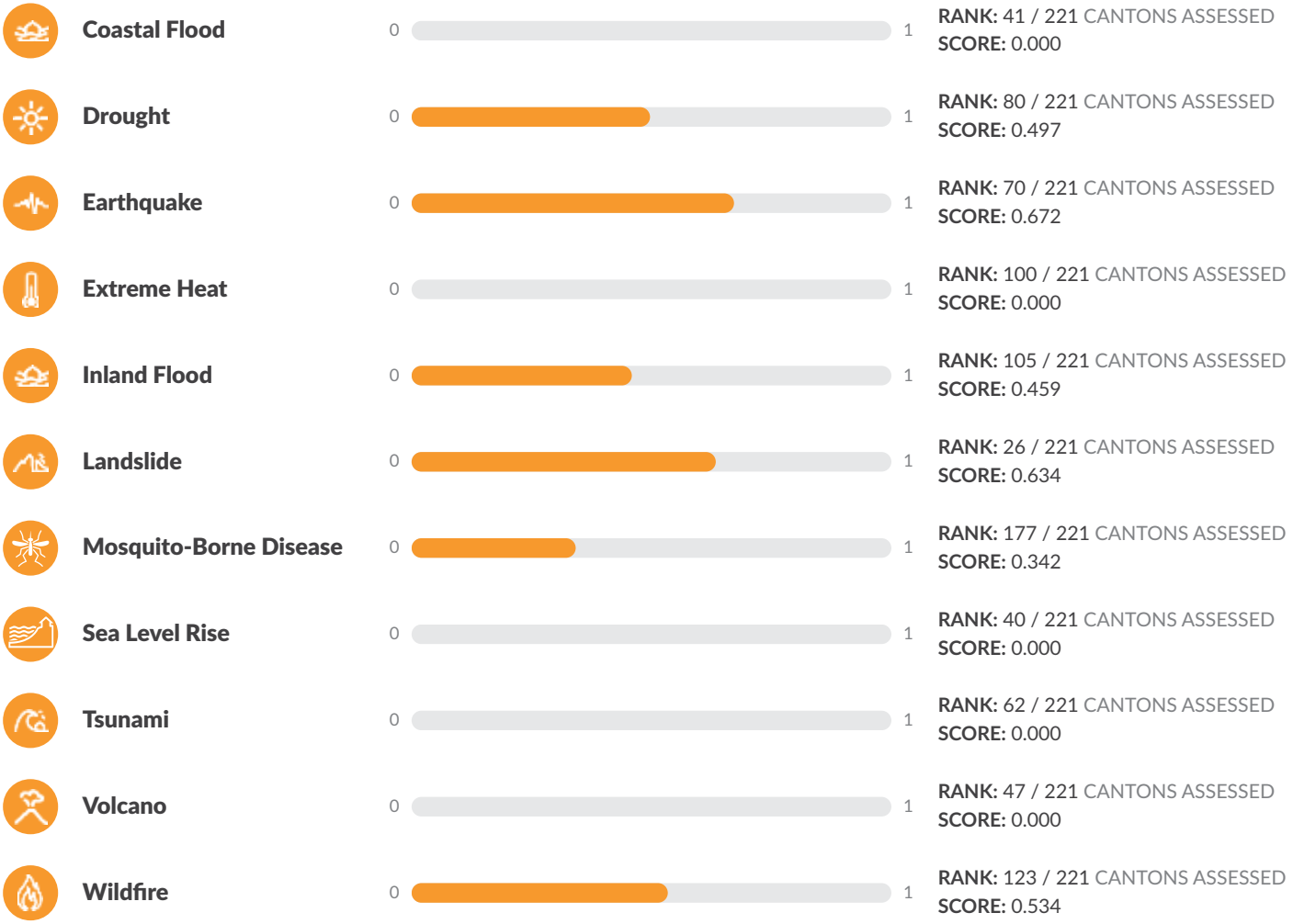
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)



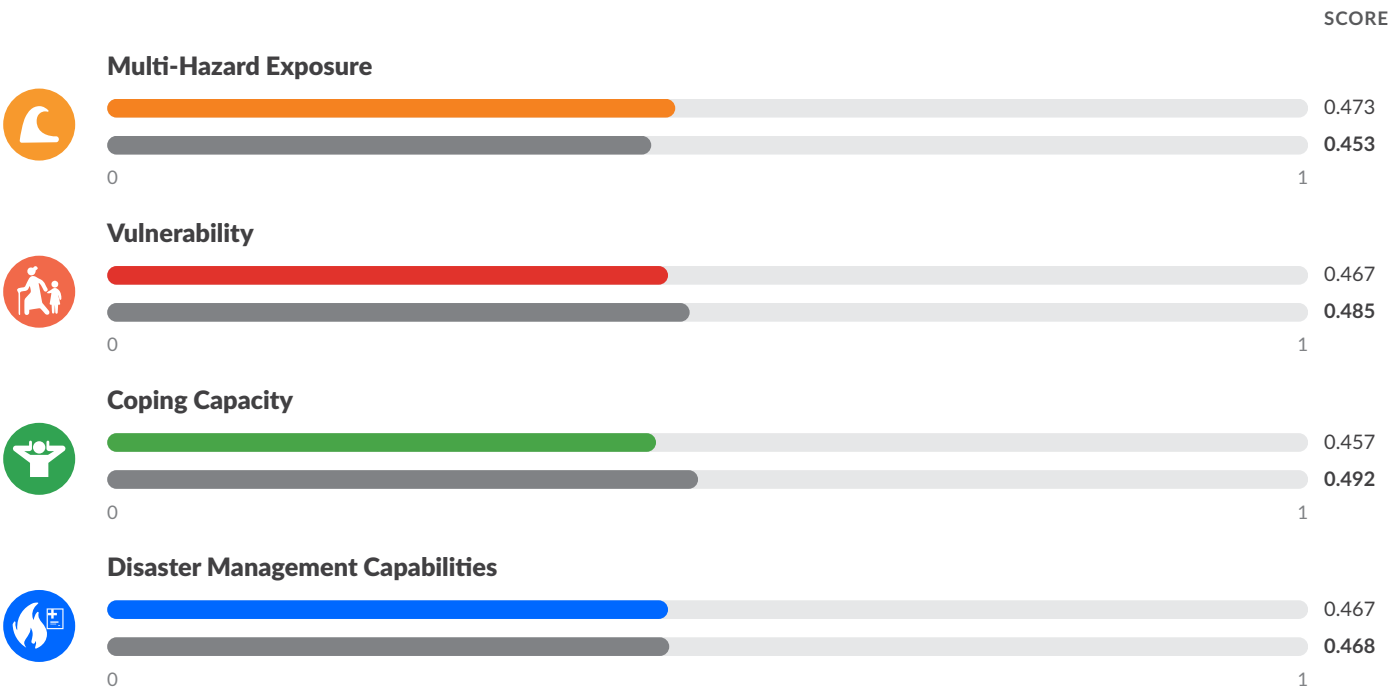
MULTI-HAZARD RISK (MHR)

RANKED
98 / 221
CANTONS ASSESSED
SCORE: 0.504

Cañar's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE



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CARLOS JULIO AROSEMENA TOLA

NDPBA SUBNATIONAL PROFILE

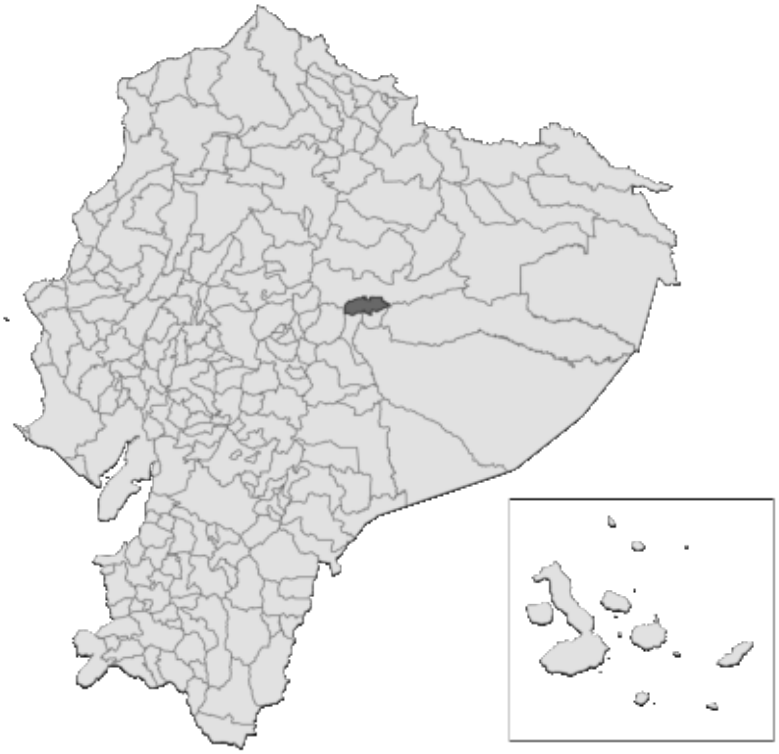
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CARLOS JULIO AROSEMENA TOLA

PROVINCE: NAPO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.422 • RANK: 186/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.478 • RANK: 117/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.122 • RANK: 220/221 CANTONS ASSESSED

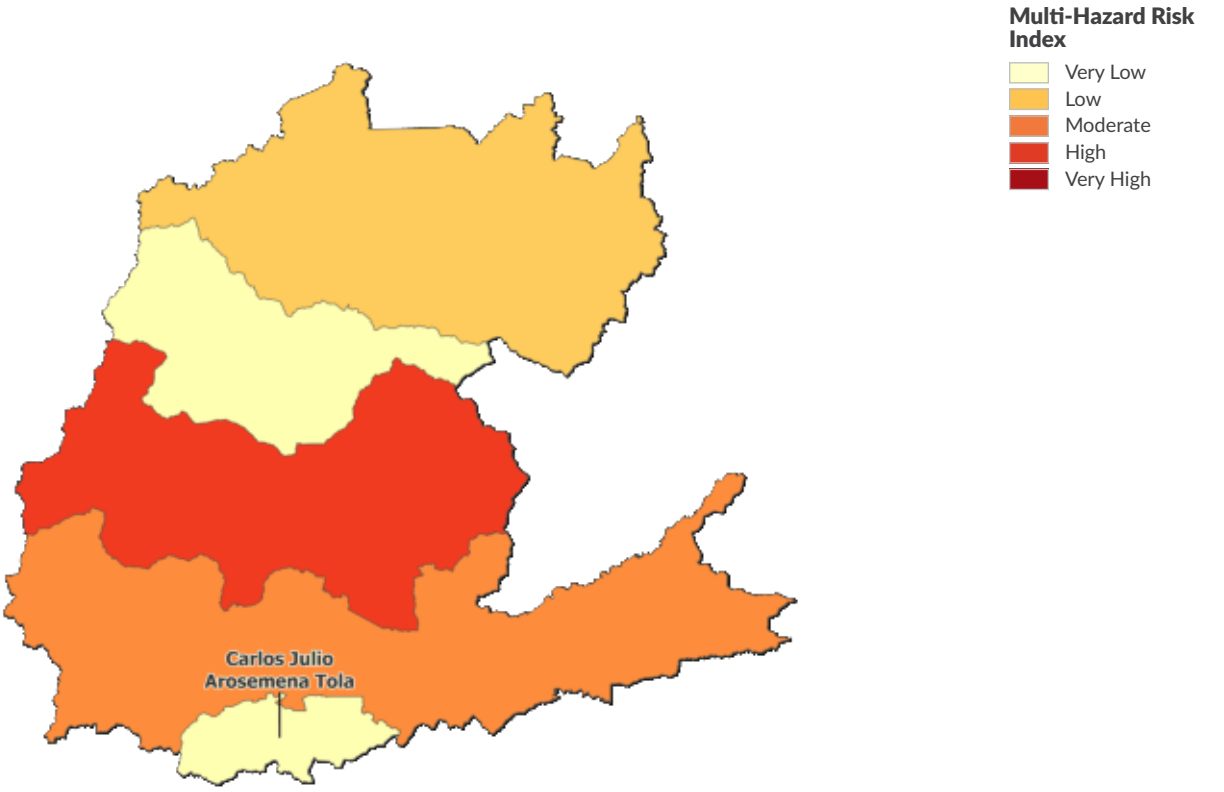
Vulnerability (V) - Moderate
SCORE: 0.479 • RANK: 120/221 CANTONS ASSESSED

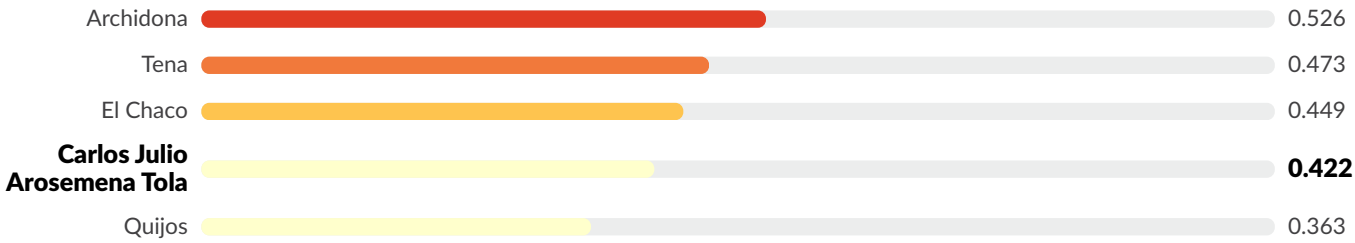
Coping Capacity (CC) - High
SCORE: 0.534 • RANK: 77/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.380 • RANK: 172/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN NAPO PROVINCE

CARLOS JULIO AROSEMENA TOLA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 220 / 221 CANTONS ASSESSED
SCORE: 0.122



MHE
0.122

Raw MHE
0.162

Relative MHE
0.082

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
6,056 people exposed
3,726 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
29%
1,774 people exposed
1,098 structures exposed (29%)
Critical Infrastructure Exposed: 30%

Landslide
14%
833 people exposed
509 structures exposed (14%)
Critical Infrastructure Exposed: 12%

Mosquito-Borne Disease
100%
6,056 people exposed
3,706 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
20%
1,233 people exposed
852 structures exposed (23%)
Critical Infrastructure Exposed: 20%

VULNERABILITY (V)

RANK: 120 / 221 CANTONS ASSESSED **SCORE: 0.479**

Vulnerability in Carlos Julio Arosemena Tola is primarily driven by Economic Constraints and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.492

- **10.2** Average Years of Schooling
- **41%** Population (age 24 and over) with General Basic Education Schooling
- **6.1%** Population (age 24 and over) with No Schooling
- **4.5%** Adult Illiteracy Rate
- **58.5%** Households with No Internet Access
- **82.7%** Households with No Access to Television
- **78.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.496

- **79.4%** Homes with Access to Public Water Source
- **56.6%** Homes Connected to the Public Sewage System
- **36.8%** Homes without Piped Water
- **6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.620

- **62.8** Age Dependency Ratio
- **13.7%** Unemployment Rate
- **53.8%** Poverty Rate (based on UBN)
- **3.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.536

- **4.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.483

- **0.3** Female to Male Labor Ratio (distance from parity)
- **69.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **10%** Prevalence of Child Marriage (among adolescents age 12-17)
- **65.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **17.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.301

- **3.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.706

- **180.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **10.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.258

21	7	28	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.452

13.8%	0.7%	16.7%	82.9%	10.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.474

9.3	2.1%	6.9	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.502

0.2	0.4	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 77 / 221 CANTONS ASSESSED **SCORE: 0.534**

Carlos Julio Arosemena Tola exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.398

58.5%
Labor Force Participation

15,793
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.700

27%
Protected Area (% of land area)

-1,156.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.572

85.4%
Voter Participation

86.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.576

Communications Capacity

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.556

10%
Household Access to Fixed Phones

85.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.646

95.3%
Homes Served by the Public Electricity Network

85.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.587

19.4
Nurses and Midwives per 10,000 persons

23.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.516

20.5
Average Distance to Airport (km)

25.1
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 172 / 221 CANTONS ASSESSED **SCORE: 0.380**

Carlos Julio Arosemena Tola exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.338

3.4	14.7%	0	104.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.422

18.2	4.7	4.5	11.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 117 / 221 CANTONS ASSESSED
SCORE: 0.478

Carlos Julio Arosemena Tola's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Mass Care Support


Economic Constraints


Economic Capacity


Emergency Services

KEY FACTORS INFLUENCING RESILIENCE



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Economic Capacity

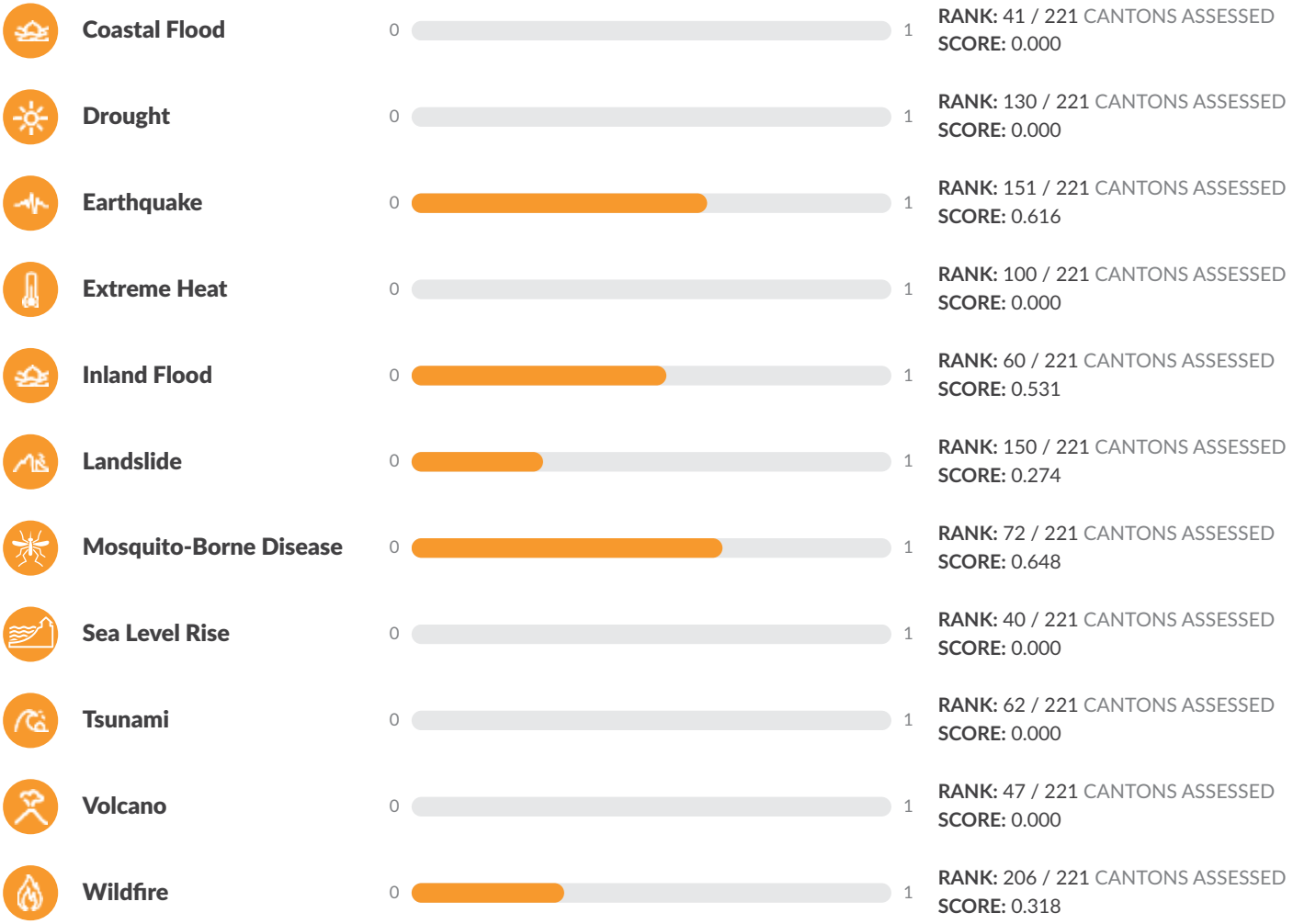
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

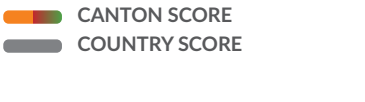


MULTI-HAZARD RISK (MHR)

RANKED
186 / 221
CANTONS ASSESSED
SCORE: 0.422

Carlos Julio Arosemena Tola's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CASCALES

NDPBA SUBNATIONAL PROFILE

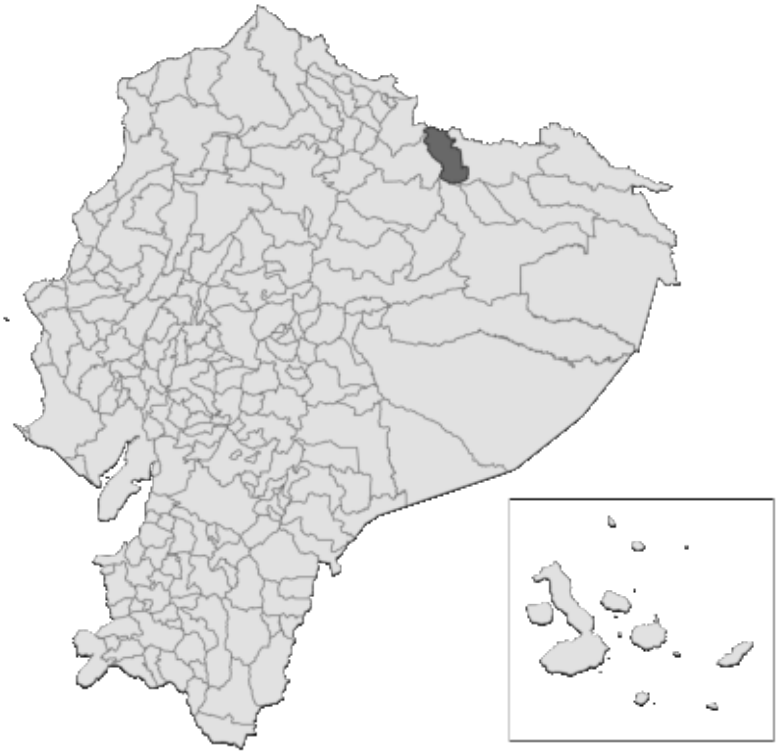
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CASCALES

PROVINCE: SUCUMBÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.485 • RANK: 118/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.523 • RANK: 76/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.454 • RANK: 143/221 CANTONS ASSESSED

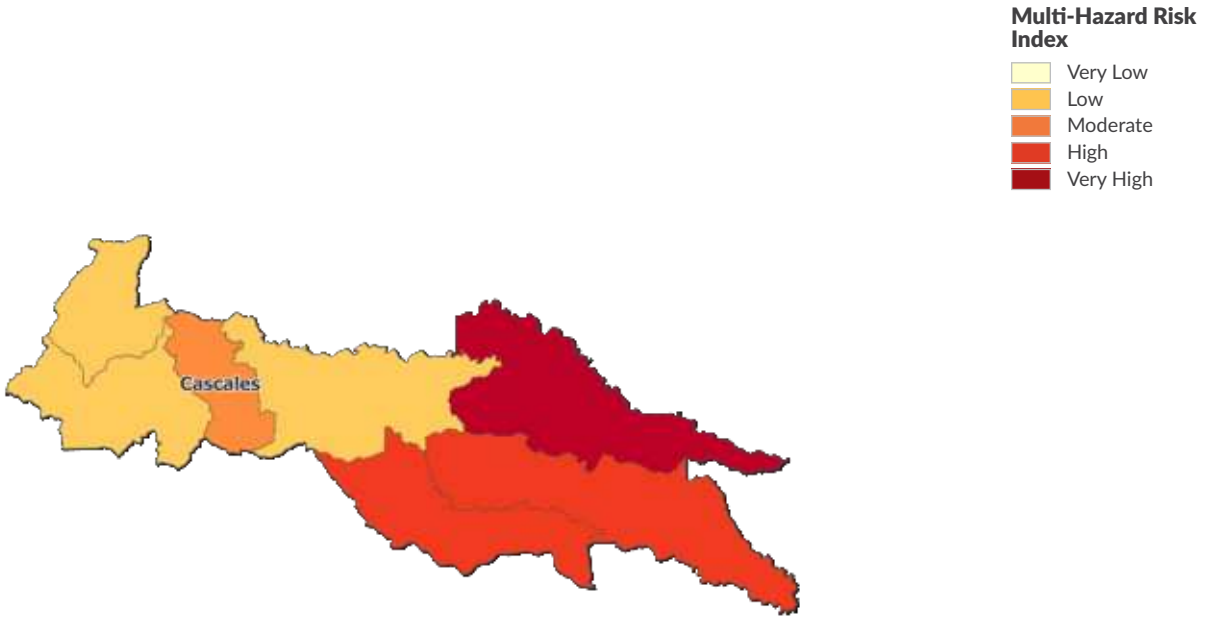
Coping Capacity (CC) - Moderate
SCORE: 0.469 • RANK: 126/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.304 • RANK: 173/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.417 • RANK: 148/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SUCUMBÍOS PROVINCE

CASCALES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Putumayo	0.567
Cuyabeno	0.539
Shushufindi	0.531
Cascales	**0.485**
Gonzalo Pizarro	0.468
Lago Agrio	0.461
Sucumbíos	0.445

MULTI-HAZARD EXPOSURE (MHE)

RANK: 173 / 221 CANTONS ASSESSED
SCORE: 0.304



MHE
0.304

Raw MHE
0.378

Relative MHE
0.230

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
15,687 people exposed
10,462 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
34%
5,356 people exposed
3,829 structures exposed (37%)
Critical Infrastructure Exposed: 35%

Landslide
3%
486 people exposed
456 structures exposed (4%)
Critical Infrastructure Exposed: 7%

Mosquito-Borne Disease
100%
15,687 people exposed
10,457 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
75%
11,807 people exposed
8,107 structures exposed (77%)
Critical Infrastructure Exposed: 74%

VULNERABILITY (V)

RANK: 76 / 221 CANTONS ASSESSED **SCORE: 0.523**

Vulnerability in Cascales is primarily driven by Marginalization and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.493

- **10.2** Average Years of Schooling
- **41.4%** Population (age 24 and over) with General Basic Education Schooling
- **5.8%** Population (age 24 and over) with No Schooling
- **4.6%** Adult Illiteracy Rate
- **60.1%** Households with No Internet Access
- **79.9%** Households with No Access to Television
- **81%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.564

- **67.1%** Homes with Access to Public Water Source
- **42.6%** Homes Connected to the Public Sewage System
- **49.4%** Homes without Piped Water
- **4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.604

- **65.5** Age Dependency Ratio
- **14.9%** Unemployment Rate
- **64.9%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.814

- **13.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.638

- **0.5** Female to Male Labor Ratio (distance from parity)
- **77.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **90.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **67.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.311

- **8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **5.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.294

- **23.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.479

36	13	46	26
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.579

21.8%	0.6%	25.1%	89.9%	11.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.479

9.3	0.6%	22.6	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.467

0	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 126 / 221 CANTONS ASSESSED **SCORE: 0.469**

Cascales exhibits weaker Coping Capacity in the areas of Communications Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.363

53%
Labor Force Participation

31,590
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.868

28.3%
Protected Area (% of land area)

8,455.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.507

84.6%
Voter Participation

80.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.406

Communications Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.337

4.6%
Household Access to Fixed Phones

73.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.458

90.2%
Homes Served by the Public Electricity Network

75.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.444

11.9
Nurses and Midwives per 10,000 persons

16.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.384

35.8
Average Distance to Airport (km)

58.2
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 148 / 221 CANTONS ASSESSED **SCORE: 0.417**

Cascales exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.458

4	22.9%	0	32.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.376

30	10.1	4.6	6.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 143 / 221 CANTONS ASSESSED
SCORE: 0.454

Cascales's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Communications Capacity



Marginalization



Economic Capacity



Emergency Services

KEY FACTORS INFLUENCING RESILIENCE



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Economic Capacity

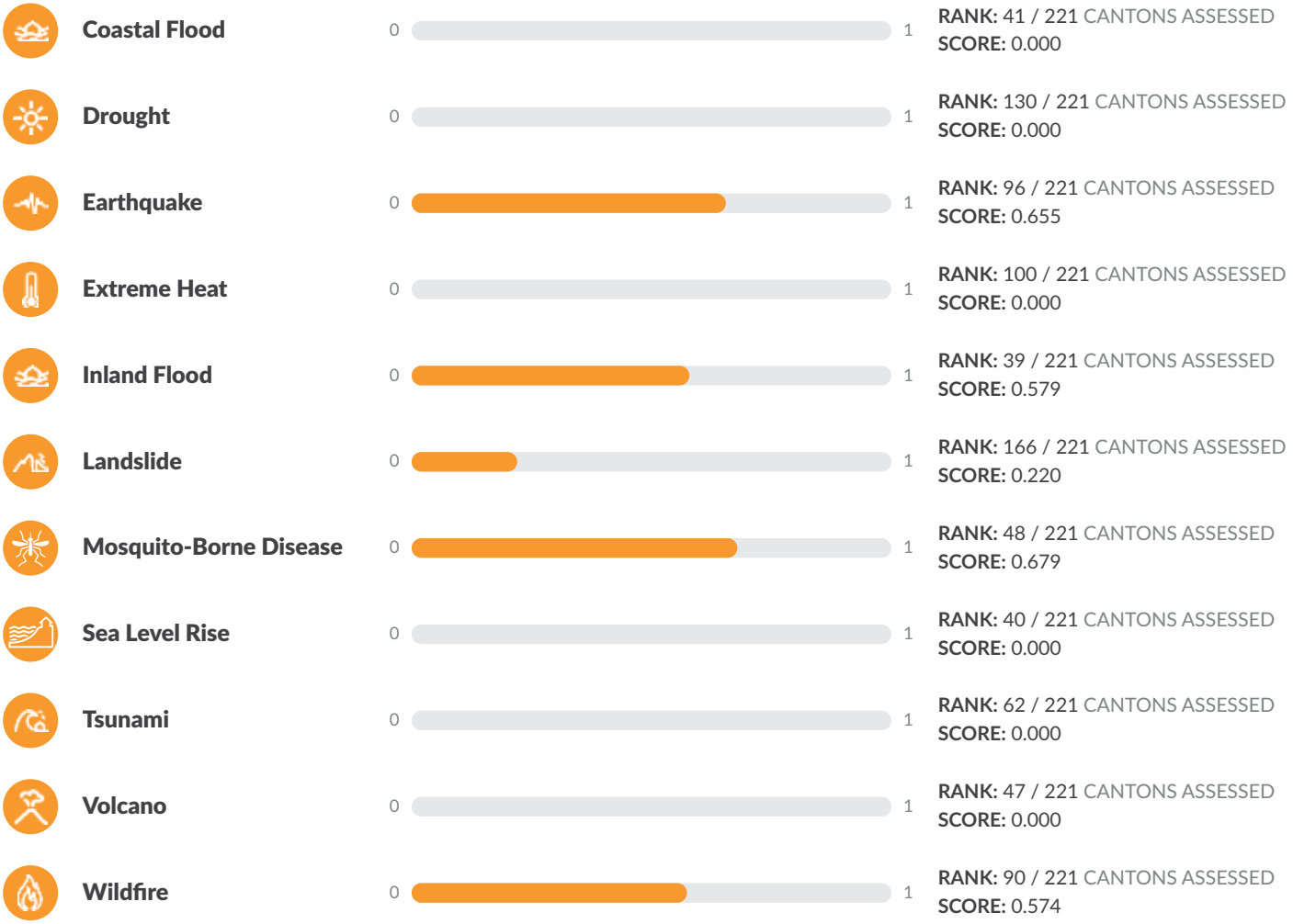
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

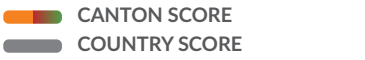


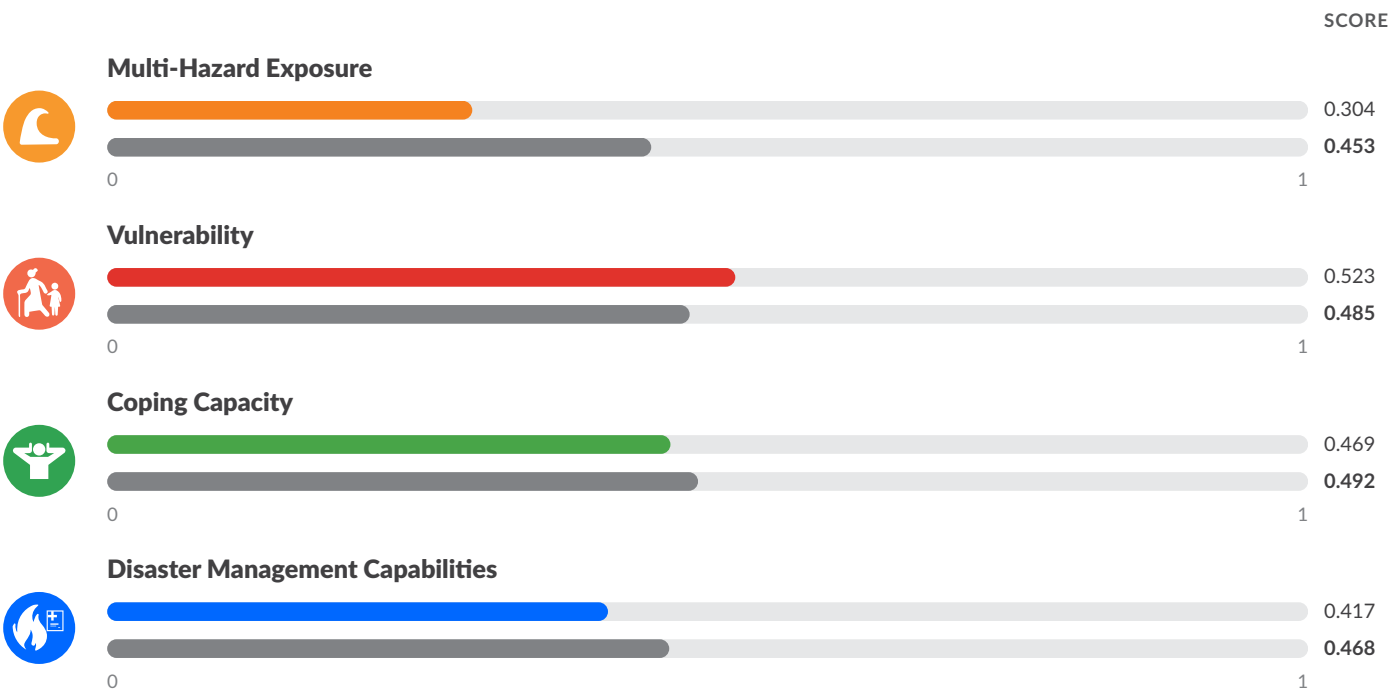
MULTI-HAZARD RISK (MHR)

RANKED
118 / 221
CANTONS ASSESSED
SCORE: 0.485

Cascales's score and ranking are due to Low Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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CATAMAYO

NDPBA SUBNATIONAL PROFILE

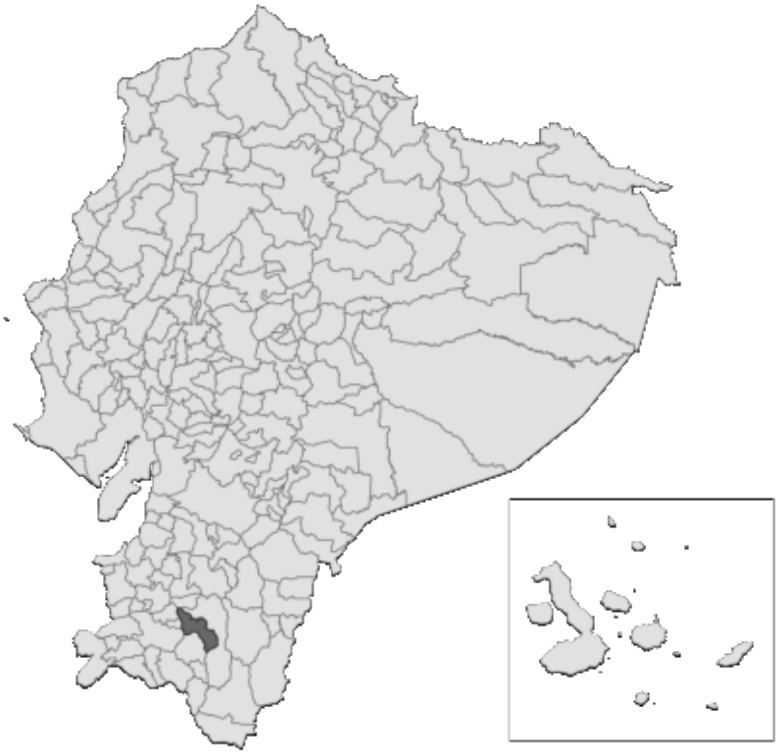
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CATAMAYO

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.467 • RANK: 136/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.442 • RANK: 152/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.524 • RANK: 80/221 CANTONS ASSESSED

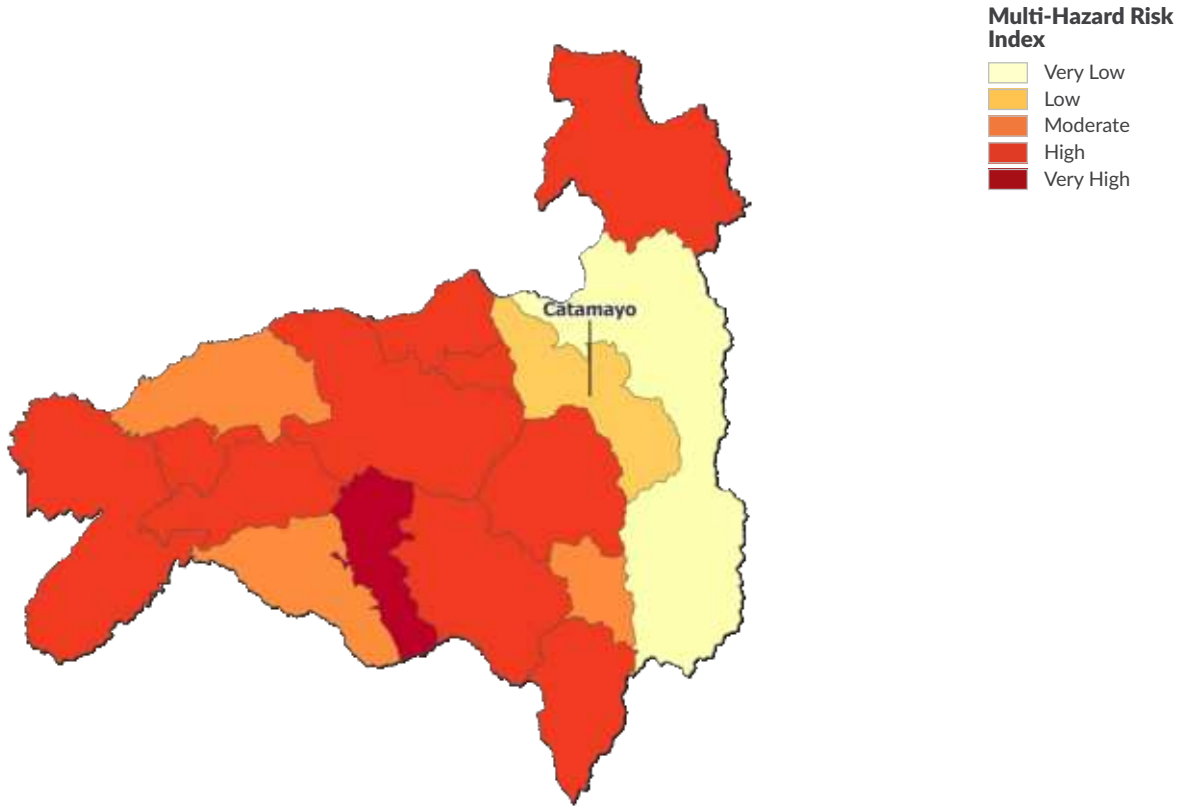
Coping Capacity (CC) - Moderate
SCORE: 0.503 • RANK: 100/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.439 • RANK: 113/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.509 • RANK: 78/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

CATAMAYO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590	Chaguarpamba	0.524
Espíndola	0.548	Olmedo	0.521
Saraguro	0.548	Celica	0.520
Zapotillo	0.546	Quilanga	0.494
Gonzanamá	0.544	Puyango	0.493
Calvas	0.536	Macará	0.492
Paltas	0.532	**Catamayo**	**0.467**
Pindal	0.528	Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 113 / 221 CANTONS ASSESSED
SCORE: 0.439



MHE
0.439

Raw MHE
0.515

Relative MHE
0.363

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
98%
- **33,480** people exposed
- **16,603** structures exposed (97%)

Critical Infrastructure Exposed: 84%

Earthquake
100%
- **34,256** people exposed
- **17,180** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
1%
- **473** people exposed
- **275** structures exposed (2%)

Critical Infrastructure Exposed: 4%

Landslide
38%
- **12,992** people exposed
- **7,945** structures exposed (46%)

Critical Infrastructure Exposed: 42%

Mosquito-Borne Disease
43%
- **14,688** people exposed
- **7,335** structures exposed (43%)

Critical Infrastructure Exposed: 65%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
63%
- **21,531** people exposed
- **11,706** structures exposed (68%)

Critical Infrastructure Exposed: 66%

VULNERABILITY (V)

RANK: 152 / 221 CANTONS ASSESSED **SCORE: 0.442**

Vulnerability in Catamayo is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.369

- **10.6** Average Years of Schooling
- **45.6%** Population (age 24 and over) with General Basic Education Schooling
- **3.3%** Population (age 24 and over) with No Schooling
- **2.5%** Adult Illiteracy Rate
- **38.6%** Households with No Internet Access
- **74.7%** Households with No Access to Television
- **67.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.403

- **94%** Homes with Access to Public Water Source
- **72.5%** Homes Connected to the Public Sewage System
- **21.2%** Homes without Piped Water
- **10.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.447

- **58.1** Age Dependency Ratio
- **13.7%** Unemployment Rate
- **34.6%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.374

- **2.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.329

- **0.3** Female to Male Labor Ratio (distance from parity)
- **39.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **45.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **34%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.466

- **11.5%** Prevalence of Disability (among persons age 5 and over)
- **2.4** Perinatal Mortality Rate (per 1,000 births)
- **6.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.304

- **56.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **9.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.591

75	15	39	80
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.431

14.1%	0.8%	17.4%	80.2%	8.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.481

54.1	1.2%	10.8	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.619

0.2	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 100 / 221 CANTONS ASSESSED **SCORE: 0.503**

Catamayo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.531

58.7%
Labor Force Participation

96,553
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.275

0%
Protected Area (% of land area)

-5,226.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.483

80.9%
Voter Participation

85.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.572

Communications Capacity

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.702

16.5%
Household Access to Fixed Phones

90.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.742

98.1%
Homes Served by the Public Electricity Network

84.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.270

6
Nurses and Midwives per 10,000 persons

9.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.577

6.4
Average Distance to Airport (km)

80.4
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 78 / 221 CANTONS ASSESSED **SCORE: 0.509**

Catamayo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.465

1.9	5%	0	18.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.552

17.2	5.1	2.3	4.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 80 / 221 CANTONS ASSESSED
SCORE: 0.524

Catamayo's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity **Disaster Impacts** **Mass Care Support** **Governance**

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

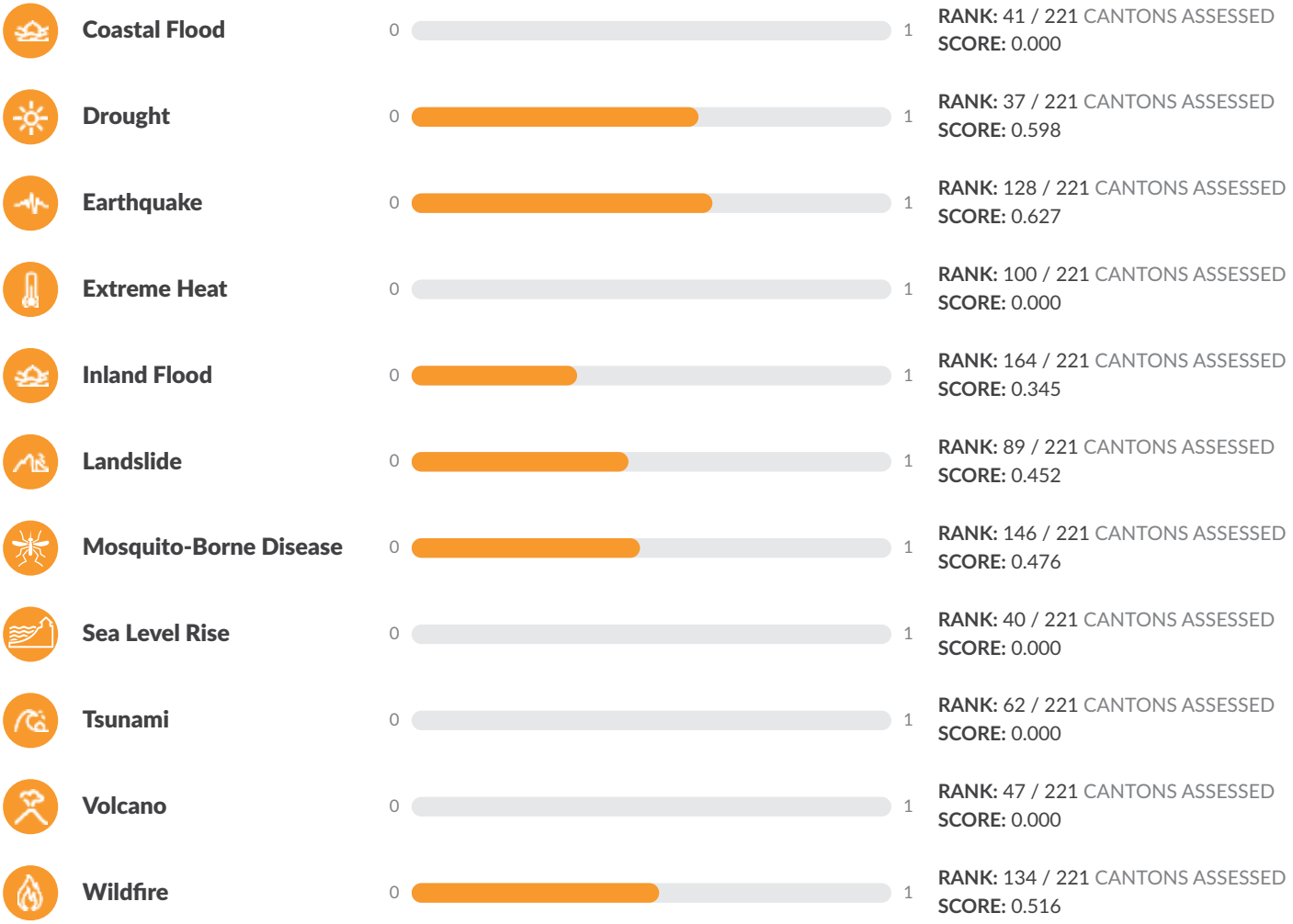
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

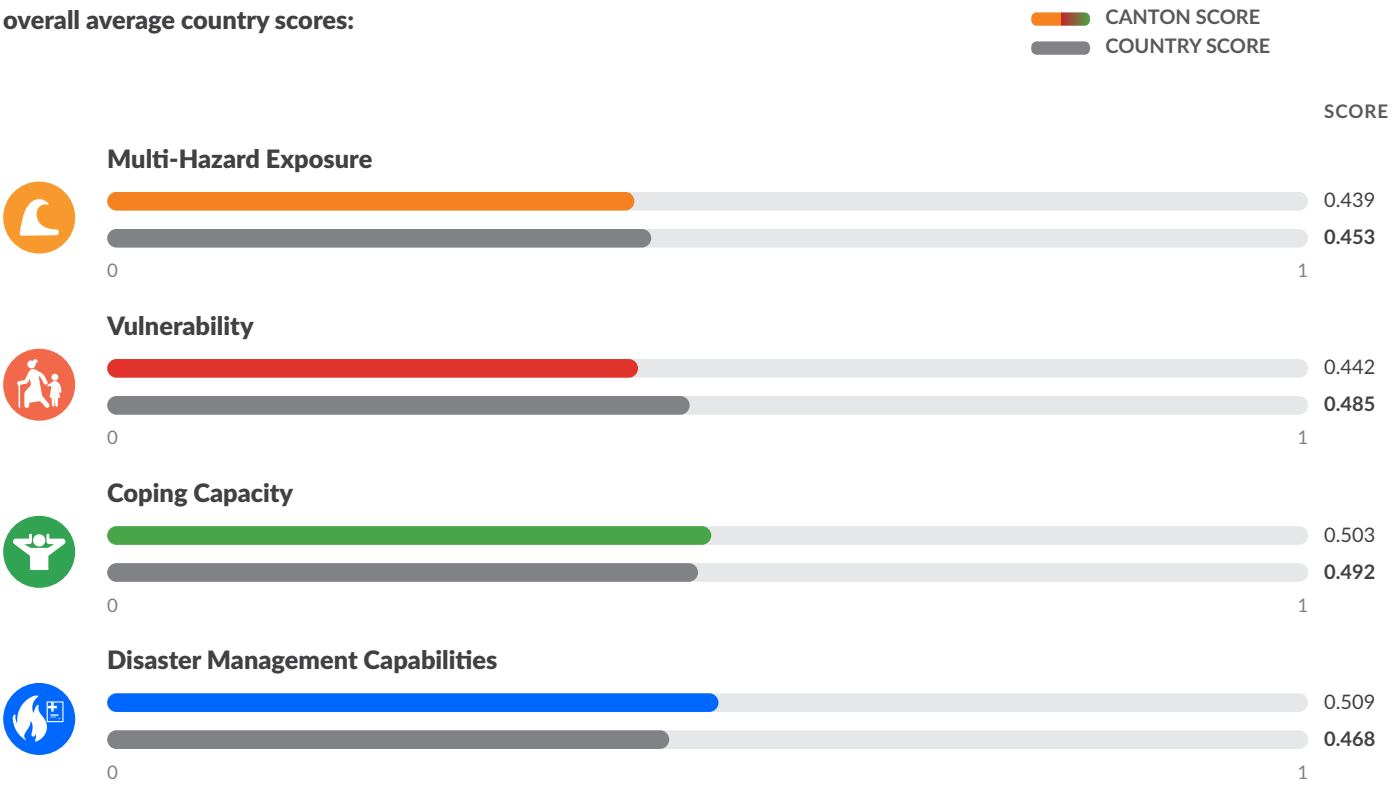


MULTI-HAZARD RISK (MHR)

RANKED
136 / 221
CANTONS ASSESSED
SCORE: 0.467

Catamayo's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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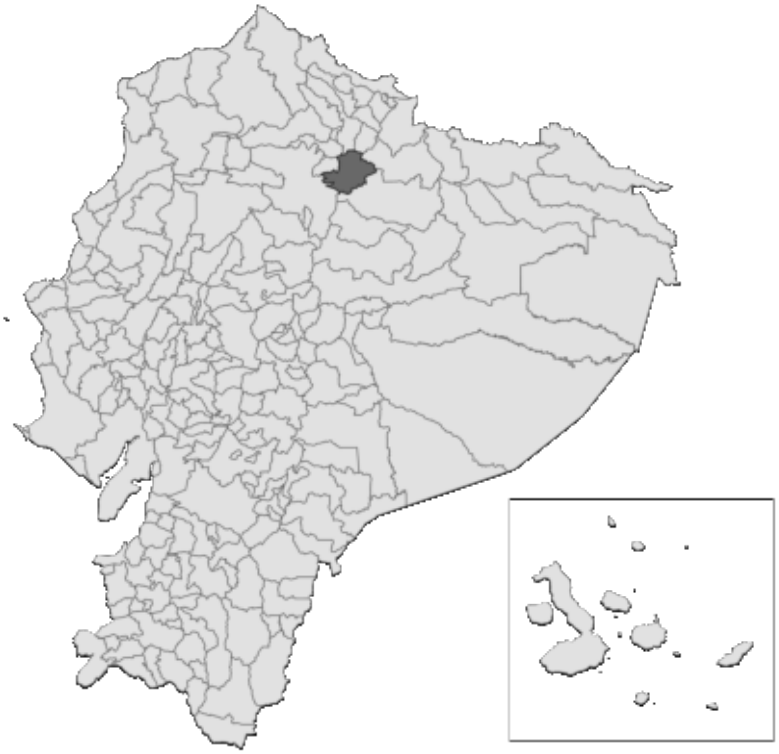
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CAYAMBE

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.412 • RANK: 195/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.389 • RANK: 192/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.602 • RANK: 26/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.676 • RANK: 14/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.455 • RANK: 105/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.519 • RANK: 73/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

CAYAMBE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	0.504
San Miguel De Los Bancos	0.463
Pedro Vicente Maldonado	0.449
Mejía	0.442
Cayambe	**0.412**
Distrito Metropolitano De Quito	0.393
Pedro Moncayo	0.381
Rumiñahui	0.313

MULTI-HAZARD EXPOSURE (MHE)

RANK: 105 / 221 CANTONS ASSESSED
SCORE: 0.455



MHE
0.455

Raw MHE
0.709

Relative MHE
0.201

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
22%
- **23,913** people exposed
- **19,968** structures exposed (31%)

Critical Infrastructure Exposed: 15%

Earthquake
100%
- **107,521** people exposed
- **64,524** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **156** people exposed
- **113** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
29%
- **31,137** people exposed
- **24,768** structures exposed (38%)

Critical Infrastructure Exposed: 32%

Mosquito-Borne Disease
14%
- **15,016** people exposed
- **8,284** structures exposed (13%)

Critical Infrastructure Exposed: 22%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
21%
- **22,051** people exposed
- **9,201** structures exposed (14%)

Critical Infrastructure Exposed: 30%

Wildfire
98%
- **105,381** people exposed
- **62,938** structures exposed (98%)

Critical Infrastructure Exposed: 96%

VULNERABILITY (V)

RANK: 192 / 221 CANTONS ASSESSED **SCORE: 0.389**

Vulnerability in Cayambe is primarily driven by Population Pressures and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.400

- **10.2** Average Years of Schooling
- **39.7%** Population (age 24 and over) with General Basic Education Schooling
- **8.2%** Population (age 24 and over) with No Schooling
- **6.2%** Adult Illiteracy Rate
- **31.4%** Households with No Internet Access
- **76%** Households with No Access to Television
- **54.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.296

- **97.4%** Homes with Access to Public Water Source
- **77.1%** Homes Connected to the Public Sewage System
- **23%** Homes without Piped Water
- **6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.341

- **47.8** Age Dependency Ratio
- **7.9%** Unemployment Rate
- **35.4%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.468

- **3.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.319

- **0.2** Female to Male Labor Ratio (distance from parity)
- **36.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **59.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **31.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.432

- **5.5%** Prevalence of Disability (among persons age 5 and over)
- **5.5** Perinatal Mortality Rate (per 1,000 births)
- **12.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.229

- **0.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **5.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.324

46	6	20	16
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.248

5.4%	0.1%	8%	73.7%	6.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.558

87.6	1.7%	15.9	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.507

0.5	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 14 / 221 CANTONS ASSESSED **SCORE: 0.676**

Cayambe exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.791

65.8%
Labor Force Participation

609,465
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.661

35.6%
Protected Area (% of land area)

-5,643.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.664

90.2%
Voter Participation

85.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.576

Communications Capacity

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.738

18.3%
Household Access to Fixed Phones

91.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.754

98.4%
Homes Served by the Public Electricity Network

84.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.326

9.3
Nurses and Midwives per 10,000 persons

9.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.486

11.4
Average Distance to Airport (km)

129.5
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 73 / 221 CANTONS ASSESSED **SCORE: 0.519**

Cayambe exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.426

3.2	5%	0.3	37.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.612

6.5	6.1	2.3	4.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 26 / 221 CANTONS ASSESSED
SCORE: 0.602

Cayambe's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Population Pressures

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

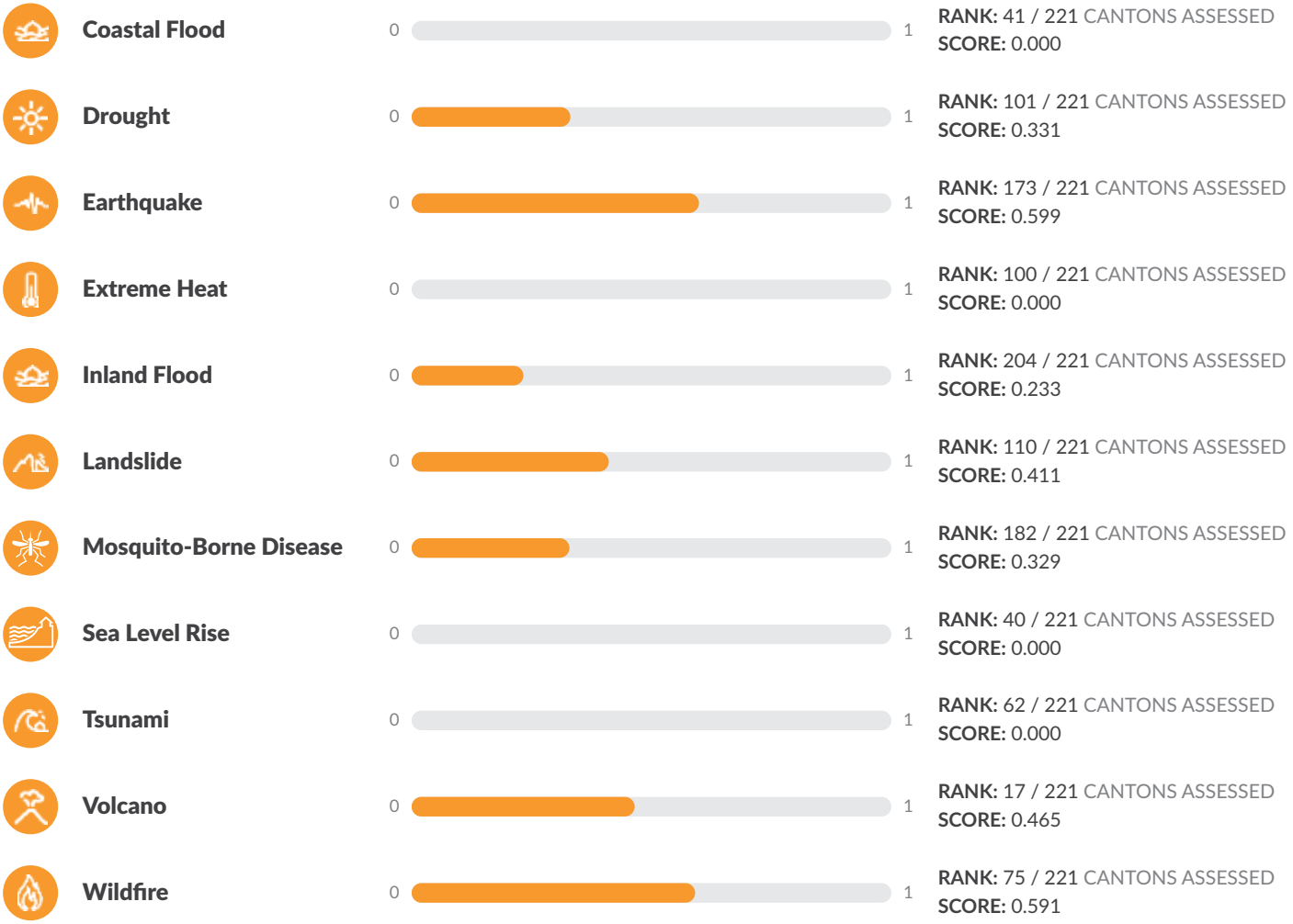
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

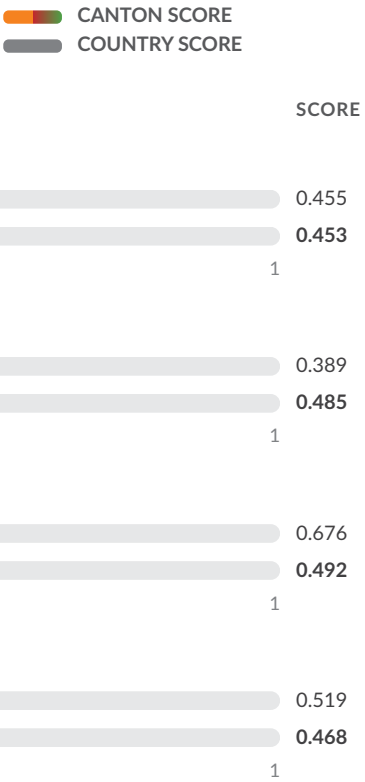


MULTI-HAZARD RISK (MHR)

RANKED
195 / 221
CANTONS ASSESSED
SCORE: 0.412

Cayambe's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CELICA

NDPBA SUBNATIONAL PROFILE

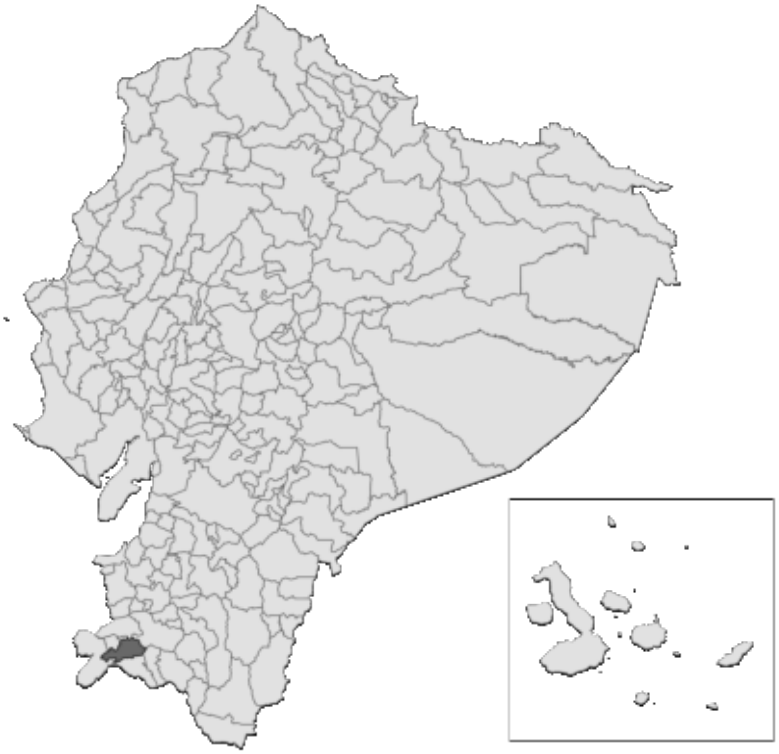
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ECUADOR

CELICA

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.520 • RANK: 87/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.506 • RANK: 89/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.418 • RANK: 175/221 CANTONS ASSESSED

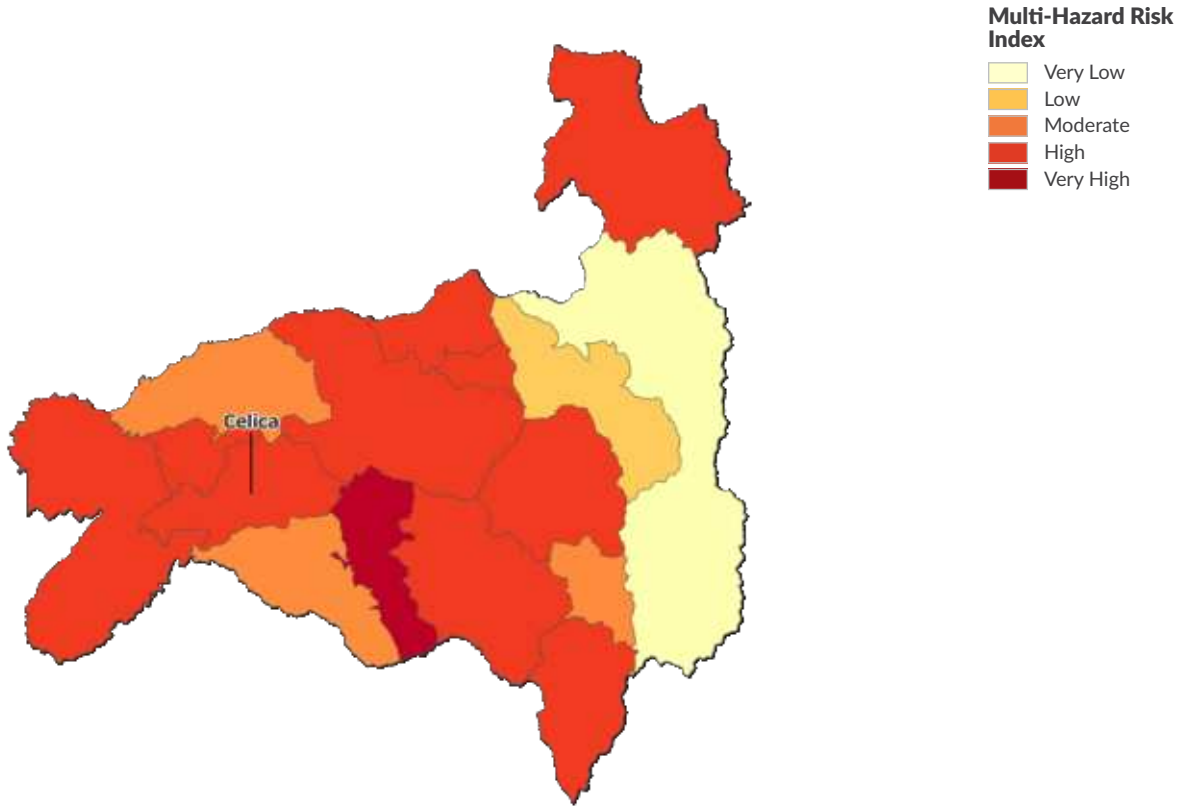
Coping Capacity (CC) - Very Low
SCORE: 0.374 • RANK: 186/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.333 • RANK: 163/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.386 • RANK: 163/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

CELICA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	**0.520**
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 163 / 221 CANTONS ASSESSED
SCORE: 0.333



MHE
0.333

Raw MHE
0.391

Relative MHE
0.274

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
37%
- **6,028** people exposed
- **4,420** structures exposed (42%)

Critical Infrastructure Exposed: 47%

Earthquake
100%
- **16,223** people exposed
- **10,589** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **28** people exposed
- **10** structures exposed (<1%)

Critical Infrastructure Exposed: 2%

Landslide
63%
- **10,284** people exposed
- **6,234** structures exposed (59%)

Critical Infrastructure Exposed: 61%

Mosquito-Borne Disease
79%
- **12,823** people exposed
- **8,295** structures exposed (78%)

Critical Infrastructure Exposed: 85%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
55%
- **8,860** people exposed
- **4,856** structures exposed (46%)

Critical Infrastructure Exposed: 55%

VULNERABILITY (V)

RANK: 89 / 221 CANTONS ASSESSED **SCORE: 0.506**

Vulnerability in Celica is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.504

- **9.6** Average Years of Schooling
- **53.5%** Population (age 24 and over) with General Basic Education Schooling
- **4.5%** Population (age 24 and over) with No Schooling
- **3.8%** Adult Illiteracy Rate
- **54.6%** Households with No Internet Access
- **77.2%** Households with No Access to Television
- **78.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.565

- **74.9%** Homes with Access to Public Water Source
- **41.6%** Homes Connected to the Public Sewage System
- **41.7%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.582

- **60.9** Age Dependency Ratio
- **18.7%** Unemployment Rate
- **59.6%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.674

- **7.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.492

- **0.5** Female to Male Labor Ratio (distance from parity)
- **44.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **63.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **44.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.491

- **8.9%** Prevalence of Disability (among persons age 5 and over)
- **6.9** Perinatal Mortality Rate (per 1,000 births)
- **8.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.281

- **3.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **5.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.499

91	18	29	18
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.508

16.3%	2.4%	17.8%	85.3%	10.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.392

27.6	-0.1	4.5	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.489

0.2	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 186 / 221 CANTONS ASSESSED **SCORE: 0.374**

Celica exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.314

49.8%
Labor Force Participation

29,959
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.306

0%
Protected Area (% of land area)

-3,145
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.297

79.1%
Voter Participation

55.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.533

Communications Capacity

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.585

14.7%
Household Access to Fixed Phones

83.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.605

96.3%
Homes Served by the Public Electricity Network

78.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.501

11.1
Nurses and Midwives per 10,000 persons

24.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.441

28.6
Average Distance to Airport (km)

83
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 163 / 221 CANTONS ASSESSED **SCORE: 0.386**

Celica exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.313

2.7	4.9%	0	93.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.460

16.4	6.9	3.7	6.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 175 / 221 CANTONS ASSESSED
SCORE: 0.418

Celica's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Mass Care Support

Economic Capacity

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

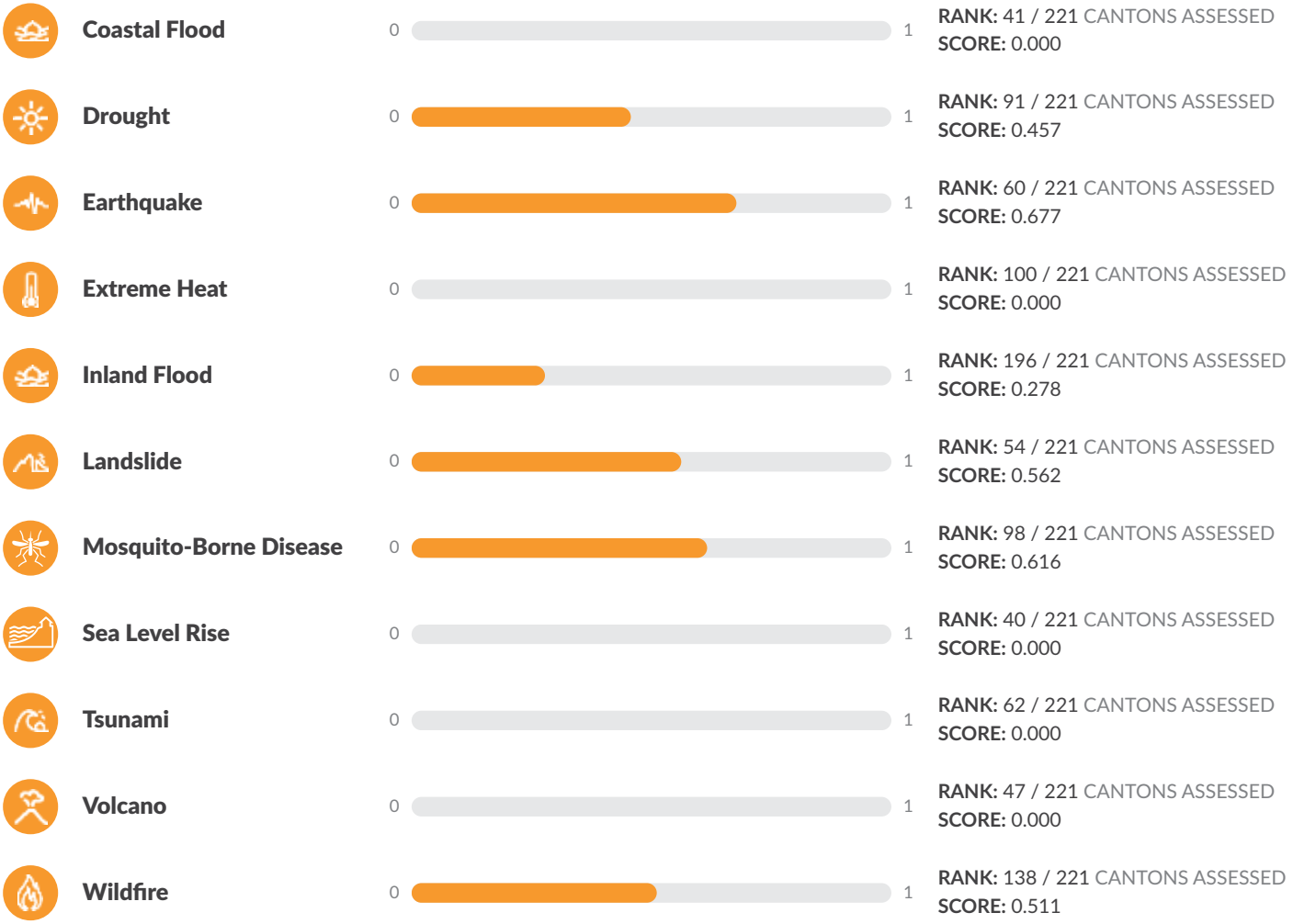
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
87 / 221
CANTONS ASSESSED
SCORE: 0.520

Celica's score and ranking are due to Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CENTINELA DEL CÓNDOR

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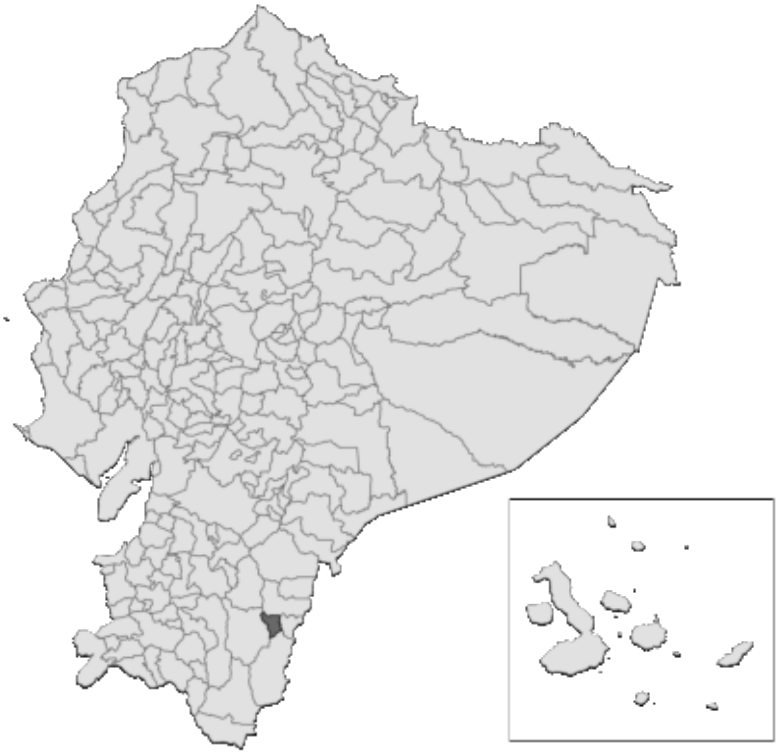
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CENTINELA DEL CÓNDOR

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.428 • RANK: 176/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.508 • RANK: 88/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.238 • RANK: 199/221 CANTONS ASSESSED

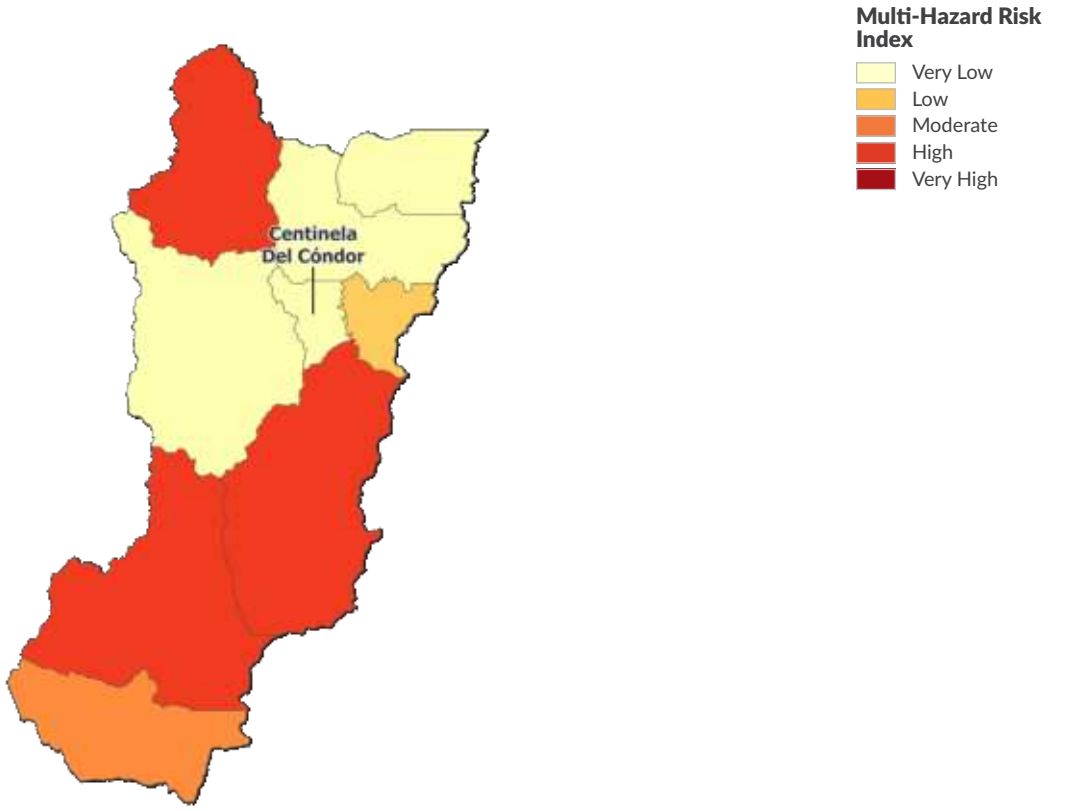
Vulnerability (V) - Moderate
SCORE: 0.479 • RANK: 120/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.487 • RANK: 107/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.516 • RANK: 76/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

CENTINELA DEL CÓNDOR • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Palanda	0.535
Yacuambi	0.535
Nangaritza	0.524
Chinchipe	0.511
Paquisha	0.465

Centinela Del Cóndor	**0.428**
El Pangui	0.428
Zamora	0.419
Yantzaza	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 199 / 221 CANTONS ASSESSED
SCORE: 0.238



MHE
0.238

Raw MHE
0.251

Relative MHE
0.224

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
7,870 people exposed
5,058 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
8%
628 people exposed
431 structures exposed (9%)
Critical Infrastructure Exposed: 5%

Landslide
60%
4,707 people exposed
3,273 structures exposed (65%)
Critical Infrastructure Exposed: 54%

Mosquito-Borne Disease
98%
7,710 people exposed
4,868 structures exposed (96%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
49%
3,873 people exposed
2,961 structures exposed (59%)
Critical Infrastructure Exposed: 34%

VULNERABILITY (V)

RANK: 120 / 221 CANTONS ASSESSED **SCORE: 0.479**

Vulnerability in Centinela Del Cóndor is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.390

- **10.6** Average Years of Schooling
- **44%** Population (age 24 and over) with General Basic Education Schooling
- **3.5%** Population (age 24 and over) with No Schooling
- **2.9%** Adult Illiteracy Rate
- **37.5%** Households with No Internet Access
- **78.7%** Households with No Access to Television
- **73.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.552

- **75.9%** Homes with Access to Public Water Source
- **66%** Homes Connected to the Public Sewage System
- **32.1%** Homes without Piped Water
- **12.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.587

- **58.8** Age Dependency Ratio
- **15.3%** Unemployment Rate
- **52.7%** Poverty Rate (based on UBN)
- **2.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.540

- **4.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.409

- **0.4** Female to Male Labor Ratio (distance from parity)
- **28.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **70.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **42.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.300

- **7.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **5.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.308

- **21.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **42.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.488

20 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**20** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**35** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**50** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.486

15.5% Homes with Exterior Walls in Poor Condition	**0.7%** Homes with Inadequate Materials Used in Outer Walls	**19%** Homes with Roofs in Poor Condition	**86.1%** Households with No Access to Vehicle for Private Use	**10.1%** Household Overcrowding

Population Pressures

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.487

30.3 Population Density (persons per sq km)	**1.7%** Average Annual Population Change (2010-2022)	**7.2** Net Migration Rate (per 1,000 persons)	**0.31** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.610

0.5 Hazard Susceptibility (recent events 2015-2025)	**0.3** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 107 / 221 CANTONS ASSESSED **SCORE: 0.487**

Centinela Del Cóndor exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.430

59.7%
Labor Force Participation

18,621
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.330

0%
Protected Area (% of land area)

-1,592.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.527

81.2%
Voter Participation

90.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.558

Communications Capacity

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.585

5.8%
Household Access to Fixed Phones

91.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.710

98.3%
Homes Served by the Public Electricity Network

80.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.377

8.9
Nurses and Midwives per 10,000 persons

14
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.561

19.4
Average Distance to Airport (km)

29.2
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 76 / 221 CANTONS ASSESSED **SCORE: 0.516**

Centinela Del Cóndor exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.468

1.9	7.7%	0	27.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.564

11.2	5.4	3.6	3.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 88 / 221 CANTONS ASSESSED
SCORE: 0.508

Centinela Del Cóndor's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity | Disaster Impacts | Economic Constraints | Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

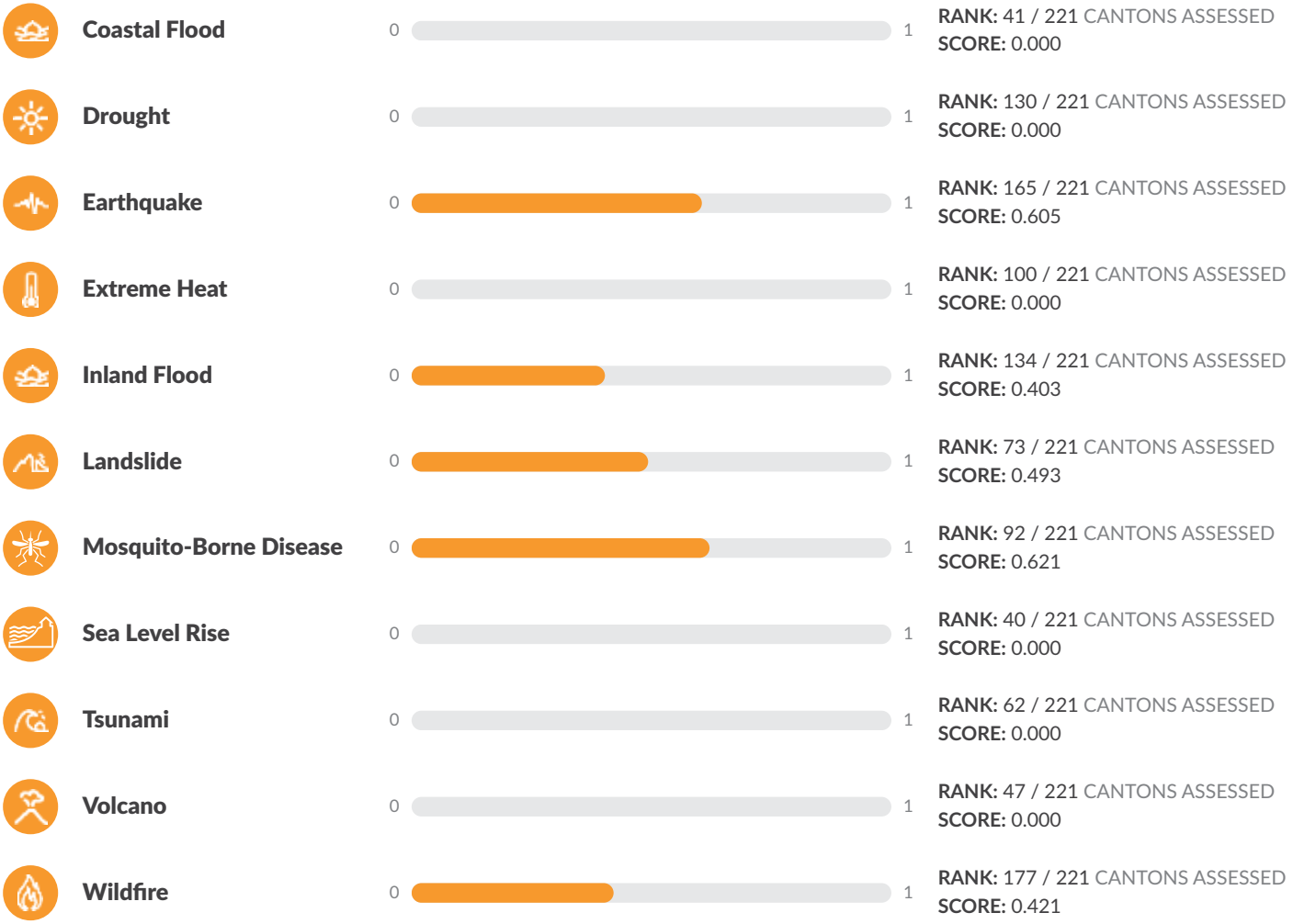
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
176 / 221
CANTONS ASSESSED
SCORE: 0.428

Centinela Del Cóndor's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

CEVALLOS

NDPBA SUBNATIONAL PROFILE

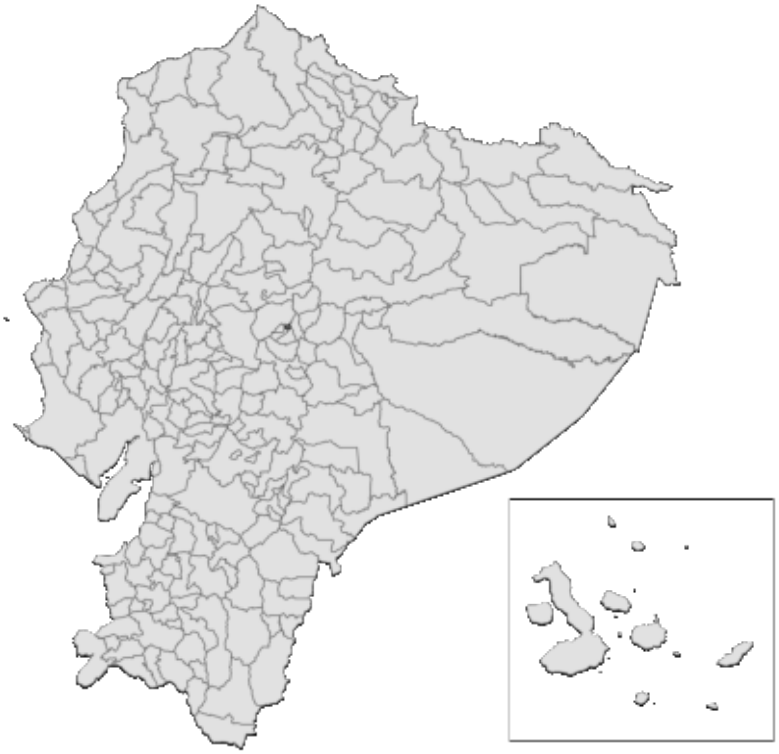
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ECUADOR

CEVALLOS

PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.340 • RANK: 219/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.308 • RANK: 218/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.629 • RANK: 16/221 CANTONS ASSESSED

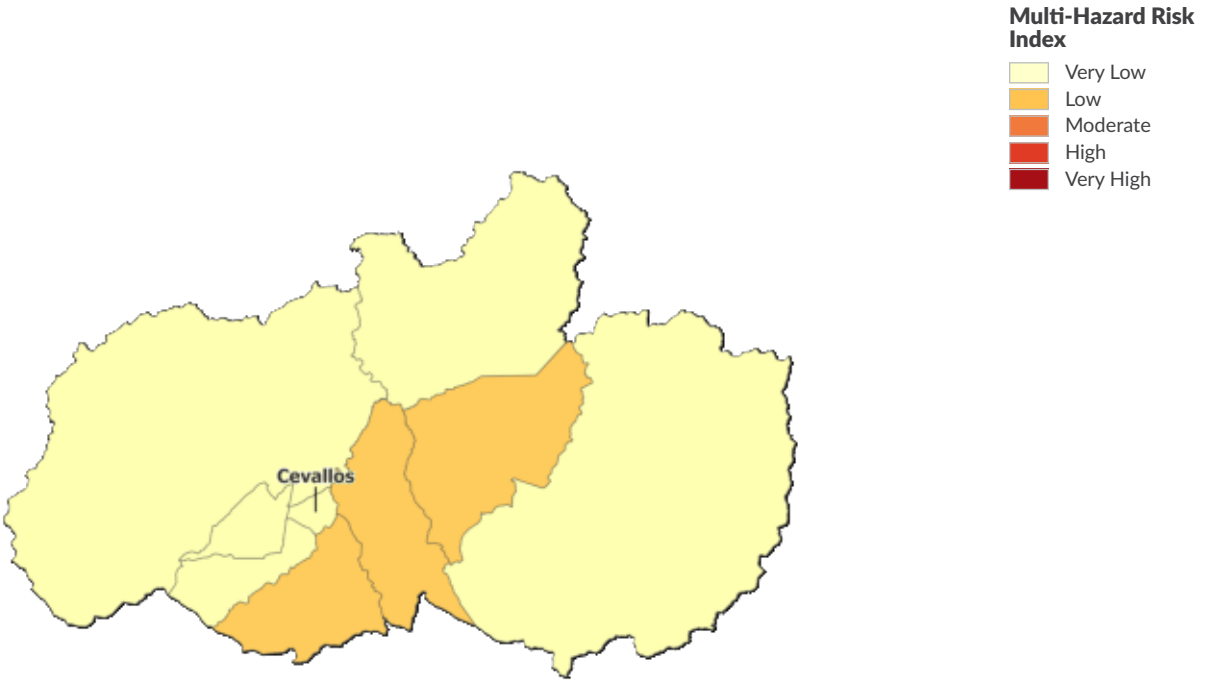
Coping Capacity (CC) - High
SCORE: 0.561 • RANK: 62/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.247 • RANK: 195/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.635 • RANK: 20/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

CEVALLOS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454
San Pedro De Pelileo	0.436
Patate	0.431
Santiago De Píllaro	0.410
Ambato	0.409
Mocha	0.379
Baños De Agua Santa	0.364
Tisaleo	0.361
Cevallos	**0.340**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 195 / 221 CANTONS ASSESSED
SCORE: 0.247



MHE
0.247

Raw MHE
0.316

Relative MHE
0.178

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
82%
- **7,714** people exposed
- **7,744** structures exposed (81%)
- **Critical Infrastructure Exposed:** 83%

Earthquake
100%
- **9,432** people exposed
- **9,588** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
2%
- **157** people exposed
- **127** structures exposed (1%)
- **Critical Infrastructure Exposed:** <1%

Landslide
18%
- **1,743** people exposed
- **1,409** structures exposed (15%)
- **Critical Infrastructure Exposed:** 32%

Mosquito-Borne Disease
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
3%
- **307** people exposed
- **310** structures exposed (3%)
- **Critical Infrastructure Exposed:** 17%

Wildfire
100%
- **9,432** people exposed
- **9,588** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

VULNERABILITY (V)

RANK: 218 / 221 CANTONS ASSESSED **SCORE: 0.308**

Vulnerability in Cevallos is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.351

- **11** Average Years of Schooling
- **44.6%** Population (age 24 and over) with General Basic Education Schooling
- **2.4%** Population (age 24 and over) with No Schooling
- **2%** Adult Illiteracy Rate
- **37.6%** Households with No Internet Access
- **85.3%** Households with No Access to Television
- **59.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.236

- **98.6%** Homes with Access to Public Water Source
- **75.5%** Homes Connected to the Public Sewage System
- **17.6%** Homes without Piped Water
- **4.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.264

- **53.6** Age Dependency Ratio
- **6.6%** Unemployment Rate
- **23.3%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.201

- **0.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.257

- **0.3** Female to Male Labor Ratio (distance from parity)
- **28** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **54.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **14%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.437

- **6.2%** Prevalence of Disability (among persons age 5 and over)
- **8.1** Perinatal Mortality Rate (per 1,000 births)
- **10.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.105

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.425

55	11	33	14
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.231

6.1%	1.3%	11.6%	57.7%	3.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.536

555.5	2.1%	13	0.25
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.167

0.2	0	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 62 / 221 CANTONS ASSESSED **SCORE: 0.561**

Cevallos exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.517

62.9%
Labor Force Participation

28,947
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.352

0%
Protected Area (% of land area)

-213.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.616

85.7%
Voter Participation

91.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.618

Communications Capacity

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.770

30.8%
Household Access to Fixed Phones

88.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.808

99.2%
Homes Served by the Public Electricity Network

84%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.278

7.7
Nurses and Midwives per 10,000 persons

8.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.618

16.3
Average Distance to Airport (km)

98.2
Average Distance to Sea or River Port (km)

6.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 20 / 221 CANTONS ASSESSED **SCORE: 0.635**

Cevallos exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.502

1.5	15.4%	0	37.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.769

8	1.7	1.4	2.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 16 / 221 CANTONS ASSESSED
SCORE: 0.629

Cevallos's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity **Population Pressures** **Mass Care Support** **Economic Capacity**

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

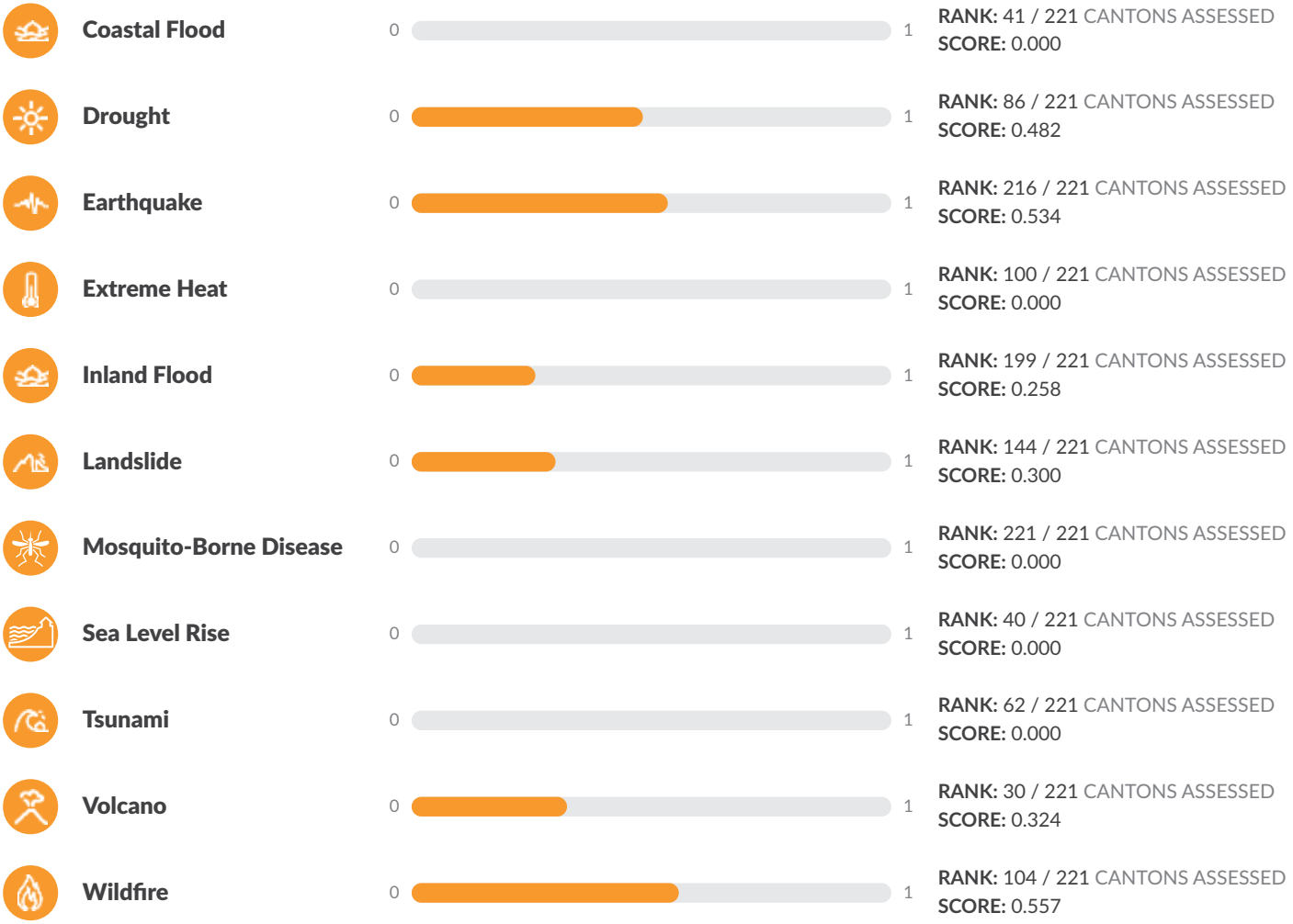
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
219 / 221
CANTONS ASSESSED
SCORE: 0.340

Cevallos's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CHAGUARPAMBA

NDPBA SUBNATIONAL PROFILE

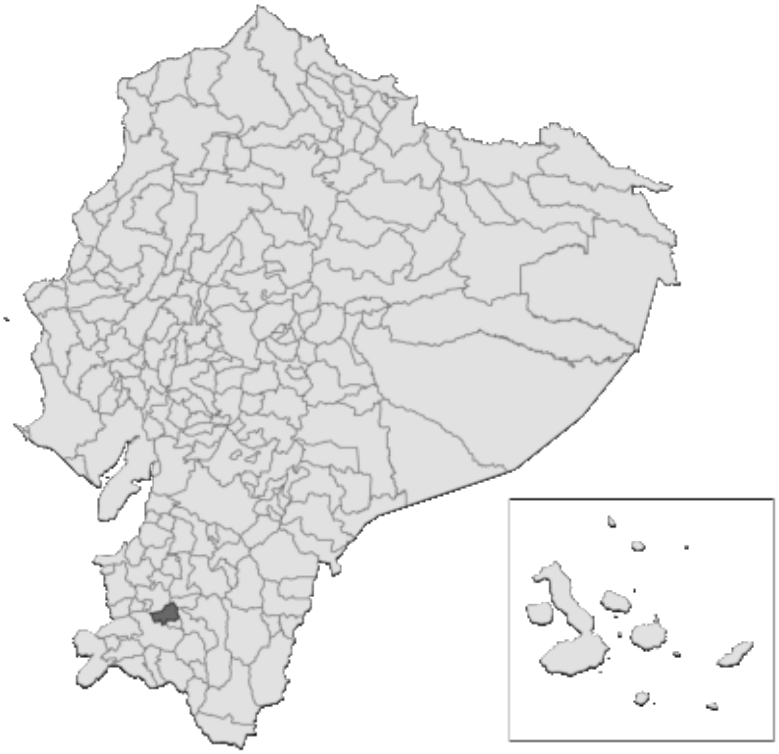
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CHAGUARPAMBA

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.524 • RANK: 80/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.419 • RANK: 174/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.354 • RANK: 150/221 CANTONS ASSESSED

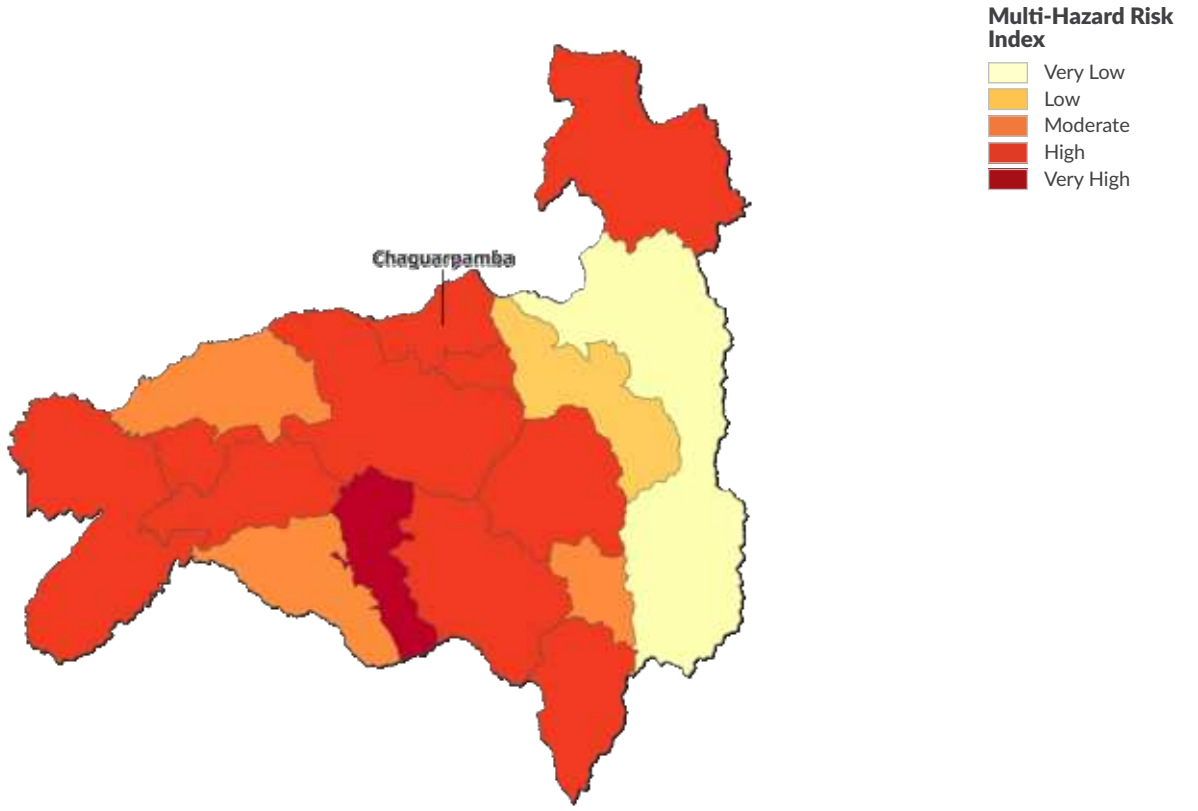
Vulnerability (V) - Moderate
SCORE: 0.496 • RANK: 102/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.323 • RANK: 212/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.430 • RANK: 140/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

CHAGUARPAMBA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528

Chaguarpamba	**0.524**
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 150 / 221 CANTONS ASSESSED
SCORE: 0.354



MHE
0.354

Raw MHE
0.299

Relative MHE
0.409

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
6%
- **512** people exposed
- **374** structures exposed (7%)

Critical Infrastructure Exposed: 2%

Earthquake
100%
- **7,990** people exposed
- **5,592** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **39** people exposed
- **50** structures exposed (<1%)

Critical Infrastructure Exposed: 3%

Landslide
100%
- **7,981** people exposed
- **5,575** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Mosquito-Borne Disease
94%
- **7,507** people exposed
- **5,243** structures exposed (94%)

Critical Infrastructure Exposed: 98%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
93%
- **7,438** people exposed
- **5,265** structures exposed (94%)

Critical Infrastructure Exposed: 87%

VULNERABILITY (V)

RANK: 102 / 221 CANTONS ASSESSED **SCORE: 0.496**

Vulnerability in Chaguarpamba is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.614

- **8.9** Average Years of Schooling
- **62.9%** Population (age 24 and over) with General Basic Education Schooling
- **3.8%** Population (age 24 and over) with No Schooling
- **3.6%** Adult Illiteracy Rate
- **60%** Households with No Internet Access
- **87.6%** Households with No Access to Television
- **86.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.601

- **70.8%** Homes with Access to Public Water Source
- **34.3%** Homes Connected to the Public Sewage System
- **39.4%** Homes without Piped Water
- **6.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.542

- **65.9** Age Dependency Ratio
- **12.2%** Unemployment Rate
- **57.4%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.331

- **1.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.363

- **0.5** Female to Male Labor Ratio (distance from parity)
- **13.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **0%** Prevalence of Child Marriage (among adolescents age 12-17)
- **50%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **80.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.363

- **12.3%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.056

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **3.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.574

59	8	79	39
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.570

19%	1.7%	24.8%	90.4%	9.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.321

21.9	-0.2	2.9	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.624

0.2	0.3	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 212 / 221 CANTONS ASSESSED **SCORE: 0.323**

Chaguarpamba exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.244

48.3%
Labor Force Participation

15,082
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.300

0%
Protected Area (% of land area)

-3,536.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.289

81.1%
Voter Participation

44.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.445

Communications Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.479

5.3%
Household Access to Fixed Phones

86.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.442

95.4%
Homes Served by the Public Electricity Network

59.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.413

8.8
Nurses and Midwives per 10,000 persons

17.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.446

38.2
Average Distance to Airport (km)

61.4
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 140 / 221 CANTONS ASSESSED **SCORE: 0.430**

Chaguarpamba exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.410

2.1	8%	0	55.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.450

18.8	6.5	4.2	6.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 174 / 221 CANTONS ASSESSED
SCORE: 0.419

Chaguarpamba's score and ranking are due to Moderate Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Disaster Impacts

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

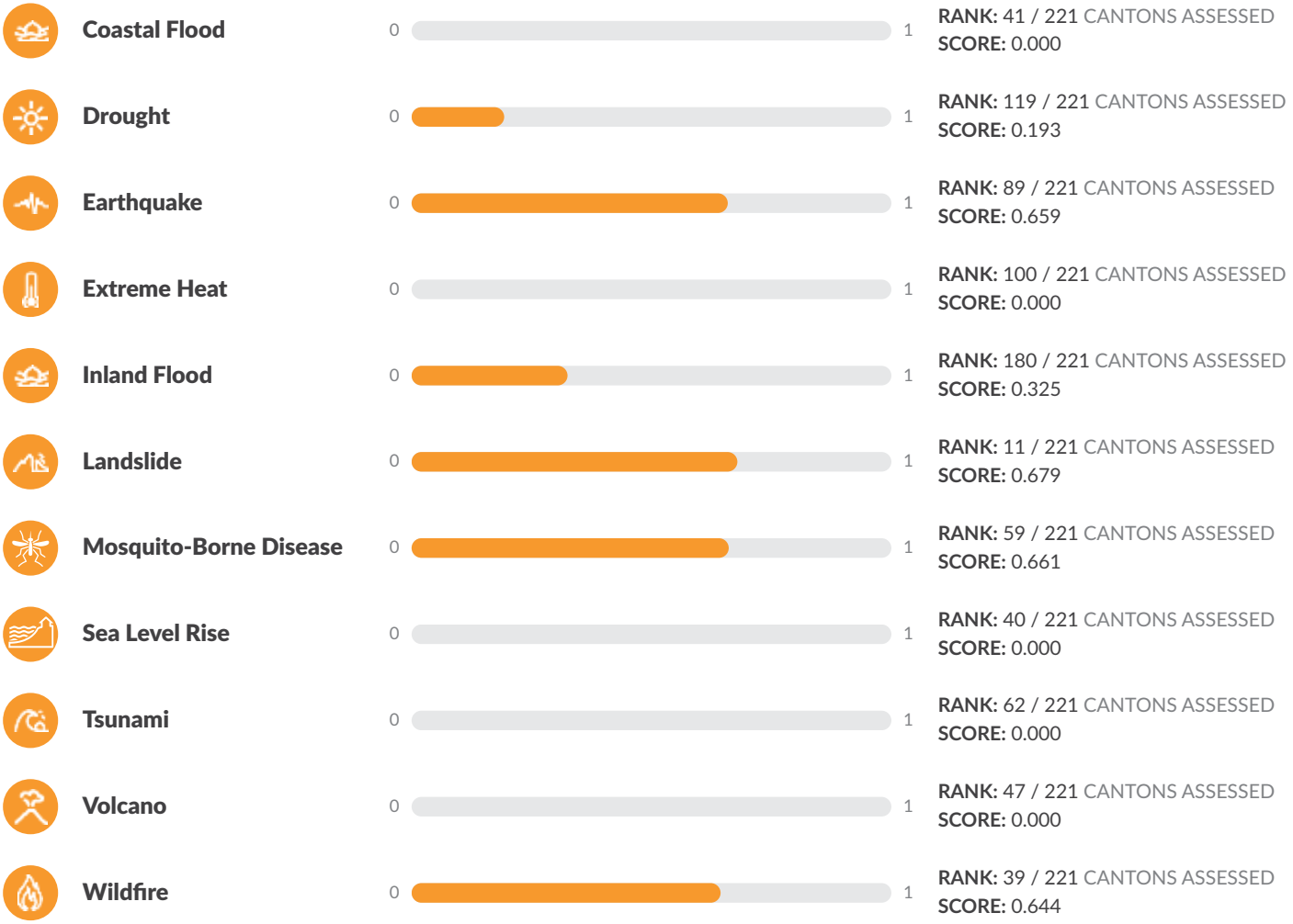
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
80 / 221
CANTONS ASSESSED
SCORE: 0.524

Chaguarpamba's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CHAMBO

PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.412 • RANK: 195/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.408 • RANK: 181/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.568 • RANK: 49/221 CANTONS ASSESSED

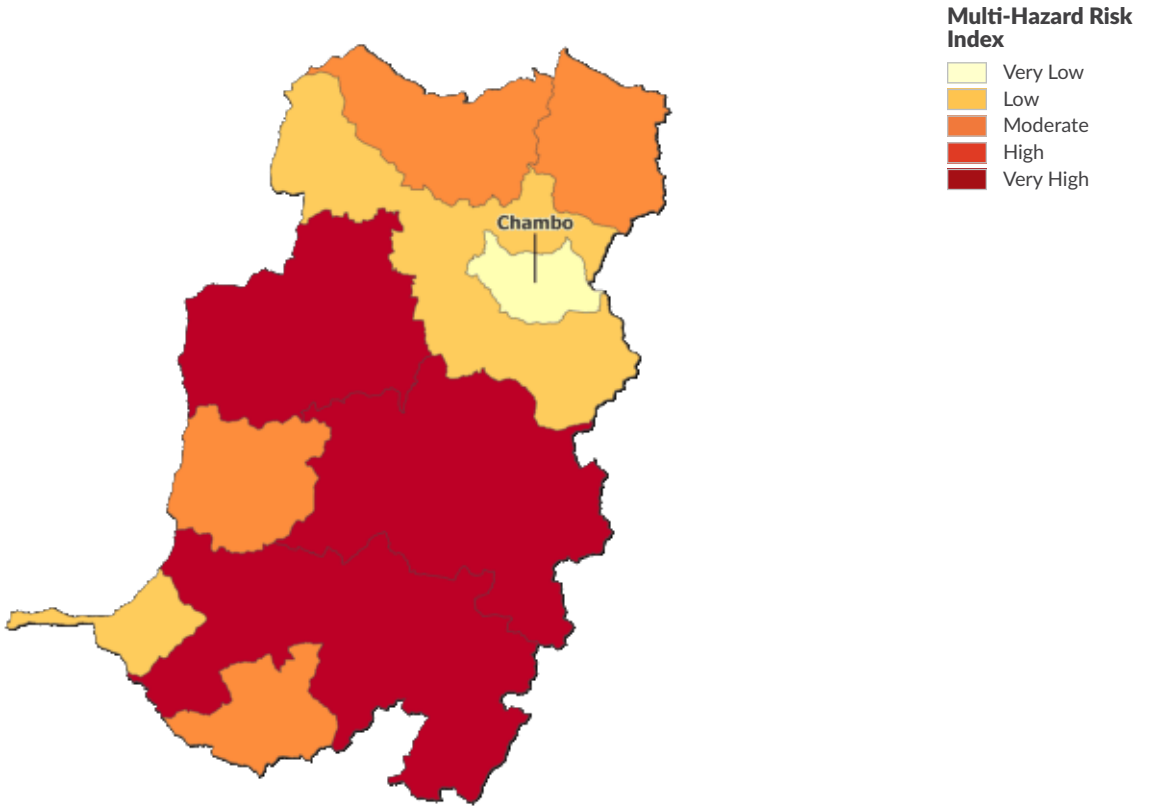
Coping Capacity (CC) - High
SCORE: 0.555 • RANK: 68/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.352 • RANK: 153/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.556 • RANK: 58/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

CHAMBO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	0.571
Guano	0.512
Penipe	0.500
Pallatanga	0.487
Chunchi	0.483
Cumandá	0.442
Riobamba	0.442
Chambo	**0.412**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 153 / 221 CANTONS ASSESSED
SCORE: 0.352



MHE
0.352

Raw MHE
0.391

Relative MHE
0.312

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
89%
- **12,124** people exposed
- **9,221** structures exposed (88%)

Critical Infrastructure Exposed: 72%

Earthquake
100%
- **13,663** people exposed
- **10,487** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **79** people exposed
- **64** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
64%
- **8,779** people exposed
- **6,819** structures exposed (65%)

Critical Infrastructure Exposed: 80%

Mosquito-Borne Disease
9%
- **1,237** people exposed
- **859** structures exposed (8%)

Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
2%
- **291** people exposed
- **254** structures exposed (2%)

Critical Infrastructure Exposed: 1%

Wildfire
96%
- **13,170** people exposed
- **10,115** structures exposed (96%)

Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 181 / 221 CANTONS ASSESSED **SCORE: 0.408**

Vulnerability in Chambo is primarily driven by Vulnerable Health Status and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.497

- **10.1** Average Years of Schooling
- **42.3%** Population (age 24 and over) with General Basic Education Schooling
- **7.7%** Population (age 24 and over) with No Schooling
- **6.6%** Adult Illiteracy Rate
- **46.2%** Households with No Internet Access
- **88.7%** Households with No Access to Television
- **65.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.358

- **93.9%** Homes with Access to Public Water Source
- **76.8%** Homes Connected to the Public Sewage System
- **28.2%** Homes without Piped Water
- **6.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.385

- **53.2** Age Dependency Ratio
- **7.2%** Unemployment Rate
- **37.3%** Poverty Rate (based on UBN)
- **1.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.336

- **2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.305

- **0.2** Female to Male Labor Ratio (distance from parity)
- **24** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **59.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **39.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.580

- **9.9%** Prevalence of Disability (among persons age 5 and over)
- **7** Perinatal Mortality Rate (per 1,000 births)
- **14.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.267

- **1.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.533

46
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

13
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

58
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

30
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.286

9.4%
Homes with Exterior Walls in Poor Condition

0.1%
Homes with Inadequate Materials Used in Outer Walls

14%
Homes with Roofs in Poor Condition

72.9%
Households with No Access to Vehicle for Private Use

4.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.409

80.8
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

-0.2
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.452

0.2
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 68 / 221 CANTONS ASSESSED **SCORE: 0.555**

Chambo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.558

64.7%
Labor Force Participation

31,698
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.582

8.4%
Protected Area (% of land area)

-1,057.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.593

84.6%
Voter Participation

90.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.506

Communications Capacity

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.620

20.1%
Household Access to Fixed Phones

82.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.707

98.3%
Homes Served by the Public Electricity Network

80.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.188

5.2
Nurses and Midwives per 10,000 persons

6.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.508

11.7
Average Distance to Airport (km)

99.3
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 58 / 221 CANTONS ASSESSED **SCORE: 0.556**

Chambo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.384

7.5	0%	0.7	7.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.727

7.5	2.5	2.3	2.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 49 / 221 CANTONS ASSESSED
SCORE: 0.568

Chambo's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Mass Care Support



Vulnerable Health Status



Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Vulnerable Health Status

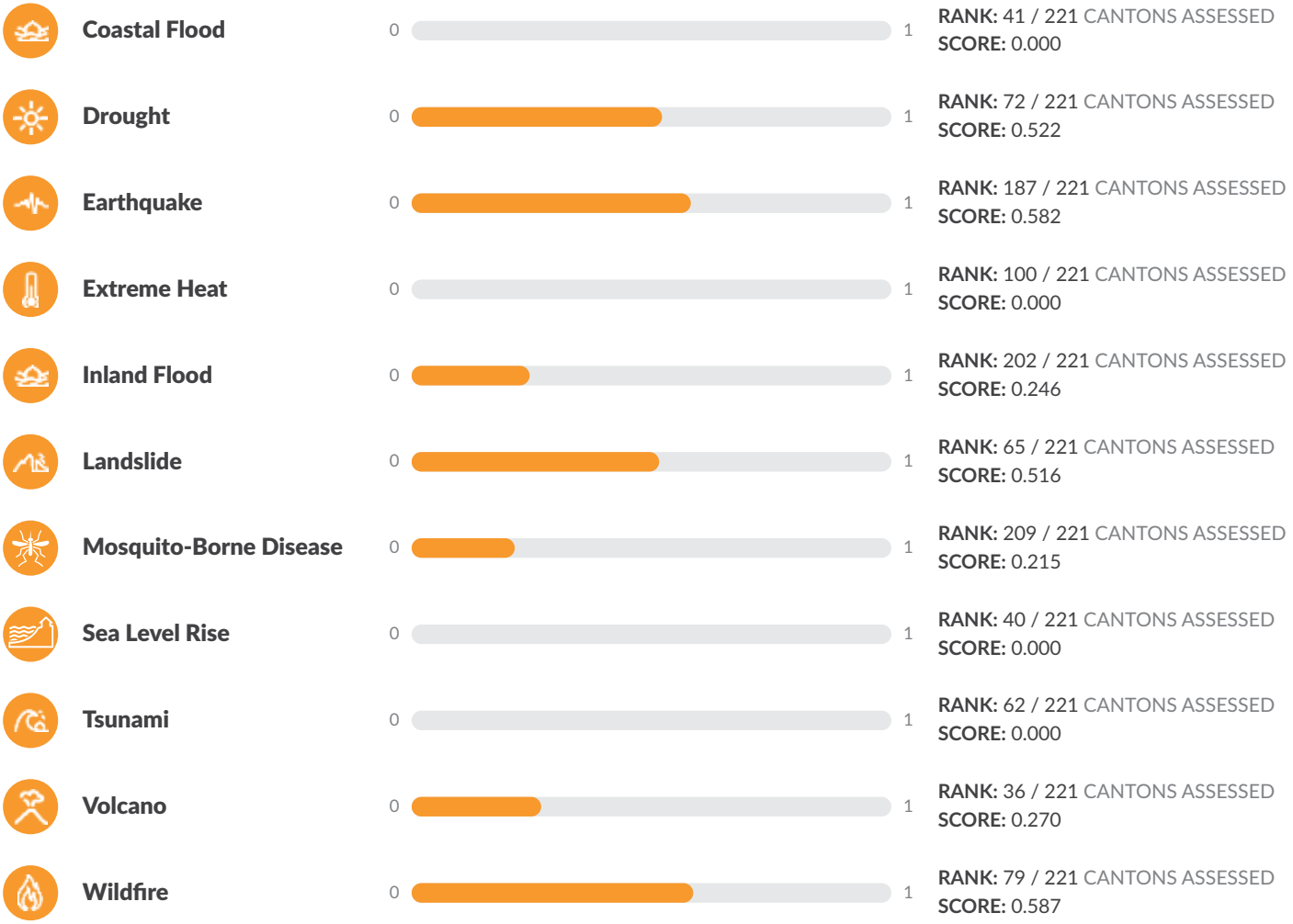
A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).



Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

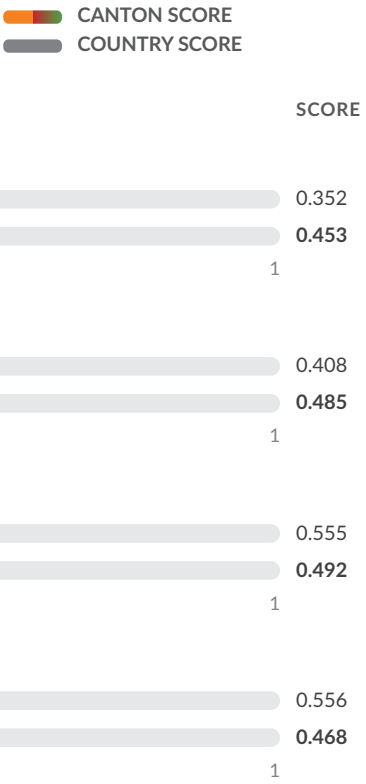


MULTI-HAZARD RISK (MHR)

RANKED
195 / 221
CANTONS ASSESSED
SCORE: 0.412

Chambo's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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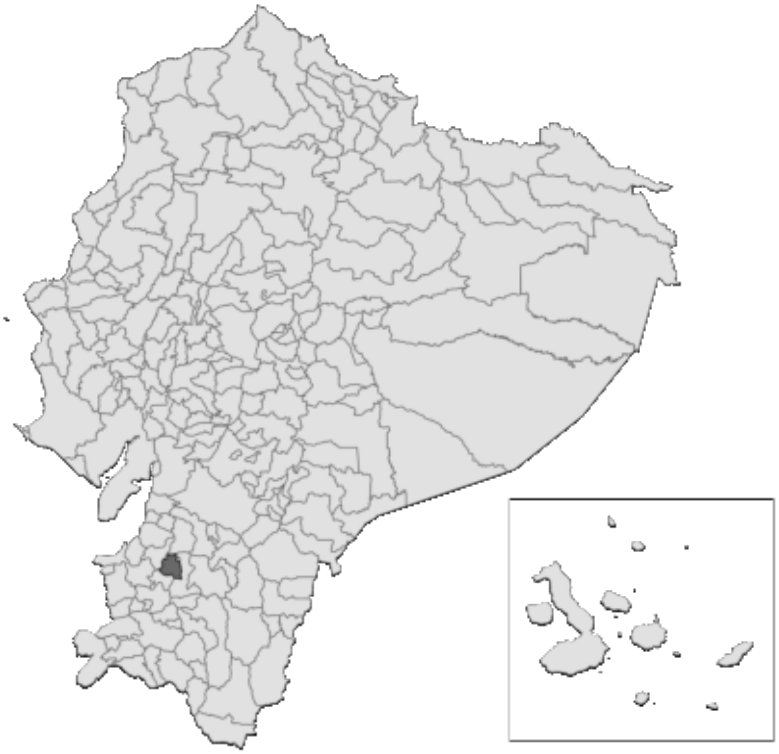
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CHILLA

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.453 • RANK: 150/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.441 • RANK: 155/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.134 • RANK: 219/221 CANTONS ASSESSED

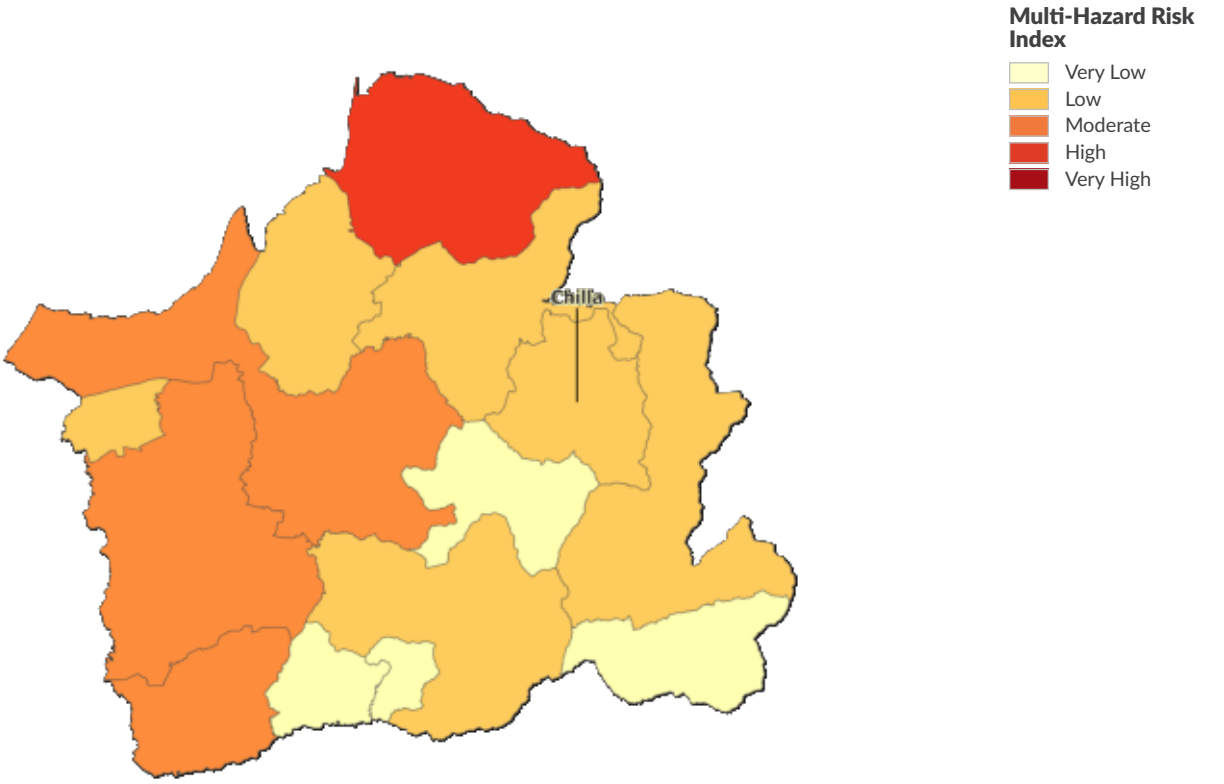
Vulnerability (V) - Moderate
SCORE: 0.501 • RANK: 97/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.364 • RANK: 190/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.459 • RANK: 108/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

CHILLA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521	Piñas	0.440
Santa Rosa	0.502	Zaruma	0.440
Arenillas	0.496	Huaquillas	0.435
Las Lajas	0.485	Portovelo	0.424
Machala	0.469	Balsas	0.420
Pasaje	0.454	Marcabelí	0.394
Chilla	**0.453**	Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 219 / 221 CANTONS ASSESSED
SCORE: 0.134



MHE
0.134

Raw MHE
0.072

Relative MHE
0.197

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
2,904 people exposed
2,001 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Landslide
100%
2,891 people exposed
1,971 structures exposed (99%)
Critical Infrastructure Exposed: 97%

Mosquito-Borne Disease
22%
645 people exposed
863 structures exposed (43%)
Critical Infrastructure Exposed: 29%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
86%
2,498 people exposed
1,824 structures exposed (91%)
Critical Infrastructure Exposed: 91%

VULNERABILITY (V)

RANK: 97 / 221 CANTONS ASSESSED **SCORE: 0.501**

Vulnerability in Chilla is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.677

- **8.8** Average Years of Schooling
- **54.4%** Population (age 24 and over) with General Basic Education Schooling
- **8%** Population (age 24 and over) with No Schooling
- **7%** Adult Illiteracy Rate
- **66.4%** Households with No Internet Access
- **93.5%** Households with No Access to Television
- **87.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.590

- **71.9%** Homes with Access to Public Water Source
- **47.4%** Homes Connected to the Public Sewage System
- **41.5%** Homes without Piped Water
- **8.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.624

- **70.7** Age Dependency Ratio
- **19.8%** Unemployment Rate
- **62.6%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.341

- **2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.531

- **0.5** Female to Male Labor Ratio (distance from parity)
- **0** Adolescent Birth Rate (among females age 15-19) per 1,000
- **0%** Prevalence of Child Marriage (among adolescents age 12-17)
- **100%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **100%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.319

- **18.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **0%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.127

- **23.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.466

0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

0
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

71
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

238
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.615

20.5%
Homes with Exterior Walls in Poor Condition

0.8%
Homes with Inadequate Materials Used in Outer Walls

29%
Homes with Roofs in Poor Condition

92.9%
Households with No Access to Vehicle for Private Use

10.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.326

6.8
Population Density (persons per sq km)

-1
Average Annual Population Change (2010-2022)

5.3
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.349

0.1
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 190 / 221 CANTONS ASSESSED **SCORE: 0.364**

Chilla exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.190

48.9%
Labor Force Participation

6,359
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.293

0%
Protected Area (% of land area)

-3,975.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.415

80.7%
Voter Participation

75.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.511

Communications Capacity

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.452

9.3%
Household Access to Fixed Phones

75.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.472

93.5%
Homes Served by the Public Electricity Network

70.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.657

22.2
Nurses and Midwives per 10,000 persons

31.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.464

24.1
Average Distance to Airport (km)

44.2
Average Distance to Sea or River Port (km)

0.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 108 / 221 CANTONS ASSESSED **SCORE: 0.459**

Chilla exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.439

1.7	7.3%	0	44.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.480

25.1	3.7	1.8	14.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 155 / 221 CANTONS ASSESSED
SCORE: 0.441

Chilla's score and ranking are due to Moderate Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Information Access Vulnerability

Economic Constraints

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

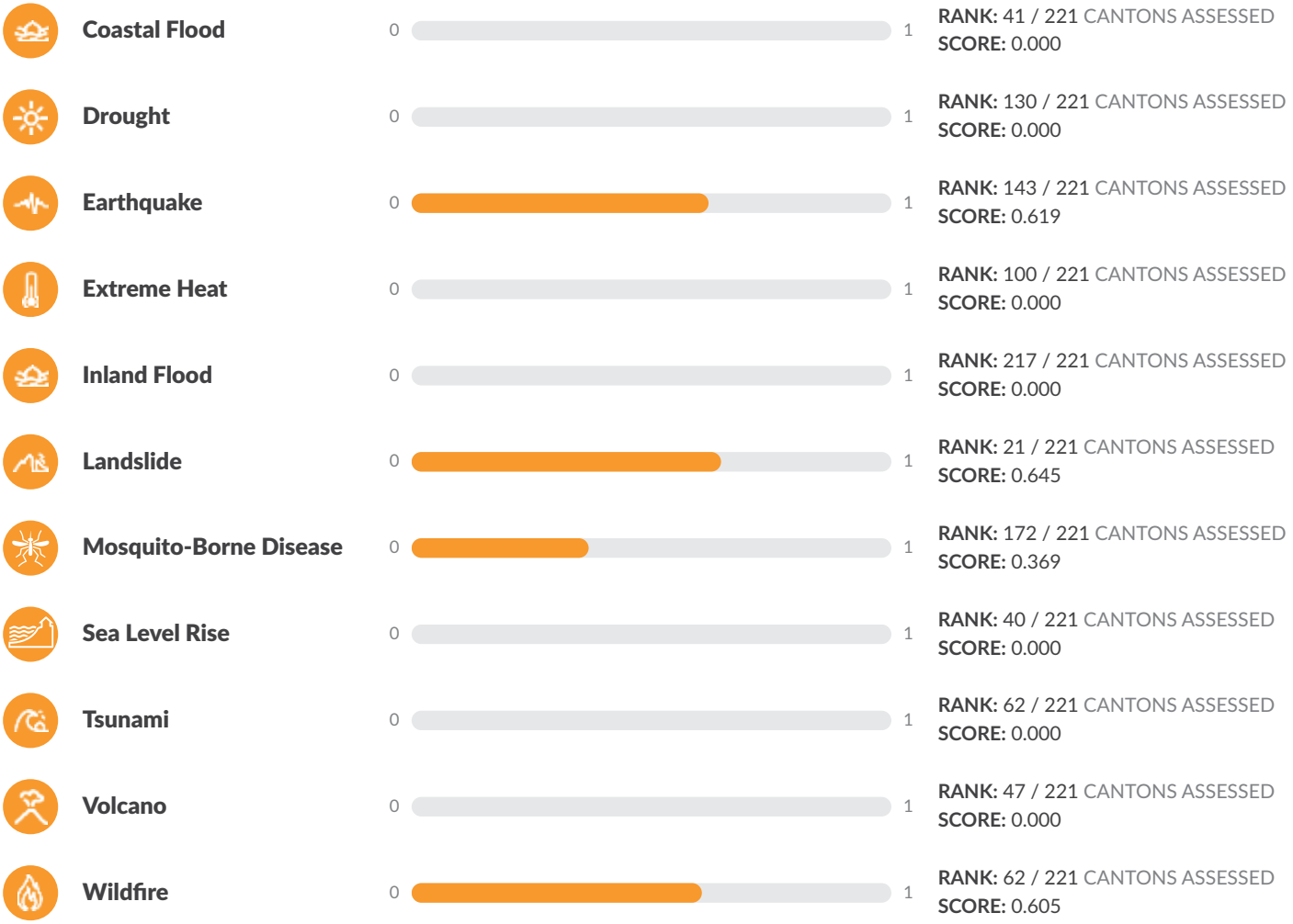
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
150 / 221
CANTONS ASSESSED
SCORE: 0.453

Chilla's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CHILLANES

PROVINCE: BOLÍVAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.522 • RANK: 84/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.576 • RANK: 31/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.394 • RANK: 193/221 CANTONS ASSESSED

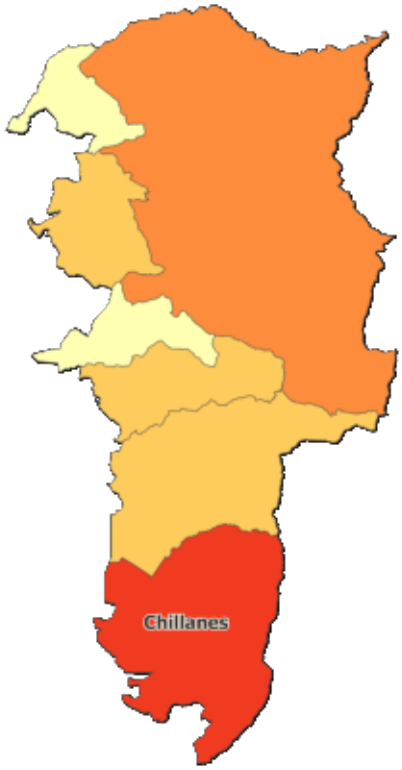
Coping Capacity (CC) - Very Low
SCORE: 0.375 • RANK: 185/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.270 • RANK: 188/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.384 • RANK: 166/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN BOLÍVAR PROVINCE

CHILLANES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Chillanes	**0.522**
Guaranda	0.505
San Miguel	0.462
Echeandía	0.445
Chimbo	0.443
Caluma	0.427
Las Naves	0.421

MULTI-HAZARD EXPOSURE (MHE)

RANK: 188 / 221 CANTONS ASSESSED
SCORE: 0.270



MHE
0.270

Raw MHE
0.416

Relative MHE
0.125

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
21,328 people exposed
16,385 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
9%
1,949 people exposed
1,070 structures exposed (7%)
Critical Infrastructure Exposed: 6%

Landslide
61%
13,026 people exposed
11,370 structures exposed (69%)
Critical Infrastructure Exposed: 52%

Mosquito-Borne Disease
44%
9,369 people exposed
6,302 structures exposed (38%)
Critical Infrastructure Exposed: 37%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
49%
10,488 people exposed
8,303 structures exposed (51%)
Critical Infrastructure Exposed: 56%

VULNERABILITY (V)

RANK: 31 / 221 CANTONS ASSESSED **SCORE: 0.576**

Vulnerability in Chillanes is primarily driven by Clean Water Access Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.672

- **8.8** Average Years of Schooling
- **50.7%** Population (age 24 and over) with General Basic Education Schooling
- **9.7%** Population (age 24 and over) with No Schooling
- **8.1%** Adult Illiteracy Rate
- **69.4%** Households with No Internet Access
- **90.9%** Households with No Access to Television
- **88.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.691

- **51.7%** Homes with Access to Public Water Source
- **28.2%** Homes Connected to the Public Sewage System
- **51.5%** Homes without Piped Water
- **7.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.581

- **62.5** Age Dependency Ratio
- **12%** Unemployment Rate
- **71.8%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.311

- **1.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.573

- **0.5** Female to Male Labor Ratio (distance from parity)
- **36** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **90.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **62.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.577

- **13.2%** Prevalence of Disability (among persons age 5 and over)
- **5.3** Perinatal Mortality Rate (per 1,000 births)
- **7.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.559

- **16.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **90.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.515

20
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

21
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

97
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.596

23.4%
Homes with Exterior Walls in Poor Condition

1.7%
Homes with Inadequate Materials Used in Outer Walls

28.3%
Homes with Roofs in Poor Condition

89.9%
Households with No Access to Vehicle for Private Use

8.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.436

29.6
Population Density (persons per sq km)

1.1%
Average Annual Population Change (2010-2022)

6.6
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.526

0.5
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 185 / 221 CANTONS ASSESSED **SCORE: 0.375**

Chillanes exhibits weaker Coping Capacity in the areas of Communications Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.388

52.7%
Labor Force Participation

46,924
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.244

0%
Protected Area (% of land area)

-7,356.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.340

83.3%
Voter Participation

49%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.443

Communications Capacity

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.335

6.5%
Household Access to Fixed Phones

65%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.400

92.1%
Homes Served by the Public Electricity Network

63.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.534

16.7
Nurses and Midwives per 10,000 persons

20.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.503

24.3
Average Distance to Airport (km)

51.8
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 166 / 221 CANTONS ASSESSED **SCORE: 0.384**

Chillanes exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.392

5.4	3%	0.8	48.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.375

12	8.3	5.3	14
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 193 / 221 CANTONS ASSESSED
SCORE: 0.394

Chillanes's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Information Access Vulnerability

Communications Capacity

Governance

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

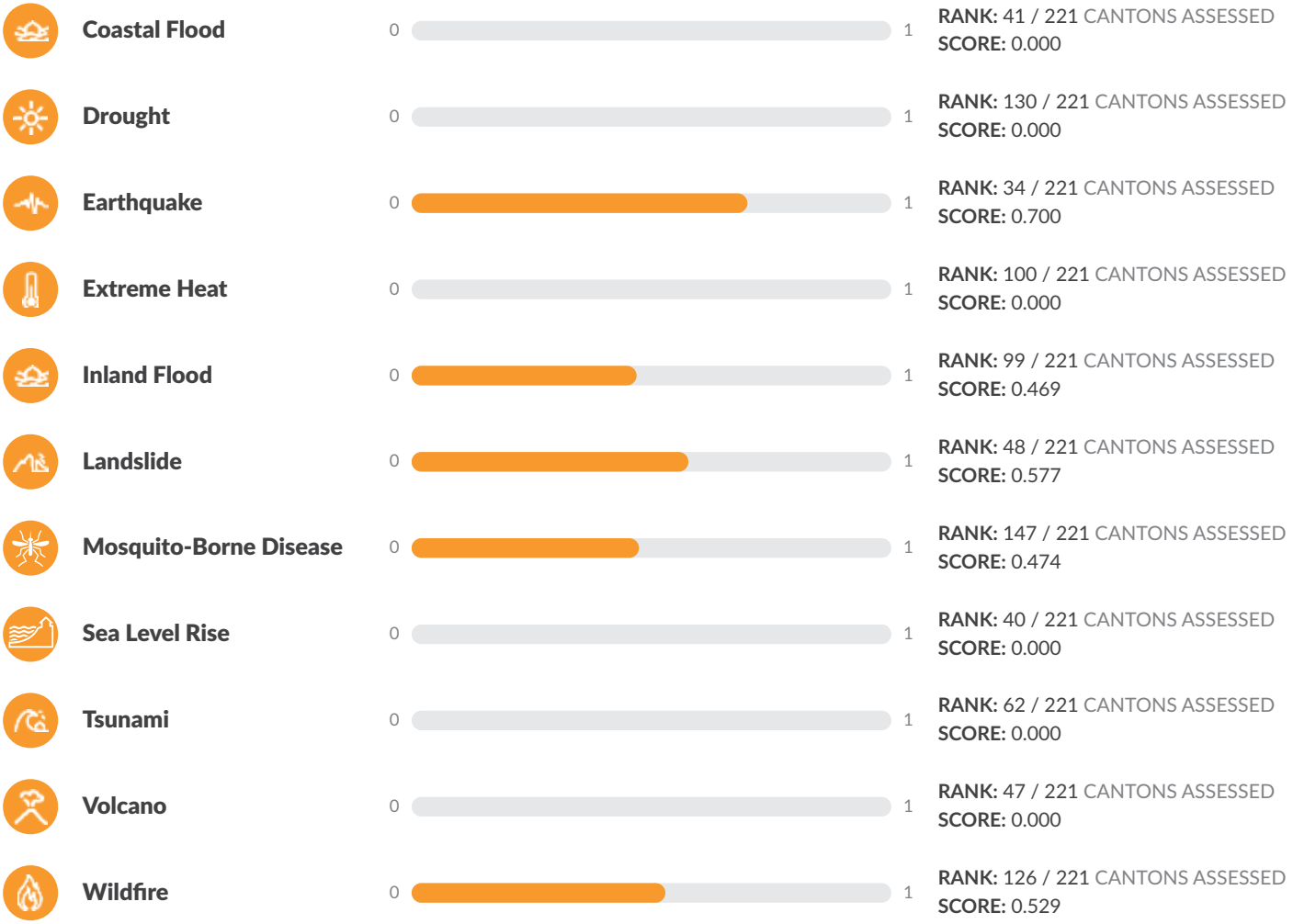
Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

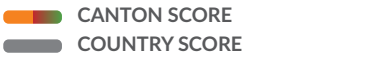


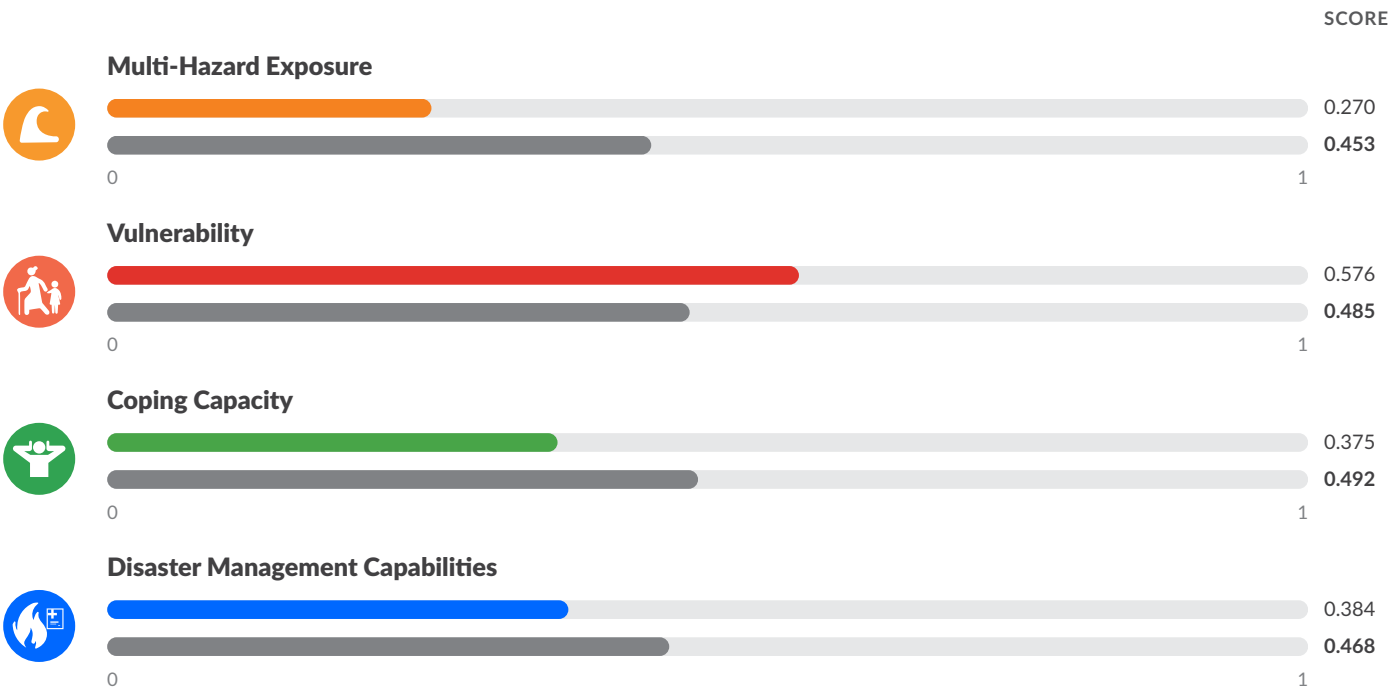
MULTI-HAZARD RISK (MHR)

RANKED
84 / 221
CANTONS ASSESSED
SCORE: 0.522

Chillanes's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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CHIMBO

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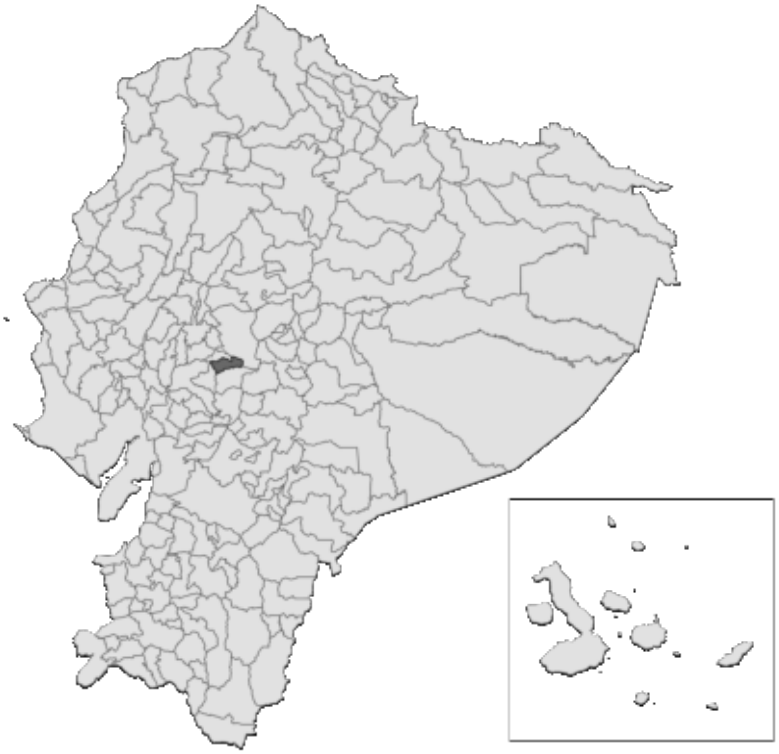
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CHIMBO

PROVINCE: BOLÍVAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.443 • RANK: 159/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.487 • RANK: 110/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.493 • RANK: 99/221 CANTONS ASSESSED

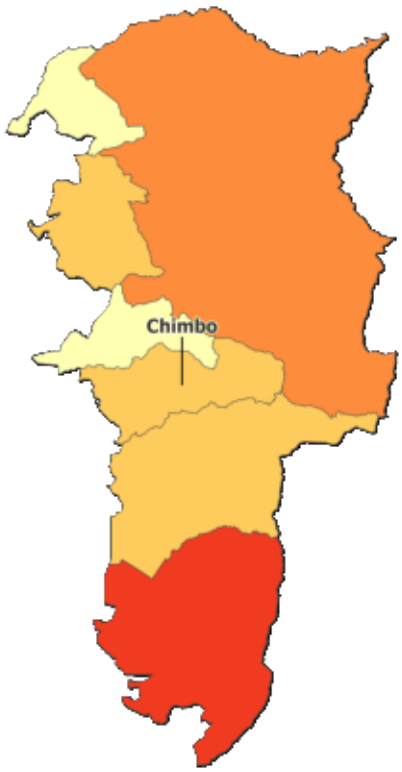
Coping Capacity (CC) - Low
SCORE: 0.406 • RANK: 171/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.249 • RANK: 193/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.559 • RANK: 56/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN BOLÍVAR PROVINCE

CHIMBO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Chillanes	0.522
Guaranda	0.505
San Miguel	0.462
Echeandía	0.445
Chimbo	**0.443**
Caluma	0.427
Las Naves	0.421

MULTI-HAZARD EXPOSURE (MHE)

RANK: 193 / 221 CANTONS ASSESSED
SCORE: 0.249



MHE
0.249

Raw MHE
0.360

Relative MHE
0.137

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
17,687 people exposed
10,165 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
2%
399 people exposed
44 structures exposed (<1%)
Critical Infrastructure Exposed: 3%

Landslide
87%
15,356 people exposed
8,888 structures exposed (87%)
Critical Infrastructure Exposed: 94%

Mosquito-Borne Disease
20%
3,528 people exposed
1,672 structures exposed (16%)
Critical Infrastructure Exposed: 20%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
62%
10,981 people exposed
7,190 structures exposed (71%)
Critical Infrastructure Exposed: 43%

VULNERABILITY (V)

RANK: 110 / 221 CANTONS ASSESSED **SCORE: 0.487**

Vulnerability in Chimbo is primarily driven by Economic Constraints and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.548

- **10.3** Average Years of Schooling
- **44.6%** Population (age 24 and over) with General Basic Education Schooling
- **7.3%** Population (age 24 and over) with No Schooling
- **6.3%** Adult Illiteracy Rate
- **58.9%** Households with No Internet Access
- **90.5%** Households with No Access to Television
- **76.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.544

- **68%** Homes with Access to Public Water Source
- **46.1%** Homes Connected to the Public Sewage System
- **46.7%** Homes without Piped Water
- **3.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.581

- **59.1** Age Dependency Ratio
- **19.7%** Unemployment Rate
- **58.5%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.263

- **1.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.424

- **0.4** Female to Male Labor Ratio (distance from parity)
- **22.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **92%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **42.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.519

- **13.3%** Prevalence of Disability (among persons age 5 and over)
- **7.6** Perinatal Mortality Rate (per 1,000 births)
- **5.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.309

- **2.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.488

38	19	33	34
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.487

20.1%	0.5%	23.5%	82.8%	6.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.384

57.5	-0.2	1.8	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.445

0.3	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 171 / 221 CANTONS ASSESSED **SCORE: 0.406**

Chimbo exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.372

53%
Labor Force Participation

35,613
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.315

0%
Protected Area (% of land area)

-2,525.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.370

83.1%
Voter Participation

58.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.506

Communications Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.558

22.1%
Household Access to Fixed Phones

73.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.503

95.7%
Homes Served by the Public Electricity Network

68.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.440

14.8
Nurses and Midwives per 10,000 persons

12.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.523

33.2
Average Distance to Airport (km)

44.9
Average Distance to Sea or River Port (km)

1.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 56 / 221 CANTONS ASSESSED **SCORE: 0.559**

Chimbo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.487

2.1	6.5%	0	13.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.631

7.9	4.5	2.1	4.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 99 / 221 CANTONS ASSESSED
SCORE: 0.493

Chimbo's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance | **Economic Capacity** | **Economic Constraints** | **Healthcare Capacity**

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

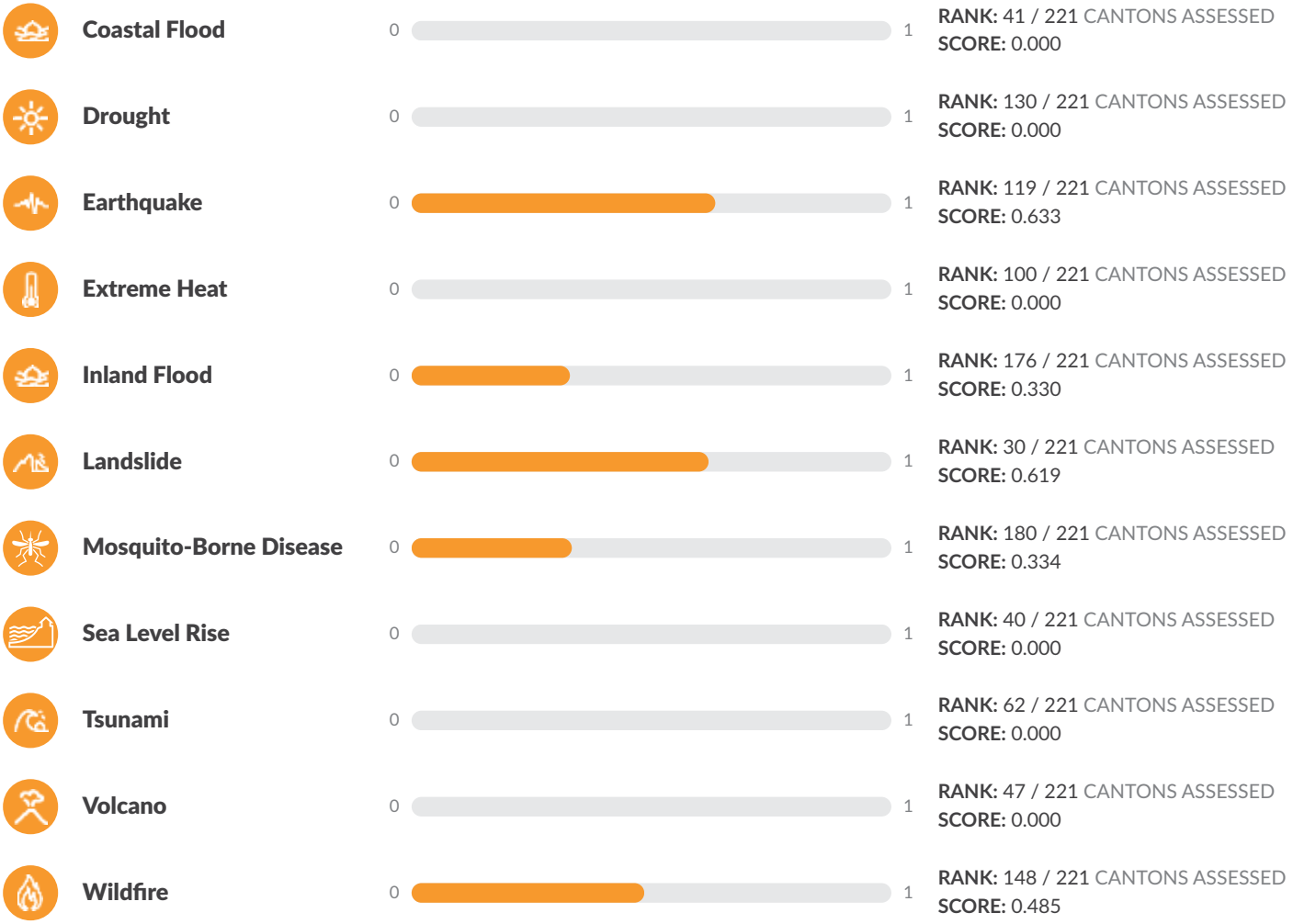
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
159 / 221
CANTONS ASSESSED
SCORE: 0.443

Chimbo's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CHINCHIPE

NDPBA SUBNATIONAL PROFILE

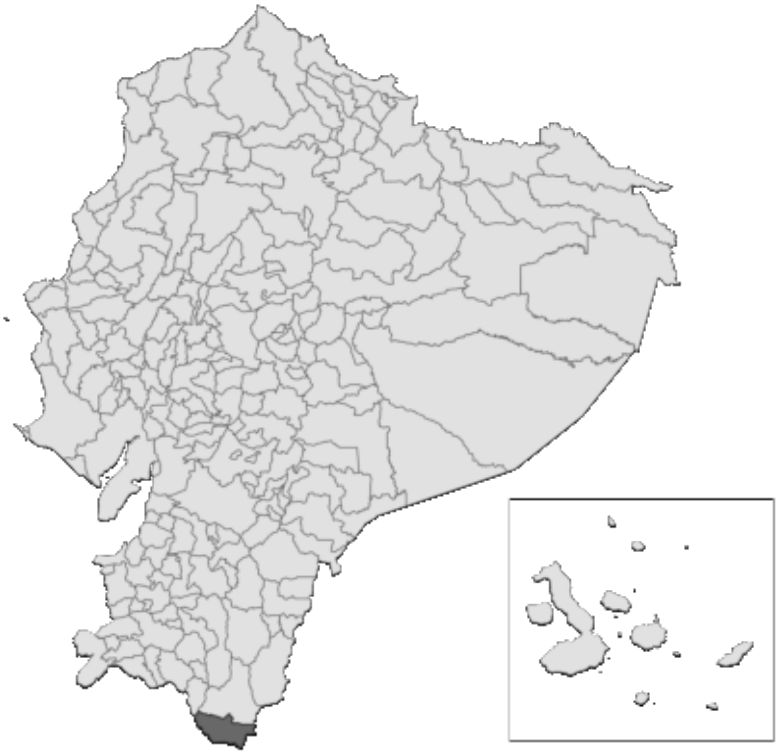
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CHINCHIPE

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.511 • RANK: 92/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.487 • RANK: 110/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.437 • RANK: 160/221 CANTONS ASSESSED

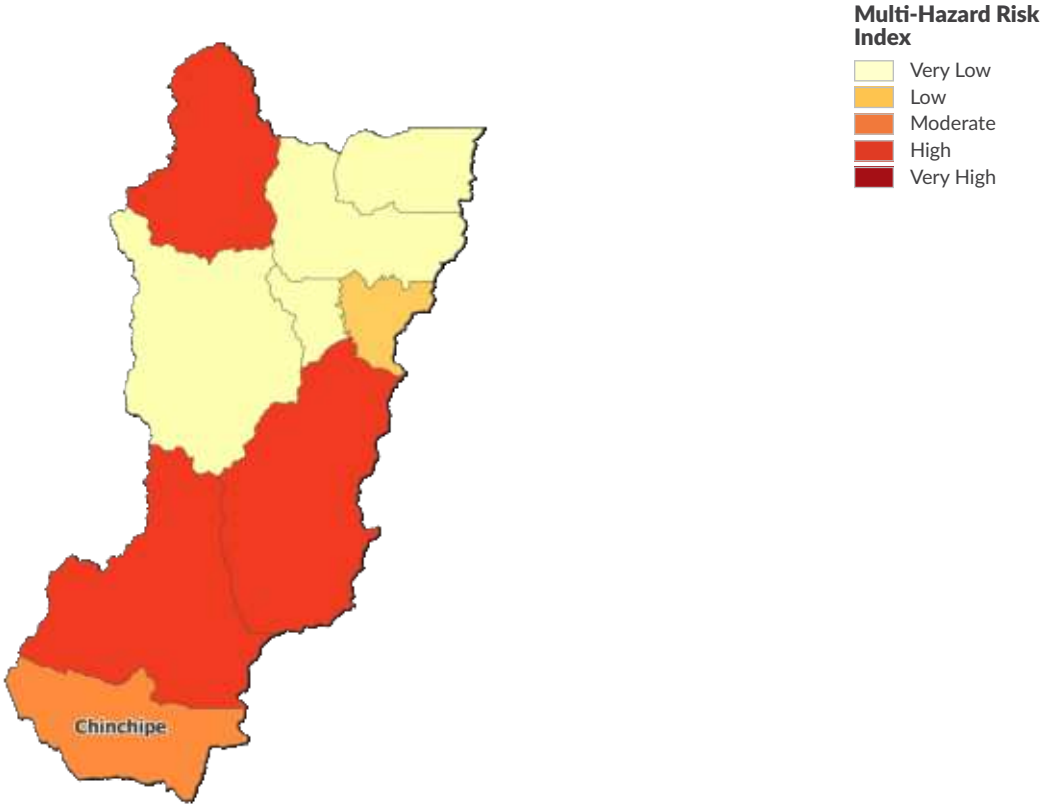
Coping Capacity (CC) - Low
SCORE: 0.437 • RANK: 157/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.357 • RANK: 145/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.361 • RANK: 186/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

CHINCHIPE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Palanda	0.535
Yacuambi	0.535
Nangaritza	0.524
Chinchipe	**0.511**
Paquisha	0.465
Centinela Del Cóndor	0.428
El Pangui	0.428
Zamora	0.419
Yantzaza	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 145 / 221 CANTONS ASSESSED
SCORE: 0.357



MHE
0.357

Raw MHE
0.342

Relative MHE
0.371

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
11,230 people exposed
7,184 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
36 people exposed
30 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Landslide
98%
11,000 people exposed
7,008 structures exposed (98%)
Critical Infrastructure Exposed: 99%

Mosquito-Borne Disease
79%
8,919 people exposed
5,585 structures exposed (78%)
Critical Infrastructure Exposed: 94%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
93%
10,389 people exposed
6,815 structures exposed (95%)
Critical Infrastructure Exposed: 82%

VULNERABILITY (V)

RANK: 110 / 221 CANTONS ASSESSED **SCORE: 0.487**

Vulnerability in Chinchipe is primarily driven by Economic Constraints and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.424

- **10.4** Average Years of Schooling
- **47.2%** Population (age 24 and over) with General Basic Education Schooling
- **3.2%** Population (age 24 and over) with No Schooling
- **2.5%** Adult Illiteracy Rate
- **48.9%** Households with No Internet Access
- **78.7%** Households with No Access to Television
- **75.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.548

- **68%** Homes with Access to Public Water Source
- **51.8%** Homes Connected to the Public Sewage System
- **35.8%** Homes without Piped Water
- **6.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.650

- **60.7** Age Dependency Ratio
- **22.4%** Unemployment Rate
- **59.9%** Poverty Rate (based on UBN)
- **2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.633

- **6.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.415

- **0.3** Female to Male Labor Ratio (distance from parity)
- **45.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **51%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.279

- **9.2%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **2.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.239

- **1.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **45.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.452

16
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

12
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

85
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.512

15.1%
Homes with Exterior Walls in Poor Condition

2.9%
Homes with Inadequate Materials Used in Outer Walls

18.6%
Homes with Roofs in Poor Condition

88.4%
Households with No Access to Vehicle for Private Use

9.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.443

9.4
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

15.8
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.599

0.2
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 157 / 221 CANTONS ASSESSED **SCORE: 0.437**

Chinchipe exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.382

55.5%
Labor Force Participation

24,334
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.581

13.1%
Protected Area (% of land area)

-4,036.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.342

78.9%
Voter Participation

67%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.541

Communications Capacity

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.588

13.3%
Household Access to Fixed Phones

84.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.614

97.3%
Homes Served by the Public Electricity Network

75.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.771

30
Nurses and Midwives per 10,000 persons

43.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.189

98.5
Average Distance to Airport (km)

97.7
Average Distance to Sea or River Port (km)

0.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 186 / 221 CANTONS ASSESSED **SCORE: 0.361**

Chinchipe exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.408

5.9	6.1%	1.5	92.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.313

7.9	48	6.7	7.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 160 / 221 CANTONS ASSESSED
SCORE: 0.437

Chinchipe's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Transportation Capacity



Emergency Services



Governance



Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Governance

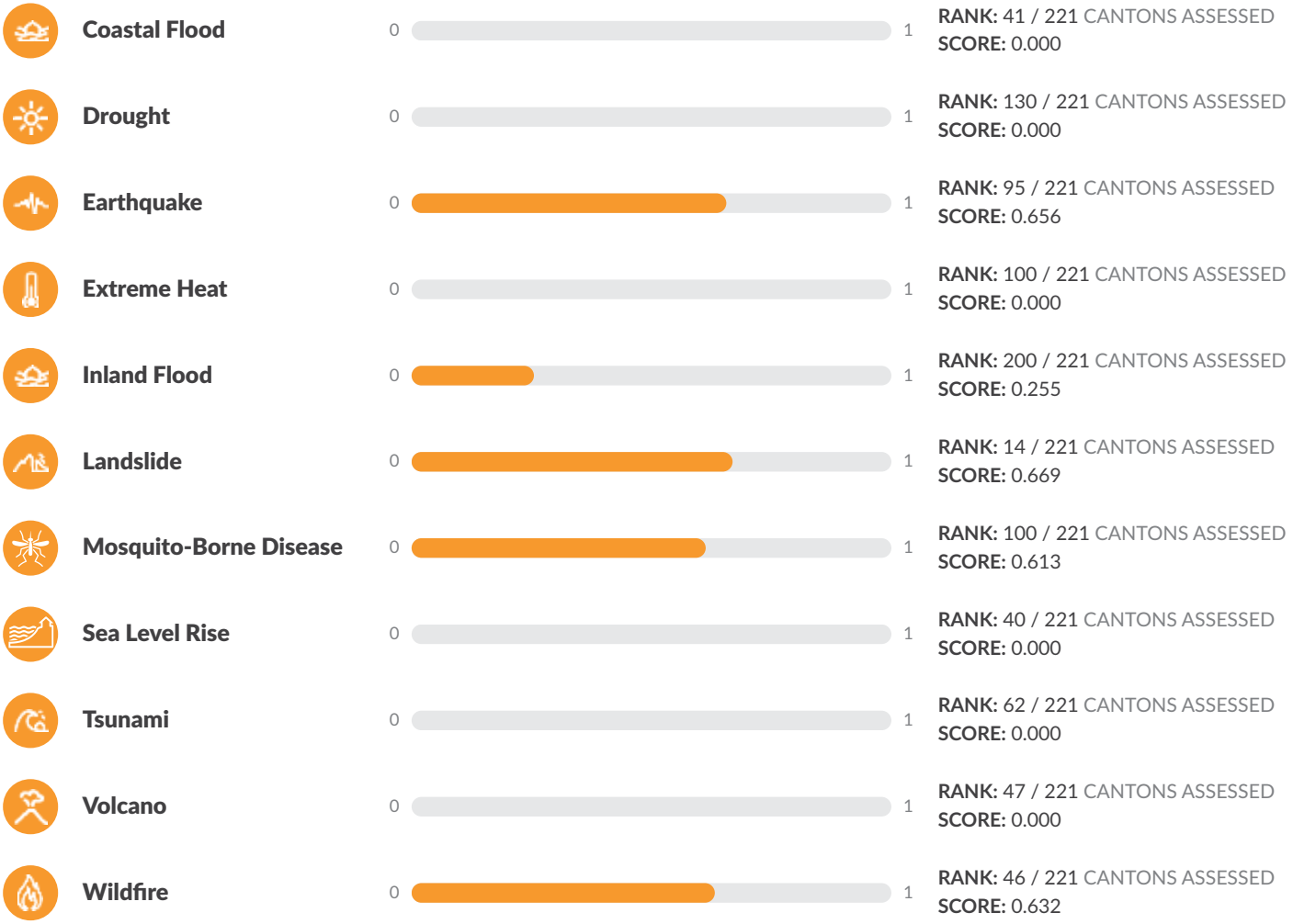
The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
92 / 221
CANTONS ASSESSED
SCORE: 0.511

Chinchipe's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CHONE

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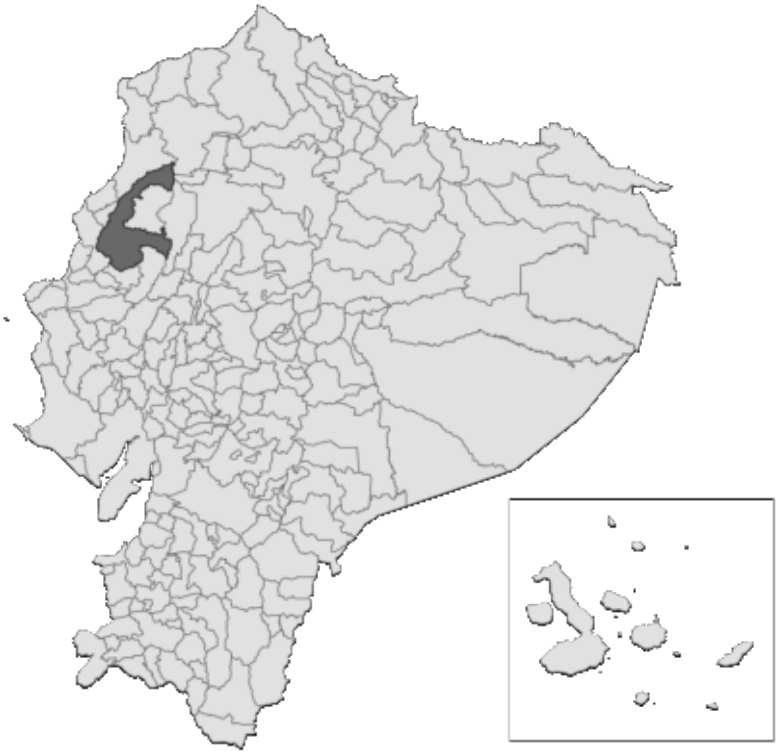
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CHONE

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.617 • RANK: 12/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.542 • RANK: 64/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.424 • RANK: 168/221 CANTONS ASSESSED

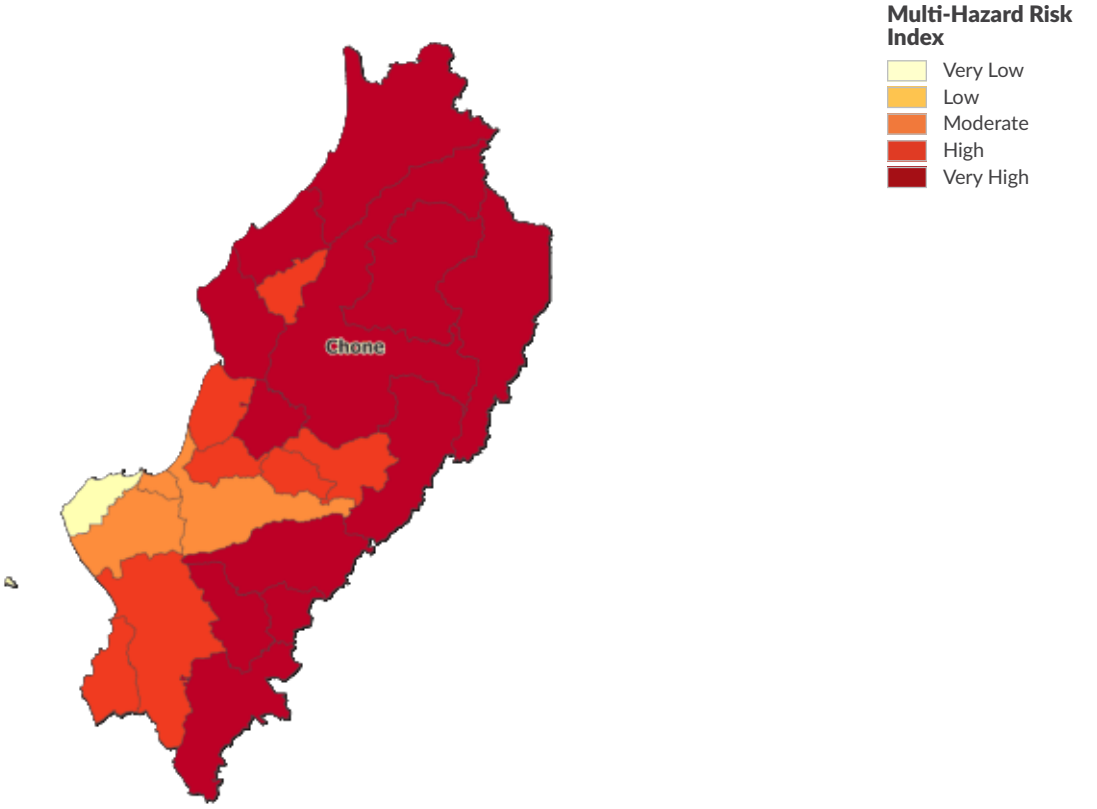
Coping Capacity (CC) - Low
SCORE: 0.453 • RANK: 141/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.739 • RANK: 16/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.361 • RANK: 186/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

CHONE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	**0.617**	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 16 / 221 CANTONS ASSESSED
SCORE: 0.739



MHE
0.739

Raw MHE
0.844

Relative MHE
0.633

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **87** people exposed
- **75** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
49%
- **74,048** people exposed
- **46,246** structures exposed (59%)

Critical Infrastructure Exposed: 64%

Earthquake
100%
- **149,692** people exposed
- **78,716** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
80%
- **119,445** people exposed
- **58,654** structures exposed (75%)

Critical Infrastructure Exposed: 78%

Inland Flood
20%
- **29,930** people exposed
- **15,690** structures exposed (20%)

Critical Infrastructure Exposed: 21%

Landslide
19%
- **28,866** people exposed
- **12,349** structures exposed (16%)

Critical Infrastructure Exposed: 9%

Mosquito-Borne Disease
99%
- **148,124** people exposed
- **77,840** structures exposed (99%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
<1%
- **42** people exposed
- **30** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
24%
- **35,572** people exposed
- **22,141** structures exposed (28%)

Critical Infrastructure Exposed: 36%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
69%
- **103,804** people exposed
- **52,283** structures exposed (66%)

Critical Infrastructure Exposed: 57%

VULNERABILITY (V)

RANK: 64 / 221 CANTONS ASSESSED **SCORE: 0.542**

Vulnerability in Chone is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.523

10 Average Years of Schooling	**42.2%** Population (age 24 and over) with General Basic Education Schooling	**8.6%** Population (age 24 and over) with No Schooling	**7.2%** Adult Illiteracy Rate	**63.3%** Households with No Internet Access
73.5% Households with No Access to Television	**81.3%** Households with No Access to Computer			

Clean Water Access Vulnerability

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.654

45.1% Homes with Access to Public Water Source	**32.1%** Homes Connected to the Public Sewage System	**53.5%** Homes without Piped Water	**4.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.525

55.2 Age Dependency Ratio	**14.8%** Unemployment Rate	**68.9%** Poverty Rate (based on UBN)	**0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.681

8.2% Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.631

0.5 Female to Male Labor Ratio (distance from parity)	**54.7** Adolescent Birth Rate (among females age 15-19) per 1,000	**6.9%** Prevalence of Child Marriage (among adolescents age 12-17)	**71.9%** Population with Unmet Basic Needs (UBN) that is Indigenous	**75.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.499

9.9% Prevalence of Disability (among persons age 5 and over)	**2.2** Perinatal Mortality Rate (per 1,000 births)	**8.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.424

10.6 Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)	**1.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)	**34.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)	**0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.600

65	28	47	34
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.596

20.4%	21.9%	19.8%	87.1%	7.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.376

41.9	0.1%	4.1	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.511

0.5	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 141 / 221 CANTONS ASSESSED **SCORE: 0.453**

Chone exhibits weaker Coping Capacity in the areas of Governance and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.525

53.6%
Labor Force Participation

265,567
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.052

0.6%
Protected Area (% of land area)

-26,654.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.455

85.4%
Voter Participation

68%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.514

Communications Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.469

8.5%
Household Access to Fixed Phones

79.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.477

94.5%
Homes Served by the Public Electricity Network

68.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.609

21.9
Nurses and Midwives per 10,000 persons

23.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.499

40
Average Distance to Airport (km)

48.2
Average Distance to Sea or River Port (km)

2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 186 / 221 CANTONS ASSESSED **SCORE: 0.361**

Chone exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.411

5.7	3.9%	1.7	88.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.310

15.3	13.5	6.3	13.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 168 / 221 CANTONS ASSESSED
SCORE: 0.424

Chone's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Emergency Services



Clean Water Access Vulnerability



Marginalization



Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Marginalization

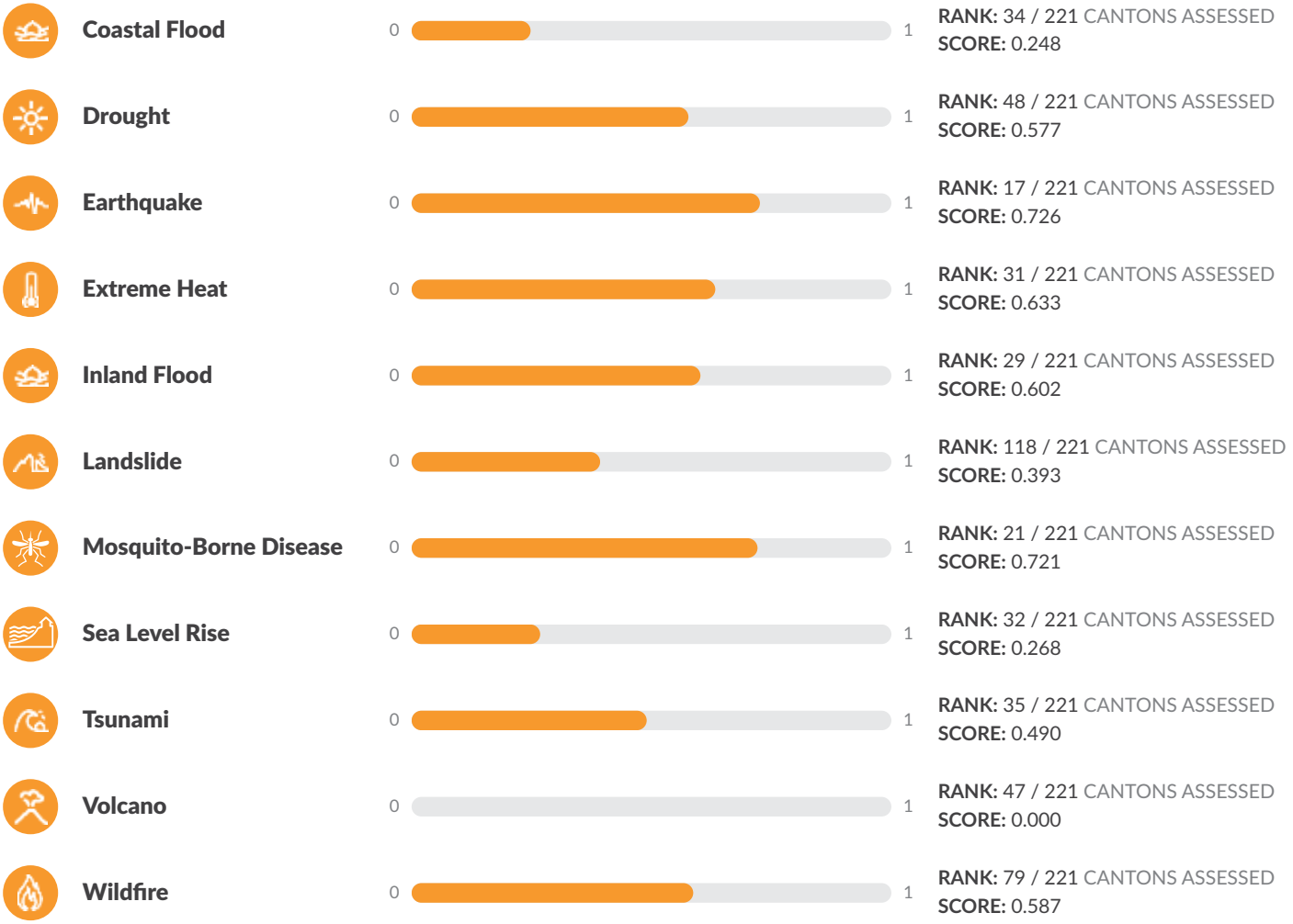
Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

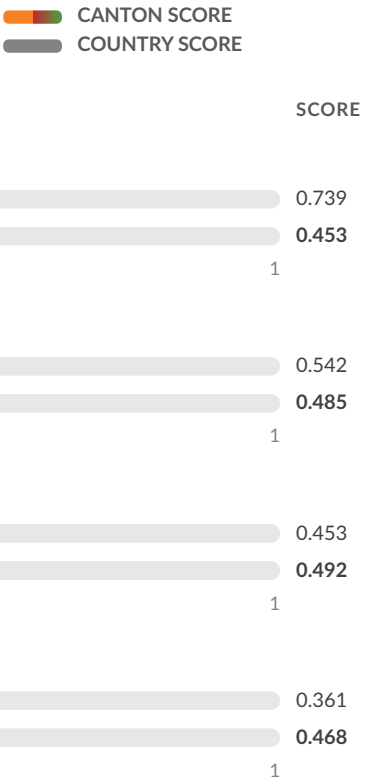


MULTI-HAZARD RISK (MHR)

RANKED
12 / 221
CANTONS ASSESSED
SCORE: 0.617

Chone's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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CHORDELEG

NDPBA SUBNATIONAL PROFILE

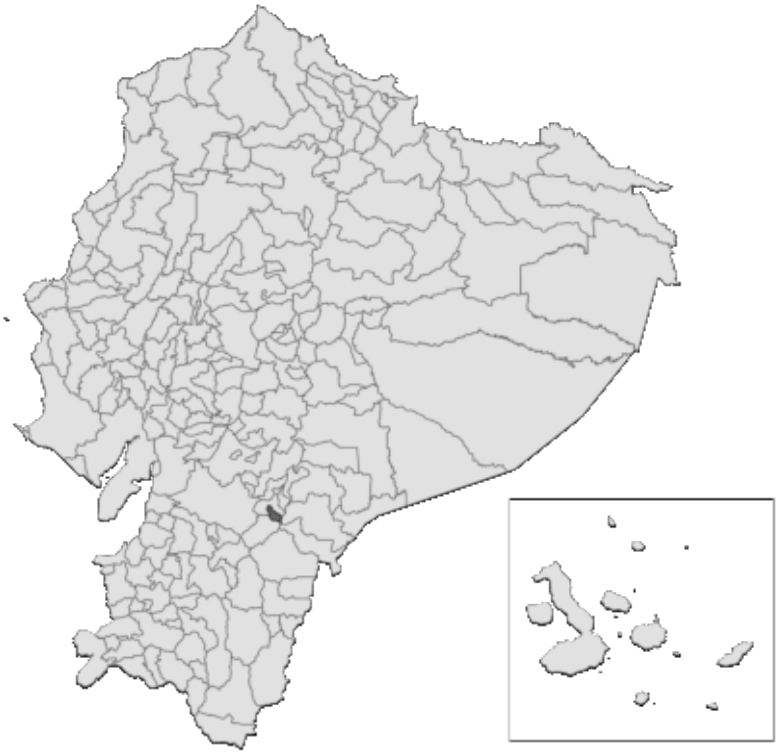
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CHORDELEG

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.430 • RANK: 174/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.388 • RANK: 194/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.554 • RANK: 60/221 CANTONS ASSESSED

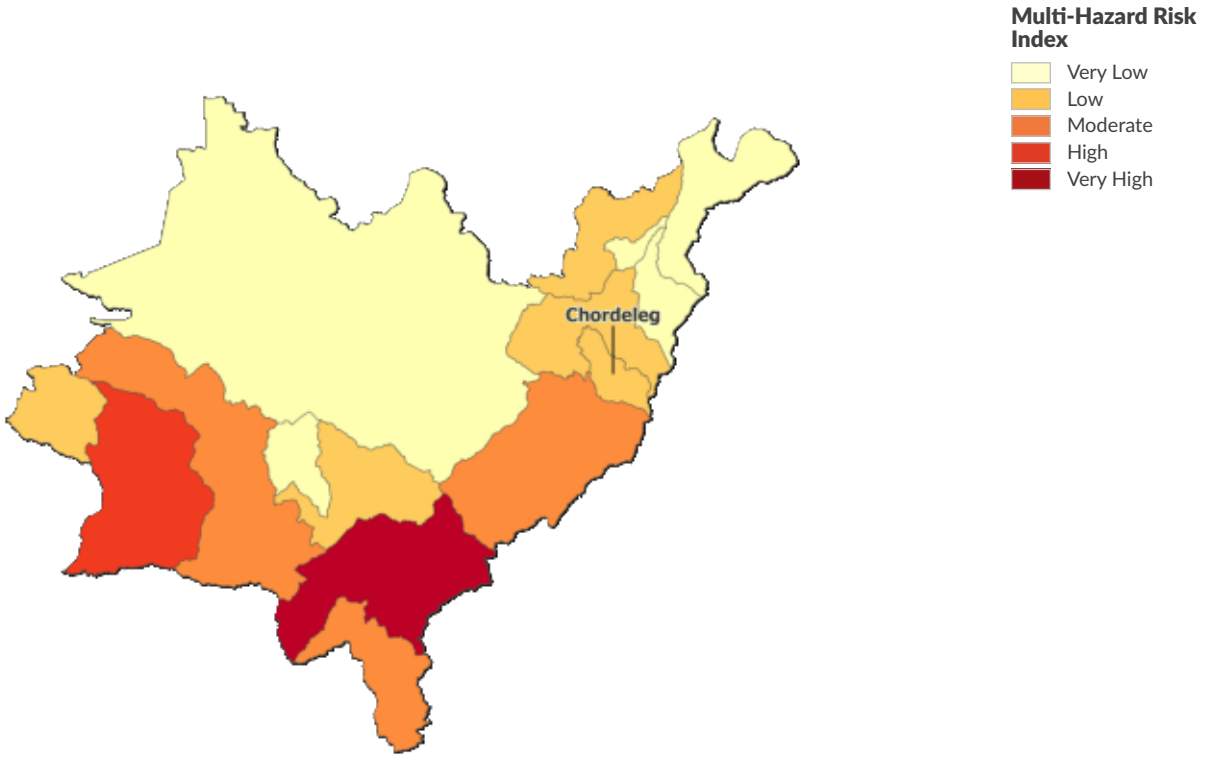
Coping Capacity (CC) - Moderate
SCORE: 0.489 • RANK: 106/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.382 • RANK: 136/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.562 • RANK: 51/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

CHORDELEG • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	**0.430**
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 136 / 221 CANTONS ASSESSED
SCORE: 0.382



MHE
0.382

Raw MHE
0.406

Relative MHE
0.358

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
90%
- **13,666** people exposed
- **8,241** structures exposed (86%)

Critical Infrastructure Exposed: 72%

Earthquake
100%
- **15,200** people exposed
- **9,623** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **103** people exposed
- **58** structures exposed (<1%)

Critical Infrastructure Exposed: 3%

Landslide
94%
- **14,280** people exposed
- **9,114** structures exposed (95%)

Critical Infrastructure Exposed: 96%

Mosquito-Borne Disease
5%
- **693** people exposed
- **482** structures exposed (5%)

Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
100%
- **15,200** people exposed
- **9,623** structures exposed (100%)

Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 194 / 221 CANTONS ASSESSED **SCORE: 0.388**

Vulnerability in Chordeleg is primarily driven by Information Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.559

- **8** Average Years of Schooling
- **59%** Population (age 24 and over) with General Basic Education Schooling
- **8.6%** Population (age 24 and over) with No Schooling
- **8.3%** Adult Illiteracy Rate
- **37.4%** Households with No Internet Access
- **71.8%** Households with No Access to Television
- **74%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.279

- **94%** Homes with Access to Public Water Source
- **74.4%** Homes Connected to the Public Sewage System
- **21.8%** Homes without Piped Water
- **3.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.395

- **65.2** Age Dependency Ratio
- **5.4%** Unemployment Rate
- **33%** Poverty Rate (based on UBN)
- **1.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.249

- **1.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.353

- **0.2** Female to Male Labor Ratio (distance from parity)
- **41.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **70%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **27.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.479

- **10.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **16%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.132

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.683

84	22	48	115
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.441

14.2%	2.7%	23%	77.5%	4.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.394

116.9	-0.2	2.9	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.230

0.2	0.1	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 106 / 221 CANTONS ASSESSED **SCORE: 0.489**

Chordeleg exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.546

66.1%
Labor Force Participation

18,197
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.342

0%
Protected Area (% of land area)

-833.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.469

74.7%
Voter Participation

93.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.502

Communications Capacity

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.650

17.1%
Household Access to Fixed Phones

86.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.653

98.2%
Homes Served by the Public Electricity Network

75.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.271

4.9
Nurses and Midwives per 10,000 persons

11.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.434

25.2
Average Distance to Airport (km)

116.4
Average Distance to Sea or River Port (km)

1.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 51 / 221 CANTONS ASSESSED **SCORE: 0.562**

Chordeleg exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.510

1.1	6.3%	0	23.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.615

5.6	3.4	3.2	5.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 60 / 221 CANTONS ASSESSED
SCORE: 0.554

Chordeleg's score and ranking are due to Very Low Vulnerability combined with Moderate Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Transportation Capacity

Information Access Vulnerability

Governance

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

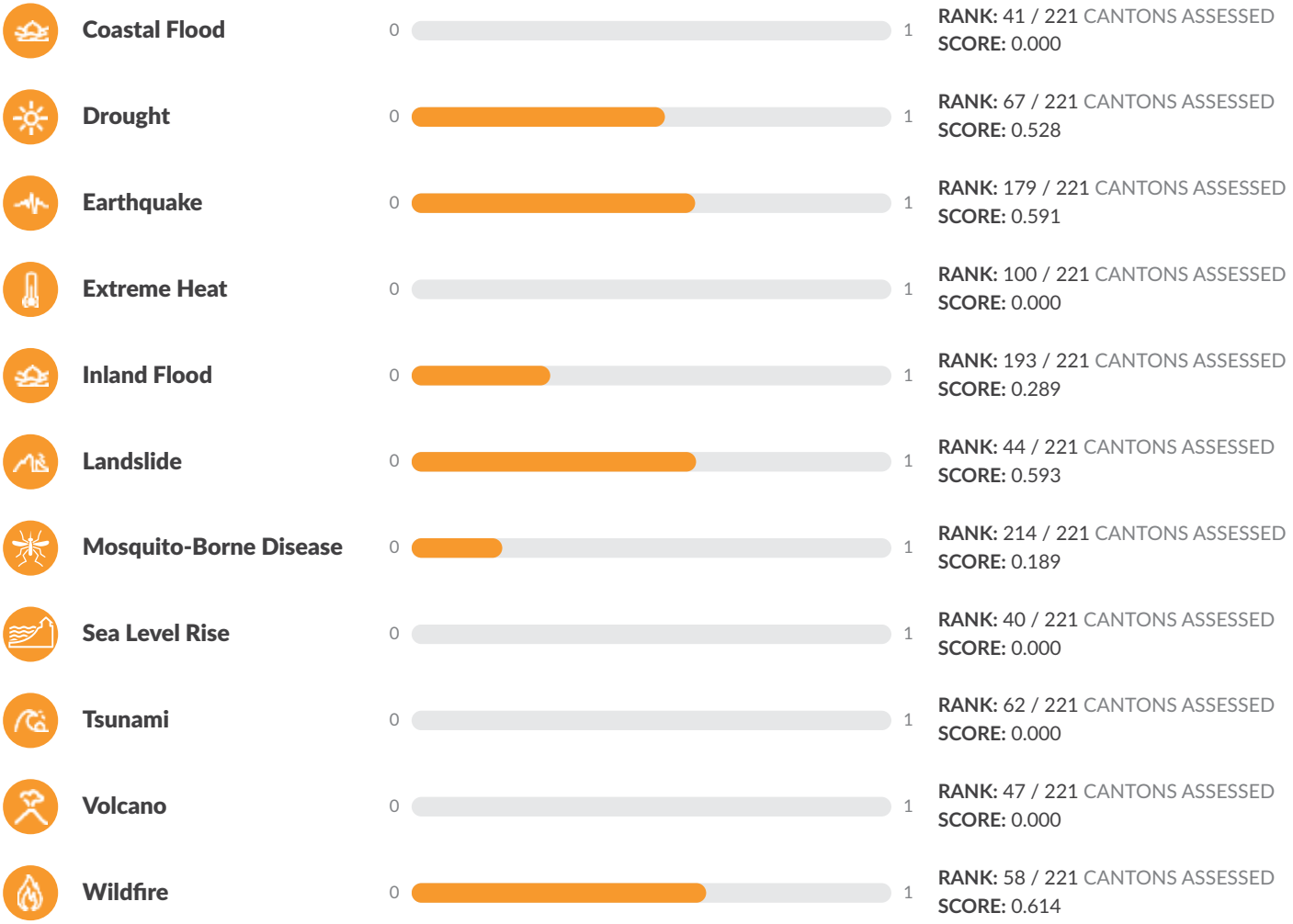
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

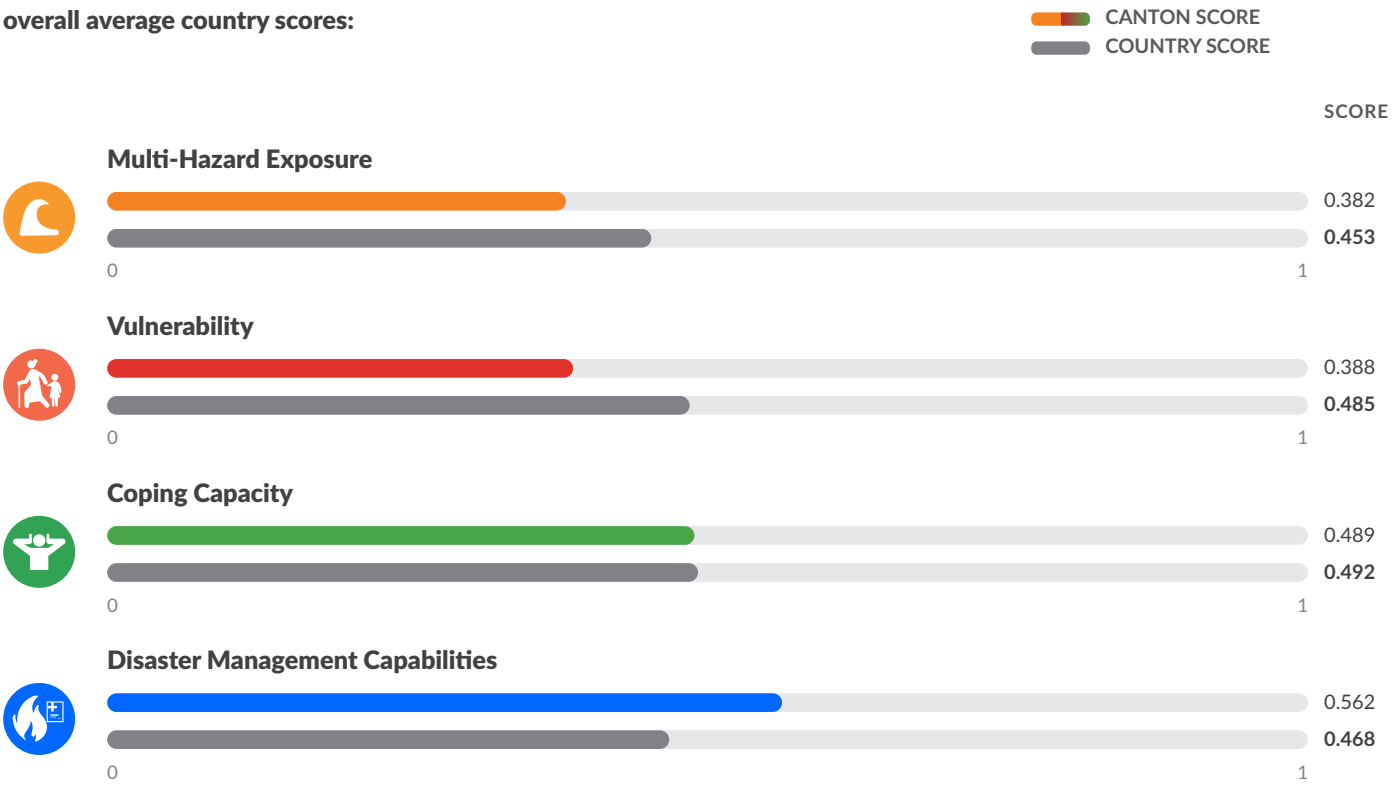


MULTI-HAZARD RISK (MHR)

RANKED
174 / 221
CANTONS ASSESSED
SCORE: 0.430

Chordeleg's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, Moderate Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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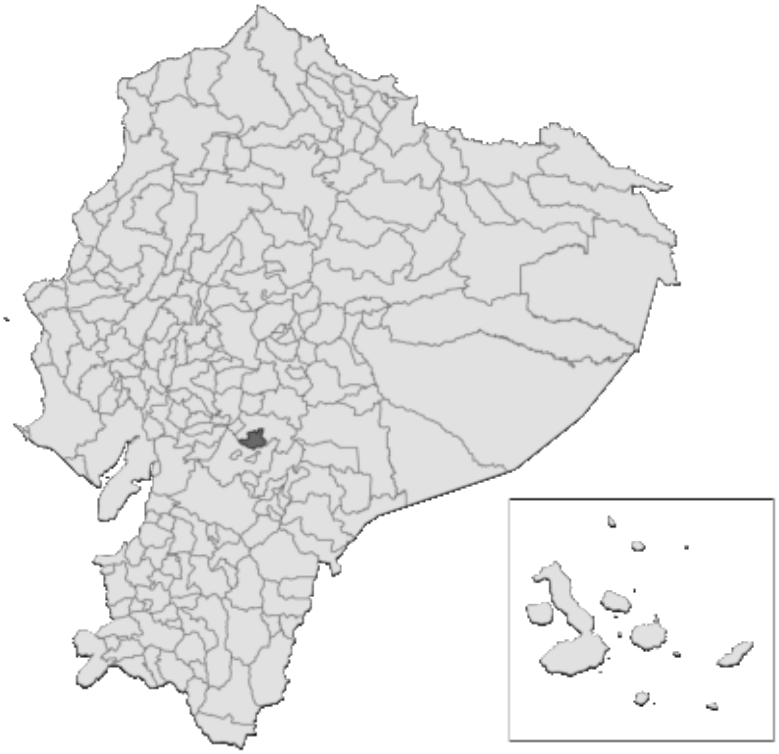
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CHUNCHI

PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.483 • RANK: 123/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.467 • RANK: 135/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.333 • RANK: 163/221 CANTONS ASSESSED

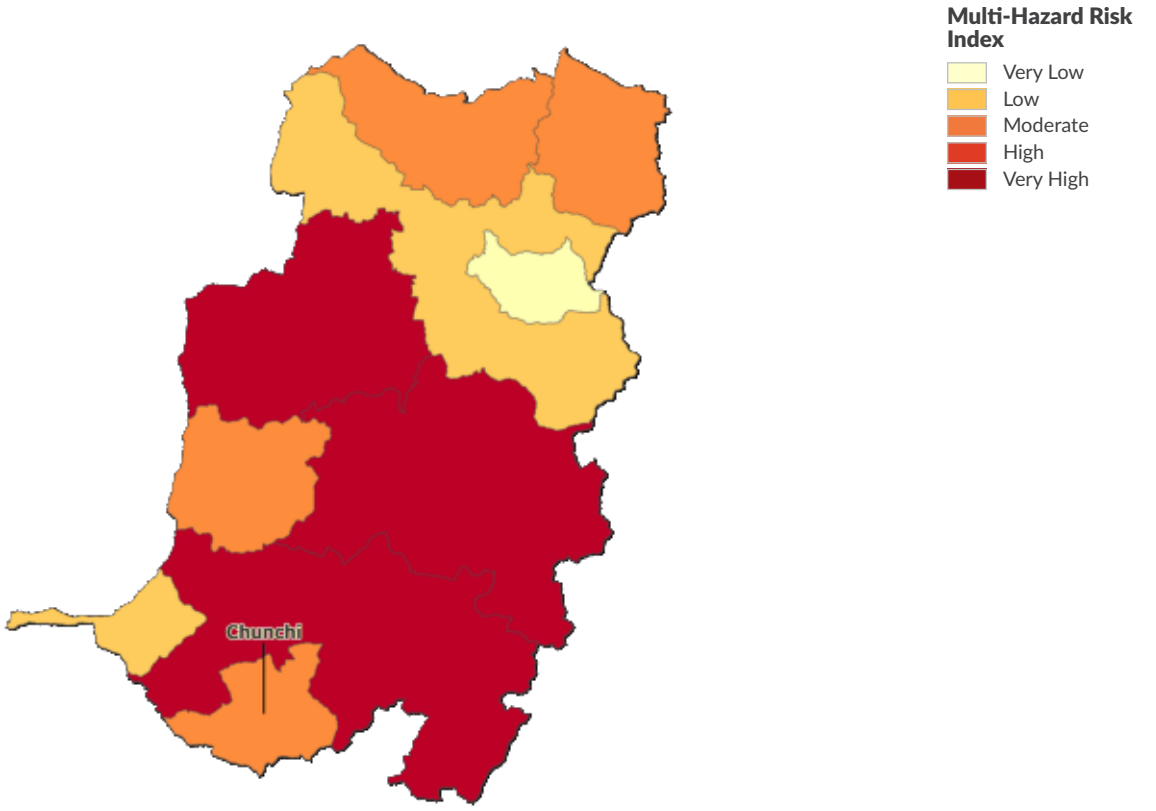
Vulnerability (V) - Moderate
SCORE: 0.487 • RANK: 110/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.367 • RANK: 189/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.521 • RANK: 72/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

CHUNCHI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	0.571
Guano	0.512
Penipe	0.500
Pallatanga	0.487
Chunchi	**0.483**
Cumandá	0.442
Riobamba	0.442
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 163 / 221 CANTONS ASSESSED
SCORE: 0.333



MHE
0.333

Raw MHE
0.370

Relative MHE
0.296

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
59%
- **8,557** people exposed
- **5,848** structures exposed (63%)
- **Critical Infrastructure Exposed:** 64%

Earthquake
100%
- **14,592** people exposed
- **9,239** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
<1%
- **121** people exposed
- **41** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 1%

Landslide
99%
- **14,501** people exposed
- **9,184** structures exposed (99%)
- **Critical Infrastructure Exposed:** 100%

Mosquito-Borne Disease
4%
- **539** people exposed
- **215** structures exposed (2%)
- **Critical Infrastructure Exposed:** 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
71%
- **10,426** people exposed
- **6,214** structures exposed (67%)
- **Critical Infrastructure Exposed:** 51%

VULNERABILITY (V)

RANK: 110 / 221 CANTONS ASSESSED **SCORE: 0.487**

Vulnerability in Chunchi is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.635

- **7.6** Average Years of Schooling
- **51.9%** Population (age 24 and over) with General Basic Education Schooling
- **16.2%** Population (age 24 and over) with No Schooling
- **14.4%** Adult Illiteracy Rate
- **40.5%** Households with No Internet Access
- **81.9%** Households with No Access to Television
- **81.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.511

- **76.7%** Homes with Access to Public Water Source
- **51.6%** Homes Connected to the Public Sewage System
- **32.3%** Homes without Piped Water
- **6.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.637

- **76.6** Age Dependency Ratio
- **10.7%** Unemployment Rate
- **53.9%** Poverty Rate (based on UBN)
- **2.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.403

- **2.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.360

- **0.3** Female to Male Labor Ratio (distance from parity)
- **51.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **57.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **20.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.361

- **12.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.179

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.466

26	15	49	20
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.401

12.4%	0.5%	18.1%	83.9%	5.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.357

39	-1.5	4.4	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.644

0.4	0.3	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 189 / 221 CANTONS ASSESSED **SCORE: 0.367**

Chunchi exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.334

53.5%
Labor Force Participation

19,065
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.330

0.1%
Protected Area (% of land area)

-2,094
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.226

66.1%
Voter Participation

76.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.552

Communications Capacity

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.621

14.3%
Household Access to Fixed Phones

86.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.595

97.6%
Homes Served by the Public Electricity Network

71.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.578

14.1
Nurses and Midwives per 10,000 persons

31
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.416

39
Average Distance to Airport (km)

90.2
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 72 / 221 CANTONS ASSESSED **SCORE: 0.521**

Chunchi exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.486

2.7	3.2%	1.6	63.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.557

5.7	5.4	4.1	5.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 135 / 221 CANTONS ASSESSED
SCORE: 0.467

Chunchi's score and ranking are due to Moderate Vulnerability combined with Very Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance **Economic Capacity** **Disaster Impacts** **Economic Constraints**

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

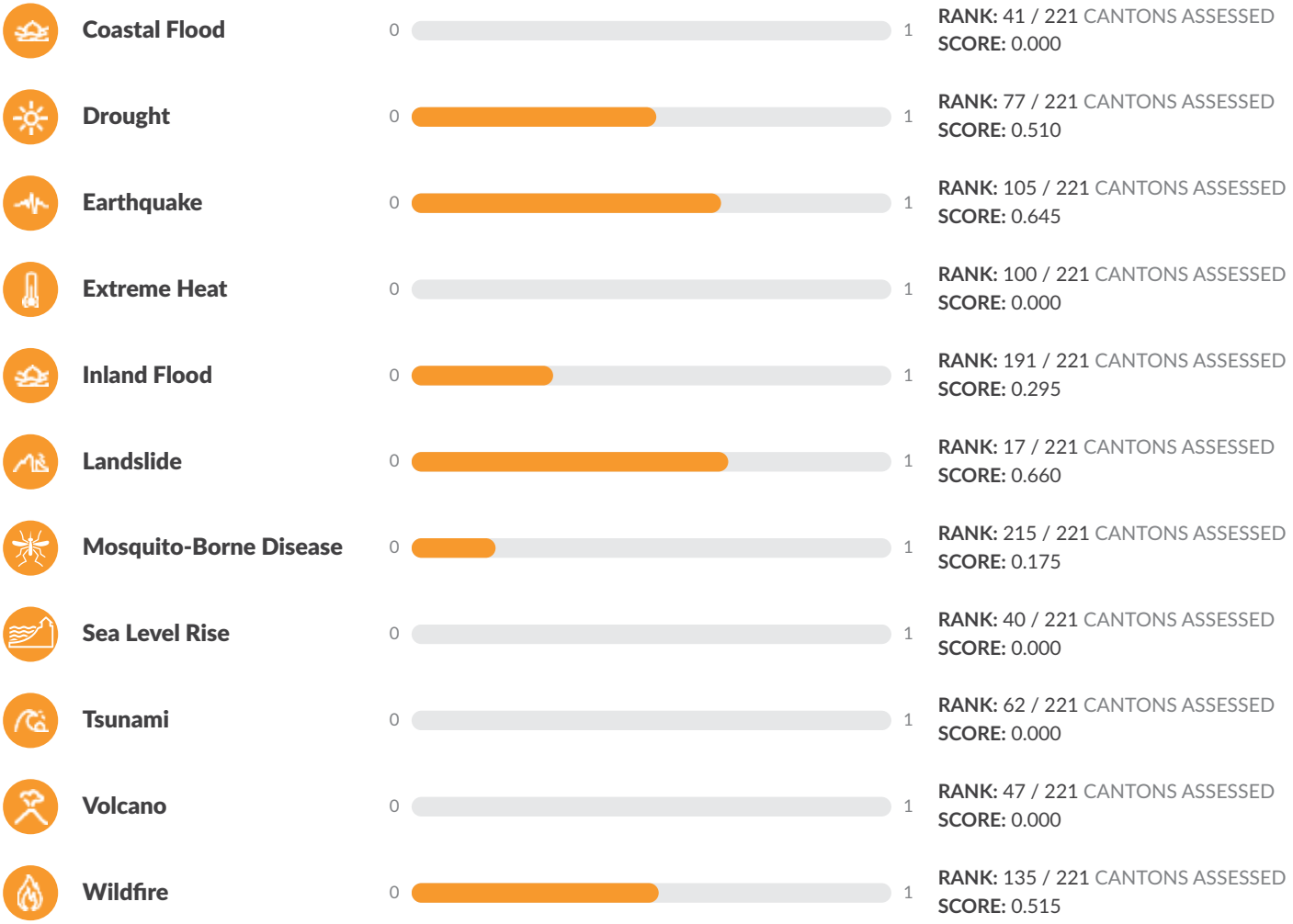
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

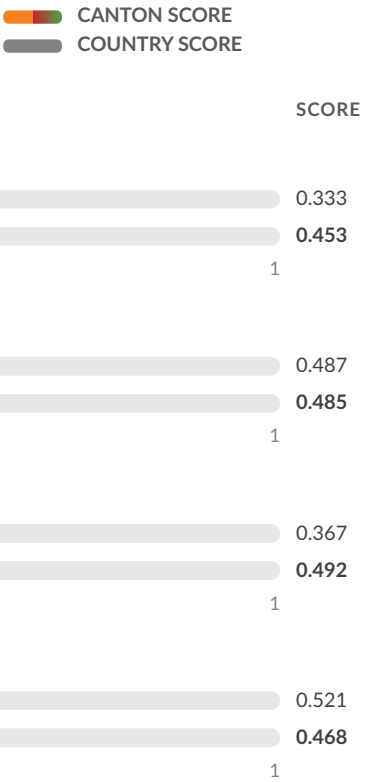


MULTI-HAZARD RISK (MHR)

RANKED
123 / 221
CANTONS ASSESSED
SCORE: 0.483

Chunchi's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Very Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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COLIMES

NDPBA SUBNATIONAL PROFILE

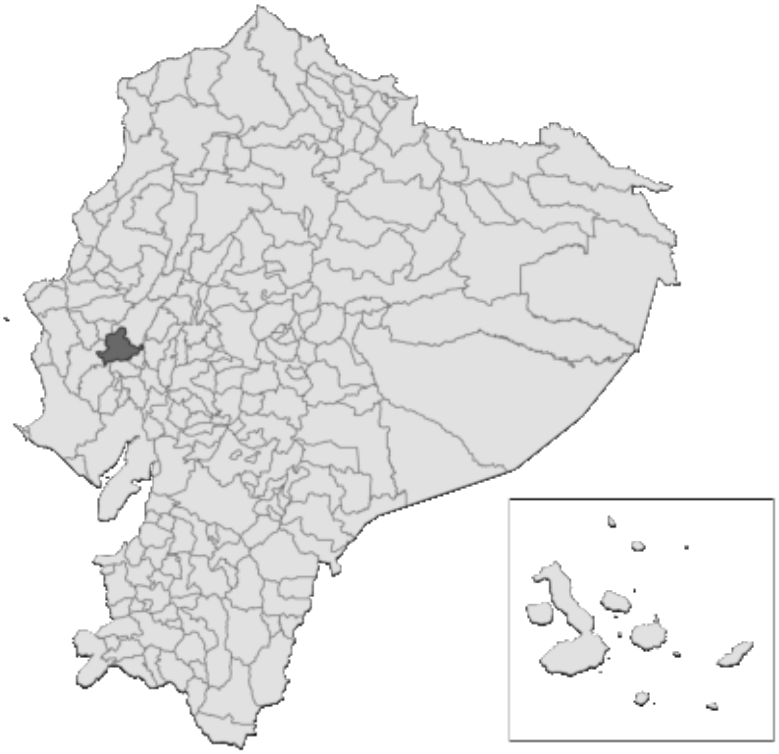
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COLIMES

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.611 • RANK: 15/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.585 • RANK: 27/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.364 • RANK: 205/221 CANTONS ASSESSED

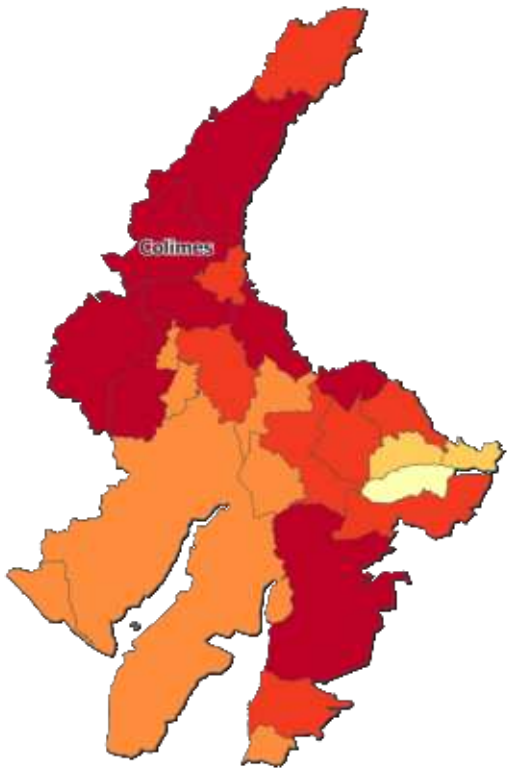
Coping Capacity (CC) - Very Low
SCORE: 0.364 • RANK: 190/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.536 • RANK: 68/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.314 • RANK: 197/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

COLIMES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	**0.611**
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 68 / 221 CANTONS ASSESSED
SCORE: 0.536



MHE
0.536

Raw MHE
0.544

Relative MHE
0.527

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
38%
- **10,594** people exposed
- **5,696** structures exposed (36%)

Critical Infrastructure Exposed: 23%

Earthquake
100%
- **28,130** people exposed
- **16,008** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **28,130** people exposed
- **16,008** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
41%
- **11,444** people exposed
- **6,317** structures exposed (39%)

Critical Infrastructure Exposed: 32%

Landslide
1%
- **318** people exposed
- **137** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
99%
- **27,867** people exposed
- **15,862** structures exposed (99%)

Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
25%
- **7,167** people exposed
- **4,528** structures exposed (28%)

Critical Infrastructure Exposed: 27%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
63%
- **17,669** people exposed
- **10,251** structures exposed (64%)

Critical Infrastructure Exposed: 67%

VULNERABILITY (V)

RANK: 27 / 221 CANTONS ASSESSED **SCORE: 0.585**

Vulnerability in Colimes is primarily driven by Information Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.778

- **7.6** Average Years of Schooling
- **59.7%** Population (age 24 and over) with General Basic Education Schooling
- **12%** Population (age 24 and over) with No Schooling
- **11.1%** Adult Illiteracy Rate
- **75.3%** Households with No Internet Access
- **87.7%** Households with No Access to Television
- **93.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.721

- **51.1%** Homes with Access to Public Water Source
- **19.3%** Homes Connected to the Public Sewage System
- **66.6%** Homes without Piped Water
- **5.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.670

- **61.8** Age Dependency Ratio
- **29.8%** Unemployment Rate
- **80.7%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.838

- **14.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.686

- **0.7** Female to Male Labor Ratio (distance from parity)
- **54.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **38.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **81.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.436

- **7.5%** Prevalence of Disability (among persons age 5 and over)
- **7.1** Perinatal Mortality Rate (per 1,000 births)
- **7.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.256

- **5.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **5.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.367

19
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

4
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

29
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

44
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.754

22.9%
Homes with Exterior Walls in Poor Condition

35.3%
Homes with Inadequate Materials Used in Outer Walls

22.1%
Homes with Roofs in Poor Condition

95.6%
Households with No Access to Vehicle for Private Use

13.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.427

34.7
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

3.5
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.171

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 190 / 221 CANTONS ASSESSED **SCORE: 0.364**

Colimes exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.327

48%
Labor Force Participation

50,334
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.290

0%
Protected Area (% of land area)

-4,198.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.491

90.5%
Voter Participation

49%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.297

Communications Capacity

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.304

2.9%
Household Access to Fixed Phones

78.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.368

93%
Homes Served by the Public Electricity Network

56.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.042

2.7
Nurses and Midwives per 10,000 persons

4.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.475

33.9
Average Distance to Airport (km)

37.4
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 197 / 221 CANTONS ASSESSED **SCORE: 0.314**

Colimes exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.280

5.8	4.1%	0	65.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.348

26	6.7	5.7	12
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 205 / 221 CANTONS ASSESSED
SCORE: 0.364

Colimes's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Information Access Vulnerability

Housing and Transportation Vulnerability

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

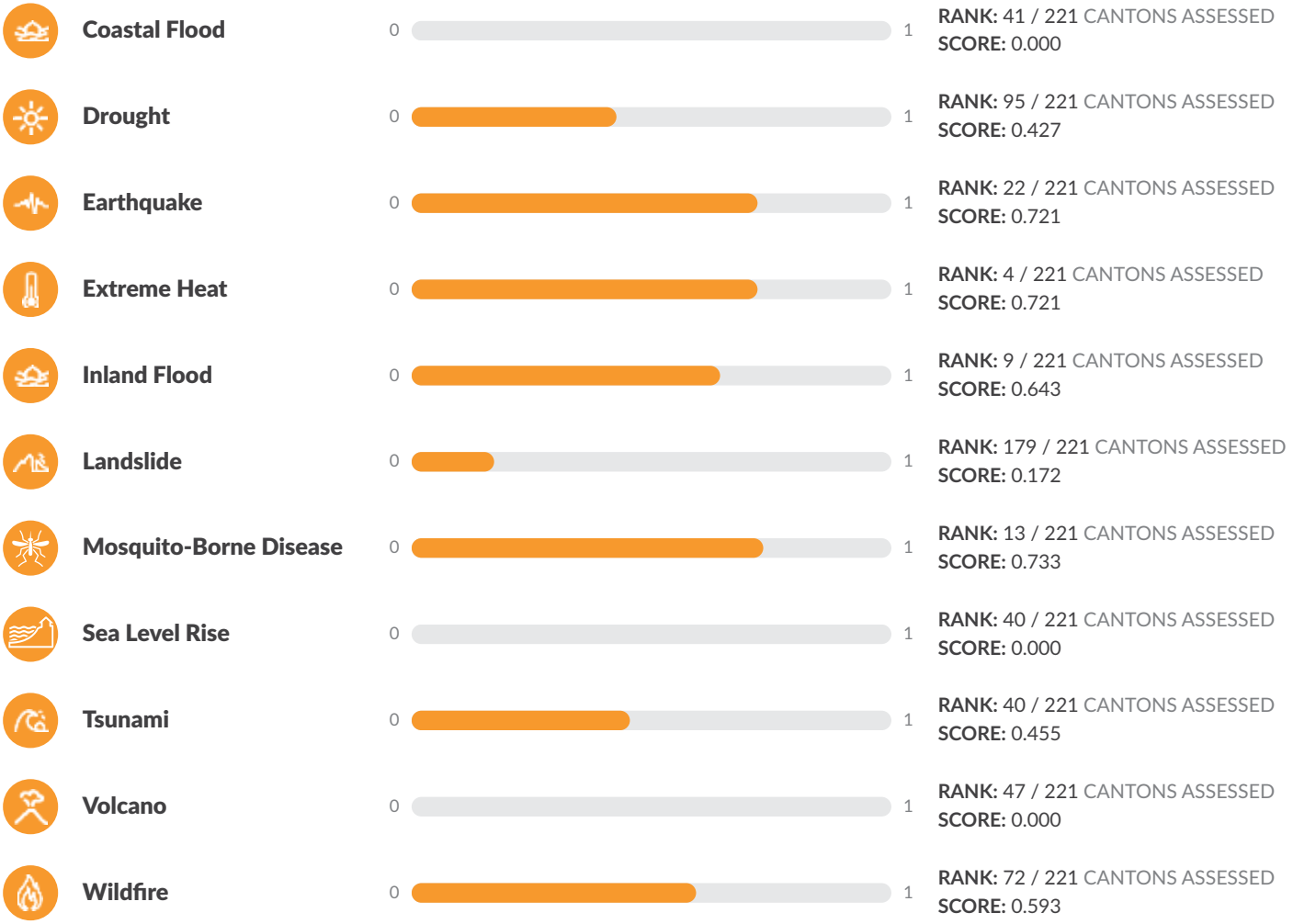
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

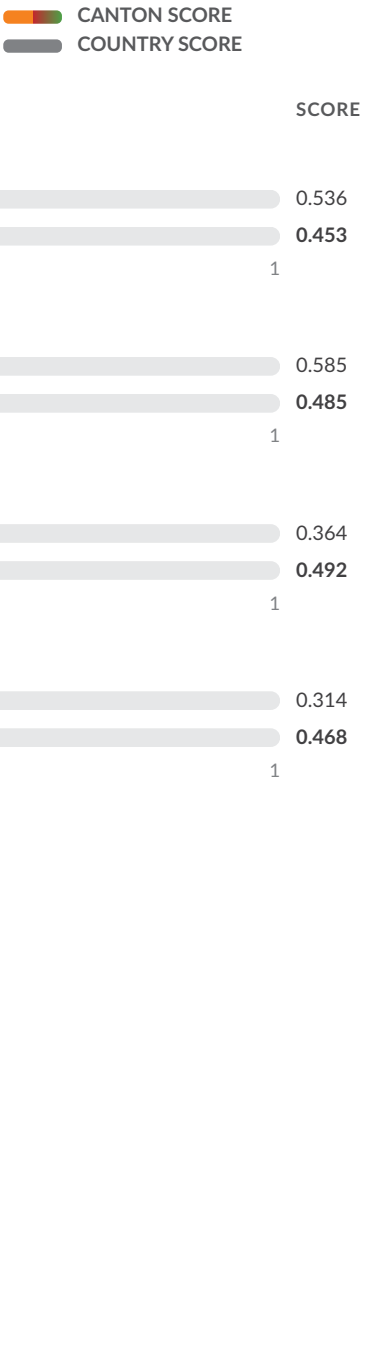


MULTI-HAZARD RISK (MHR)

RANKED
15 / 221
CANTONS ASSESSED
SCORE: 0.611

Colimes's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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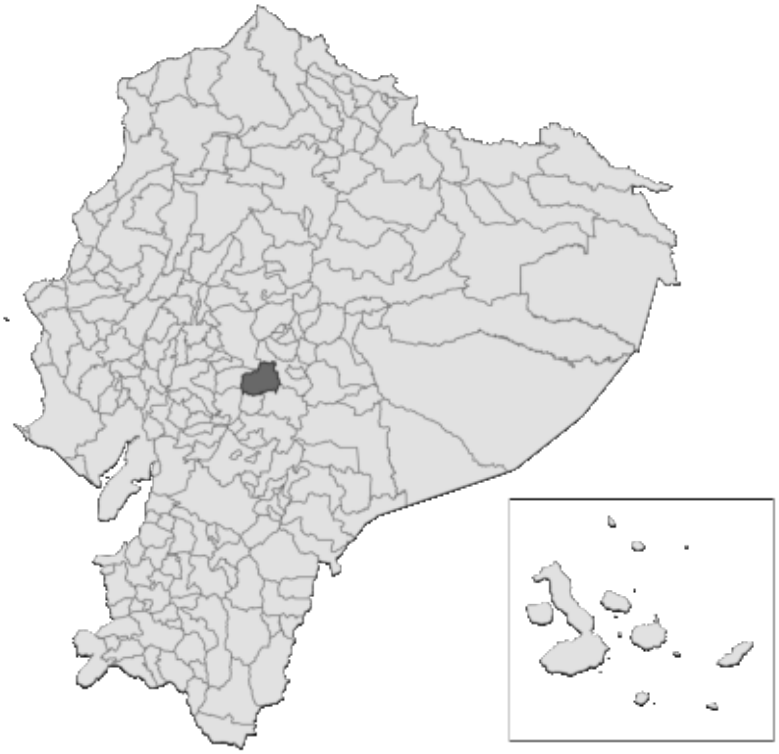
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ECUADOR

COLTA

PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.571 • RANK: 39/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.568 • RANK: 39/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.396 • RANK: 188/221 CANTONS ASSESSED

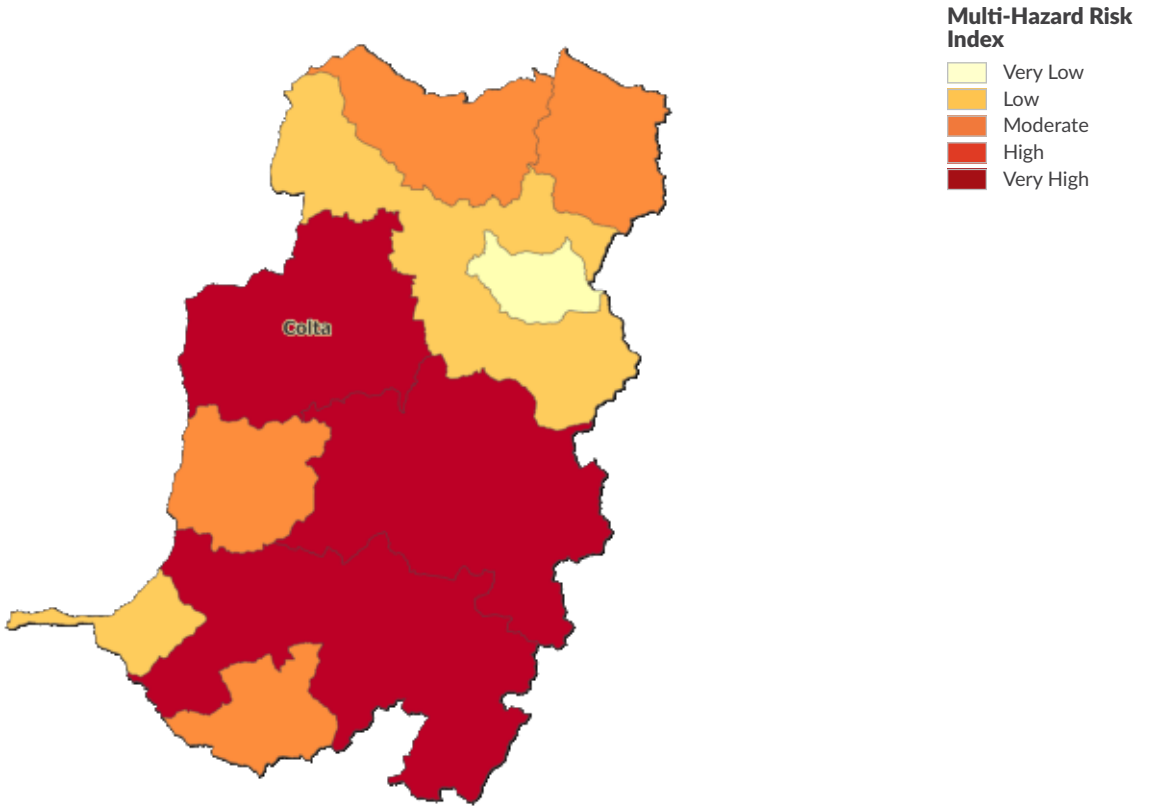
Coping Capacity (CC) - Very Low
SCORE: 0.343 • RANK: 206/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.472 • RANK: 95/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.414 • RANK: 153/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

COLTA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	**0.571**
Guano	0.512
Penipe	0.500
Pallatanga	0.487
Chunchi	0.483
Cumandá	0.442
Riobamba	0.442
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 95 / 221 CANTONS ASSESSED
SCORE: 0.472



MHE
0.472

Raw MHE
0.622

Relative MHE
0.323

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
27%
- **13,769** people exposed
- **12,493** structures exposed (29%)

Critical Infrastructure Exposed: 53%

Earthquake
100%
- **51,113** people exposed
- **43,227** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
5%
- **2,518** people exposed
- **1,661** structures exposed (4%)

Critical Infrastructure Exposed: 14%

Landslide
81%
- **41,257** people exposed
- **35,033** structures exposed (81%)

Critical Infrastructure Exposed: 64%

Mosquito-Borne Disease
7%
- **3,807** people exposed
- **3,612** structures exposed (8%)

Critical Infrastructure Exposed: 60%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
<1%
- **30** people exposed
- **46** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Wildfire
99%
- **50,791** people exposed
- **42,965** structures exposed (99%)

Critical Infrastructure Exposed: 92%

VULNERABILITY (V)

RANK: 39 / 221 CANTONS ASSESSED **SCORE: 0.568**

Vulnerability in Colta is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.813

- **6.7** Average Years of Schooling
- **40.7%** Population (age 24 and over) with General Basic Education Schooling
- **25.7%** Population (age 24 and over) with No Schooling
- **21.5%** Adult Illiteracy Rate
- **77.8%** Households with No Internet Access
- **95.7%** Households with No Access to Television
- **89.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.630

- **89.3%** Homes with Access to Public Water Source
- **28.3%** Homes Connected to the Public Sewage System
- **74.2%** Homes without Piped Water
- **7.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.812

- **67** Age Dependency Ratio
- **25.3%** Unemployment Rate
- **81.3%** Poverty Rate (based on UBN)
- **4.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.549

- **5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.516

- **0.4** Female to Male Labor Ratio (distance from parity)
- **38** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **85%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **64.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.522

- **14.9%** Prevalence of Disability (among persons age 5 and over)
- **3.1** Perinatal Mortality Rate (per 1,000 births)
- **11%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.185

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.485

48
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

41
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

22
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.397

10.8%
Homes with Exterior Walls in Poor Condition

0.2%
Homes with Inadequate Materials Used in Outer Walls

15.4%
Homes with Roofs in Poor Condition

90.7%
Households with No Access to Vehicle for Private Use

5.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.264

37.2
Population Density (persons per sq km)

-3.1
Average Annual Population Change (2010-2022)

-1
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.590

0.5
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 206 / 221 CANTONS ASSESSED **SCORE: 0.343**

Colta exhibits weaker Coping Capacity in the areas of Communications Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.295

44.8%
Labor Force Participation

57,465
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.297

0%
Protected Area (% of land area)

-3,748.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.336

78.2%
Voter Participation

68%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.412

Communications Capacity

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.295

4.9%
Household Access to Fixed Phones

65.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.309

92.2%
Homes Served by the Public Electricity Network

47.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.557

16.1
Nurses and Midwives per 10,000 persons

24
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.488

19.8
Average Distance to Airport (km)

82.3
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 153 / 221 CANTONS ASSESSED **SCORE: 0.414**

Colta exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.373

7.2	0.4%	0.8	19.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.455

7.9	7.5	5.7	7.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 188 / 221 CANTONS ASSESSED
SCORE: 0.396

Colta's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Information Access Vulnerability

Economic Constraints

Communications Capacity

Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

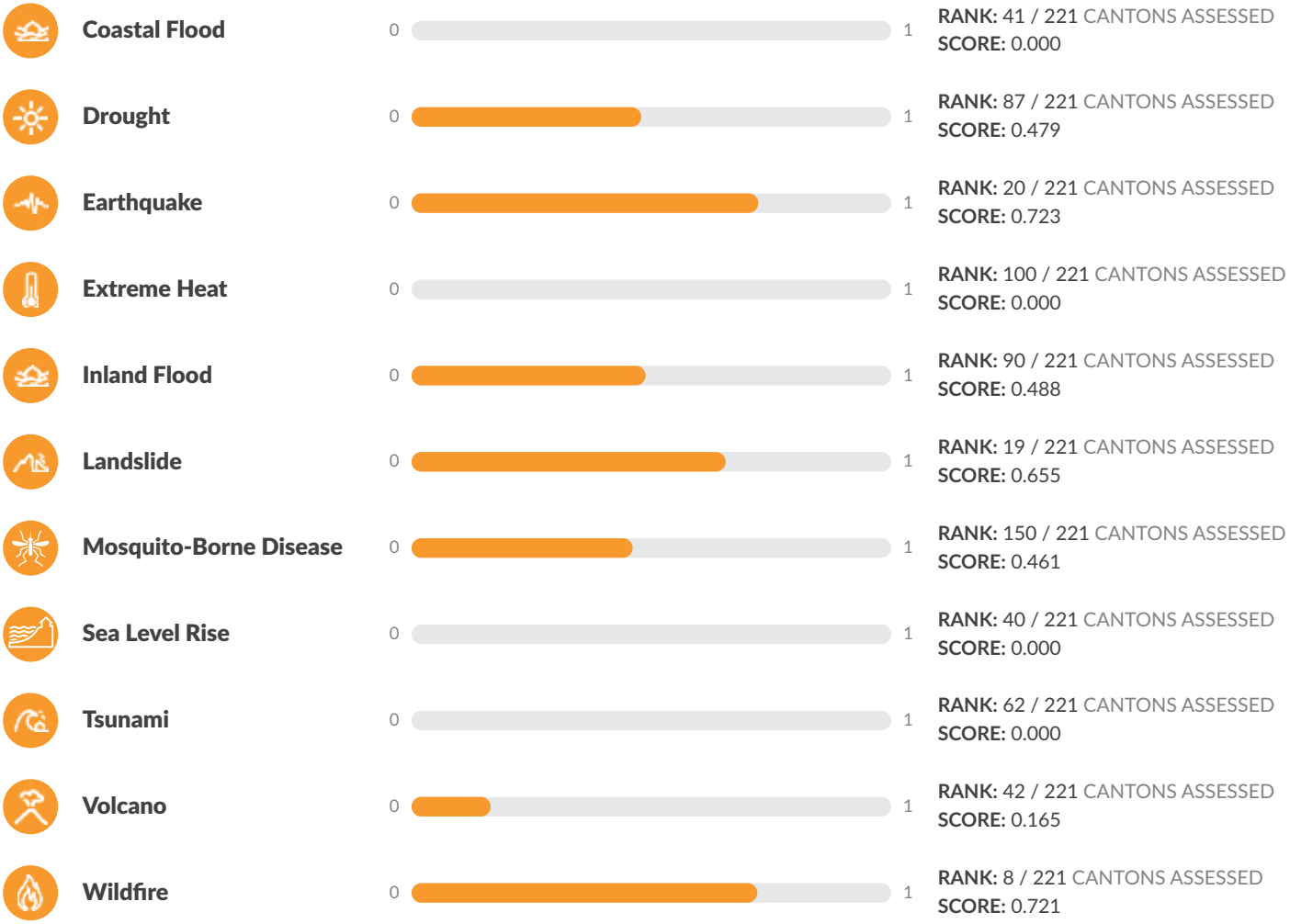
Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)

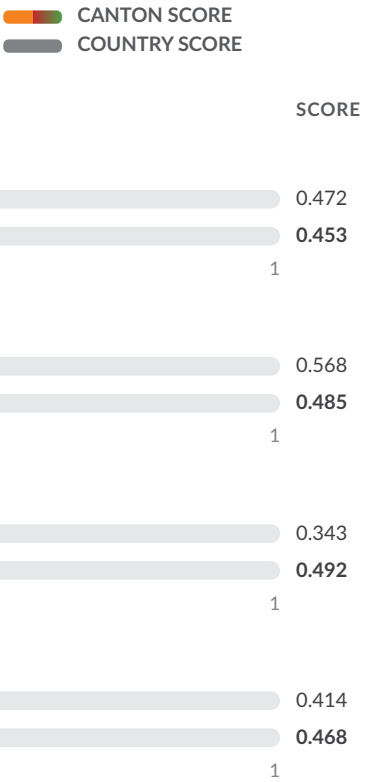


MULTI-HAZARD RISK (MHR)

RANKED
39 / 221
CANTONS ASSESSED
SCORE: 0.571

Colta's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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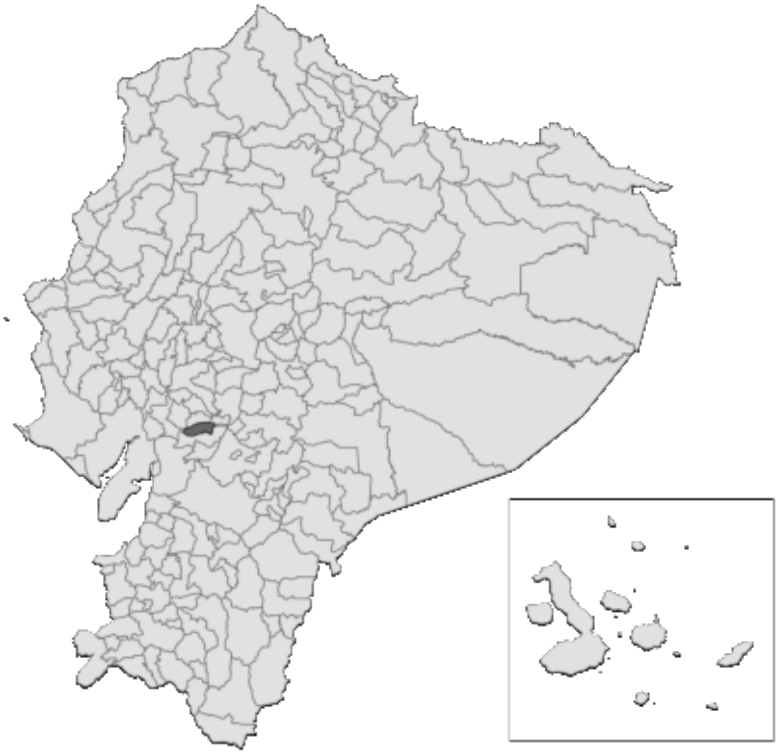
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CORONEL MARCELINO MARIDUEÑA

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.428 • RANK: 176/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.378 • RANK: 198/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.546 • RANK: 64/221 CANTONS ASSESSED

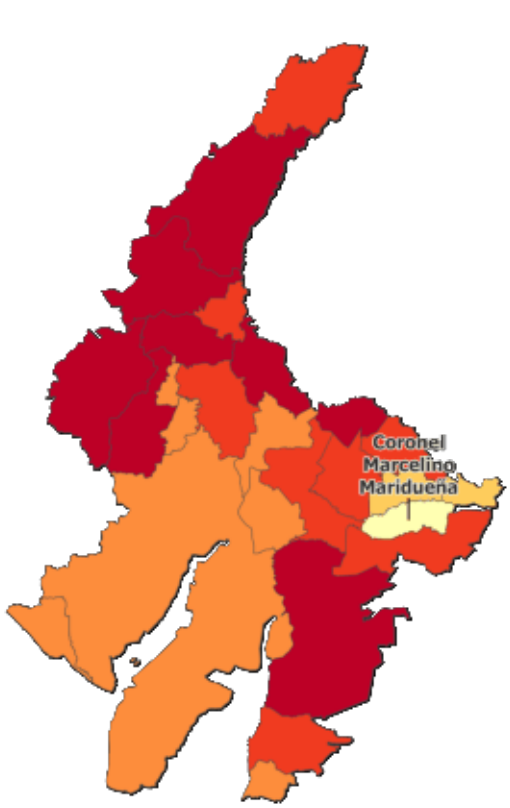
Coping Capacity (CC) - High
SCORE: 0.552 • RANK: 69/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.353 • RANK: 151/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.465 • RANK: 102/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

CORONEL MARCELINO MARIDUEÑA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	**0.428**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 151 / 221 CANTONS ASSESSED
SCORE: 0.353



MHE
0.353

Raw MHE
0.330

Relative MHE
0.375

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
12%
- **1,691** people exposed
- **397** structures exposed (8%)

Critical Infrastructure Exposed: 3%

Earthquake
100%
- **14,561** people exposed
- **5,011** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
82%
- **11,962** people exposed
- **3,887** structures exposed (78%)

Critical Infrastructure Exposed: 90%

Inland Flood
49%
- **7,207** people exposed
- **2,194** structures exposed (44%)

Critical Infrastructure Exposed: 49%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
- **14,561** people exposed
- **5,011** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
33%
- **4,838** people exposed
- **1,137** structures exposed (23%)

Critical Infrastructure Exposed: 17%

VULNERABILITY (V)

RANK: 198 / 221 CANTONS ASSESSED **SCORE: 0.378**

Vulnerability in Coronel Marcelino Maridueña is primarily driven by Vulnerable Health Status and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.319

- **11** Average Years of Schooling
- **37.7%** Population (age 24 and over) with General Basic Education Schooling
- **3.3%** Population (age 24 and over) with No Schooling
- **2.9%** Adult Illiteracy Rate
- **33.9%** Households with No Internet Access
- **68%** Households with No Access to Television
- **68.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.348

- **69.8%** Homes with Access to Public Water Source
- **58.2%** Homes Connected to the Public Sewage System
- **12.1%** Homes without Piped Water
- **1.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.409

- **54** Age Dependency Ratio
- **10.6%** Unemployment Rate
- **39.8%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.566

- **5.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.448

- **0.4** Female to Male Labor Ratio (distance from parity)
- **17.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **66%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **64.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.490

- **8.3%** Prevalence of Disability (among persons age 5 and over)
- **8.3** Perinatal Mortality Rate (per 1,000 births)
- **2.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.551

- **17.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **44.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.554

45	16	51	45
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.300

4.7%	3.5%	9%	79.5%	4.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.432

51.9	0.8%	11.6	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.249

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 69 / 221 CANTONS ASSESSED **SCORE: 0.552**

Coronel Marcelino Maridueña exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.553

56.4%
Labor Force Participation

217,996
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.325

0%
Protected Area (% of land area)

-1,875.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.570

83.8%
Voter Participation

90%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.610

Communications Capacity

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.747

17.5%
Household Access to Fixed Phones

91.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.760

98.8%
Homes Served by the Public Electricity Network

82.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.218

3.8
Nurses and Midwives per 10,000 persons

9.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.715

3.8
Average Distance to Airport (km)

45.9
Average Distance to Sea or River Port (km)

2.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 102 / 221 CANTONS ASSESSED **SCORE: 0.465**

Coronel Marcelino Maridueña exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.423

4	1.7%	1.1	49.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.506

10	6.6	4.9	4.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 64 / 221 CANTONS ASSESSED
SCORE: 0.546

Coronel Marcelino Maridueña's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Mass Care Support



Emergency Services



Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Emergency Services

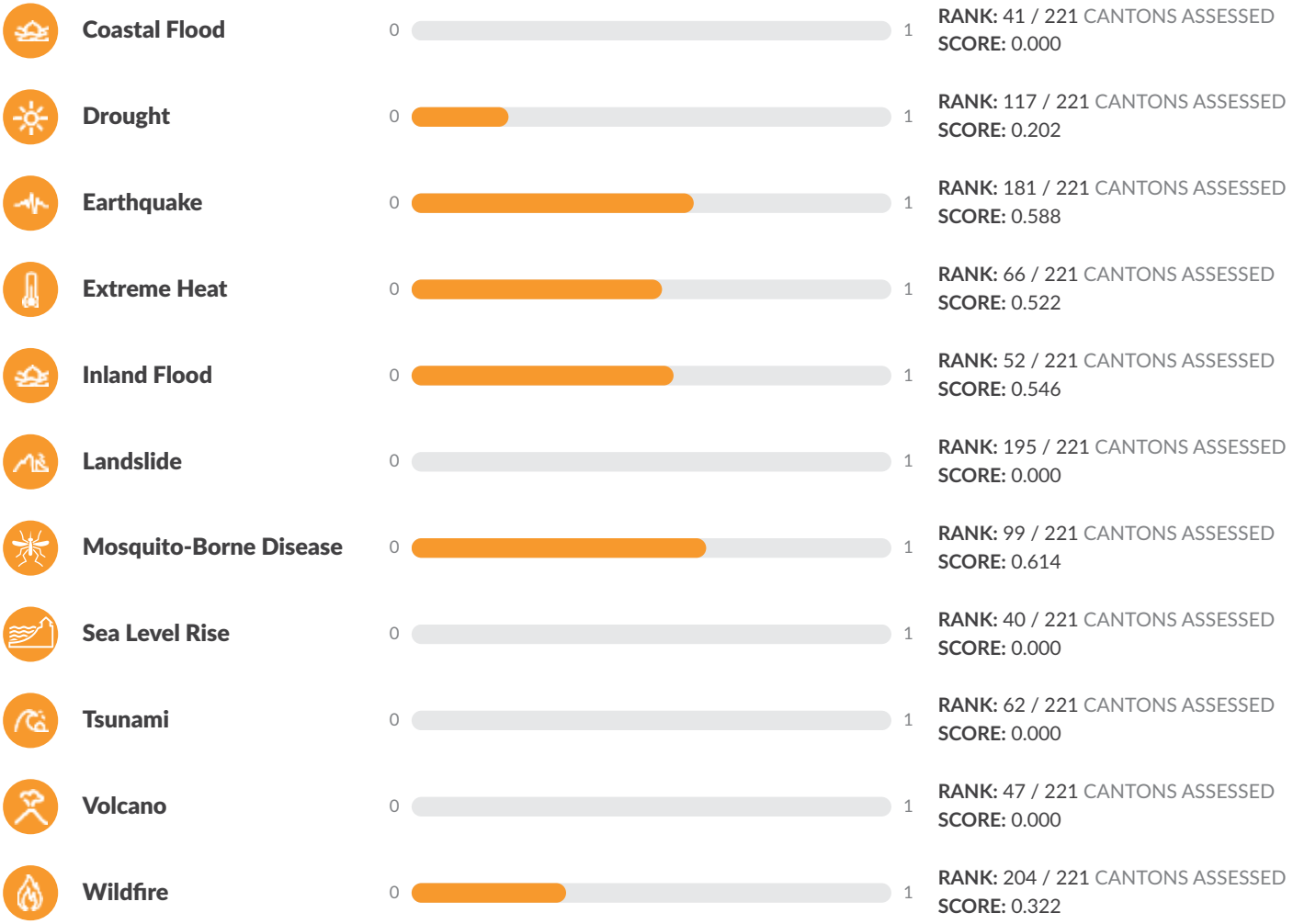
Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
176 / 221
CANTONS ASSESSED
SCORE: 0.428

Coronel Marcelino Maridueña's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE

SCORE

Multi-Hazard Exposure

0.353
0.453

0 1

Vulnerability

0.378
0.485

0 1

Coping Capacity

0.552
0.492

0 1

Disaster Management Capabilities

0.465
0.468

0 1

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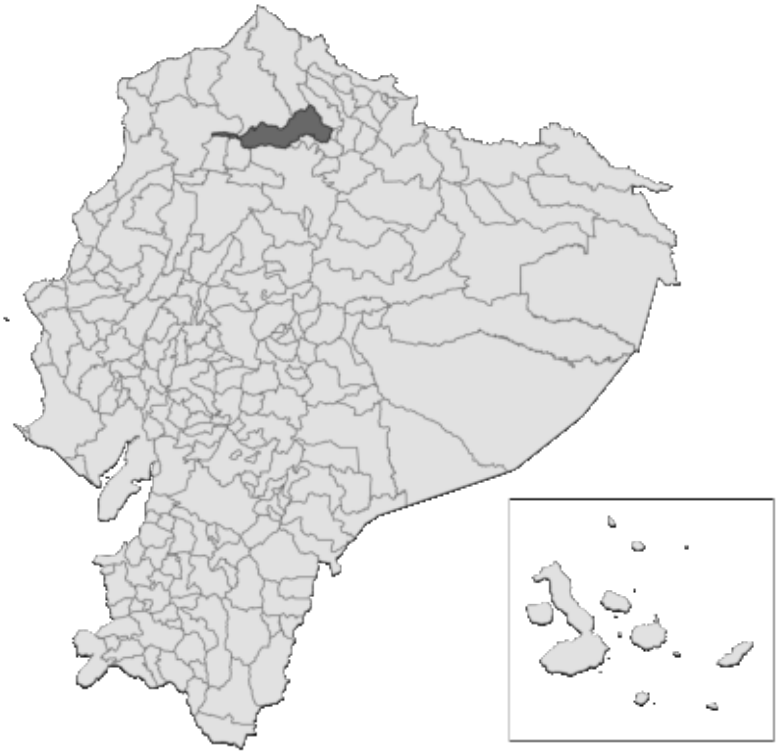
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COTACACHI

PROVINCE: IMBABURA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.507 • RANK: 95/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.503 • RANK: 93/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.476 • RANK: 119/221 CANTONS ASSESSED

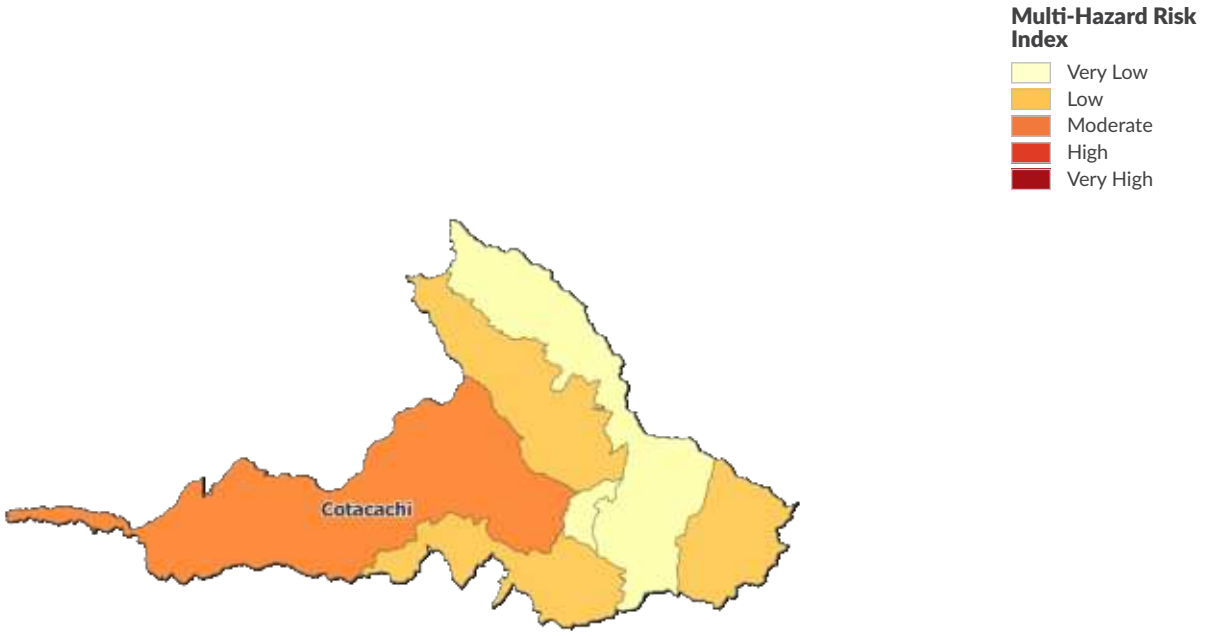
Coping Capacity (CC) - Moderate
SCORE: 0.502 • RANK: 101/221 CANTONS ASSESSED

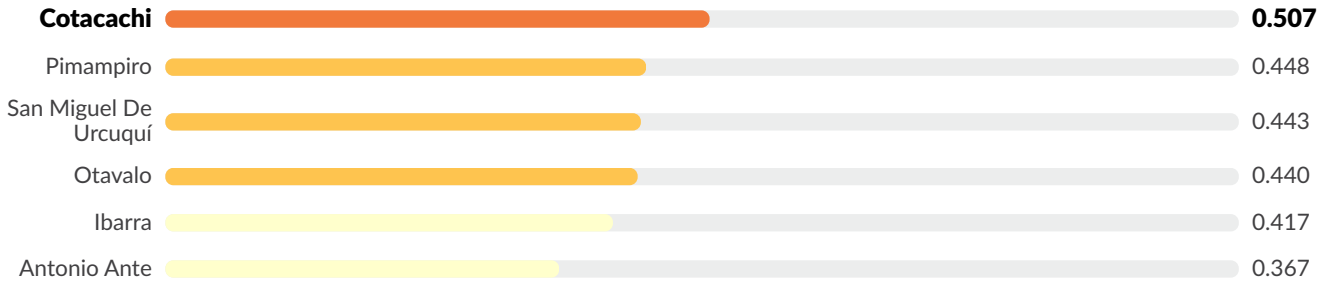
Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.458 • RANK: 103/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.430 • RANK: 140/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN IMBABURA PROVINCE

COTACACHI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 103 / 221 CANTONS ASSESSED
SCORE: 0.458



MHE
0.458

Raw MHE
0.617

Relative MHE
0.299

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
54,006 people exposed
36,766 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
4%
2,271 people exposed
1,515 structures exposed (4%)
Critical Infrastructure Exposed: 8%

Landslide
37%
20,037 people exposed
15,805 structures exposed (43%)
Critical Infrastructure Exposed: 51%

Mosquito-Borne Disease
30%
16,189 people exposed
10,206 structures exposed (28%)
Critical Infrastructure Exposed: 9%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
60%
32,414 people exposed
21,074 structures exposed (57%)
Critical Infrastructure Exposed: 48%

Wildfire
98%
52,703 people exposed
35,812 structures exposed (97%)
Critical Infrastructure Exposed: 97%

VULNERABILITY (V)

RANK: 93 / 221 CANTONS ASSESSED **SCORE: 0.503**

Vulnerability in Cotacachi is primarily driven by Information Access Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.567

- **8.8** Average Years of Schooling
- **45.2%** Population (age 24 and over) with General Basic Education Schooling
- **13.6%** Population (age 24 and over) with No Schooling
- **10.6%** Adult Illiteracy Rate
- **47.8%** Households with No Internet Access
- **81.6%** Households with No Access to Television
- **74.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.554

- **77.3%** Homes with Access to Public Water Source
- **49.9%** Homes Connected to the Public Sewage System
- **36%** Homes without Piped Water
- **8.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.520

- **58** Age Dependency Ratio
- **13.8%** Unemployment Rate
- **54.8%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.528

- **4.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.478

- **0.4** Female to Male Labor Ratio (distance from parity)
- **29.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **60.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **69.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.395

- **8.6%** Prevalence of Disability (among persons age 5 and over)
- **1.5** Perinatal Mortality Rate (per 1,000 births)
- **7.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.216

- **0.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.494

48	16	31	40
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.447

14.3%	1.1%	19%	84.9%	6.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.519

28.4	1.4%	17.6	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.542

0.4	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 101 / 221 CANTONS ASSESSED **SCORE: 0.502**

Cotacachi exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.533

56.6%
Labor Force Participation

160,463
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.510

18.5%
Protected Area (% of land area)

-11,470.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.494

84.2%
Voter Participation

79.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.475

Communications Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.591

20%
Household Access to Fixed Phones

79.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.646

97.2%
Homes Served by the Public Electricity Network

79.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.370

10
Nurses and Midwives per 10,000 persons

12.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.293

33.9
Average Distance to Airport (km)

146.1
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 140 / 221 CANTONS ASSESSED **SCORE: 0.430**

Cotacachi exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.437

3.2	4.8%	0.4	39.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.423

14.7	9.7	3.5	9.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 119 / 221 CANTONS ASSESSED
SCORE: 0.476

Cotacachi's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Healthcare Capacity

Emergency Services

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

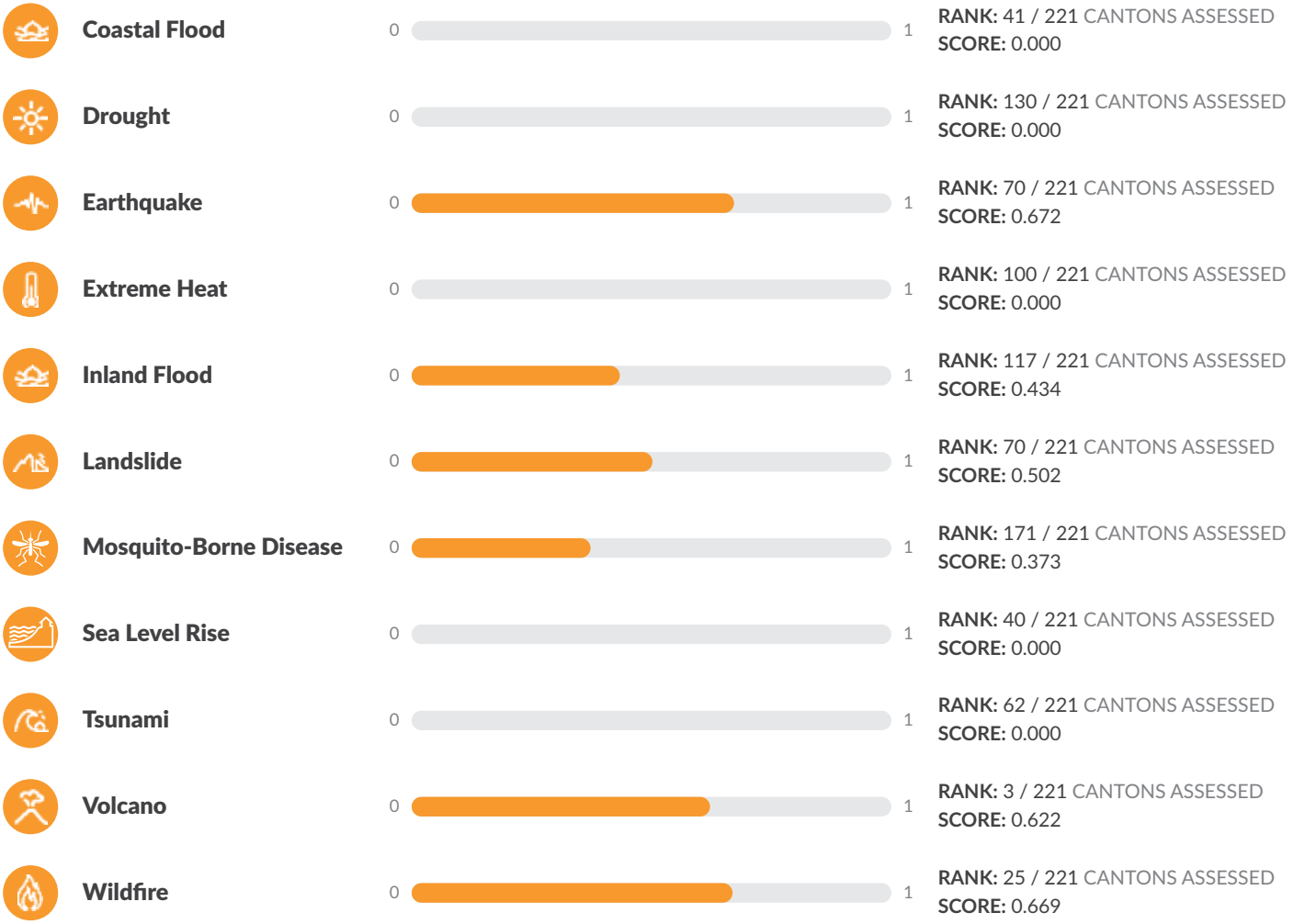
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

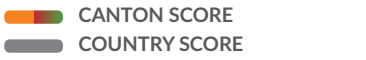


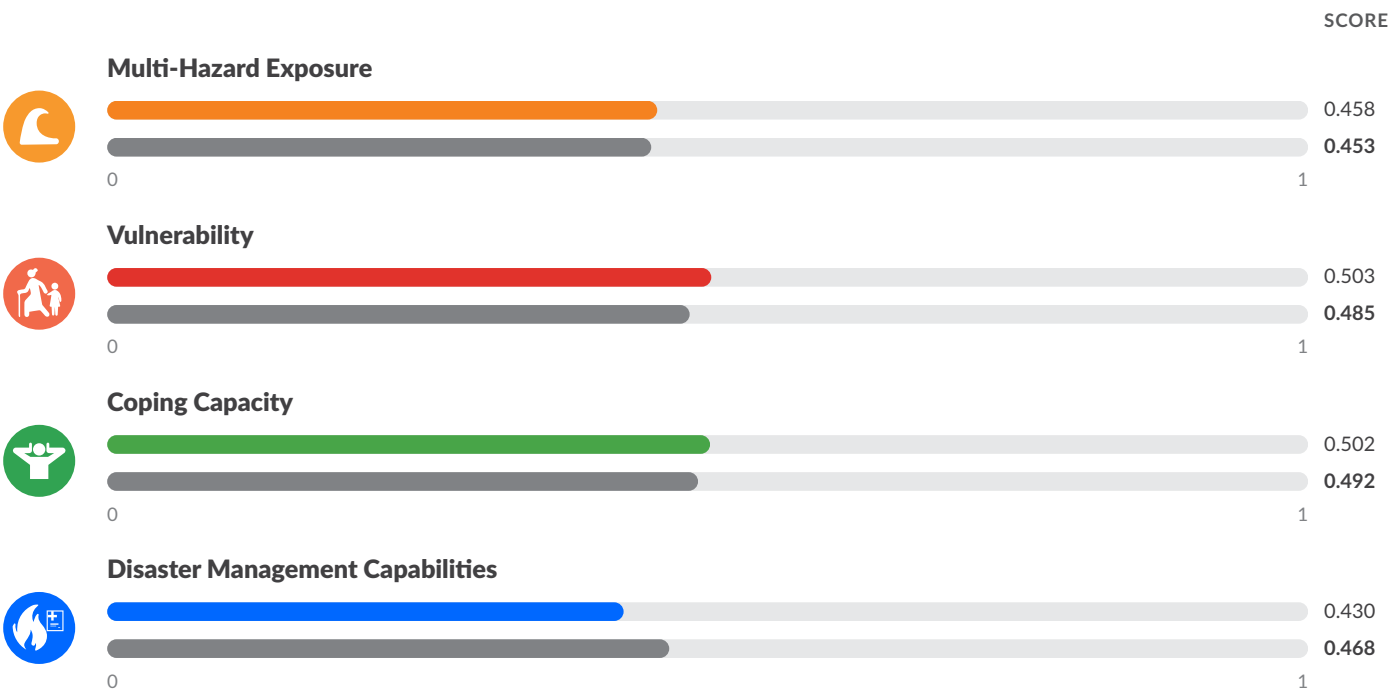
MULTI-HAZARD RISK (MHR)

RANKED
95 / 221
CANTONS ASSESSED
SCORE: 0.507

Cotacachi's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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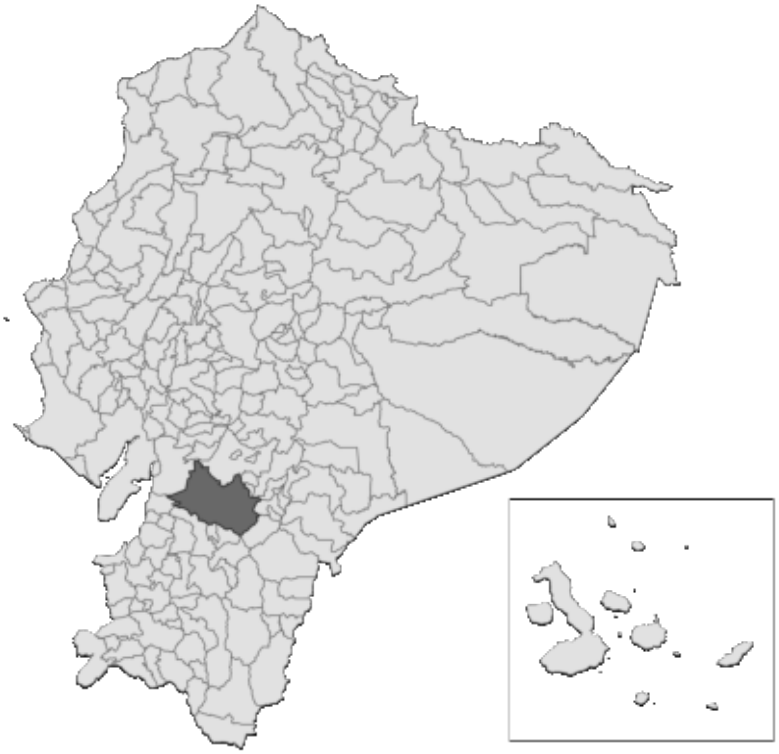
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CUENCA

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.417 • RANK: 191/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.322 • RANK: 215/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.654 • RANK: 11/221 CANTONS ASSESSED

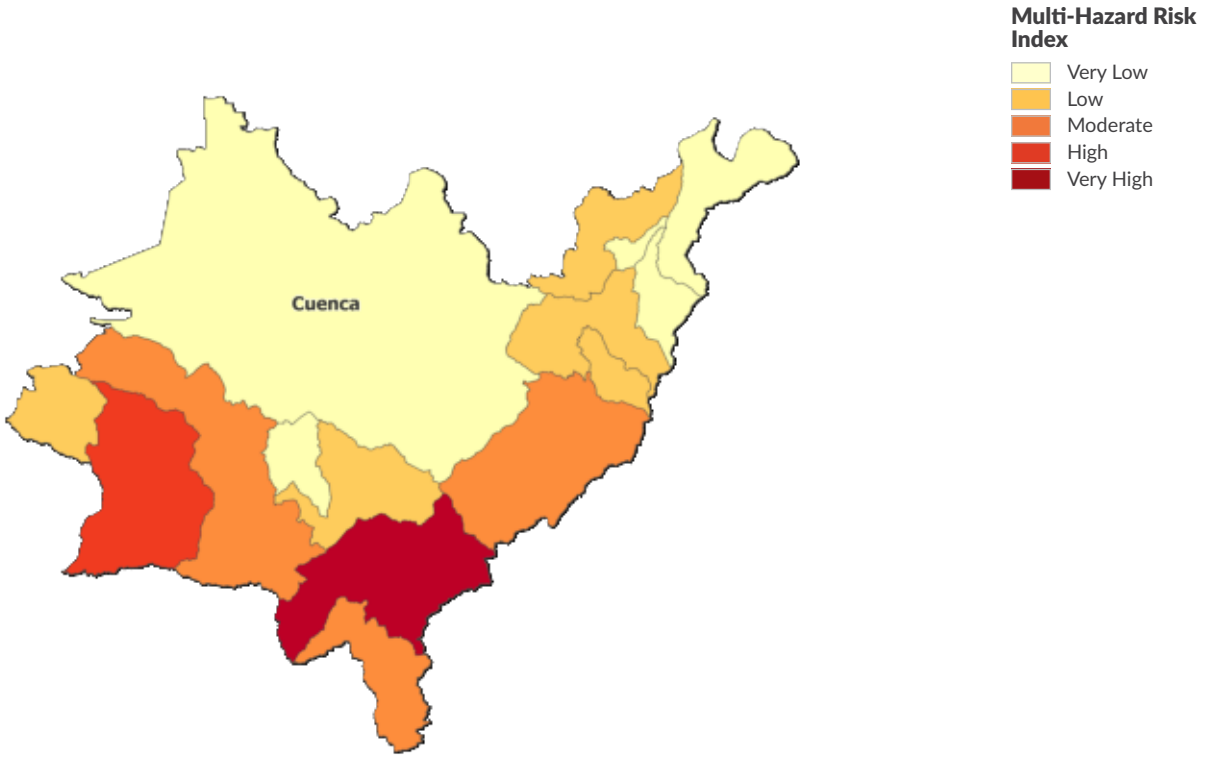
Coping Capacity (CC) - Very High
SCORE: 0.700 • RANK: 7/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.629 • RANK: 40/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.584 • RANK: 38/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

CUENCA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	**0.417**
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 40 / 221 CANTONS ASSESSED
SCORE: 0.629



MHE
0.629

Raw MHE
1.000

Relative MHE
0.258

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
11%
- **67,430** people exposed
- **46,182** structures exposed (15%)

Critical Infrastructure Exposed: 14%

Earthquake
100%
- **612,139** people exposed
- **311,074** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
<1%
- **238** people exposed
- **235** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Inland Flood
10%
- **63,513** people exposed
- **25,728** structures exposed (8%)

Critical Infrastructure Exposed: 8%

Landslide
28%
- **173,012** people exposed
- **125,649** structures exposed (40%)

Critical Infrastructure Exposed: 35%

Mosquito-Borne Disease
21%
- **129,720** people exposed
- **51,628** structures exposed (17%)

Critical Infrastructure Exposed: 59%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
90%
- **548,945** people exposed
- **286,767** structures exposed (92%)

Critical Infrastructure Exposed: 93%

VULNERABILITY (V)

RANK: 215 / 221 CANTONS ASSESSED **SCORE: 0.322**

Vulnerability in Cuenca is primarily driven by Population Pressures and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.202

- **12.2** Average Years of Schooling
- **32.9%** Population (age 24 and over) with General Basic Education Schooling
- **2.9%** Population (age 24 and over) with No Schooling
- **2.4%** Adult Illiteracy Rate
- **19%** Households with No Internet Access
- **70.6%** Households with No Access to Television
- **41.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.207

- **97.1%** Homes with Access to Public Water Source
- **81.6%** Homes Connected to the Public Sewage System
- **10.4%** Homes without Piped Water
- **4.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.233

- **49.3** Age Dependency Ratio
- **7.1%** Unemployment Rate
- **19.8%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.479

- **3.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.234

- **0.2** Female to Male Labor Ratio (distance from parity)
- **28.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **40.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **19.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.469

- **6.3%** Prevalence of Disability (among persons age 5 and over)
- **2.9** Perinatal Mortality Rate (per 1,000 births)
- **12.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.316

- **0.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **22.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.520

99
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

9
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

35
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

39
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.160

4.1%
Homes with Exterior Walls in Poor Condition

0.4%
Homes with Inadequate Materials Used in Outer Walls

6.9%
Homes with Roofs in Poor Condition

55.5%
Households with No Access to Vehicle for Private Use

3.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.548

186.6
Population Density (persons per sq km)

1.3%
Average Annual Population Change (2010-2022)

26.8
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.498

0.5
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 7 / 221 CANTONS ASSESSED **SCORE: 0.700**

Cuenca exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.886

63.5%
Labor Force Participation

4,164,345
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.360

18.1%
Protected Area (% of land area)

-23,241.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.581

79.1%
Voter Participation

96.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.746

Communications Capacity

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.884

41.6%
Household Access to Fixed Phones

92.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.862

99.2%
Homes Served by the Public Electricity Network

88.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.682

23.2
Nurses and Midwives per 10,000 persons

34.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.556

8.3
Average Distance to Airport (km)

102.7
Average Distance to Sea or River Port (km)

2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 38 / 221 CANTONS ASSESSED **SCORE: 0.584**

Cuenca exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.526

4	0.3%	2	9.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.643

5.4	5.1	1.9	4.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 11 / 221 CANTONS ASSESSED
SCORE: 0.654

Cuenca's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Disaster Impacts

Mass Care Support

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

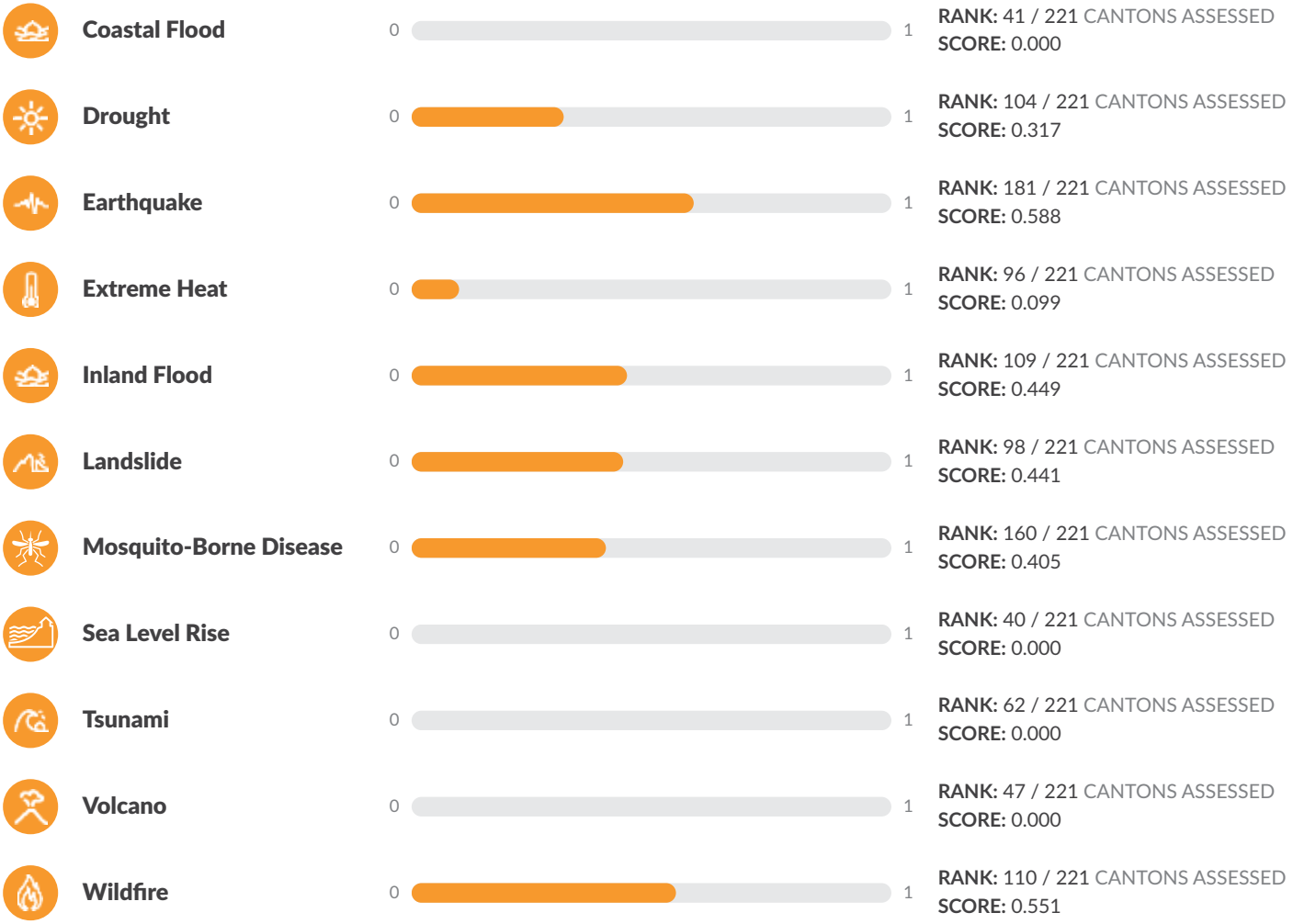
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
191 / 221
CANTONS ASSESSED
SCORE: 0.417

Cuenca's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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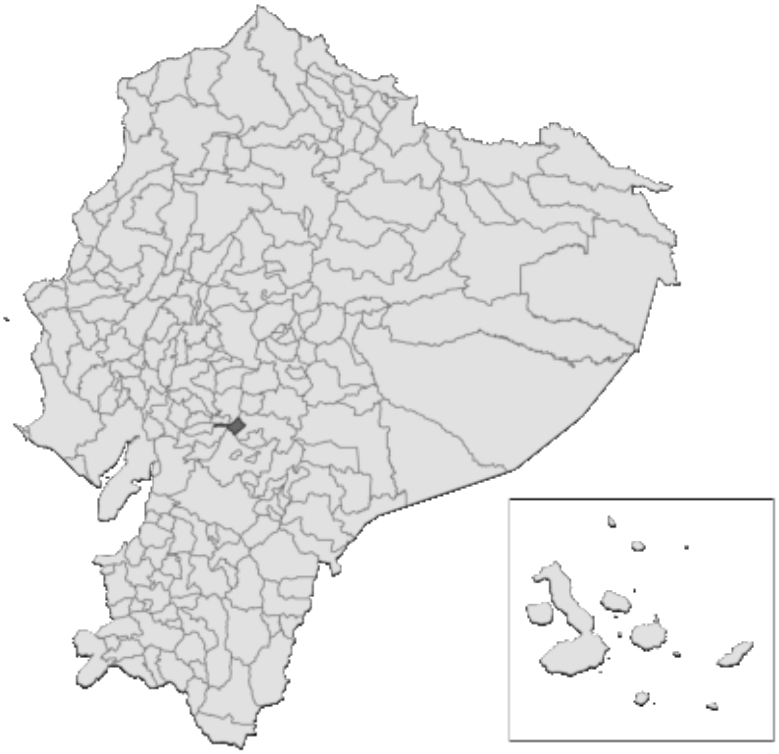
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PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.442 • RANK: 161/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.479 • RANK: 115/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.206 • RANK: 208/221 CANTONS ASSESSED

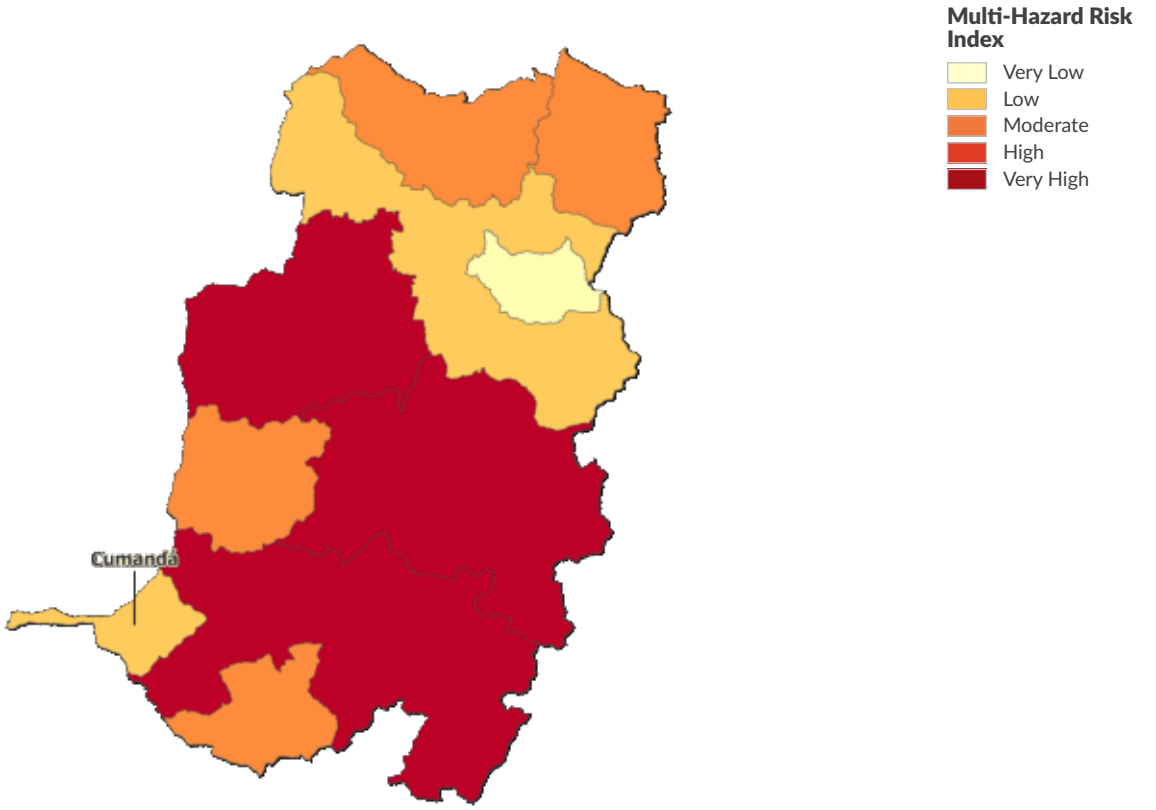
Vulnerability (V) - Low
SCORE: 0.432 • RANK: 159/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.469 • RANK: 126/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.400 • RANK: 159/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

CUMANDÁ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	0.571
Guano	0.512
Penipe	0.500
Pallatanga	0.487
Chunchi	0.483
Cumandá	**0.442**
Riobamba	0.442
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 208 / 221 CANTONS ASSESSED
SCORE: 0.206



MHE
0.206

Raw MHE
0.322

Relative MHE
0.090

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
14,713 people exposed
8,811 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
4%
594 people exposed
325 structures exposed (4%)
Critical Infrastructure Exposed: 11%

Landslide
41%
6,045 people exposed
3,564 structures exposed (40%)
Critical Infrastructure Exposed: 34%

Mosquito-Borne Disease
97%
14,324 people exposed
8,375 structures exposed (95%)
Critical Infrastructure Exposed: 96%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
19%
2,807 people exposed
1,911 structures exposed (22%)
Critical Infrastructure Exposed: 26%

VULNERABILITY (V)

RANK: 159 / 221 CANTONS ASSESSED **SCORE: 0.432**

Vulnerability in Cumandá is primarily driven by Population Pressures and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.462

- **10.2** Average Years of Schooling
- **40.1%** Population (age 24 and over) with General Basic Education Schooling
- **6%** Population (age 24 and over) with No Schooling
- **4.5%** Adult Illiteracy Rate
- **44.4%** Households with No Internet Access
- **83.4%** Households with No Access to Television
- **77.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.403

- **85.5%** Homes with Access to Public Water Source
- **58.4%** Homes Connected to the Public Sewage System
- **18.2%** Homes without Piped Water
- **5.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.443

- **57.3** Age Dependency Ratio
- **15%** Unemployment Rate
- **36.2%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.415

- **2.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.391

- **0.3** Female to Male Labor Ratio (distance from parity)
- **39.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **46.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **53.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.398

- **10.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.412

- **27.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.570

41 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**22** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**37** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**77** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.375

8.2% Homes with Exterior Walls in Poor Condition	**1.4%** Homes with Inadequate Materials Used in Outer Walls	**14.4%** Homes with Roofs in Poor Condition	**85.3%** Households with No Access to Vehicle for Private Use	**5.8%** Household Overcrowding

Population Pressures

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.583

104.1 Population Density (persons per sq km)	**2.2%** Average Annual Population Change (2010-2022)	**18.4** Net Migration Rate (per 1,000 persons)	**0.29** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.405

0.3 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 126 / 221 CANTONS ASSESSED **SCORE: 0.469**

Cumandá exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.530

63.2%
Labor Force Participation

32,303
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.316

0%
Protected Area (% of land area)

-2,482.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.472

80.1%
Voter Participation

85.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.457

Communications Capacity

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.440

5.3%
Household Access to Fixed Phones

83.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.691

98.1%
Homes Served by the Public Electricity Network

80.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.138

5.4
Nurses and Midwives per 10,000 persons

4.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.559

13.9
Average Distance to Airport (km)

65.2
Average Distance to Sea or River Port (km)

1.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 159 / 221 CANTONS ASSESSED **SCORE: 0.400**

Cumandá exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.261

3.5	1.1%	0	68.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.540

22.9	4.2	3.2	3.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 115 / 221 CANTONS ASSESSED
SCORE: 0.479

Cumandá's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Population Pressures

Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

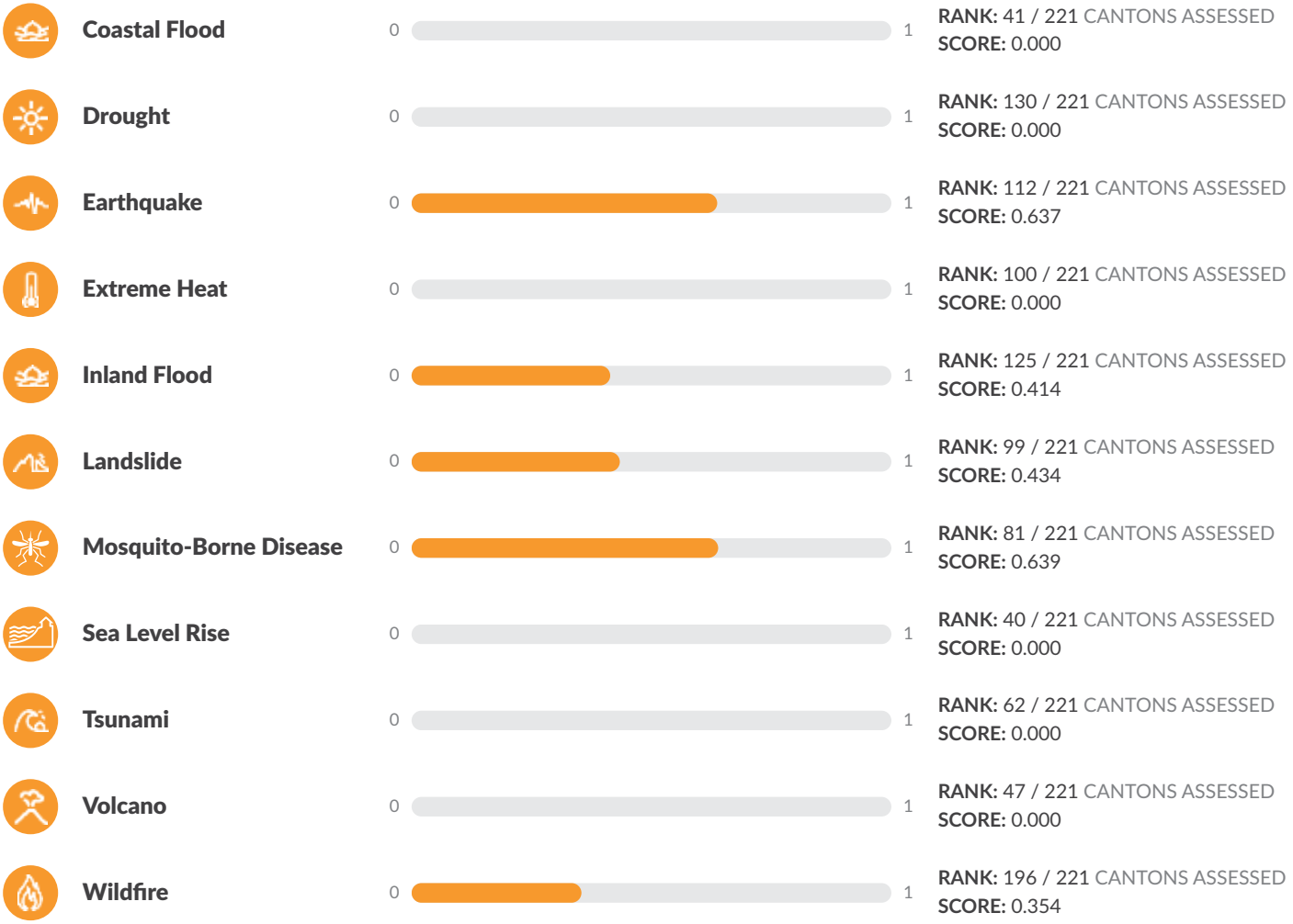
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

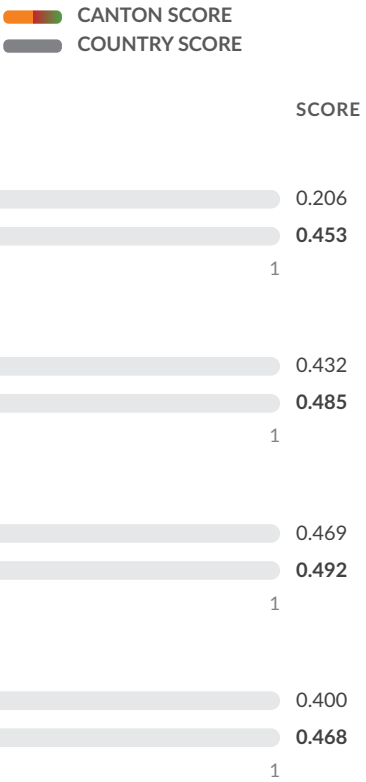


MULTI-HAZARD RISK (MHR)

RANKED
161 / 221
CANTONS ASSESSED
SCORE: 0.442

Cumandá's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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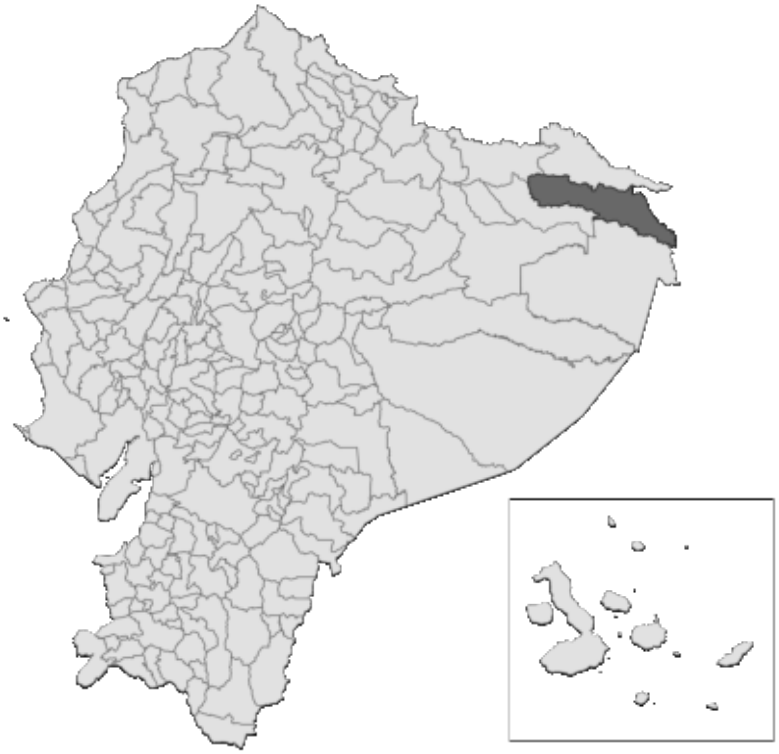
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CUYABENO

PROVINCE: SUCUMBÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.539 • RANK: 62/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.522 • RANK: 78/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.433 • RANK: 162/221 CANTONS ASSESSED

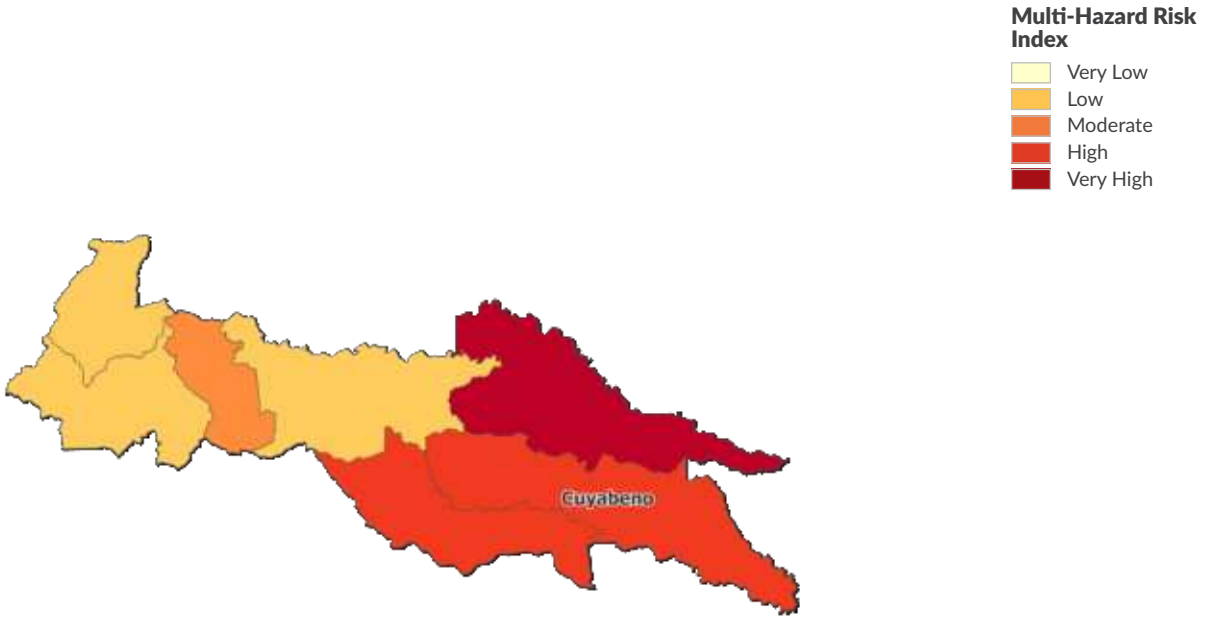
Coping Capacity (CC) - Moderate
SCORE: 0.512 • RANK: 91/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.455 • RANK: 105/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.308 • RANK: 202/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SUCUMBÍOS PROVINCE

CUYABENO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Putumayo	0.567
Cuyabeno	**0.539**
Shushufindi	0.531
Cascales	0.485
Gonzalo Pizarro	0.468
Lago Agrio	0.461
Sucumbíos	0.445

MULTI-HAZARD EXPOSURE (MHE)

RANK: 105 / 221 CANTONS ASSESSED
SCORE: 0.455



MHE
0.455

Raw MHE
0.374

Relative MHE
0.537

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
10,074 people exposed
8,072 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
10,074 people exposed
8,072 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
37%
3,738 people exposed
3,665 structures exposed (45%)
Critical Infrastructure Exposed: 38%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
10,060 people exposed
8,035 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
94%
9,504 people exposed
7,812 structures exposed (97%)
Critical Infrastructure Exposed: 97%

VULNERABILITY (V)

RANK: 78 / 221 CANTONS ASSESSED **SCORE: 0.522**

Vulnerability in Cuyabeno is primarily driven by Marginalization and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.507

- **10.1** Average Years of Schooling
- **41%** Population (age 24 and over) with General Basic Education Schooling
- **5.2%** Population (age 24 and over) with No Schooling
- **5%** Adult Illiteracy Rate
- **65.5%** Households with No Internet Access
- **80.3%** Households with No Access to Television
- **82.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.656

- **59.4%** Homes with Access to Public Water Source
- **29.9%** Homes Connected to the Public Sewage System
- **68.2%** Homes without Piped Water
- **4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.668

- **60.7** Age Dependency Ratio
- **19.5%** Unemployment Rate
- **76%** Poverty Rate (based on UBN)
- **1.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.465

- **3.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.696

- **0.5** Female to Male Labor Ratio (distance from parity)
- **63.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **83.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **83.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.331

- **9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.403

- **17.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **6.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.461

17	7	45	68
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.595

21.4%	0.7%	29.7%	91.6%	8.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.481

2.3	2.3%	18.4	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.250

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 91 / 221 CANTONS ASSESSED **SCORE: 0.512**

Cuyabeno exhibits weaker Coping Capacity in the areas of Communications Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.499

51.6%
Labor Force Participation

278,259
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.592

84.1%
Protected Area (% of land area)

-17,550
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.539

87.1%
Voter Participation

77.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.472

Communications Capacity

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.383

3.5%
Household Access to Fixed Phones

83.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.398

85.6%
Homes Served by the Public Electricity Network

74.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.605

21.5
Nurses and Midwives per 10,000 persons

23.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.501

12.5
Average Distance to Airport (km)

34
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 202 / 221 CANTONS ASSESSED **SCORE: 0.308**

Cuyabeno exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.360

7	27.1%	0	70.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.255

37.3	12.1	8.4	10.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 162 / 221 CANTONS ASSESSED
SCORE: 0.433

Cuyabeno's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Emergency Services

Marginalization

Economic Constraints

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

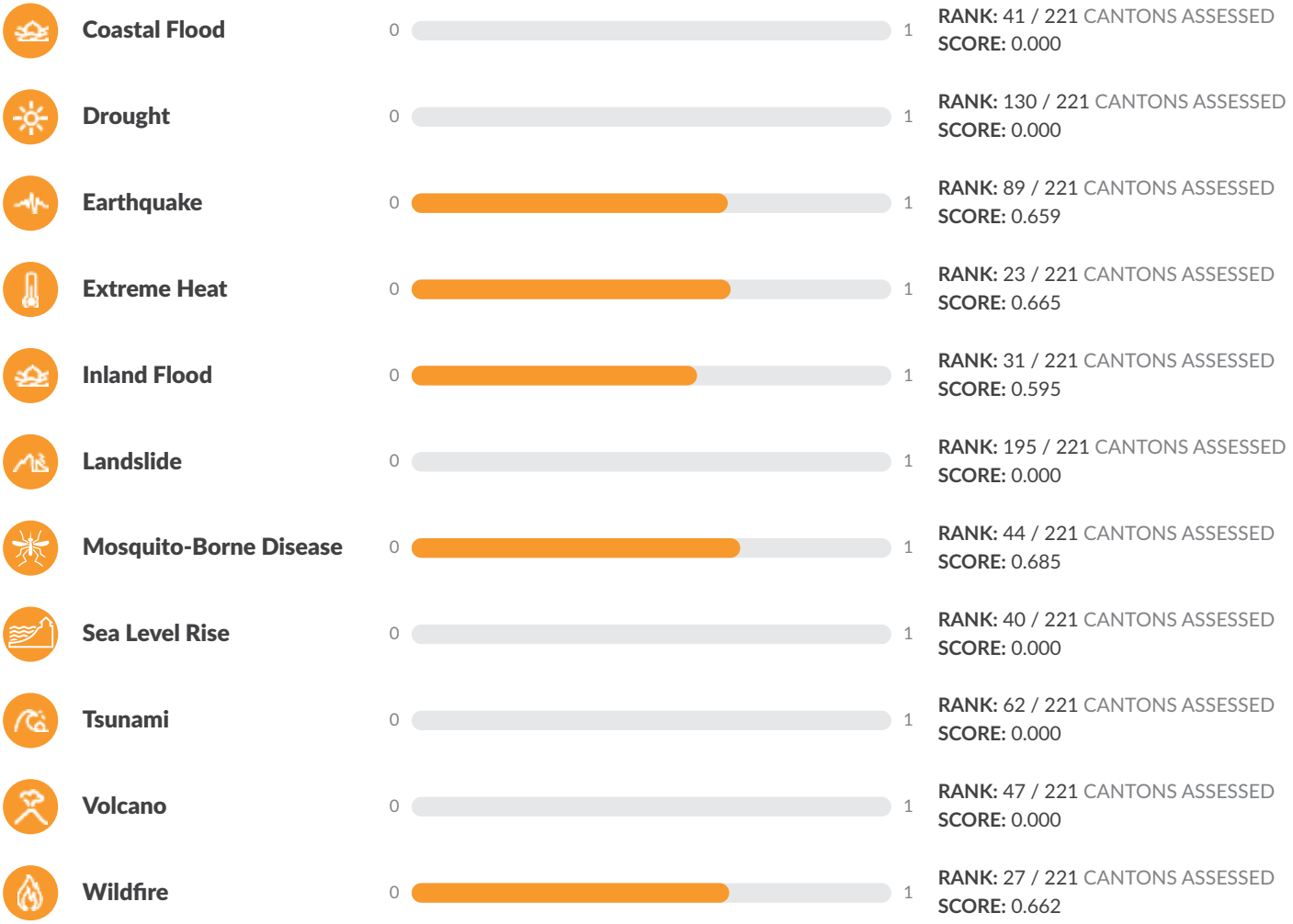
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

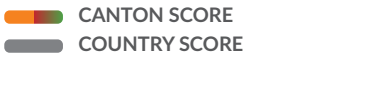


MULTI-HAZARD RISK (MHR)

RANKED
62 / 221
CANTONS ASSESSED
SCORE: 0.539

Cuyabeno's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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DAULE

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.537 • RANK: 65/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.409 • RANK: 180/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.580 • RANK: 43/221 CANTONS ASSESSED

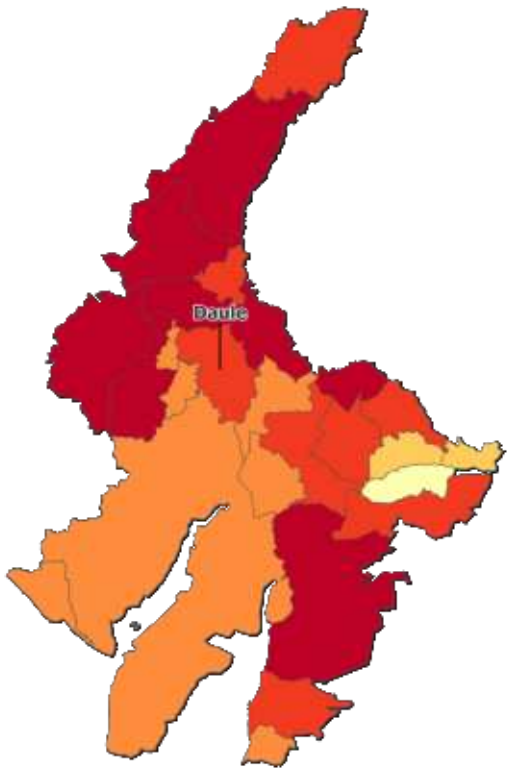
Coping Capacity (CC) - Very High
SCORE: 0.599 • RANK: 39/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.887 • RANK: 4/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.549 • RANK: 62/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

DAULE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	**0.537**
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 4 / 221 CANTONS ASSESSED
SCORE: 0.887



MHE
0.887

Raw MHE
0.884

Relative MHE
0.889

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **269** people exposed
- **229** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
85%
- **133,312** people exposed
- **70,730** structures exposed (91%)

Critical Infrastructure Exposed: 88%

Earthquake
100%
- **156,464** people exposed
- **78,067** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **156,464** people exposed
- **78,067** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
38%
- **59,440** people exposed
- **36,406** structures exposed (47%)

Critical Infrastructure Exposed: 39%

Landslide
<1%
- **1,185** people exposed
- **5,149** structures exposed (7%)

Critical Infrastructure Exposed: 6%

Mosquito-Borne Disease
100%
- **156,367** people exposed
- **78,017** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
<1%
- **15** people exposed
- **78** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
99%
- **155,561** people exposed
- **73,904** structures exposed (95%)

Critical Infrastructure Exposed: 88%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
30%
- **47,658** people exposed
- **26,651** structures exposed (34%)

Critical Infrastructure Exposed: 31%

VULNERABILITY (V)

RANK: 180 / 221 CANTONS ASSESSED **SCORE: 0.409**

Vulnerability in Daule is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.242

- **12.9** Average Years of Schooling
- **27.4%** Population (age 24 and over) with General Basic Education Schooling
- **4%** Population (age 24 and over) with No Schooling
- **3.5%** Adult Illiteracy Rate
- **35.8%** Households with No Internet Access
- **61.5%** Households with No Access to Television
- **50.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.415

- **80.8%** Homes with Access to Public Water Source
- **65.2%** Homes Connected to the Public Sewage System
- **27%** Homes without Piped Water
- **4.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.350

- **49.4** Age Dependency Ratio
- **13.5%** Unemployment Rate
- **34.6%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.814

- **13.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.329

- **0.4** Female to Male Labor Ratio (distance from parity)
- **33.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **30.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **28.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.486

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **5.8** Perinatal Mortality Rate (per 1,000 births)
- **8.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.430

- **8.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **17.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.441

52 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**7** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**22** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**68** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.403

12.4% Homes with Exterior Walls in Poor Condition	**10.6%** Homes with Inadequate Materials Used in Outer Walls	**13.6%** Homes with Roofs in Poor Condition	**57.5%** Households with No Access to Vehicle for Private Use	**7.6%** Household Overcrowding

Population Pressures

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.656

435.1 Population Density (persons per sq km)	**5.2%** Average Annual Population Change (2010-2022)	**26.8** Net Migration Rate (per 1,000 persons)	**0.24** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.326

0.3 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 39 / 221 CANTONS ASSESSED **SCORE: 0.599**

Daule exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.730

61%
Labor Force Participation

899,617
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.339

0%
Protected Area (% of land area)

-1,007.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.612

89.3%
Voter Participation

81.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.541

Communications Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.701

21.9%
Household Access to Fixed Phones

87.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.592

97.2%
Homes Served by the Public Electricity Network

73.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.118

2.7
Nurses and Midwives per 10,000 persons

6.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.753

18.2
Average Distance to Airport (km)

6.2
Average Distance to Sea or River Port (km)

3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 62 / 221 CANTONS ASSESSED **SCORE: 0.549**

Daule exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.440

3.1	2.3%	0.4	22.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.659

6.4	3.7	2.3	3.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 43 / 221 CANTONS ASSESSED
SCORE: 0.580

Daule's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Population Pressures

Mass Care Support

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

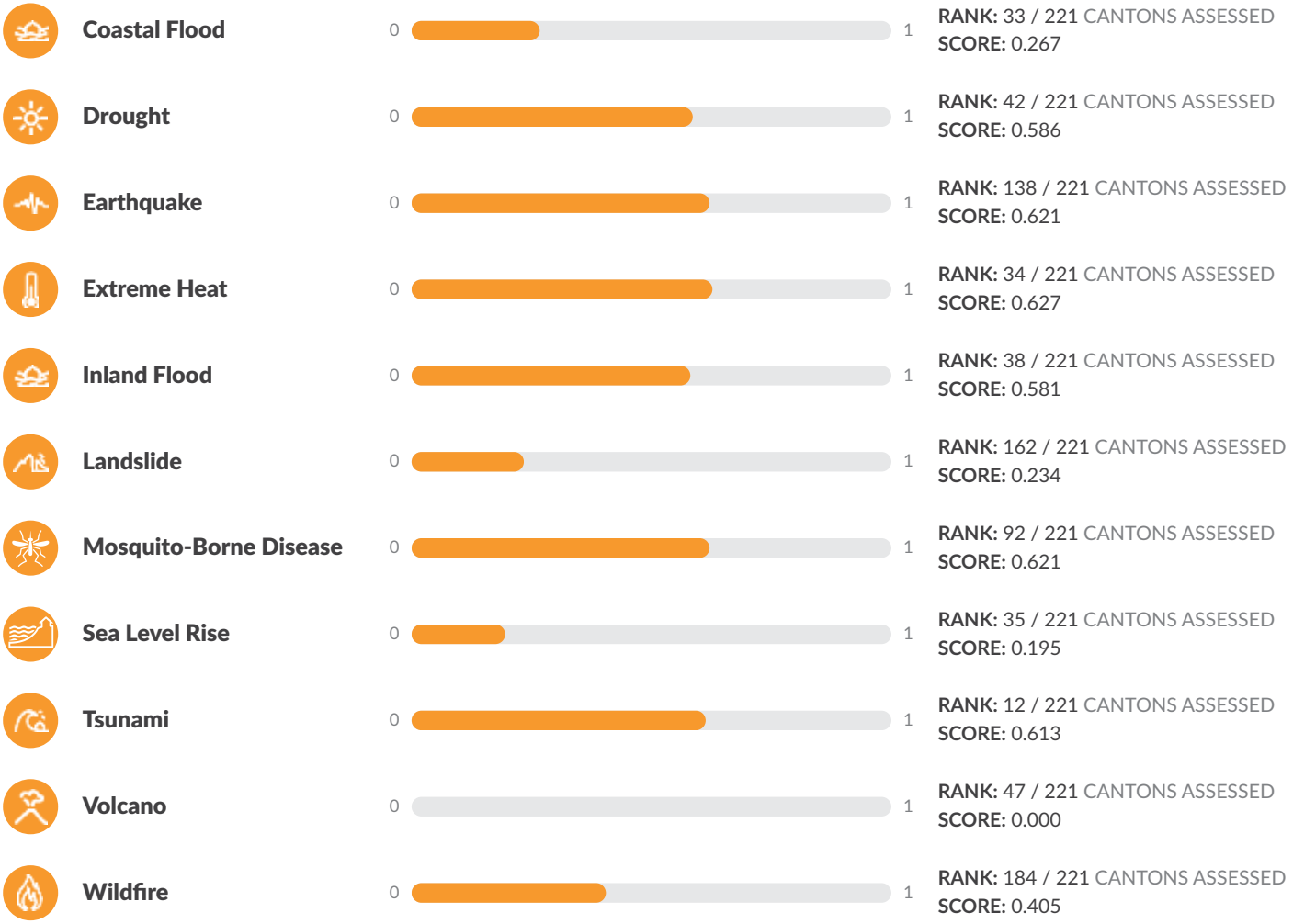
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

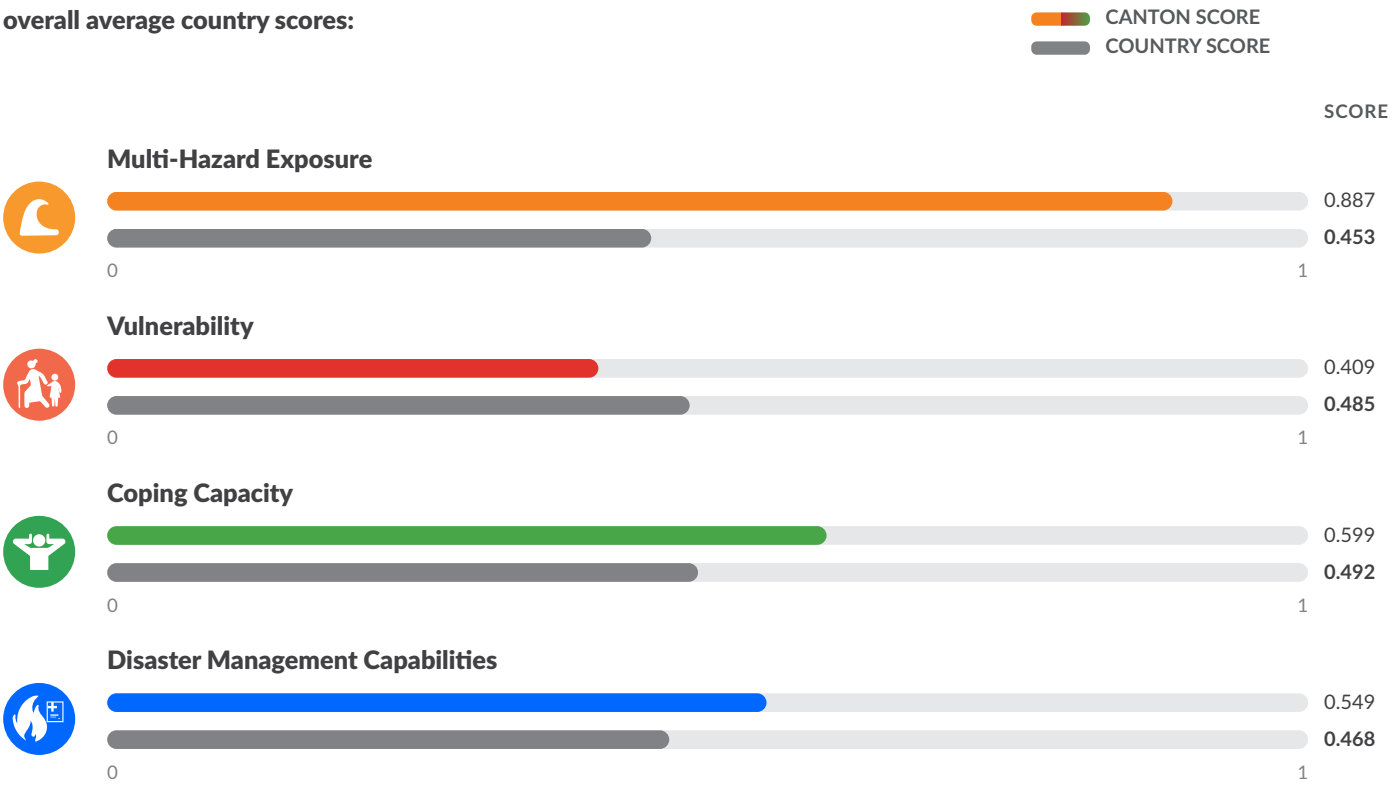


MULTI-HAZARD RISK (MHR)

RANKED
65 / 221
CANTONS ASSESSED
SCORE: 0.537

Daule's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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DÉLEG

NDPBA SUBNATIONAL PROFILE

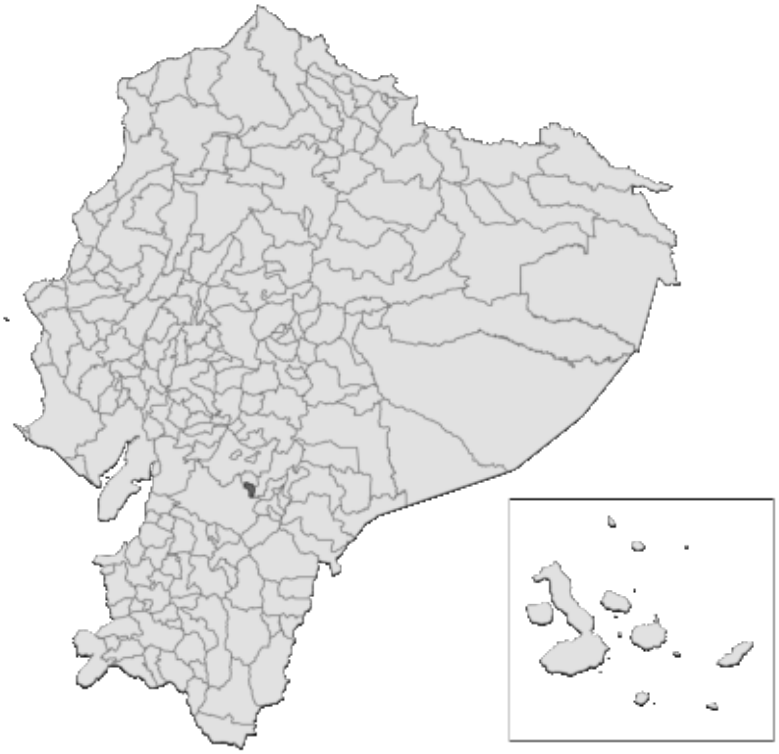
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DÉLEG

PROVINCE: CAÑAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.479 • RANK: 126/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.472 • RANK: 130/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.332 • RANK: 165/221 CANTONS ASSESSED

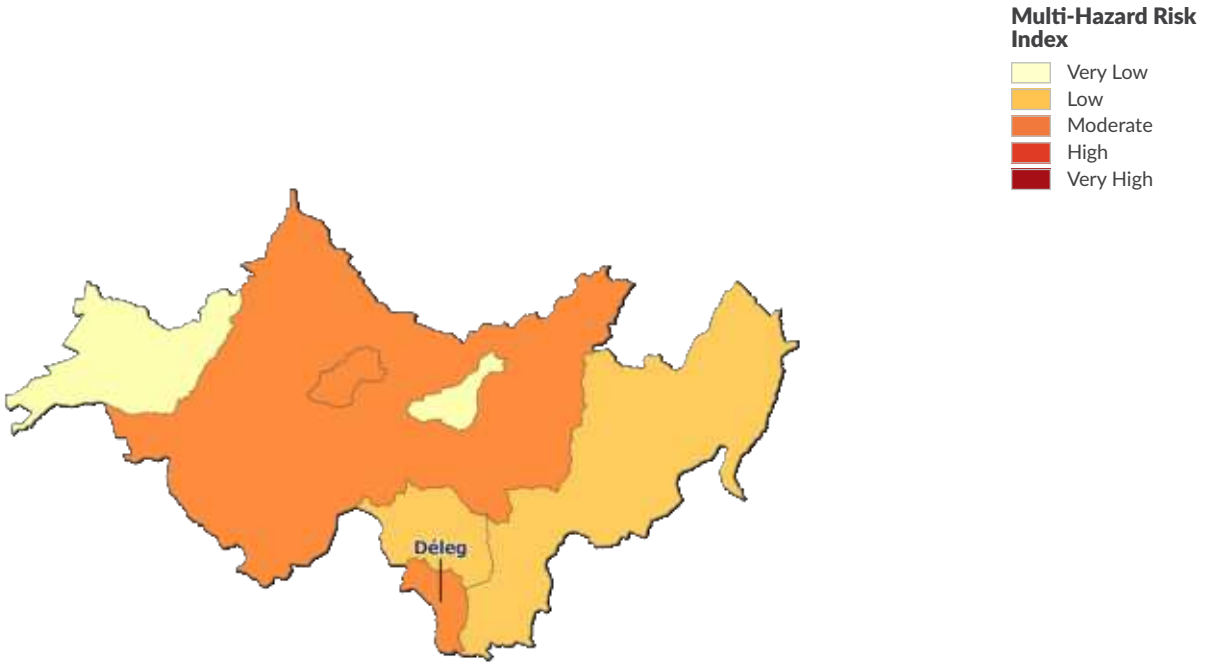
Vulnerability (V) - Low
SCORE: 0.455 • RANK: 143/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.352 • RANK: 200/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.518 • RANK: 74/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CAÑAR PROVINCE

DÉLEG • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Suscal	0.506
Cañar	0.504
Déleg	**0.479**
Biblián	0.457
Azogues	0.445
La Troncal	0.426
El Tambo	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 165 / 221 CANTONS ASSESSED
SCORE: 0.332



MHE
0.332

Raw MHE
0.345

Relative MHE
0.319

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
65%
4,224 people exposed
9,926 structures exposed (67%)
Critical Infrastructure Exposed: 54%

Earthquake
100%
6,453 people exposed
14,715 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
4%
252 people exposed
430 structures exposed (3%)
Critical Infrastructure Exposed: 4%

Landslide
59%
3,789 people exposed
8,553 structures exposed (58%)
Critical Infrastructure Exposed: 62%

Mosquito-Borne Disease
20%
1,287 people exposed
3,022 structures exposed (21%)
Critical Infrastructure Exposed: 42%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
98%
6,316 people exposed
14,517 structures exposed (99%)
Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 143 / 221 CANTONS ASSESSED **SCORE: 0.455**

Vulnerability in Déleg is primarily driven by Economic Constraints and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.610

- **8.1** Average Years of Schooling
- **53.4%** Population (age 24 and over) with General Basic Education Schooling
- **11.3%** Population (age 24 and over) with No Schooling
- **9.8%** Adult Illiteracy Rate
- **38.1%** Households with No Internet Access
- **87.8%** Households with No Access to Television
- **78.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.406

- **94.5%** Homes with Access to Public Water Source
- **28%** Homes Connected to the Public Sewage System
- **25.3%** Homes without Piped Water
- **2.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.619

- **74.6** Age Dependency Ratio
- **14.9%** Unemployment Rate
- **43.5%** Poverty Rate (based on UBN)
- **1.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.322

- **1.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.363

- **0.4** Female to Male Labor Ratio (distance from parity)
- **26** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **53.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **37.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.570

- **16.4%** Prevalence of Disability (among persons age 5 and over)
- **22.2** Perinatal Mortality Rate (per 1,000 births)
- **4.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.201

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **50.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.492

98 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**26** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**38** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.363

11.4% Homes with Exterior Walls in Poor Condition	**2%** Homes with Inadequate Materials Used in Outer Walls	**17%** Homes with Roofs in Poor Condition	**72.3%** Households with No Access to Vehicle for Private Use	**4.6%** Household Overcrowding

Population Pressures

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.386

82.2 Population Density (persons per sq km)	**0.1%** Average Annual Population Change (2010-2022)	**-0.2** Net Migration Rate (per 1,000 persons)	**0.28** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.348

0.2 Hazard Susceptibility (recent events 2015-2025)	**0.1** Disaster Loss Ratio (recent events 2015-2025)	**0** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 200 / 221 CANTONS ASSESSED **SCORE: 0.352**

Déleg exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.235

50.5%
Labor Force Participation

8,805
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.343

0%
Protected Area (% of land area)

-768.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.235

58.6%
Voter Participation

78%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.589

Communications Capacity

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.626

15.8%
Household Access to Fixed Phones

85.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.745

97.7%
Homes Served by the Public Electricity Network

86.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.439

8.3
Nurses and Midwives per 10,000 persons

21.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.544

13
Average Distance to Airport (km)

109.3
Average Distance to Sea or River Port (km)

3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 74 / 221 CANTONS ASSESSED **SCORE: 0.518**

Déleg exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.370

3.4	0.8%	0	12.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.666

8.5	3.7	1.8	3.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 130 / 221 CANTONS ASSESSED
SCORE: 0.472

Déleg's score and ranking are due to Low Vulnerability combined with Very Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity | **Governance** | **Mass Care Support** | **Economic Constraints**

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

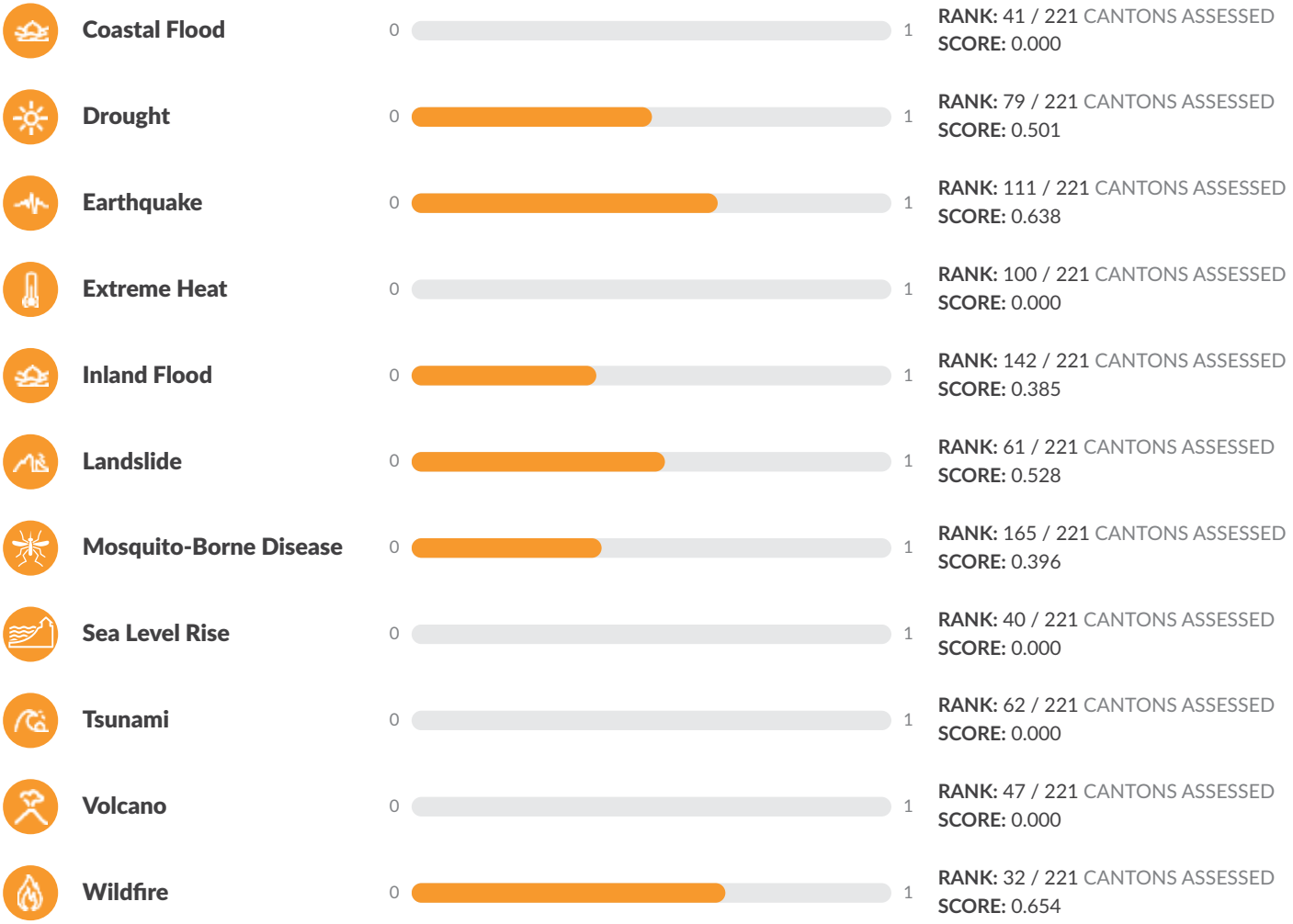
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

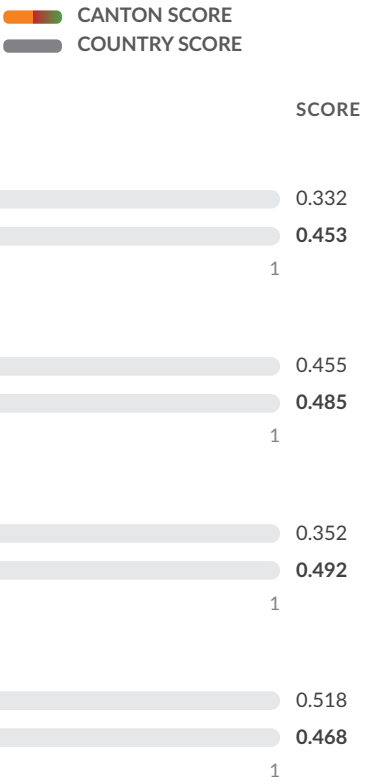


MULTI-HAZARD RISK (MHR)

RANKED
126 / 221
CANTONS ASSESSED
SCORE: 0.479

Déleg's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Very Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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DISTRITO METROPOLITANO DE QUITO

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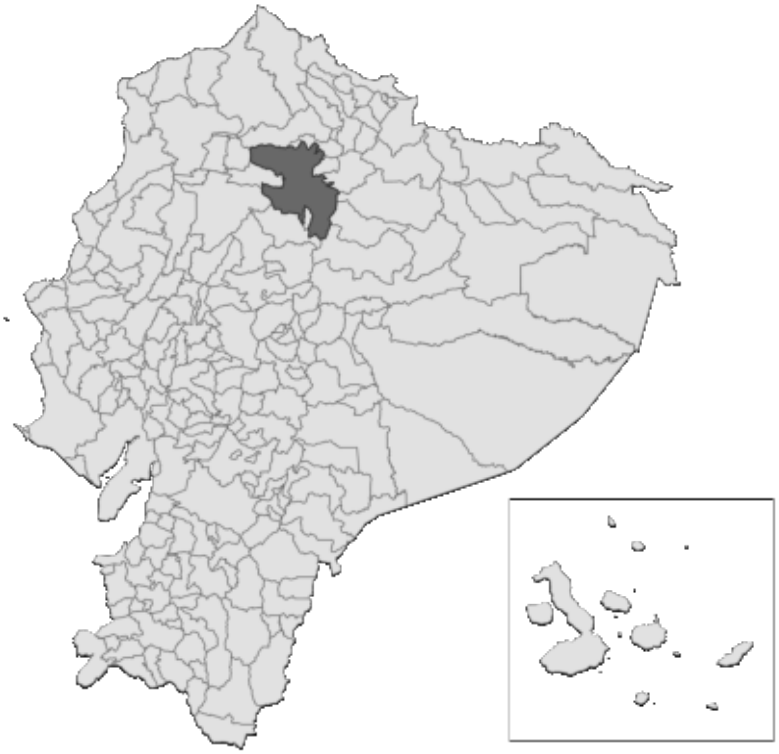
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DISTRITO METROPOLITANO DE QUITO

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.393 • RANK: 204/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.314 • RANK: 216/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.697 • RANK: 2/221 CANTONS ASSESSED

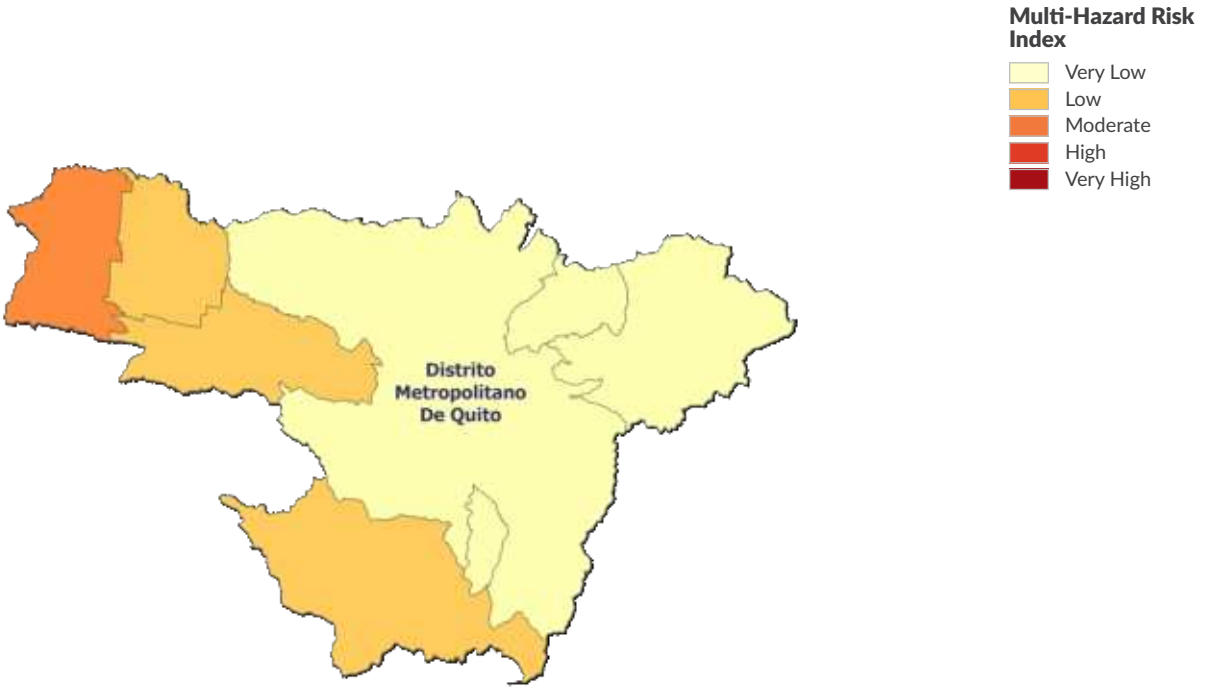
Coping Capacity (CC) - Very High
SCORE: 0.749 • RANK: 2/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.663 • RANK: 26/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.656 • RANK: 14/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

DISTRITO METROPOLITANO DE QUITO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	0.504
San Miguel De Los Bancos	0.463
Pedro Vicente Maldonado	0.449
Mejía	0.442
Cayambe	0.412
Distrito Metropolitano De Quito	**0.393**
Pedro Moncayo	0.381
Rumiñahui	0.313

MULTI-HAZARD EXPOSURE (MHE)

RANK: 26 / 221 CANTONS ASSESSED
SCORE: 0.663



MHE
0.663

Raw MHE
1.000

Relative MHE
0.325

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
24%
- **674,378** people exposed
- **264,926** structures exposed (30%)
- **Critical Infrastructure Exposed:** 24%

Earthquake
100%
- **2,800,924** people exposed
- **872,904** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
<1%
- **6,626** people exposed
- **3,304** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 2%

Landslide
41%
- **1,143,389** people exposed
- **391,275** structures exposed (45%)
- **Critical Infrastructure Exposed:** 60%

Mosquito-Borne Disease
35%
- **976,750** people exposed
- **256,167** structures exposed (29%)
- **Critical Infrastructure Exposed:** 33%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
4%
- **122,119** people exposed
- **63,227** structures exposed (7%)
- **Critical Infrastructure Exposed:** 11%

Wildfire
92%
- **2,571,549** people exposed
- **783,091** structures exposed (90%)
- **Critical Infrastructure Exposed:** 91%

VULNERABILITY (V)

RANK: 216 / 221 CANTONS ASSESSED **SCORE: 0.314**

Vulnerability in Distrito Metropolitano De Quito is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.119

- **13.2** Average Years of Schooling
- **24.9%** Population (age 24 and over) with General Basic Education Schooling
- **2%** Population (age 24 and over) with No Schooling
- **1.5%** Adult Illiteracy Rate
- **21.2%** Households with No Internet Access
- **63.5%** Households with No Access to Television
- **35.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.070

- **98.9%** Homes with Access to Public Water Source
- **95%** Homes Connected to the Public Sewage System
- **5.3%** Homes without Piped Water
- **2.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.217

- **45** Age Dependency Ratio
- **11%** Unemployment Rate
- **13.7%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.411

- **2.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.173

- **0.2** Female to Male Labor Ratio (distance from parity)
- **23.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **31.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **17.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.496

- **4.8%** Prevalence of Disability (among persons age 5 and over)
- **8.8** Perinatal Mortality Rate (per 1,000 births)
- **13%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.363

- **0.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.447

57
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

10
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

32
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.098

2.5%
Homes with Exterior Walls in Poor Condition

0.1%
Homes with Inadequate Materials Used in Outer Walls

3.2%
Homes with Roofs in Poor Condition

60.1%
Households with No Access to Vehicle for Private Use

3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.613

637.9
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

39.9
Net Migration Rate (per 1,000 persons)

0.24
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.708

0.5
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 2 / 221 CANTONS ASSESSED **SCORE: 0.749**

Distrito Metropolitano De Quito exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.980

68.1%
Labor Force Participation

27,374,251
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.185

4.5%
Protected Area (% of land area)

-35,139.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.700

83.5%
Voter Participation

98.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.755

Communications Capacity

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.933

42.3%
Household Access to Fixed Phones

93.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.863

99.7%
Homes Served by the Public Electricity Network

84.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.666

23.8
Nurses and Midwives per 10,000 persons

30.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.560

9.9
Average Distance to Airport (km)

128.4
Average Distance to Sea or River Port (km)

3.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 14 / 221 CANTONS ASSESSED **SCORE: 0.656**

Distrito Metropolitano De Quito exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.509

2.2	2.5%	2.1	71.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.802

3.6	3	1.1	2.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 2 / 221 CANTONS ASSESSED
SCORE: 0.697

Distrito Metropolitano De Quito's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Population Pressures

Vulnerable Health Status

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

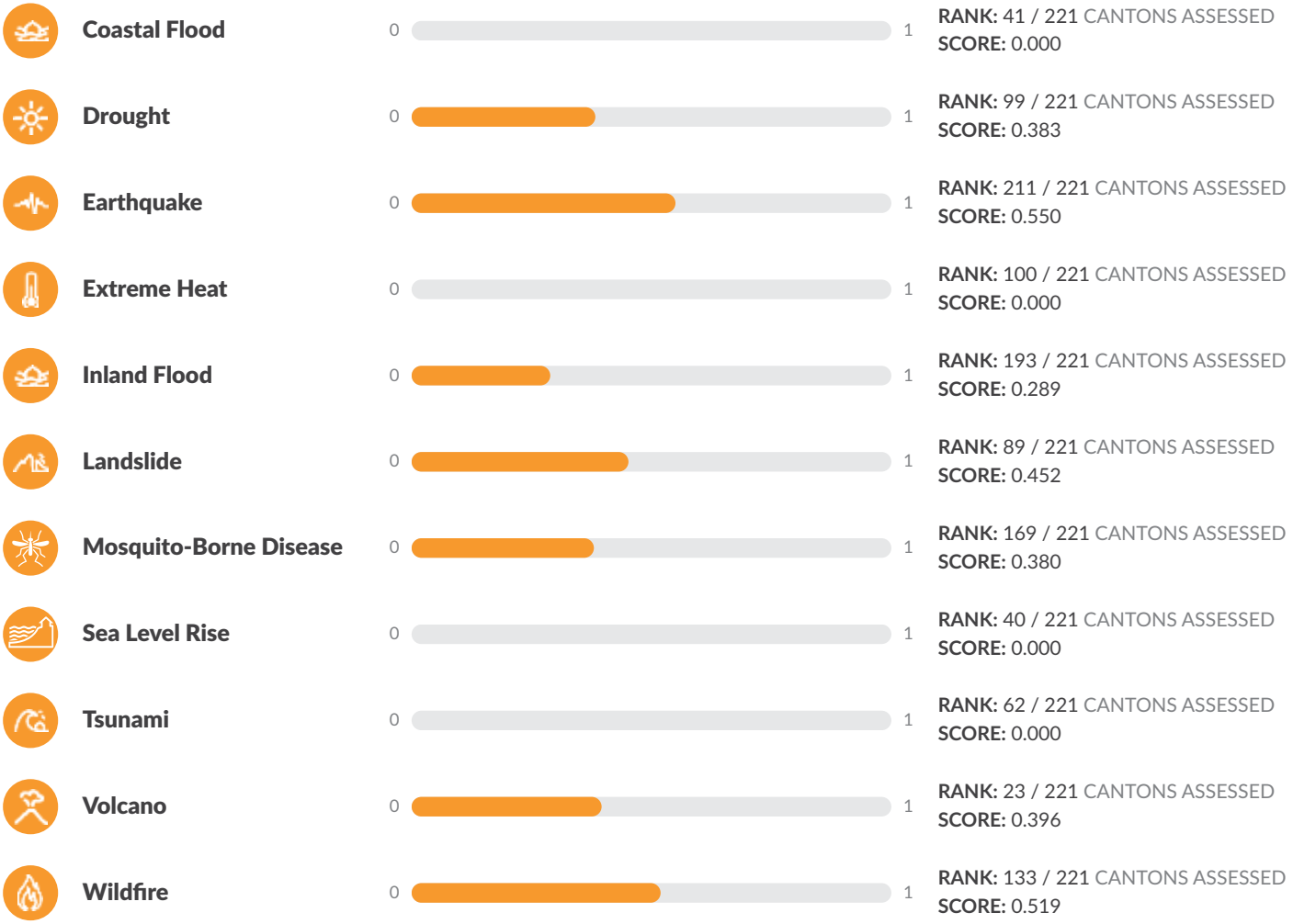
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
204 / 221
CANTONS ASSESSED
SCORE: 0.393

Distrito Metropolitano De Quito's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

DURÁN

NDPBA SUBNATIONAL PROFILE

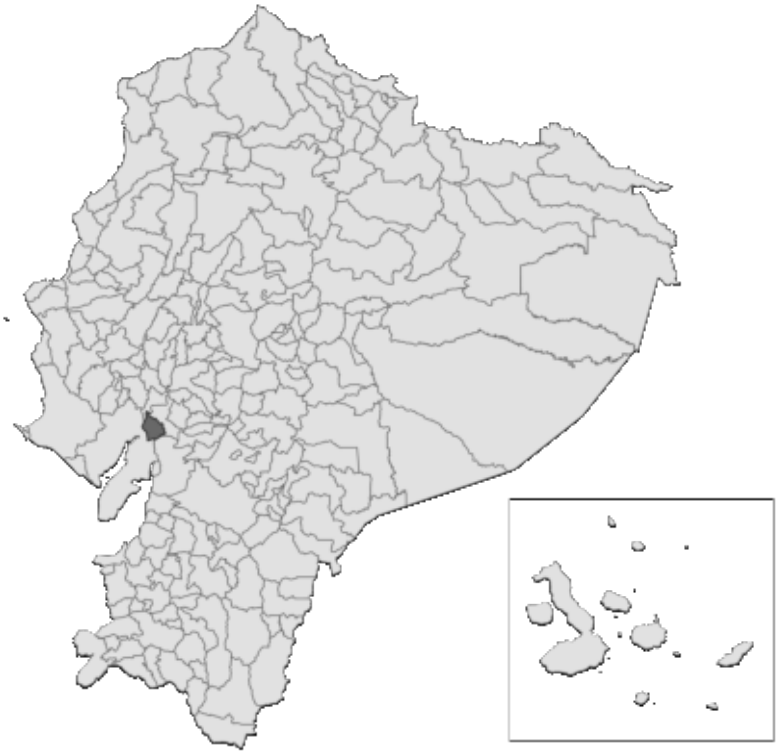
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ECUADOR

DURÁN

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.502 • RANK: 100/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.457 • RANK: 142/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.643 • RANK: 14/221 CANTONS ASSESSED

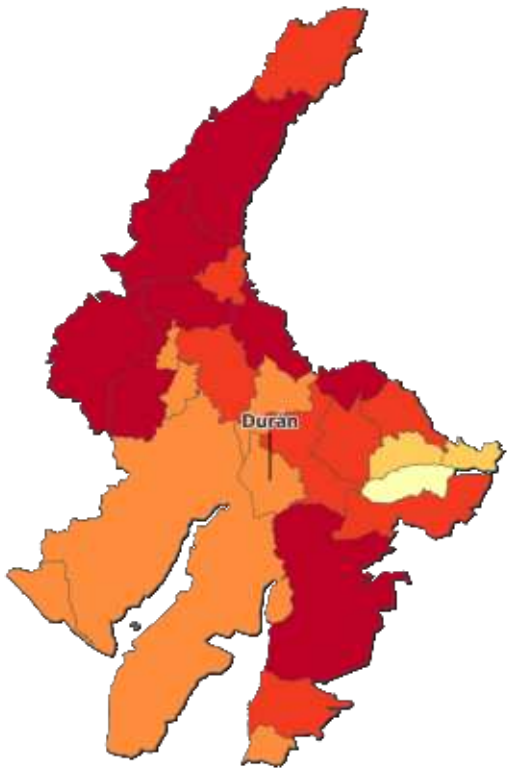
Coping Capacity (CC) - Very High
SCORE: 0.693 • RANK: 8/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.934 • RANK: 1/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.692 • RANK: 7/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

DURÁN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	**0.502**
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 1 / 221 CANTONS ASSESSED
SCORE: 0.934



MHE
0.934

Raw MHE
0.932

Relative MHE
0.936

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **4,563** people exposed
- **1,171** structures exposed (2%)
- **Critical Infrastructure Exposed:** 13%

Drought
100%
- **284,955** people exposed
- **73,413** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **284,955** people exposed
- **73,413** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
100%
- **284,955** people exposed
- **73,413** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Inland Flood
19%
- **53,370** people exposed
- **11,238** structures exposed (15%)
- **Critical Infrastructure Exposed:** 28%

Landslide
2%
- **4,743** people exposed
- **1,012** structures exposed (1%)
- **Critical Infrastructure Exposed:** 1%

Mosquito-Borne Disease
96%
- **272,203** people exposed
- **69,478** structures exposed (95%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
<1%
- **276** people exposed
- **146** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 6%

Tsunami
99%
- **282,901** people exposed
- **72,684** structures exposed (99%)
- **Critical Infrastructure Exposed:** 91%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
41%
- **117,199** people exposed
- **33,023** structures exposed (45%)
- **Critical Infrastructure Exposed:** 26%

VULNERABILITY (V)

RANK: 142 / 221 CANTONS ASSESSED **SCORE: 0.457**

Vulnerability in Durán is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.284

- **11.7** Average Years of Schooling
- **32%** Population (age 24 and over) with General Basic Education Schooling
- **2.5%** Population (age 24 and over) with No Schooling
- **1.8%** Adult Illiteracy Rate
- **35.7%** Households with No Internet Access
- **78.7%** Households with No Access to Television
- **64.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.566

- **58%** Homes with Access to Public Water Source
- **36.9%** Homes Connected to the Public Sewage System
- **56.5%** Homes without Piped Water
- **1.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.460

- **51** Age Dependency Ratio
- **15.6%** Unemployment Rate
- **65.4%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.600

- **6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.512

- **0.3** Female to Male Labor Ratio (distance from parity)
- **35.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **83.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **76.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.535

- **6.2%** Prevalence of Disability (among persons age 5 and over)
- **9.5** Perinatal Mortality Rate (per 1,000 births)
- **8.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.599

- **14** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **5.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **23.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.515

44	**18**	**35**	**44**
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.416

7.2%	**7.6%**	**10.1%**	**81.9%**	**9.7%**
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.627

889	**2.2%**	**18.8**	**0.27**
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.234

0.3	**0**	**0**
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 8 / 221 CANTONS ASSESSED **SCORE: 0.693**

Durán exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.832

62%
Labor Force Participation

2,874,691
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.620

11.7%
Protected Area (% of land area)

-730
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.674

83.9%
Voter Participation

97.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.598

Communications Capacity

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.711

19.1%
Household Access to Fixed Phones

89.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.644

97.9%
Homes Served by the Public Electricity Network

76.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.173

3.4
Nurses and Midwives per 10,000 persons

8.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.862

7.4
Average Distance to Airport (km)

4
Average Distance to Sea or River Port (km)

3.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 7 / 221 CANTONS ASSESSED **SCORE: 0.692**

Durán exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.533

1.5	1.1%	0.4	4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.851

2.5	1.8	1.4	2.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 14 / 221 CANTONS ASSESSED
SCORE: 0.643

Durán's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Population Pressures

Clean Water Access Vulnerability

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

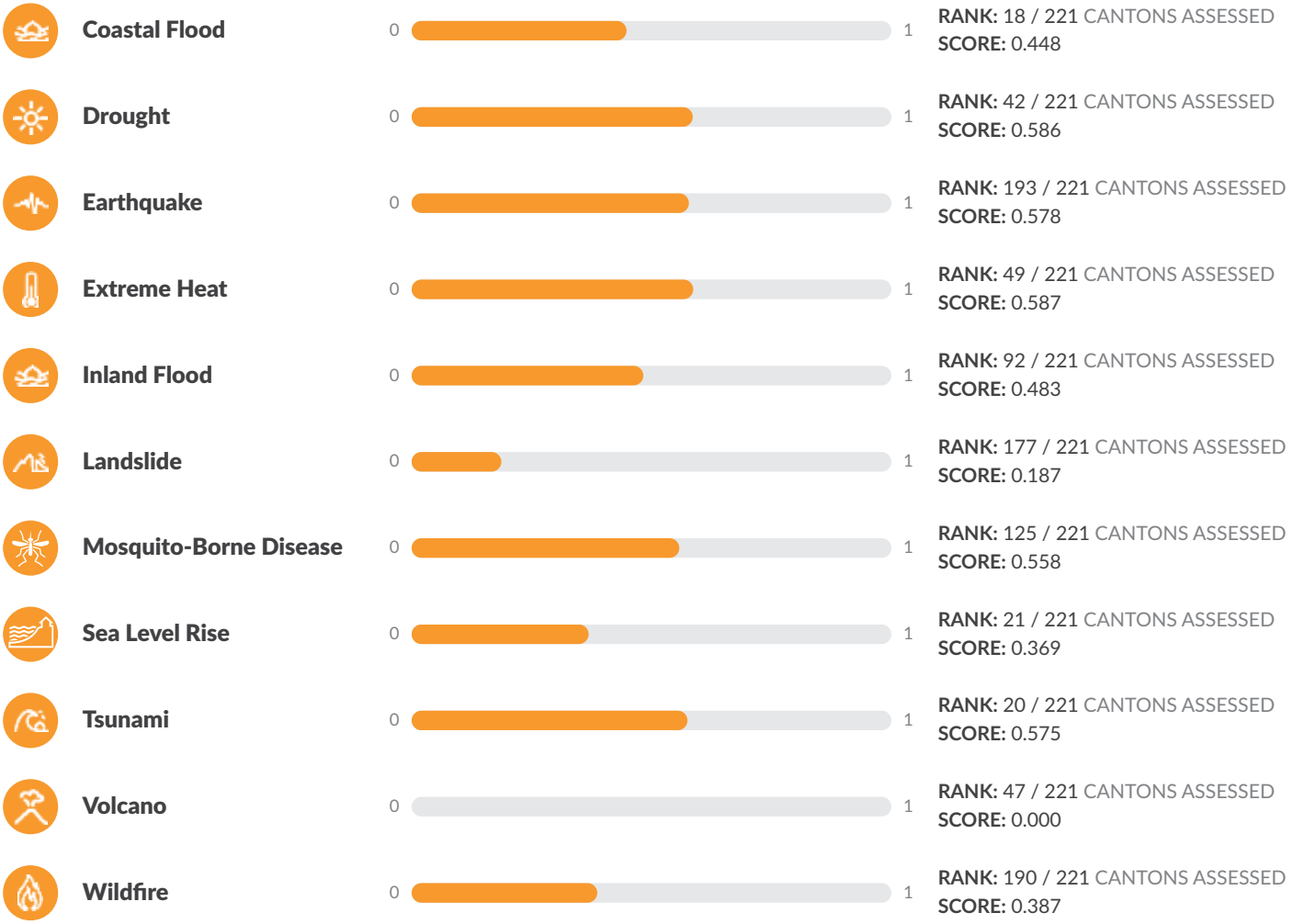
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

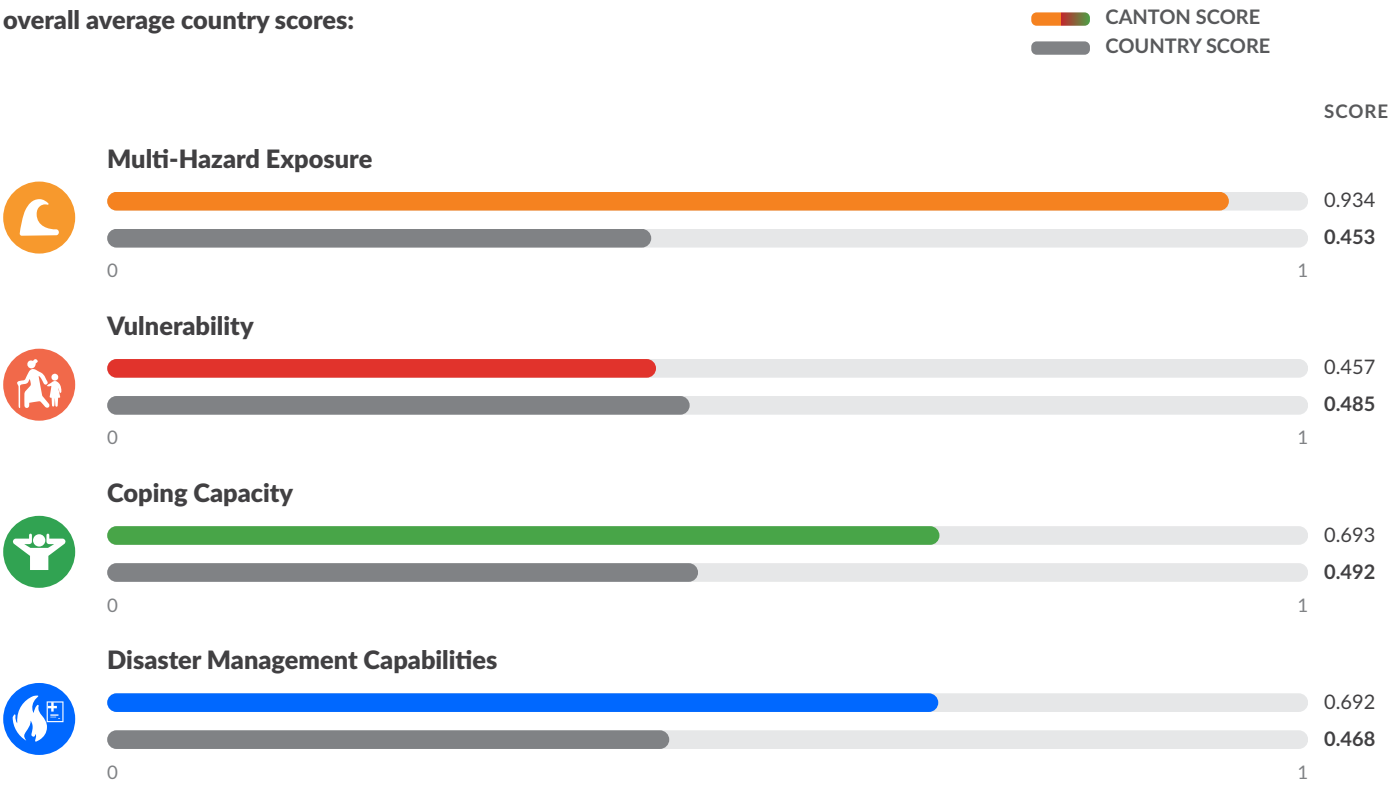


MULTI-HAZARD RISK (MHR)

RANKED
100 / 221
CANTONS ASSESSED
SCORE: 0.502

Durán's score and ranking are due to Very High Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

ECHEANDÍA

NDPBA SUBNATIONAL PROFILE

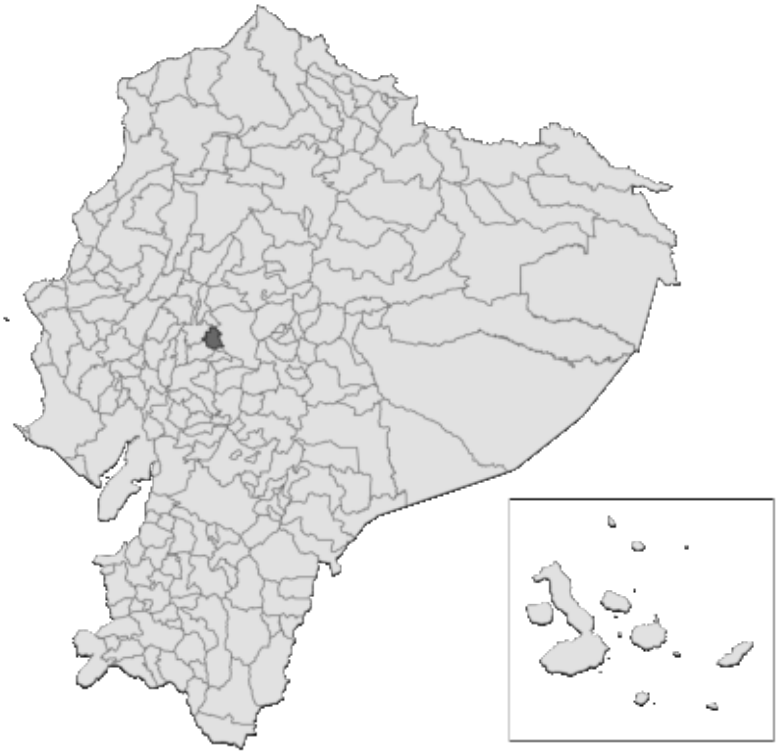
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ECHEANDÍA

PROVINCE: BOLÍVAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.445 • RANK: 156/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.488 • RANK: 108/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.245 • RANK: 196/221 CANTONS ASSESSED

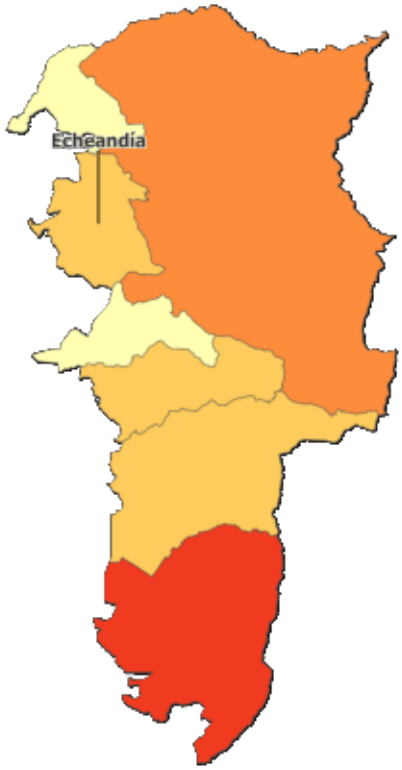
Vulnerability (V) - Low
SCORE: 0.464 • RANK: 134/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.452 • RANK: 142/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.477 • RANK: 92/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN BOLÍVAR PROVINCE

ECHEANDÍA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Chillanes	0.522
Guaranda	0.505
San Miguel	0.462
Echeandía	**0.445**
Chimbo	0.443
Caluma	0.427
Las Naves	0.421

MULTI-HAZARD EXPOSURE (MHE)

RANK: 196 / 221 CANTONS ASSESSED
SCORE: 0.245



MHE
0.245

Raw MHE
0.301

Relative MHE
0.190

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
13,831 people exposed
5,732 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
27%
3,669 people exposed
1,348 structures exposed (24%)
Critical Infrastructure Exposed: 27%

Landslide
28%
3,880 people exposed
1,682 structures exposed (29%)
Critical Infrastructure Exposed: 27%

Mosquito-Borne Disease
99%
13,643 people exposed
5,630 structures exposed (98%)
Critical Infrastructure Exposed: 98%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
47%
6,558 people exposed
2,673 structures exposed (47%)
Critical Infrastructure Exposed: 43%

VULNERABILITY (V)

RANK: 134 / 221 CANTONS ASSESSED **SCORE: 0.464**

Vulnerability in Echeandía is primarily driven by Information Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.533

- **10** Average Years of Schooling
- **41.7%** Population (age 24 and over) with General Basic Education Schooling
- **8.2%** Population (age 24 and over) with No Schooling
- **6.3%** Adult Illiteracy Rate
- **59.7%** Households with No Internet Access
- **80%** Households with No Access to Television
- **84.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.486

- **79.6%** Homes with Access to Public Water Source
- **51.6%** Homes Connected to the Public Sewage System
- **25.3%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.500

- **57.6** Age Dependency Ratio
- **15.9%** Unemployment Rate
- **43.6%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.312

- **1.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.474

- **0.4** Female to Male Labor Ratio (distance from parity)
- **49.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **61%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **44.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.333

- **8.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.339

- **26.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.536

43
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

12
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

32
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

110
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.505

17.6%
Homes with Exterior Walls in Poor Condition

2.5%
Homes with Inadequate Materials Used in Outer Walls

21.5%
Homes with Roofs in Poor Condition

88.3%
Households with No Access to Vehicle for Private Use

6.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.488

59.8
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

10.3
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.421

0.2
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 142 / 221 CANTONS ASSESSED **SCORE: 0.452**

Echeandía exhibits weaker Coping Capacity in the areas of Economic Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.372

55.5%
Labor Force Participation

21,365
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.309

0%
Protected Area (% of land area)

-2,936
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.507

86.4%
Voter Participation

74.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.526

Communications Capacity

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.548

13.2%
Household Access to Fixed Phones

81.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.539

95.8%
Homes Served by the Public Electricity Network

72.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.439

16.4
Nurses and Midwives per 10,000 persons

11.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.578

23.4
Average Distance to Airport (km)

25.5
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 92 / 221 CANTONS ASSESSED **SCORE: 0.477**

Echeandía exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.395

3.6	7.4%	0	36.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.558

20.8	4.1	2.8	3.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 108 / 221 CANTONS ASSESSED
SCORE: 0.488

Echeandía's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Economic Capacity



Mass Care Support



Healthcare Capacity



Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Healthcare Capacity

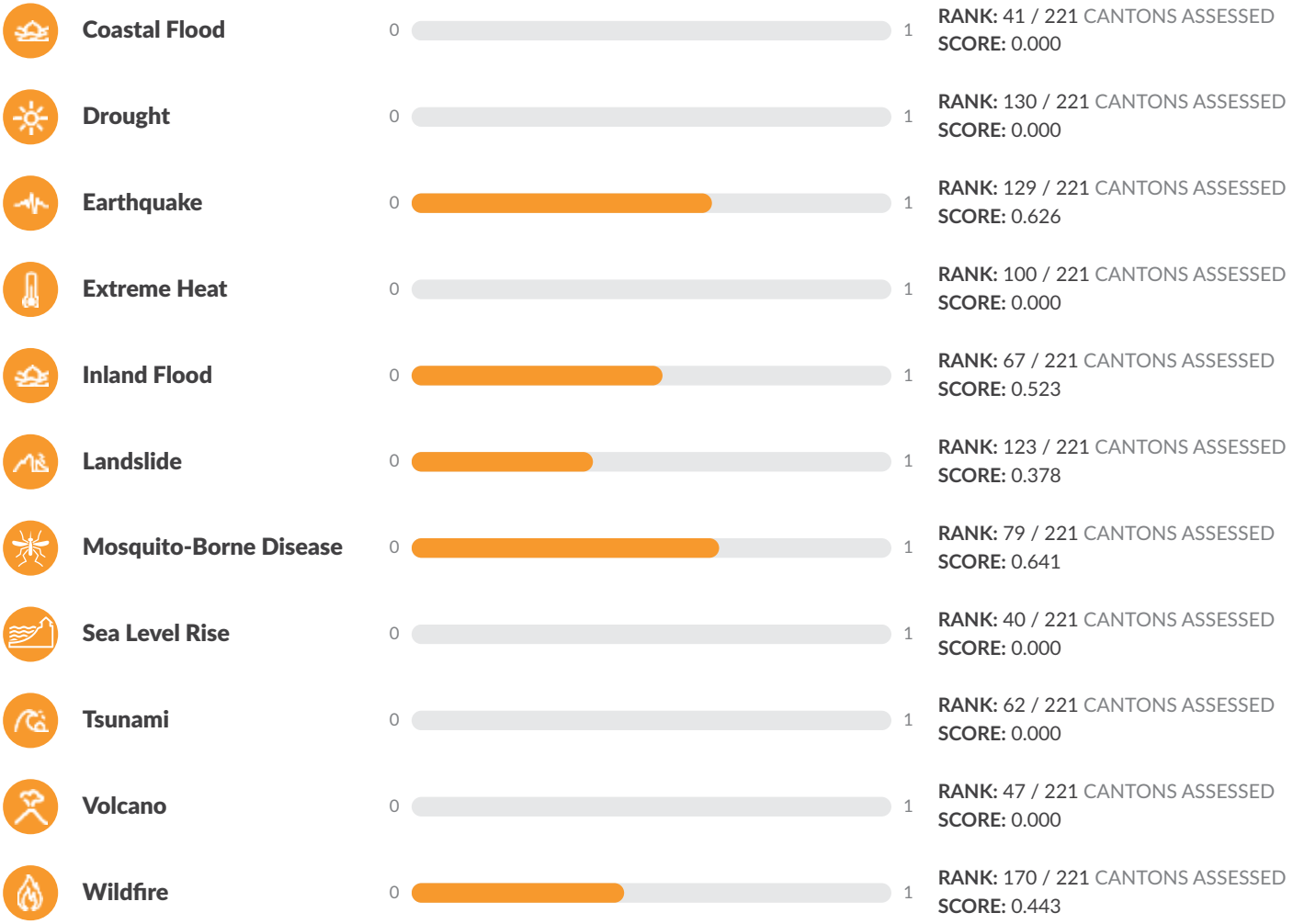
Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

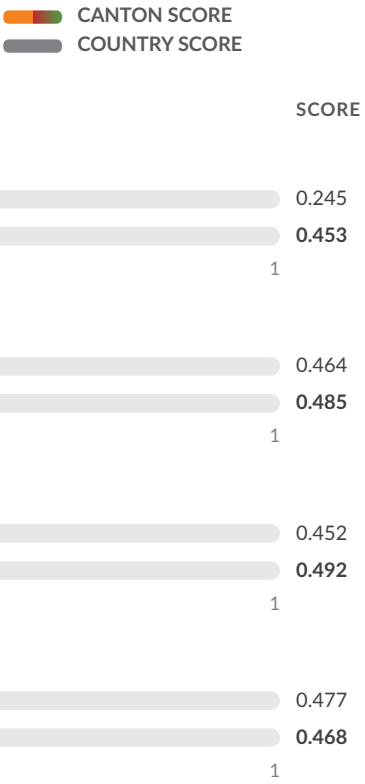


MULTI-HAZARD RISK (MHR)

RANKED
156 / 221
CANTONS ASSESSED
SCORE: 0.445

Echeandía's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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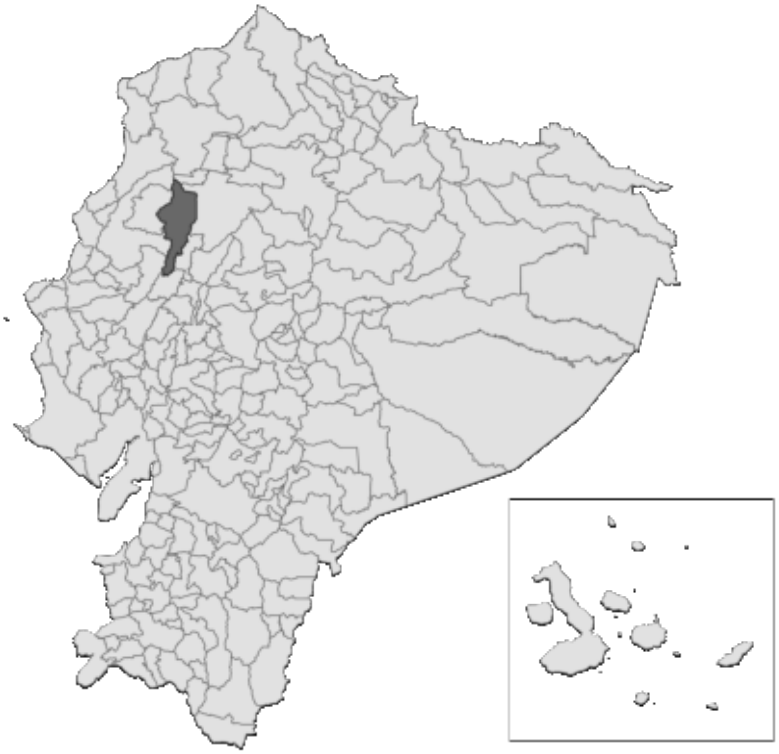
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ECUADOR

EL CARMEN

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.574 • RANK: 36/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.547 • RANK: 61/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.404 • RANK: 181/221 CANTONS ASSESSED

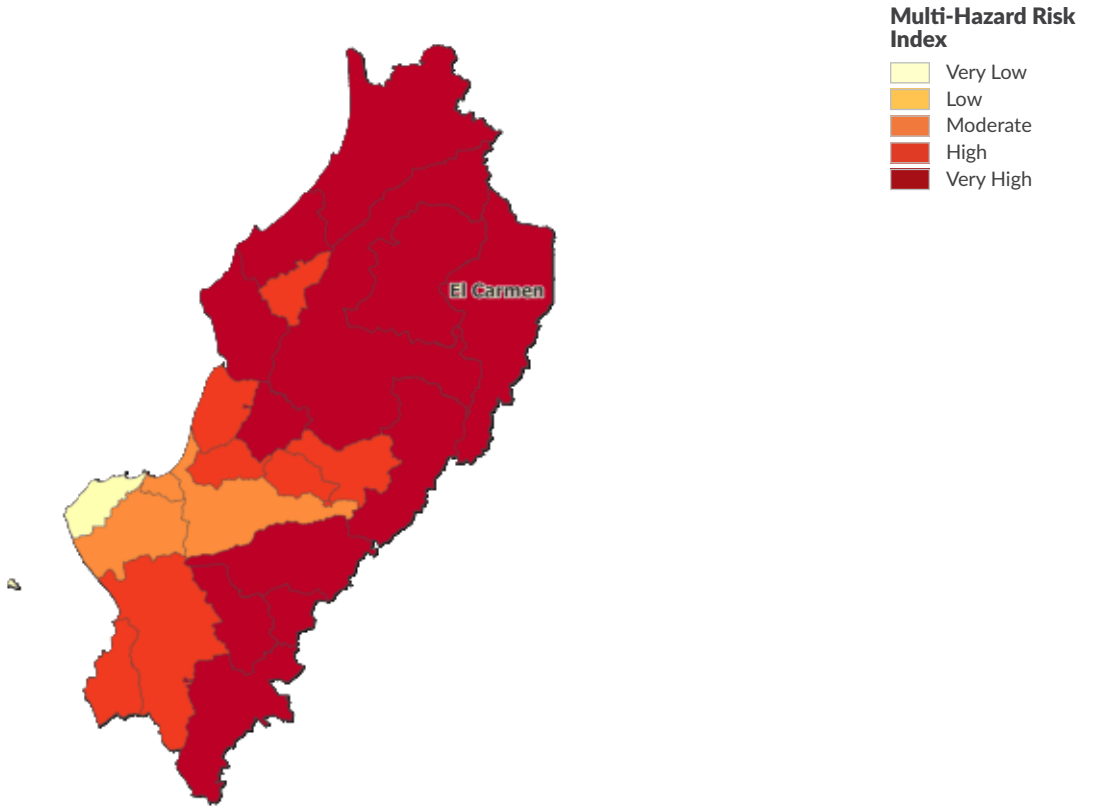
Coping Capacity (CC) - Low
SCORE: 0.454 • RANK: 140/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.505 • RANK: 80/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.303 • RANK: 206/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

EL CARMEN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	**El Carmen**	**0.574**	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 80 / 221 CANTONS ASSESSED
SCORE: 0.505



MHE
0.505

Raw MHE
0.730

Relative MHE
0.280

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
130,124 people exposed
57,070 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
39%
50,826 people exposed
23,032 structures exposed (40%)
Critical Infrastructure Exposed: 39%

Inland Flood
6%
8,175 people exposed
3,504 structures exposed (6%)
Critical Infrastructure Exposed: 14%

Landslide
<1%
1,282 people exposed
736 structures exposed (1%)
Critical Infrastructure Exposed: 1%

Mosquito-Borne Disease
100%
130,103 people exposed
57,028 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
66%
85,583 people exposed
38,398 structures exposed (67%)
Critical Infrastructure Exposed: 59%

VULNERABILITY (V)

RANK: 61 / 221 CANTONS ASSESSED **SCORE: 0.547**

Vulnerability in El Carmen is primarily driven by Marginalization and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.580

- **9.1** Average Years of Schooling
- **50%** Population (age 24 and over) with General Basic Education Schooling
- **8.4%** Population (age 24 and over) with No Schooling
- **6.7%** Adult Illiteracy Rate
- **55.5%** Households with No Internet Access
- **82%** Households with No Access to Television
- **84.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.647

- **52.2%** Homes with Access to Public Water Source
- **16.2%** Homes Connected to the Public Sewage System
- **53.9%** Homes without Piped Water
- **2.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.525

- **57.4** Age Dependency Ratio
- **13.3%** Unemployment Rate
- **70.6%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.541

- **4.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.662

- **0.6** Female to Male Labor Ratio (distance from parity)
- **69.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **58%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **72.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.392

- **7.8%** Prevalence of Disability (among persons age 5 and over)
- **0.5** Perinatal Mortality Rate (per 1,000 births)
- **8.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.423

- **22.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.465

66
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

24
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.523

15.2%
Homes with Exterior Walls in Poor Condition

9.8%
Homes with Inadequate Materials Used in Outer Walls

17.7%
Homes with Roofs in Poor Condition

85.3%
Households with No Access to Vehicle for Private Use

8.3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.466

69.5
Population Density (persons per sq km)

0.9%
Average Annual Population Change (2010-2022)

7.9
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.578

0.4
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 140 / 221 CANTONS ASSESSED **SCORE: 0.454**

El Carmen exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.558

54.1%
Labor Force Participation

379,939
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.024

0%
Protected Area (% of land area)

-24,569.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.492

87.1%
Voter Participation

68.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.456

Communications Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.445

3.4%
Household Access to Fixed Phones

88.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.574

96.3%
Homes Served by the Public Electricity Network

75.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.254

5.6
Nurses and Midwives per 10,000 persons

9.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.550

25.6
Average Distance to Airport (km)

32.1
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 206 / 221 CANTONS ASSESSED **SCORE: 0.303**

El Carmen exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.272

4.5	4.9%	0.3	133.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.334

16.2	9.5	5.9	14.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 181 / 221 CANTONS ASSESSED
SCORE: 0.404

El Carmen's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Healthcare Capacity


Mass Care Support


Emergency Services


Marginalization

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Emergency Services

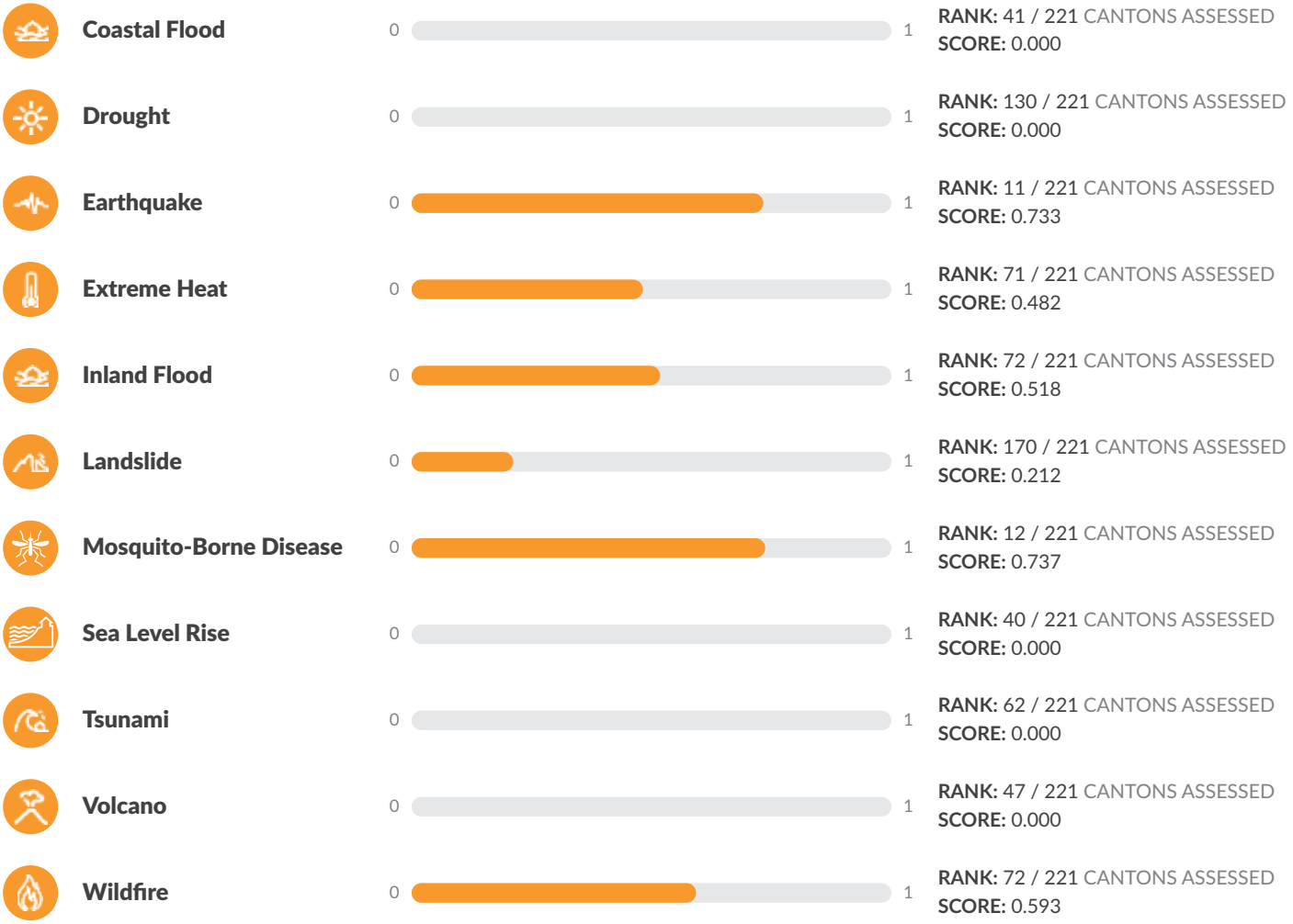
Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

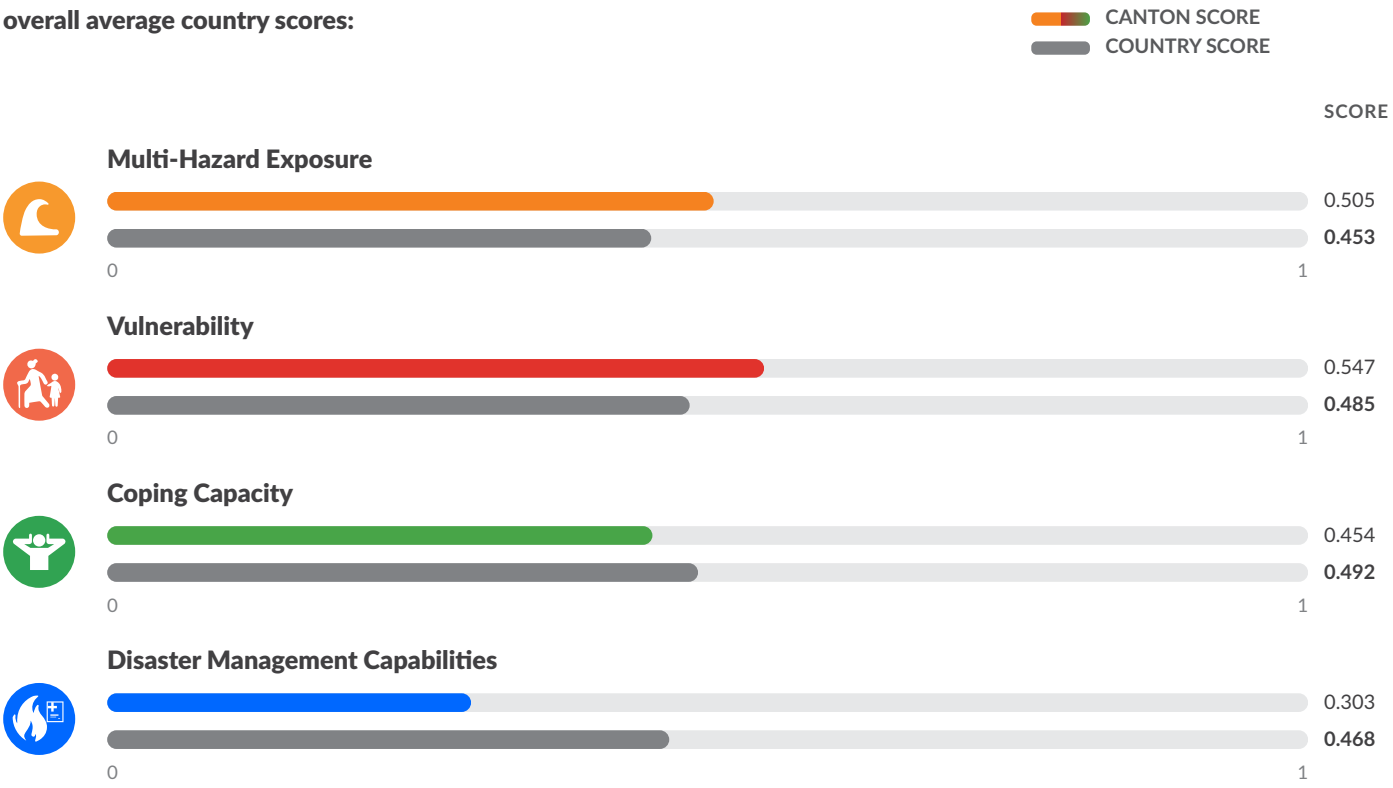


MULTI-HAZARD RISK (MHR)

RANKED
36 / 221
CANTONS ASSESSED
SCORE: 0.574

El Carmen's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

EL CHACO

NDPBA SUBNATIONAL PROFILE

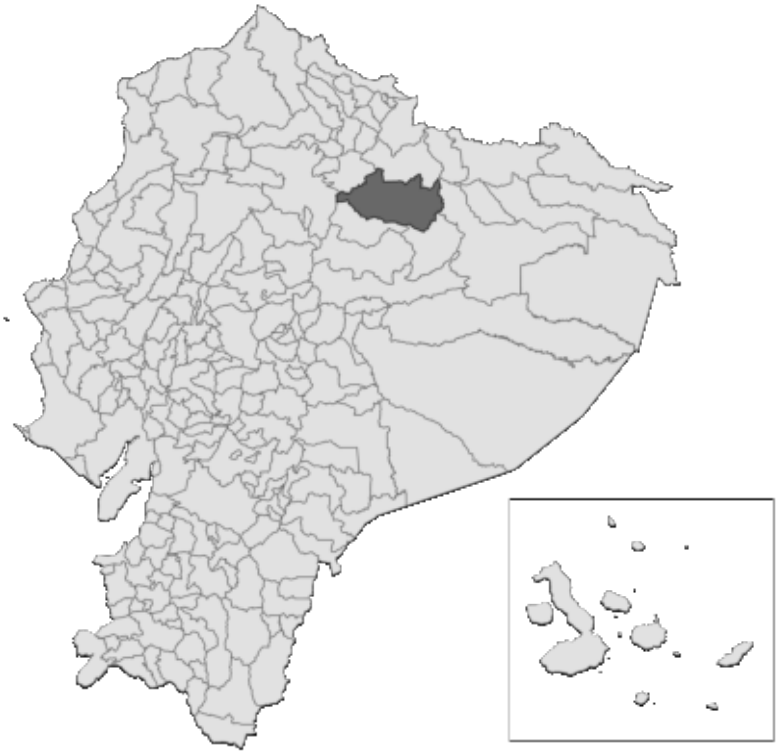
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ECUADOR

EL CHACO

PROVINCE: NAPO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.449 • RANK: 152/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.527 • RANK: 77/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.379 • RANK: 137/221 CANTONS ASSESSED

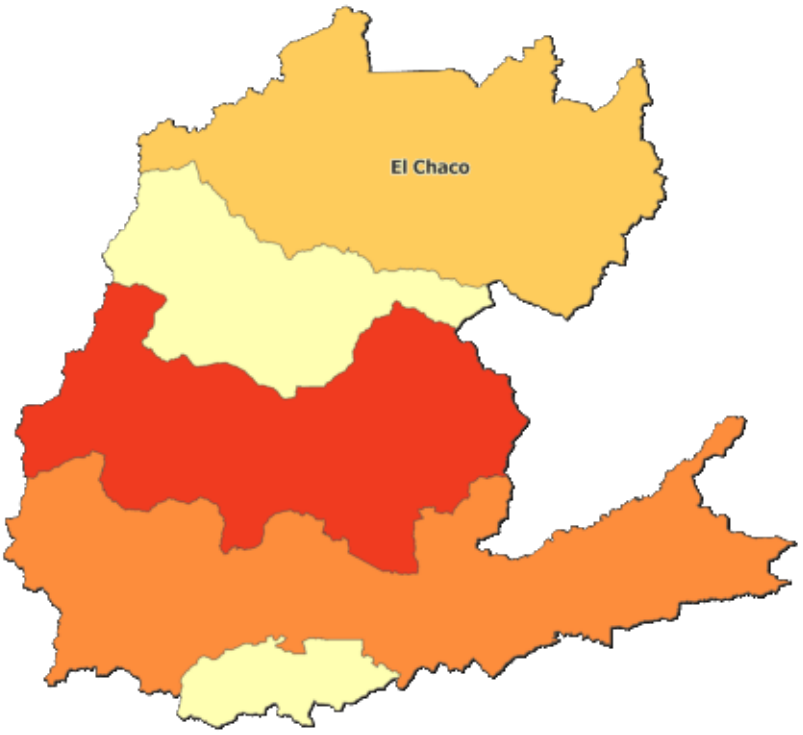
Vulnerability (V) - Very Low
SCORE: 0.387 • RANK: 197/221 CANTONS ASSESSED

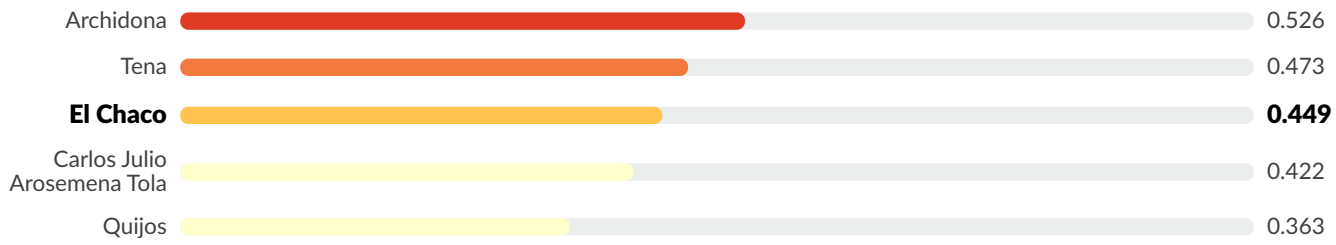
Coping Capacity (CC) - Very High
SCORE: 0.640 • RANK: 24/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.329 • RANK: 194/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN NAPO PROVINCE

EL CHACO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 137 / 221 CANTONS ASSESSED
SCORE: 0.379



MHE
0.379

Raw MHE
0.375

Relative MHE
0.384

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
12,970 people exposed
9,700 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
8%
1,013 people exposed
900 structures exposed (9%)
Critical Infrastructure Exposed: 20%

Landslide
91%
11,753 people exposed
8,454 structures exposed (87%)
Critical Infrastructure Exposed: 80%

Mosquito-Borne Disease
56%
7,233 people exposed
5,653 structures exposed (58%)
Critical Infrastructure Exposed: 63%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
16%
2,019 people exposed
2,345 structures exposed (24%)
Critical Infrastructure Exposed: 29%

Wildfire
74%
9,592 people exposed
8,138 structures exposed (84%)
Critical Infrastructure Exposed: 87%

VULNERABILITY (V)

RANK: 197 / 221 CANTONS ASSESSED **SCORE: 0.387**

Vulnerability in El Chaco is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.300

- **11.2** Average Years of Schooling
- **34.8%** Population (age 24 and over) with General Basic Education Schooling
- **4.3%** Population (age 24 and over) with No Schooling
- **3.4%** Adult Illiteracy Rate
- **38.5%** Households with No Internet Access
- **55.4%** Households with No Access to Television
- **61.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.360

- **87%** Homes with Access to Public Water Source
- **80.1%** Homes Connected to the Public Sewage System
- **22.5%** Homes without Piped Water
- **6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.469

- **48.2** Age Dependency Ratio
- **16.7%** Unemployment Rate
- **37.8%** Poverty Rate (based on UBN)
- **1.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.176

- **0.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.260

- **0.3** Female to Male Labor Ratio (distance from parity)
- **26.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **47.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **21.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.280

- **7.2%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **5.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.321

- **28.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **42.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.349

29
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

13
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

21
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.359

12%
Homes with Exterior Walls in Poor Condition

0.7%
Homes with Inadequate Materials Used in Outer Walls

14.7%
Homes with Roofs in Poor Condition

81.1%
Households with No Access to Vehicle for Private Use

4.6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.402

2.7
Population Density (persons per sq km)

1.3%
Average Annual Population Change (2010-2022)

21.1
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.701

0.4
Hazard Susceptibility (recent events 2015-2025)

0.5
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 24 / 221 CANTONS ASSESSED **SCORE: 0.640**

El Chaco exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.720

67.7%
Labor Force Participation

132,170
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.566

75.4%
Protected Area (% of land area)

-18,693
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.700

86.3%
Voter Participation

96.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.525

Communications Capacity

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.590

13.7%
Household Access to Fixed Phones

84.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.728

98.6%
Homes Served by the Public Electricity Network

80.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.555

19.5
Nurses and Midwives per 10,000 persons

19.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.226

62.4
Average Distance to Airport (km)

80.9
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 194 / 221 CANTONS ASSESSED **SCORE: 0.329**

El Chaco exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.344

6.7	22.9%	0	78
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.314

27.5	12.4	6.7	8.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 77 / 221 CANTONS ASSESSED
SCORE: 0.527

El Chaco's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Disaster Impacts

Emergency Services

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

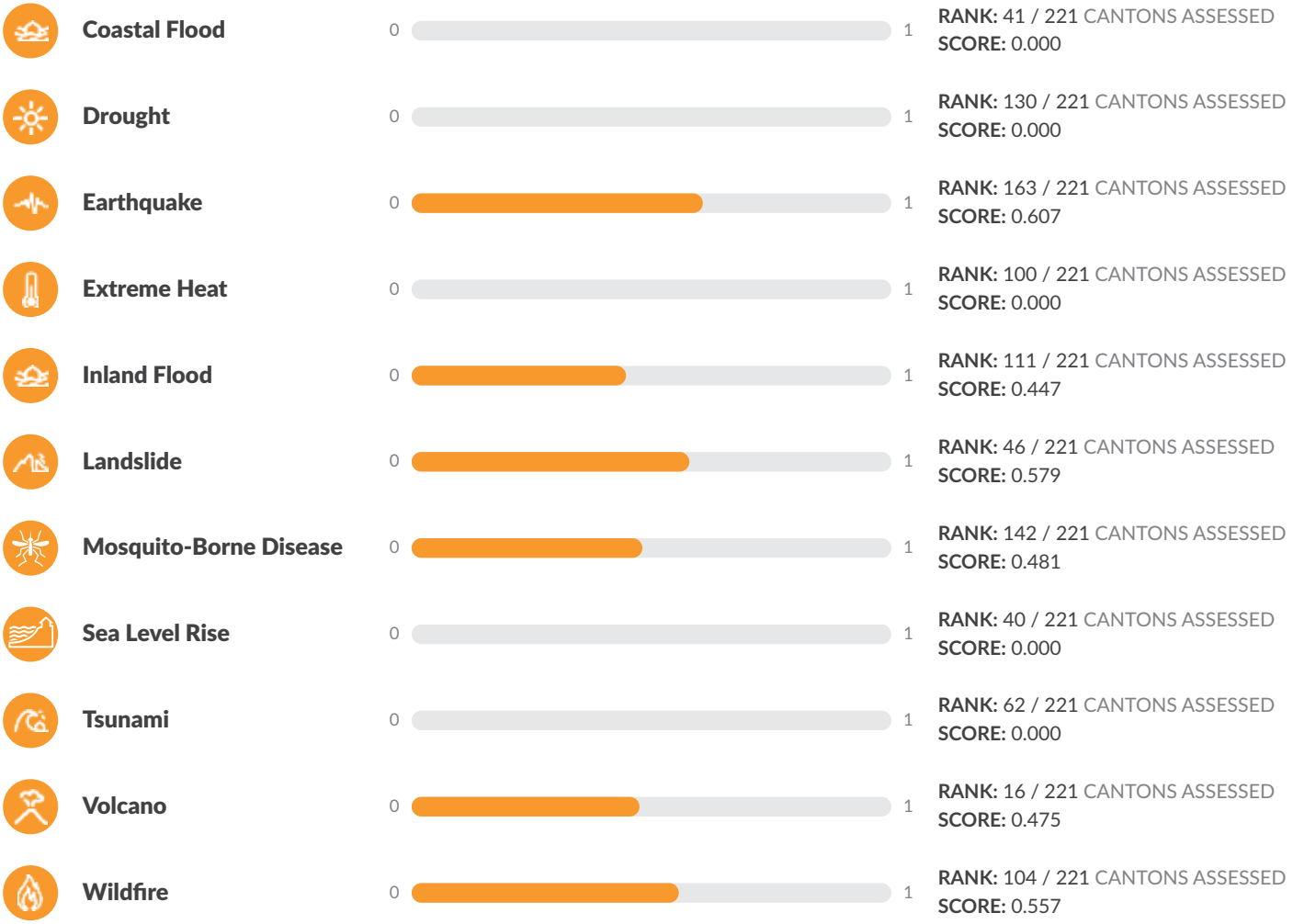
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

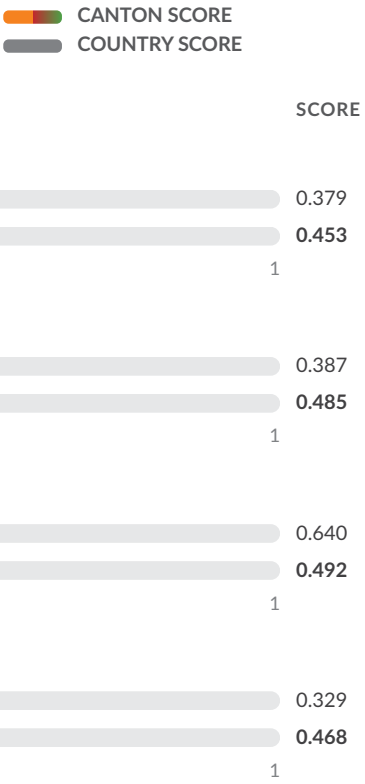


MULTI-HAZARD RISK (MHR)

RANKED
152 / 221
CANTONS ASSESSED
SCORE: 0.449

El Chaco's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

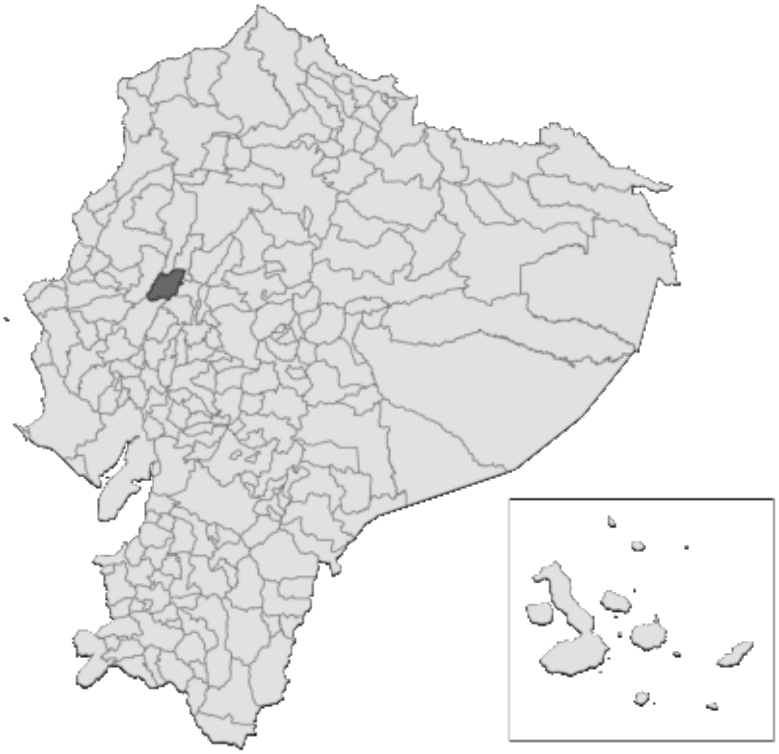
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ECUADOR

EL EMPALME

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.562 • RANK: 47/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.439 • RANK: 158/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.568 • RANK: 56/221 CANTONS ASSESSED

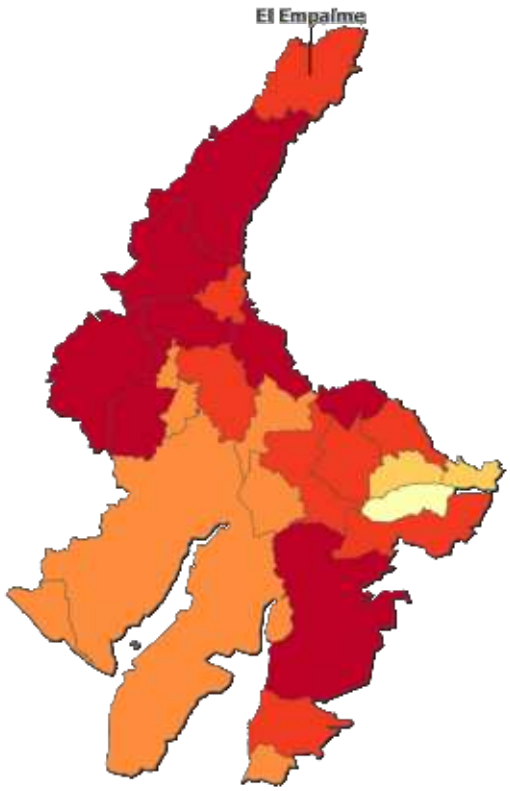
Vulnerability (V) - Very High
SCORE: 0.576 • RANK: 31/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.475 • RANK: 121/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.418 • RANK: 147/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

EL EMPALME • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	**0.562**
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 56 / 221 CANTONS ASSESSED
SCORE: 0.568



MHE
0.568

Raw MHE
0.686

Relative MHE
0.450

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **87,367** people exposed
- **37,547** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **87,367** people exposed
- **37,547** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
1%
- **1,012** people exposed
- **538** structures exposed (1%)

Critical Infrastructure Exposed: 8%

Landslide
<1%
- **98** people exposed
- **37** structures exposed (<1%)

Critical Infrastructure Exposed: 10%

Mosquito-Borne Disease
98%
- **85,243** people exposed
- **36,722** structures exposed (98%)

Critical Infrastructure Exposed: 98%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
69%
- **60,715** people exposed
- **28,004** structures exposed (75%)

Critical Infrastructure Exposed: 76%

VULNERABILITY (V)

RANK: 31 / 221 CANTONS ASSESSED **SCORE: 0.576**

Vulnerability in El Empalme is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.629

- **8.8** Average Years of Schooling
- **53.1%** Population (age 24 and over) with General Basic Education Schooling
- **8.6%** Population (age 24 and over) with No Schooling
- **7.2%** Adult Illiteracy Rate
- **64%** Households with No Internet Access
- **83.5%** Households with No Access to Television
- **87.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.717

- **57.5%** Homes with Access to Public Water Source
- **6.8%** Homes Connected to the Public Sewage System
- **58.5%** Homes without Piped Water
- **4.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.544

- **57.6** Age Dependency Ratio
- **15.4%** Unemployment Rate
- **71.5%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.691

- **8.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.690

- **0.6** Female to Male Labor Ratio (distance from parity)
- **77.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **9.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **50.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **78.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.507

- **9.4%** Prevalence of Disability (among persons age 5 and over)
- **3.8** Perinatal Mortality Rate (per 1,000 births)
- **7.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.501

- **27.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **28.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.526

31
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

35
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

85
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.619

19.1%
Homes with Exterior Walls in Poor Condition

15.9%
Homes with Inadequate Materials Used in Outer Walls

21.9%
Homes with Roofs in Poor Condition

88.8%
Households with No Access to Vehicle for Private Use

9.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.481

122.9
Population Density (persons per sq km)

0.6%
Average Annual Population Change (2010-2022)

7.2
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.399

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 121 / 221 CANTONS ASSESSED **SCORE: 0.475**

El Empalme exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.500

52.9%
Labor Force Participation

214,731
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.275

0%
Protected Area (% of land area)

-5,226.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.510

86.9%
Voter Participation

72.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.484

Communications Capacity

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.461

4.1%
Household Access to Fixed Phones

87.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.548

96.6%
Homes Served by the Public Electricity Network

70.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.256

4.4
Nurses and Midwives per 10,000 persons

11.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.670

12.9
Average Distance to Airport (km)

16.7
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 147 / 221 CANTONS ASSESSED **SCORE: 0.418**

El Empalme exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.314

5.2	1.4%	1	97.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.523

6.9	8.4	3.9	4.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 158 / 221 CANTONS ASSESSED
SCORE: 0.439

El Empalme's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Clean Water Access Vulnerability

Marginalization

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

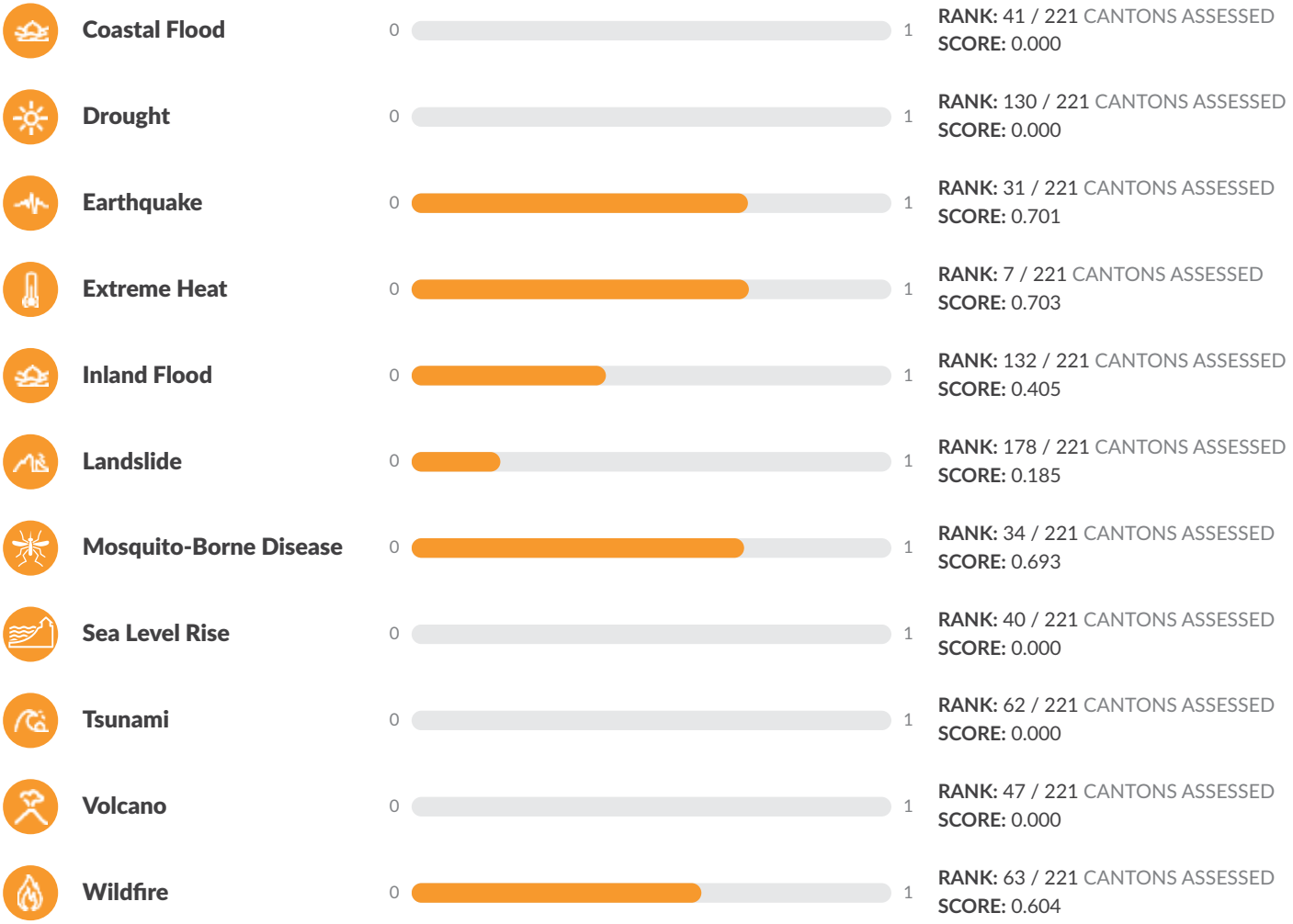
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

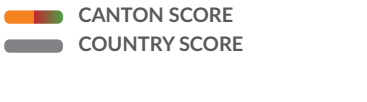


MULTI-HAZARD RISK (MHR)

RANKED
47 / 221
CANTONS ASSESSED
SCORE: 0.562

El Empalme's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

EL GUABO

NDPBA SUBNATIONAL PROFILE

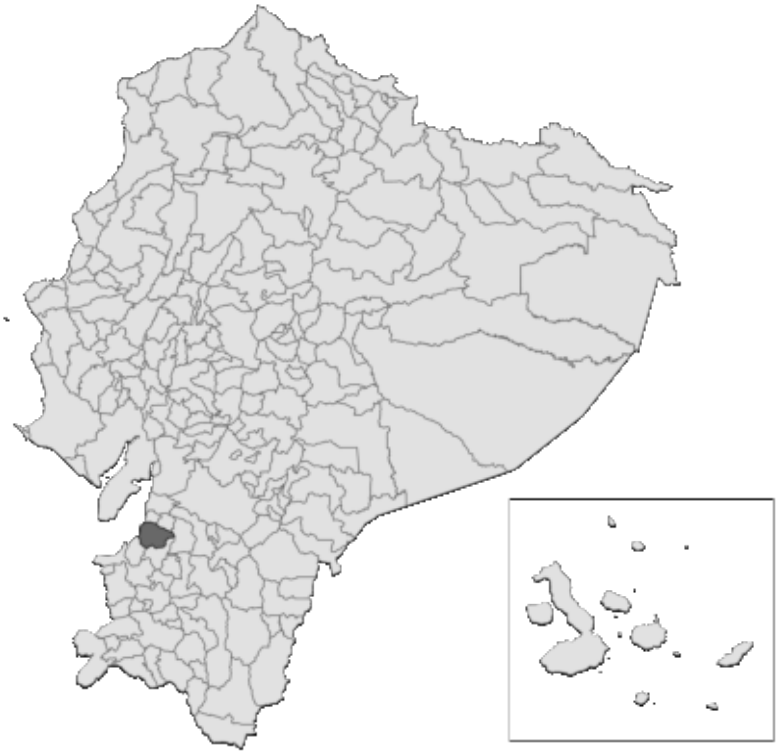
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ECUADOR

EL GUABO

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.521 • RANK: 85/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.506 • RANK: 89/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.559 • RANK: 53/221 CANTONS ASSESSED

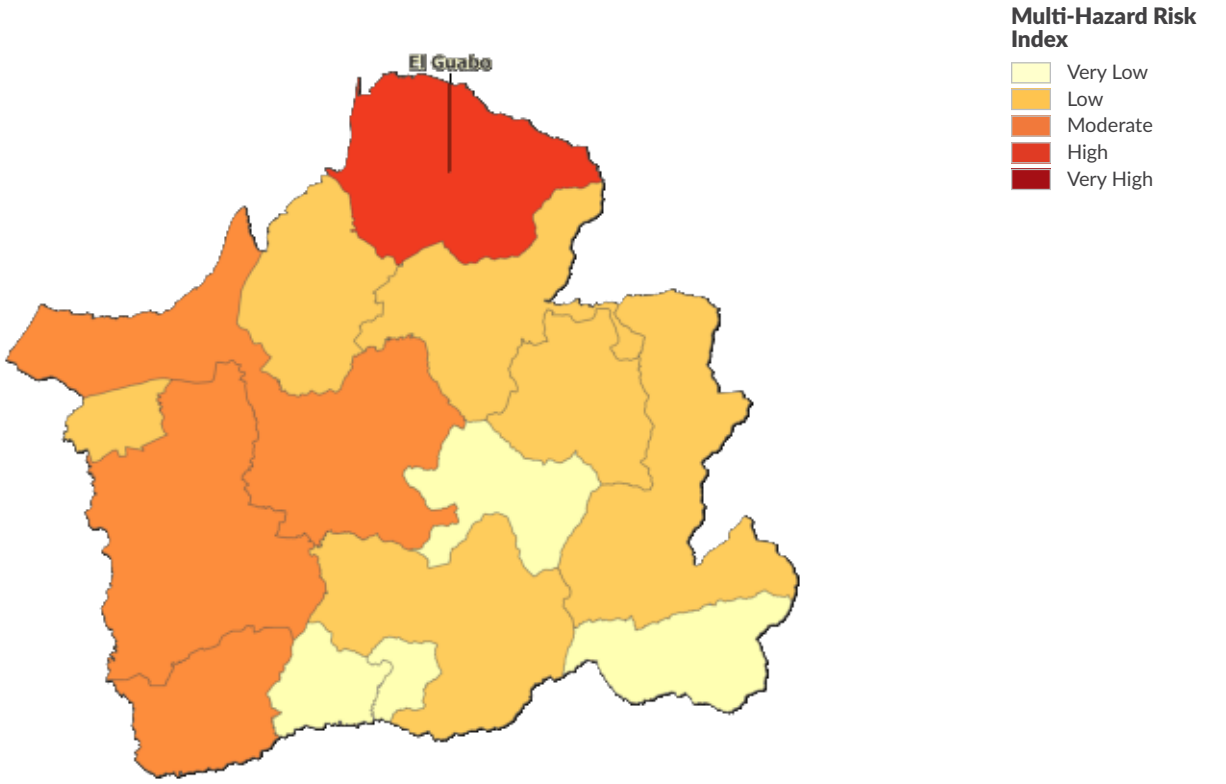
Coping Capacity (CC) - High
SCORE: 0.579 • RANK: 52/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.761 • RANK: 12/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.603 • RANK: 29/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

EL GUABO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	**0.521**
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	0.435
Portovelo	0.424
Balsas	0.420
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 12 / 221 CANTONS ASSESSED
SCORE: 0.761



MHE
0.761

Raw MHE
0.673

Relative MHE
0.849

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
5%
- **2,999** people exposed
- **1,964** structures exposed (8%)
- **Critical Infrastructure Exposed:** 17%

Drought
99%
- **55,137** people exposed
- **24,128** structures exposed (98%)
- **Critical Infrastructure Exposed:** 95%

Earthquake
100%
- **55,819** people exposed
- **24,534** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
94%
- **52,515** people exposed
- **22,905** structures exposed (93%)
- **Critical Infrastructure Exposed:** 90%

Inland Flood
44%
- **24,695** people exposed
- **10,390** structures exposed (42%)
- **Critical Infrastructure Exposed:** 49%

Landslide
2%
- **907** people exposed
- **519** structures exposed (2%)
- **Critical Infrastructure Exposed:** 5%

Mosquito-Borne Disease
93%
- **52,009** people exposed
- **22,965** structures exposed (94%)
- **Critical Infrastructure Exposed:** 89%

Sea Level Rise
2%
- **1,146** people exposed
- **743** structures exposed (3%)
- **Critical Infrastructure Exposed:** 9%

Tsunami
89%
- **49,934** people exposed
- **22,003** structures exposed (90%)
- **Critical Infrastructure Exposed:** 80%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
8%
- **4,324** people exposed
- **2,159** structures exposed (9%)
- **Critical Infrastructure Exposed:** 14%

VULNERABILITY (V)

RANK: 89 / 221 CANTONS ASSESSED **SCORE: 0.506**

Vulnerability in El Guabo is primarily driven by Disaster Impacts and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.436

- **10** Average Years of Schooling
- **48%** Population (age 24 and over) with General Basic Education Schooling
- **4.1%** Population (age 24 and over) with No Schooling
- **3%** Adult Illiteracy Rate
- **43.5%** Households with No Internet Access
- **74.8%** Households with No Access to Television
- **78.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.523

- **81.8%** Homes with Access to Public Water Source
- **67.1%** Homes Connected to the Public Sewage System
- **30.2%** Homes without Piped Water
- **12.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.382

- **55.2** Age Dependency Ratio
- **9.2%** Unemployment Rate
- **52.4%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.506

- **4.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.596

- **0.5** Female to Male Labor Ratio (distance from parity)
- **58** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **58.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **70%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.409

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.683

- **53** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **48.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.463

48
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

27
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

37
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.498

10.8%
Homes with Exterior Walls in Poor Condition

6.1%
Homes with Inadequate Materials Used in Outer Walls

13%
Homes with Roofs in Poor Condition

88.3%
Households with No Access to Vehicle for Private Use

12.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.582

102.7
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

26.8
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.622

0.2
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 52 / 221 CANTONS ASSESSED **SCORE: 0.579**

El Guabo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.651

60.4%
Labor Force Participation

349,730
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.245

0%
Protected Area (% of land area)

-7,261.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.654

85.3%
Voter Participation

94.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.544

Communications Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.436

4.8%
Household Access to Fixed Phones

84.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.642

98.3%
Homes Served by the Public Electricity Network

73.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.402

11.6
Nurses and Midwives per 10,000 persons

12.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.695

6.2
Average Distance to Airport (km)

21.6
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 29 / 221 CANTONS ASSESSED **SCORE: 0.603**

El Guabo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.561

1.7	2.2%	1.1	17
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.644

7.6	4.3	2.4	3.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 53 / 221 CANTONS ASSESSED
SCORE: 0.559

El Guabo's score and ranking are due to High Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Disaster Impacts



Healthcare Capacity



Marginalization



Population Pressures

KEY FACTORS INFLUENCING RESILIENCE



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Marginalization

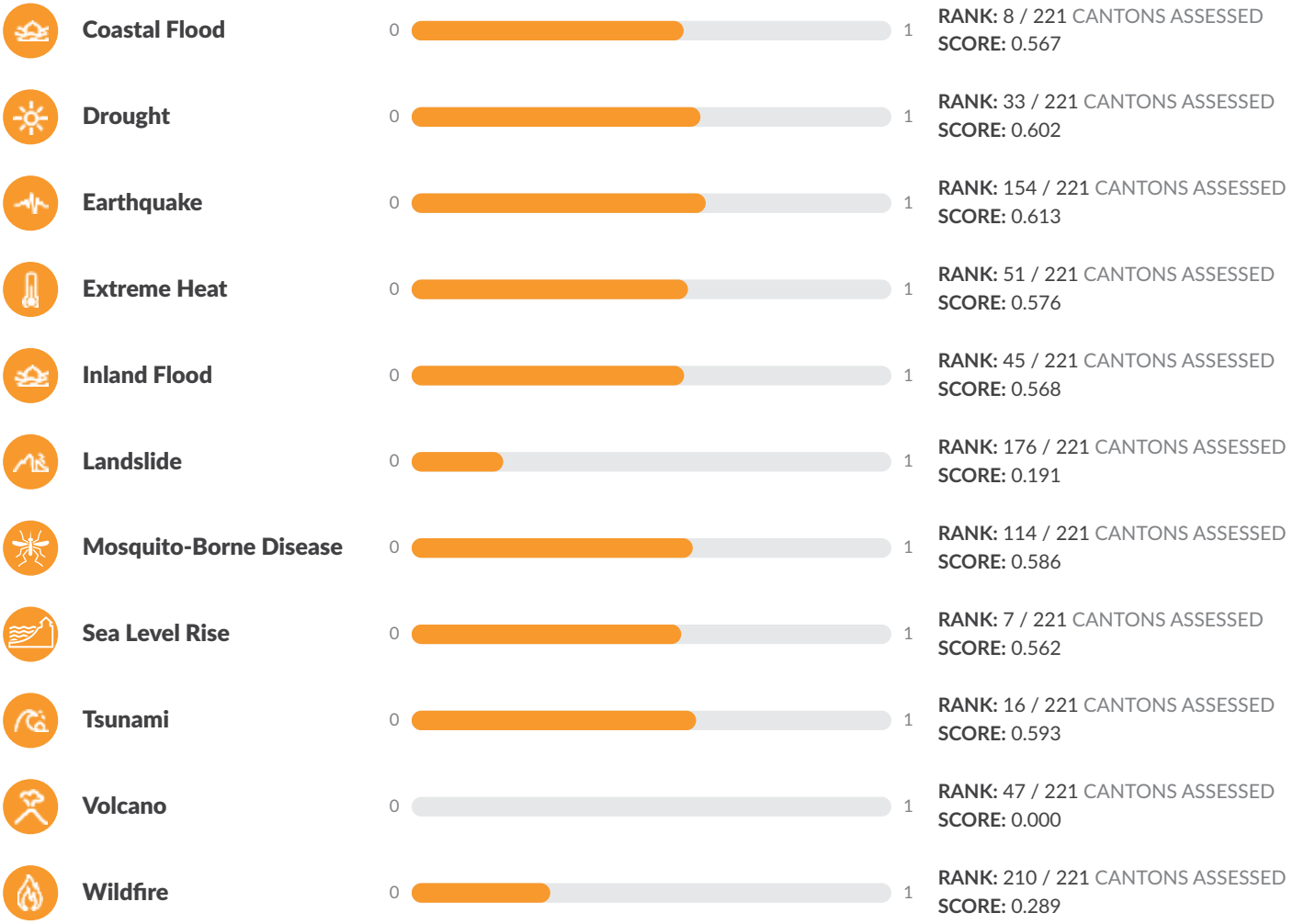
Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

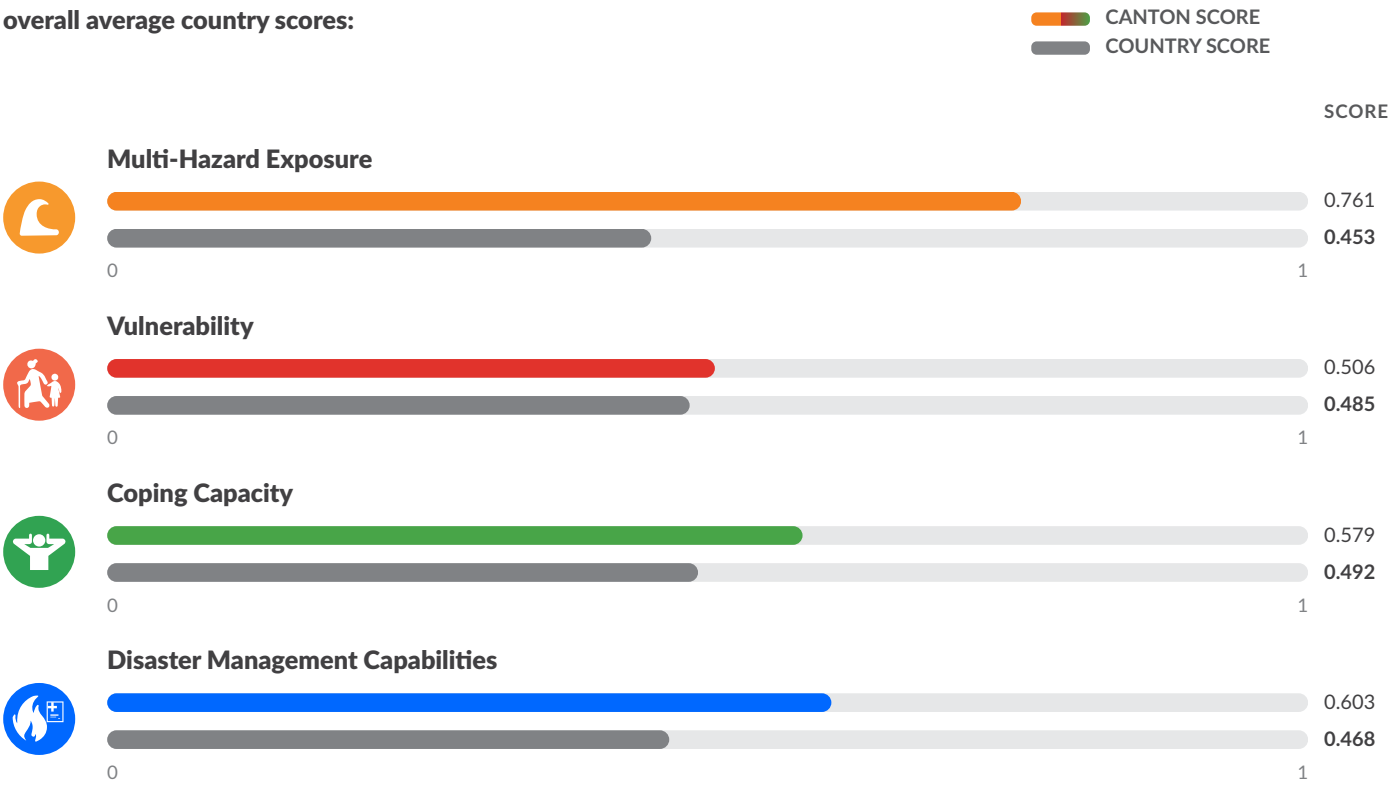


MULTI-HAZARD RISK (MHR)

RANKED
85 / 221
CANTONS ASSESSED
SCORE: 0.521

El Guabo's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ELOY ALFARO

NDPBA SUBNATIONAL PROFILE

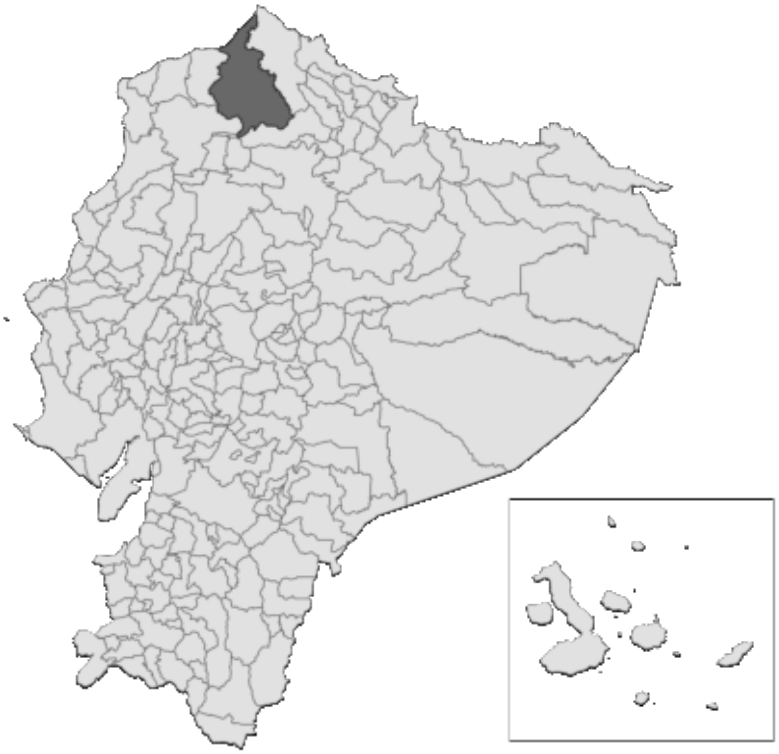
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ELOY ALFARO

PROVINCE: ESMERALDAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.631 • RANK: 5/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.626 • RANK: 10/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.352 • RANK: 211/221 CANTONS ASSESSED

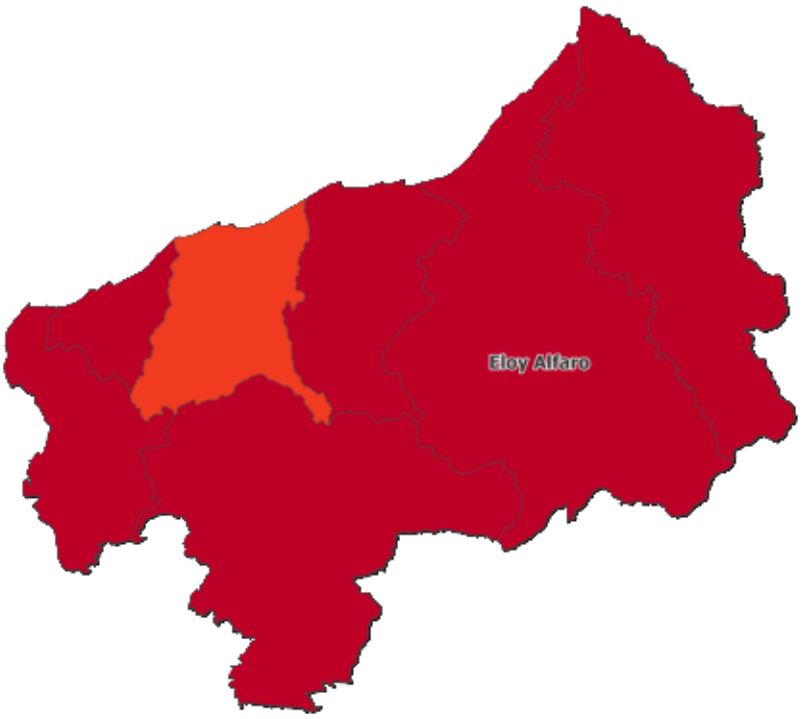
Coping Capacity (CC) - Very Low
SCORE: 0.349 • RANK: 201/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.578 • RANK: 51/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.333 • RANK: 193/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ESMERALDAS PROVINCE

ELOY ALFARO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Rioverde	0.636
Eloy Alfaro	**0.631**
Muisne	0.614
Atacames	0.585
San Lorenzo	0.572
Quinindé	0.568
Esmeraldas	0.523

MULTI-HAZARD EXPOSURE (MHE)

RANK: 51 / 221 CANTONS ASSESSED
SCORE: 0.578



MHE
0.578

Raw MHE
0.604

Relative MHE
0.552

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
13%
- **6,743** people exposed
- **2,538** structures exposed (14%)
- **Critical Infrastructure Exposed:** 21%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Earthquake
100%
- **50,853** people exposed
- **18,699** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
88%
- **44,791** people exposed
- **15,305** structures exposed (82%)
- **Critical Infrastructure Exposed:** 84%

Inland Flood
29%
- **14,964** people exposed
- **5,236** structures exposed (28%)
- **Critical Infrastructure Exposed:** 23%

Landslide
2%
- **1,192** people exposed
- **760** structures exposed (4%)
- **Critical Infrastructure Exposed:** 3%

Mosquito-Borne Disease
99%
- **50,216** people exposed
- **18,183** structures exposed (97%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
3%
- **1,627** people exposed
- **593** structures exposed (3%)
- **Critical Infrastructure Exposed:** 5%

Tsunami
50%
- **25,489** people exposed
- **8,548** structures exposed (46%)
- **Critical Infrastructure Exposed:** 61%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
63%
- **32,042** people exposed
- **12,061** structures exposed (65%)
- **Critical Infrastructure Exposed:** 48%

VULNERABILITY (V)

RANK: 10 / 221 CANTONS ASSESSED **SCORE: 0.626**

Vulnerability in Eloy Alfaro is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.690

- **8.1** Average Years of Schooling
- **46.1%** Population (age 24 and over) with General Basic Education Schooling
- **13.2%** Population (age 24 and over) with No Schooling
- **10.3%** Adult Illiteracy Rate
- **83.6%** Households with No Internet Access
- **76.2%** Households with No Access to Television
- **93.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.805

- **29.5%** Homes with Access to Public Water Source
- **12.5%** Homes Connected to the Public Sewage System
- **77%** Homes without Piped Water
- **6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.698

- **69** Age Dependency Ratio
- **19.8%** Unemployment Rate
- **87.6%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.562

- **5.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.784

- **0.6** Female to Male Labor Ratio (distance from parity)
- **74.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **97.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **84.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.423

- **10.3%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.516

- **20.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **27.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.565

13
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

123
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.777

28.9%
Homes with Exterior Walls in Poor Condition

2.9%
Homes with Inadequate Materials Used in Outer Walls

32.2%
Homes with Roofs in Poor Condition

97.9%
Households with No Access to Vehicle for Private Use

14.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.512

10.3
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

13.1
Net Migration Rate (per 1,000 persons)

0.35
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.332

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 201 / 221 CANTONS ASSESSED **SCORE: 0.349**

Eloy Alfaro exhibits weaker Coping Capacity in the areas of Governance and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.363

48.6%
Labor Force Participation

73,646
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.398

37.5%
Protected Area (% of land area)

-37,340.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.281

81.1%
Voter Participation

42.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.387

Communications Capacity

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.285

5.7%
Household Access to Fixed Phones

58.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.320

89%
Homes Served by the Public Electricity Network

57.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.617

25.1
Nurses and Midwives per 10,000 persons

21.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.325

36
Average Distance to Airport (km)

73.2
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 193 / 221 CANTONS ASSESSED **SCORE: 0.333**

Eloy Alfaro exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.380

6.8	6.3%	0.9	73.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.285

21.7	19.9	5.6	11
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 211 / 221 CANTONS ASSESSED
SCORE: 0.352

Eloy Alfaro's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Marginalization

Housing and Transportation Vulnerability

Governance

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

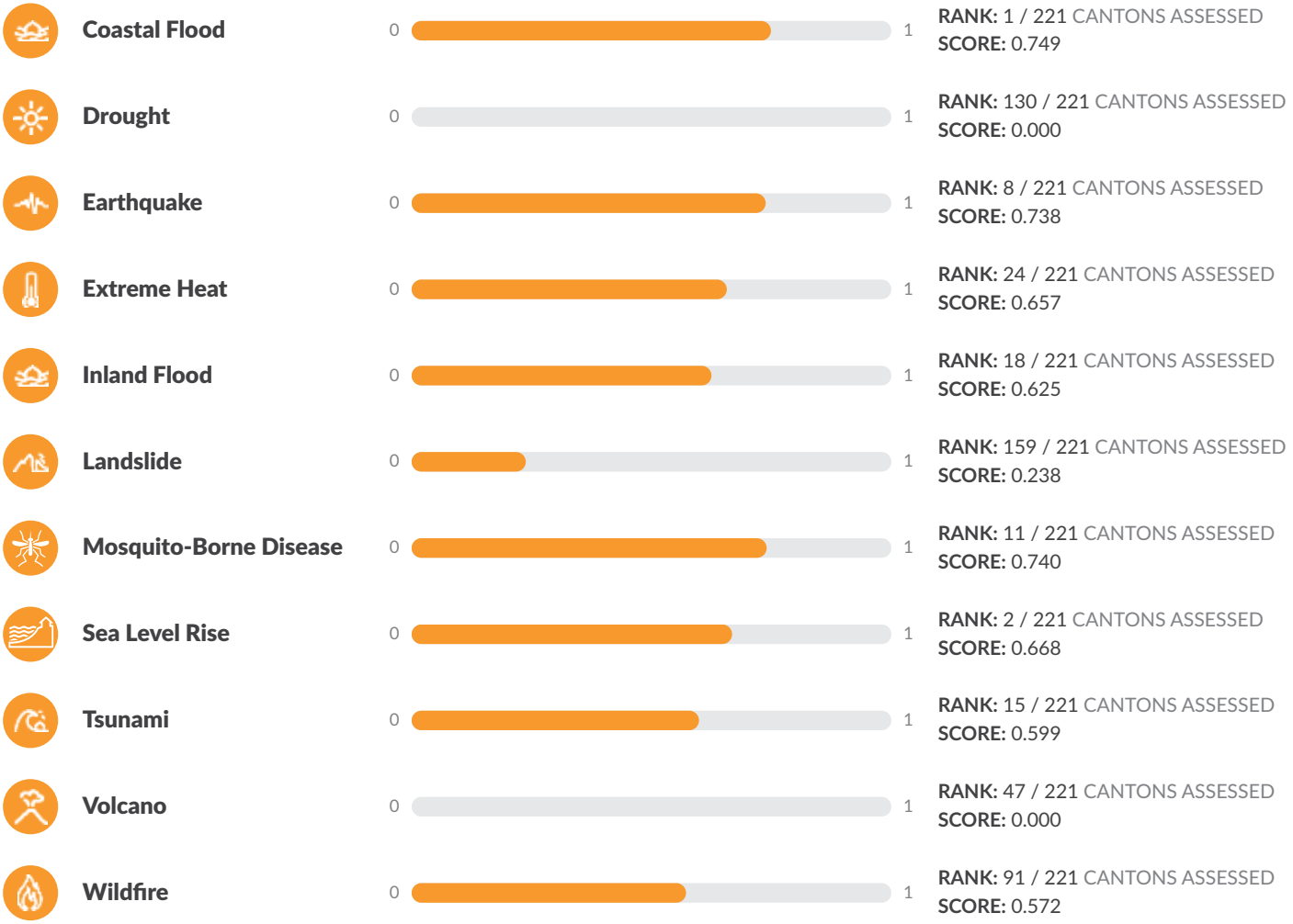
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

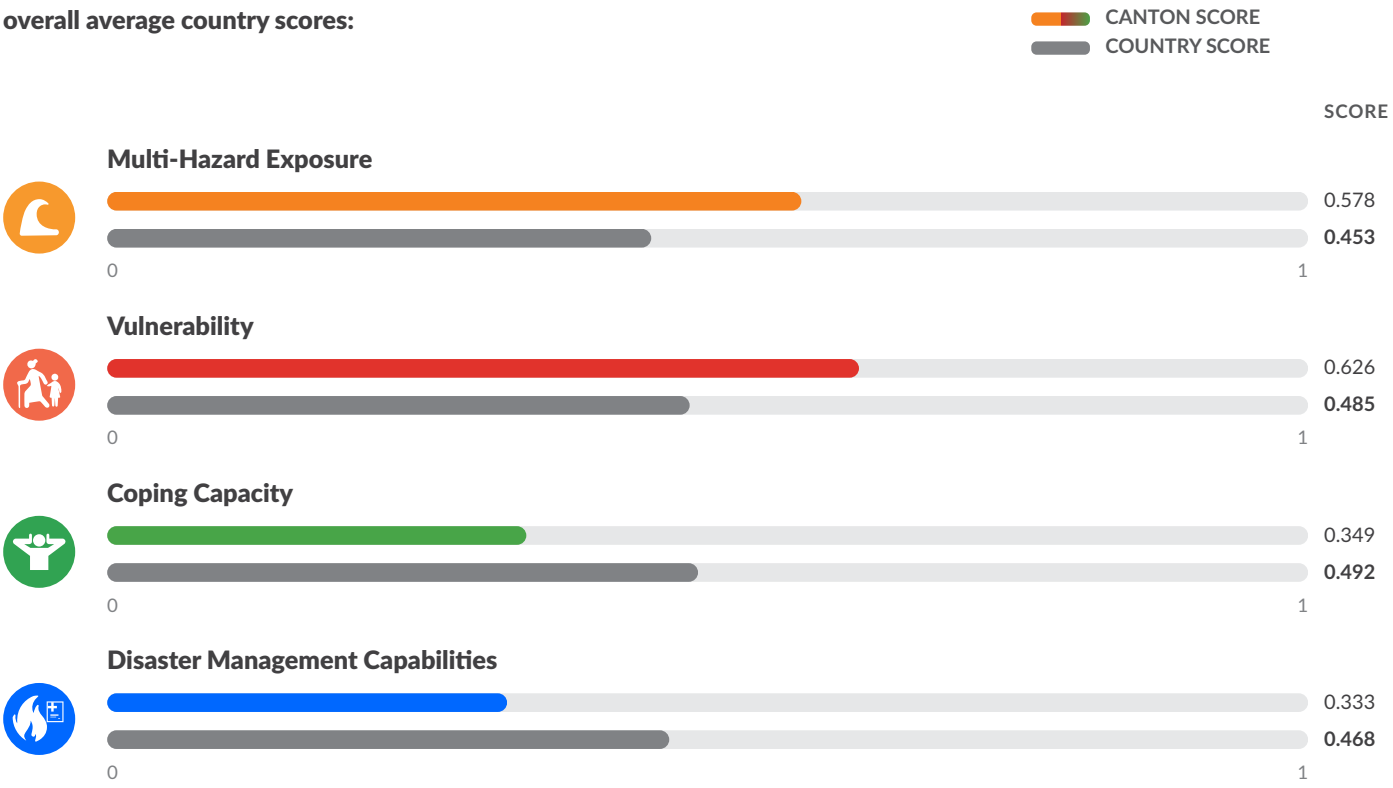


MULTI-HAZARD RISK (MHR)

RANKED
5 / 221
CANTONS ASSESSED
SCORE: 0.631

Eloy Alfaro's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

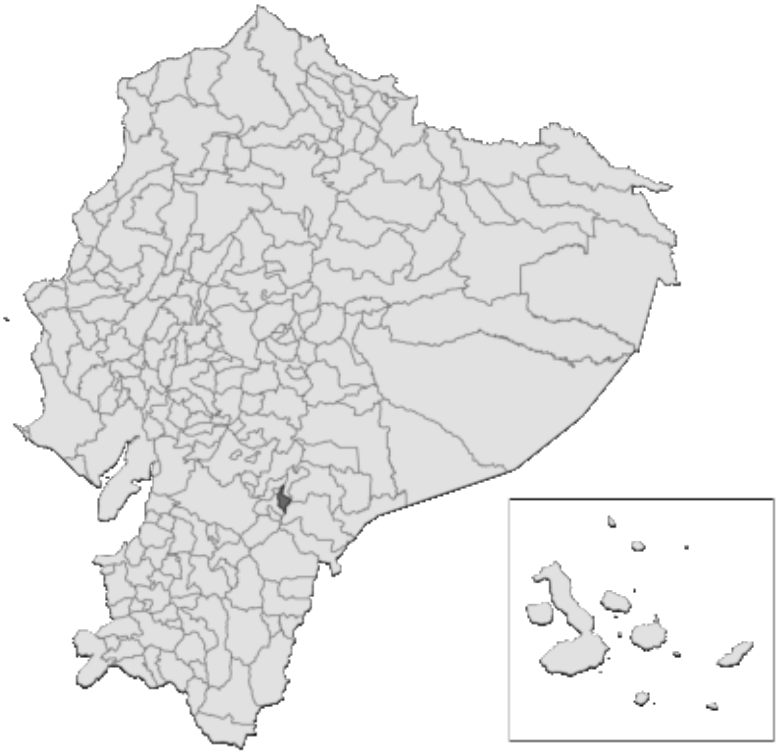
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ECUADOR

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PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.407 • RANK: 199/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.516 • RANK: 84/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.176 • RANK: 213/221 CANTONS ASSESSED

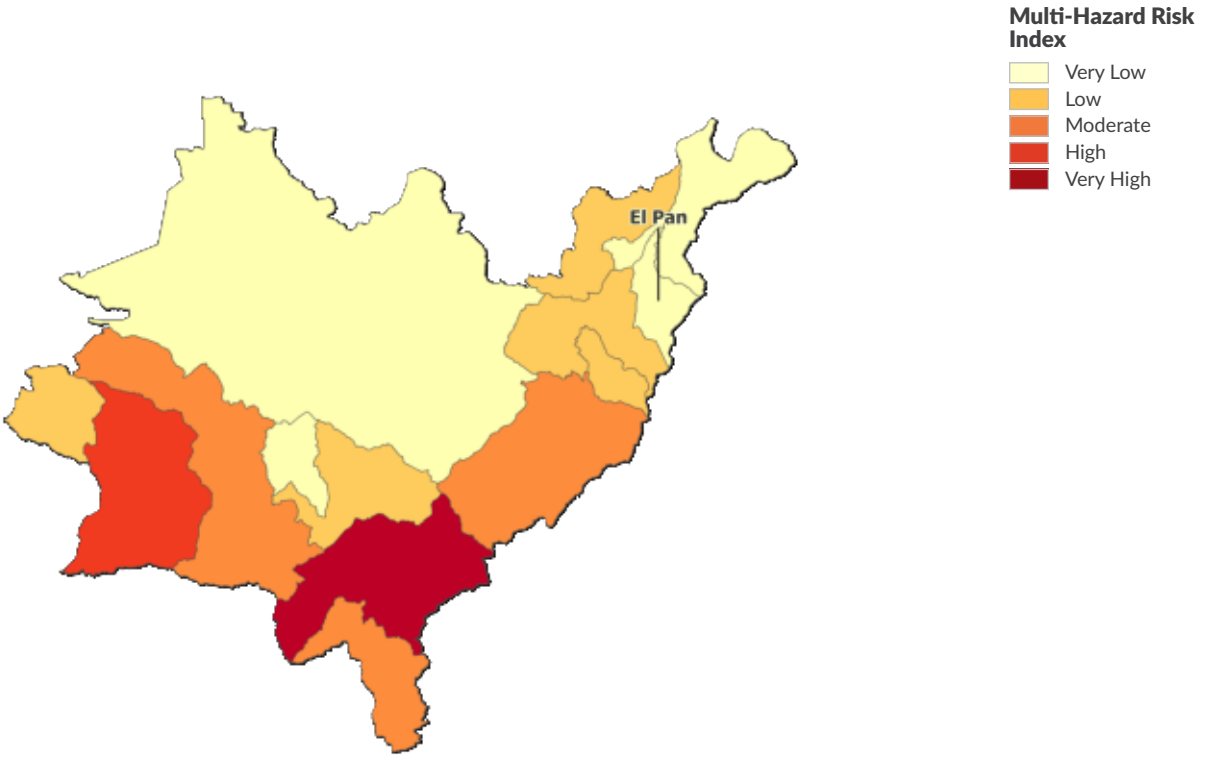
Vulnerability (V) - Very Low
SCORE: 0.374 • RANK: 201/221 CANTONS ASSESSED

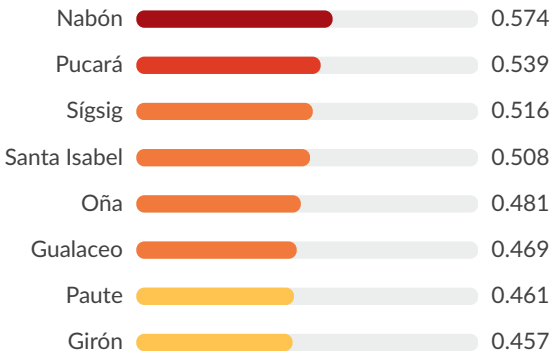
Coping Capacity (CC) - Very Low
SCORE: 0.363 • RANK: 193/221 CANTONS ASSESSED

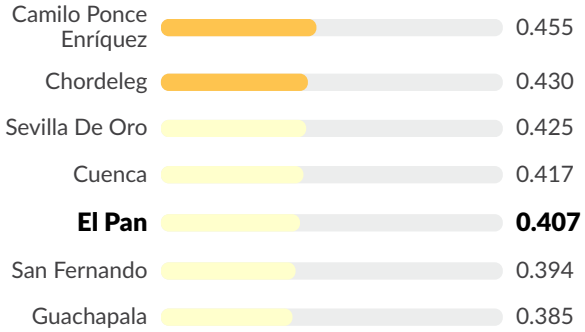
Disaster Management Capabilities (DMC) - High
SCORE: 0.560 • RANK: 55/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

EL PAN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE







MULTI-HAZARD EXPOSURE (MHE)

RANK: 213 / 221 CANTONS ASSESSED
SCORE: 0.176



MHE
0.176

Raw MHE
0.149

Relative MHE
0.203

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
3,668 people exposed
3,610 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Landslide
100%
3,668 people exposed
3,437 structures exposed (95%)
Critical Infrastructure Exposed: 99%

Mosquito-Borne Disease
28%
1,019 people exposed
720 structures exposed (20%)
Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
3,668 people exposed
3,610 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 201 / 221 CANTONS ASSESSED **SCORE: 0.374**

Vulnerability in El Pan is primarily driven by Information Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.553

- **8.5** Average Years of Schooling
- **57.7%** Population (age 24 and over) with General Basic Education Schooling
- **6.7%** Population (age 24 and over) with No Schooling
- **4.8%** Adult Illiteracy Rate
- **36.4%** Households with No Internet Access
- **87.6%** Households with No Access to Television
- **73.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.227

- **85.5%** Homes with Access to Public Water Source
- **74%** Homes Connected to the Public Sewage System
- **12.2%** Homes without Piped Water
- **1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.479

- **71.6** Age Dependency Ratio
- **9.9%** Unemployment Rate
- **25.6%** Poverty Rate (based on UBN)
- **1.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.397

- **2.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.430

- **0.4** Female to Male Labor Ratio (distance from parity)
- **9.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **100%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **42.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.491

- **16.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **13.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.096

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.635

103	46	74	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.364

9.5%	4.1%	19.5%	75.7%	3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.228

19.9	-0.6	-2.5	0.24
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.215

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 193 / 221 CANTONS ASSESSED **SCORE: 0.363**

El Pan exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.157

48.9%
Labor Force Participation

4,013
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.337

0%
Protected Area (% of land area)

-1,104.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.343

73%
Voter Participation

81.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.597

Communications Capacity

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.667

28.6%
Household Access to Fixed Phones

81.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.854

98.6%
Homes Served by the Public Electricity Network

89.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.503

10.8
Nurses and Midwives per 10,000 persons

25.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.363

37.3
Average Distance to Airport (km)

105.9
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 55 / 221 CANTONS ASSESSED **SCORE: 0.560**

El Pan exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.393

1.9	2.3%	0	35.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.727

11.7	2.8	1.6	2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 84 / 221 CANTONS ASSESSED
SCORE: 0.516

El Pan's score and ranking are due to Very Low Vulnerability combined with Very Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Transportation Capacity

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

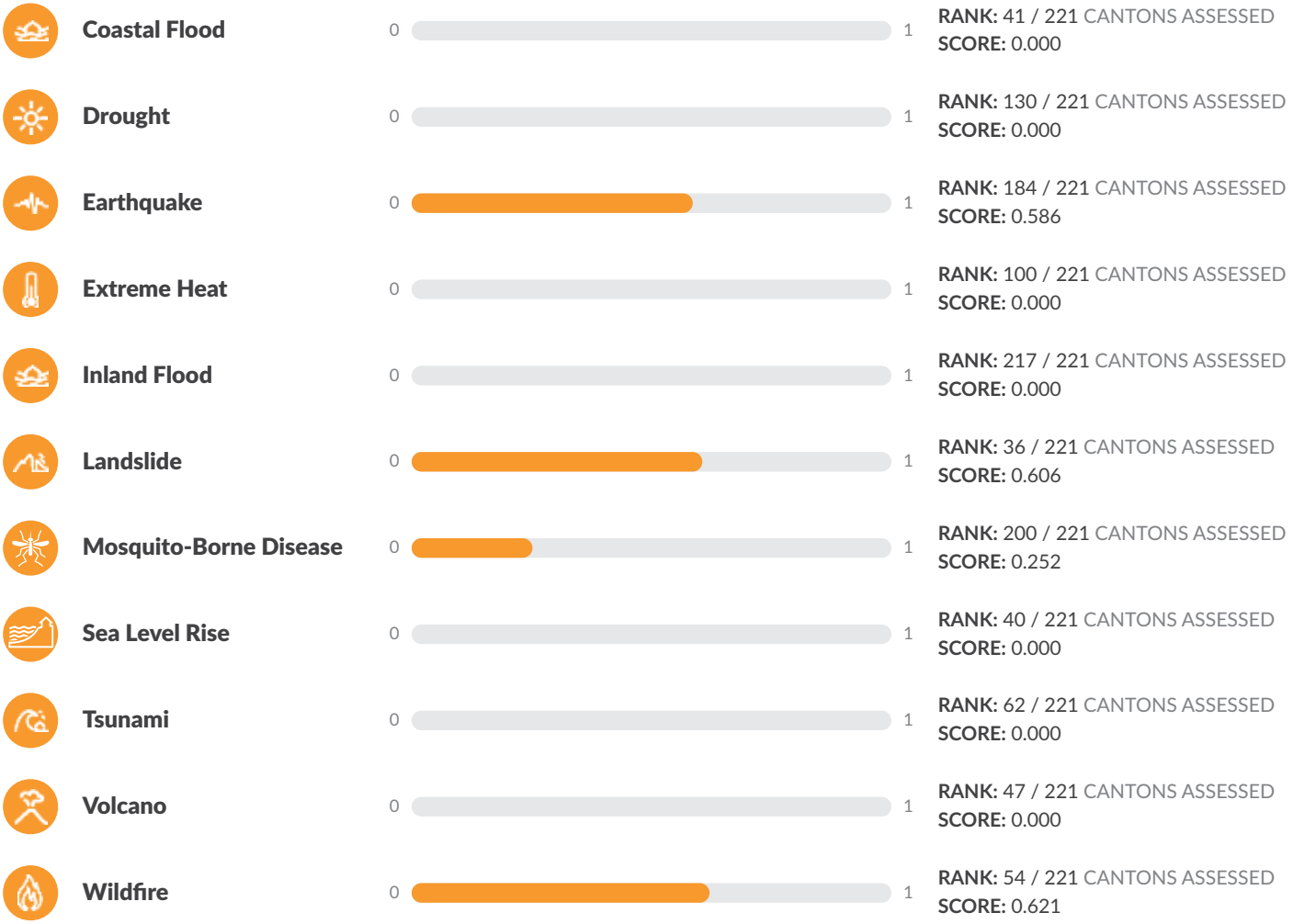
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

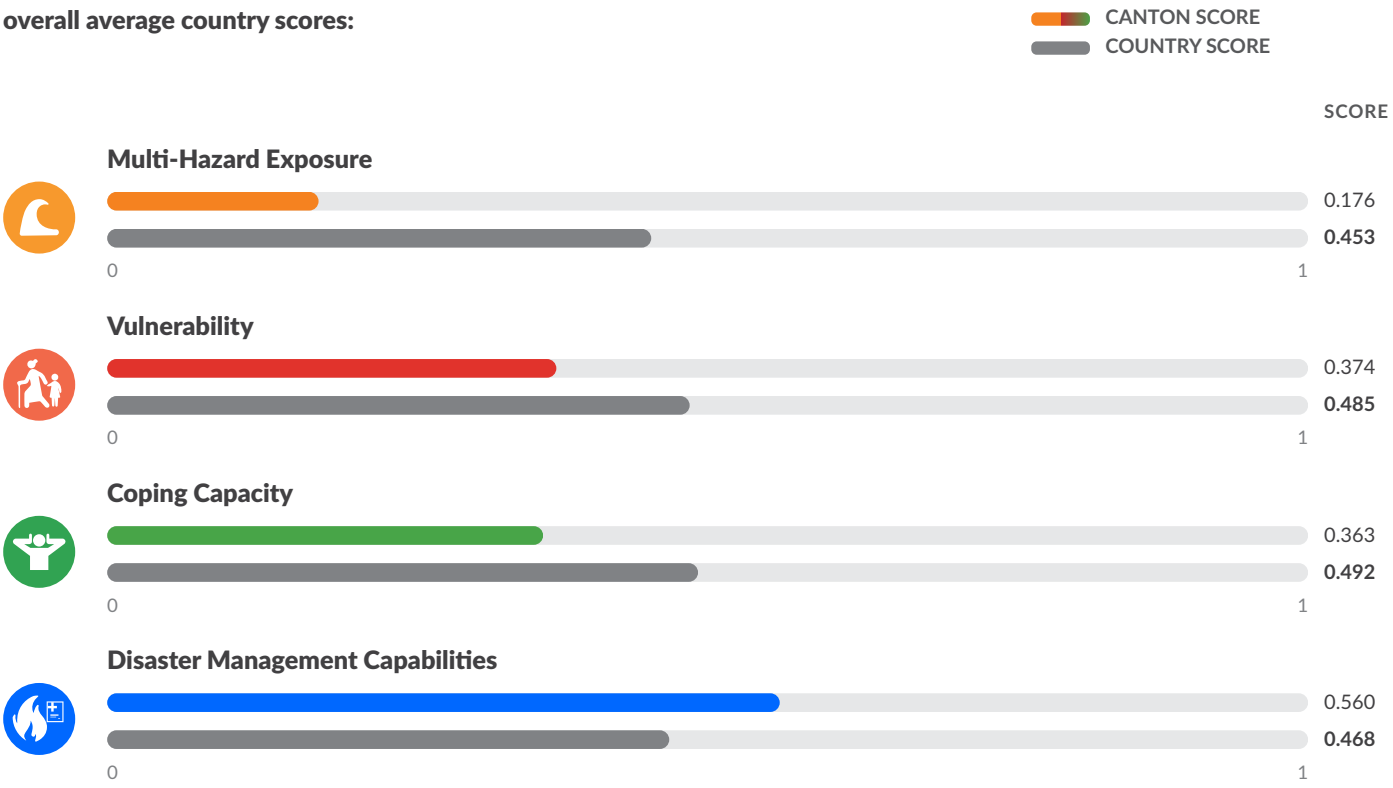


MULTI-HAZARD RISK (MHR)

RANKED
199 / 221
CANTONS ASSESSED
SCORE: 0.407

El Pan's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, Very Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

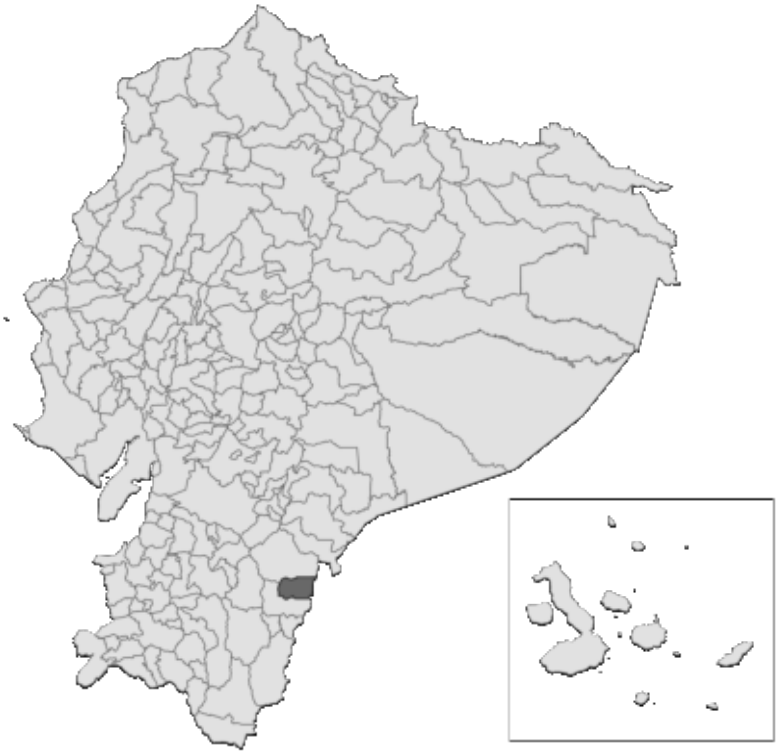
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EL PANGUI

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.428 • RANK: 176/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.501 • RANK: 95/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.214 • RANK: 206/221 CANTONS ASSESSED

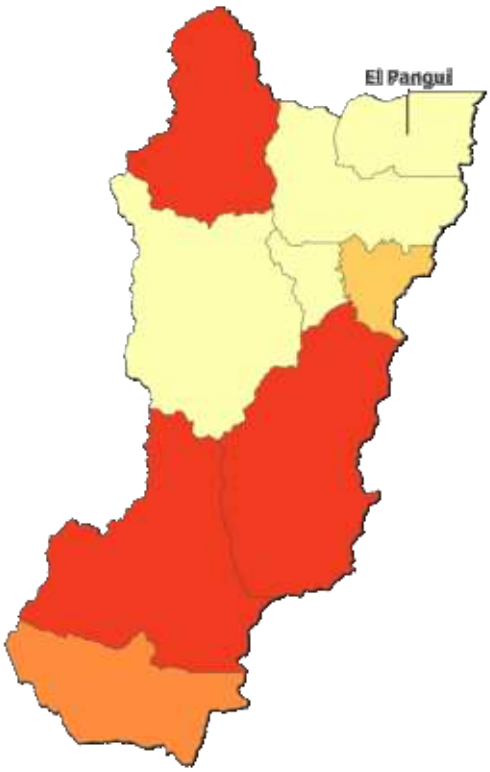
Vulnerability (V) - High
SCORE: 0.513 • RANK: 84/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.539 • RANK: 73/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.478 • RANK: 91/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

EL PANGUI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Palanda	0.535
Yacuambi	0.535
Nangaritza	0.524
Chinchipe	0.511
Paquisha	0.465
Centinela Del Cóndor	0.428
El Pangui	**0.428**
Zamora	0.419
Yantzaza	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 206 / 221 CANTONS ASSESSED
SCORE: 0.214



MHE
0.214

Raw MHE
0.301

Relative MHE
0.127

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
10,452 people exposed
9,685 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
10%
1,037 people exposed
1,339 structures exposed (14%)
Critical Infrastructure Exposed: 7%

Landslide
35%
3,703 people exposed
3,832 structures exposed (40%)
Critical Infrastructure Exposed: 51%

Mosquito-Borne Disease
99%
10,380 people exposed
9,538 structures exposed (98%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
13%
1,307 people exposed
2,021 structures exposed (21%)
Critical Infrastructure Exposed: 34%

VULNERABILITY (V)

RANK: 84 / 221 CANTONS ASSESSED **SCORE: 0.513**

Vulnerability in El Pangui is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.426

- **10.2** Average Years of Schooling
- **46.5%** Population (age 24 and over) with General Basic Education Schooling
- **4.6%** Population (age 24 and over) with No Schooling
- **3.2%** Adult Illiteracy Rate
- **38.5%** Households with No Internet Access
- **79%** Households with No Access to Television
- **73.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.531

- **78.2%** Homes with Access to Public Water Source
- **62.2%** Homes Connected to the Public Sewage System
- **32.3%** Homes without Piped Water
- **10.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.548

- **62.1** Age Dependency Ratio
- **16.2%** Unemployment Rate
- **50.2%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.650

- **7.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.556

- **0.4** Female to Male Labor Ratio (distance from parity)
- **79.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **81.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **38.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.290

- **4.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.346

- **23.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **29.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.395

16
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

22
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

19
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.375

8.8%
Homes with Exterior Walls in Poor Condition

0.5%
Homes with Inadequate Materials Used in Outer Walls

10%
Homes with Roofs in Poor Condition

85.2%
Households with No Access to Vehicle for Private Use

9.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.664

20.2
Population Density (persons per sq km)

3.3%
Average Annual Population Change (2010-2022)

22.7
Net Migration Rate (per 1,000 persons)

0.33
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.689

0.5
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 73 / 221 CANTONS ASSESSED **SCORE: 0.539**

El Pangui exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.708

59.8%
Labor Force Participation

877,479
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.353

0%
Protected Area (% of land area)

-103.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.416

79.8%
Voter Participation

78.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.555

Communications Capacity

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.572

7.8%
Household Access to Fixed Phones

88.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.551

95.8%
Homes Served by the Public Electricity Network

74%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.635

19.6
Nurses and Midwives per 10,000 persons

31.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.460

22.3
Average Distance to Airport (km)

59.8
Average Distance to Sea or River Port (km)

0.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 91 / 221 CANTONS ASSESSED **SCORE: 0.478**

El Pangui exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.449

1.8	18.5%	0	65.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.506

23.2	6.2	3	4.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 95 / 221 CANTONS ASSESSED
SCORE: 0.501

El Pangui's score and ranking are due to High Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Disaster Impacts


Population Pressures


Governance


Marginalization

KEY FACTORS INFLUENCING RESILIENCE



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Governance

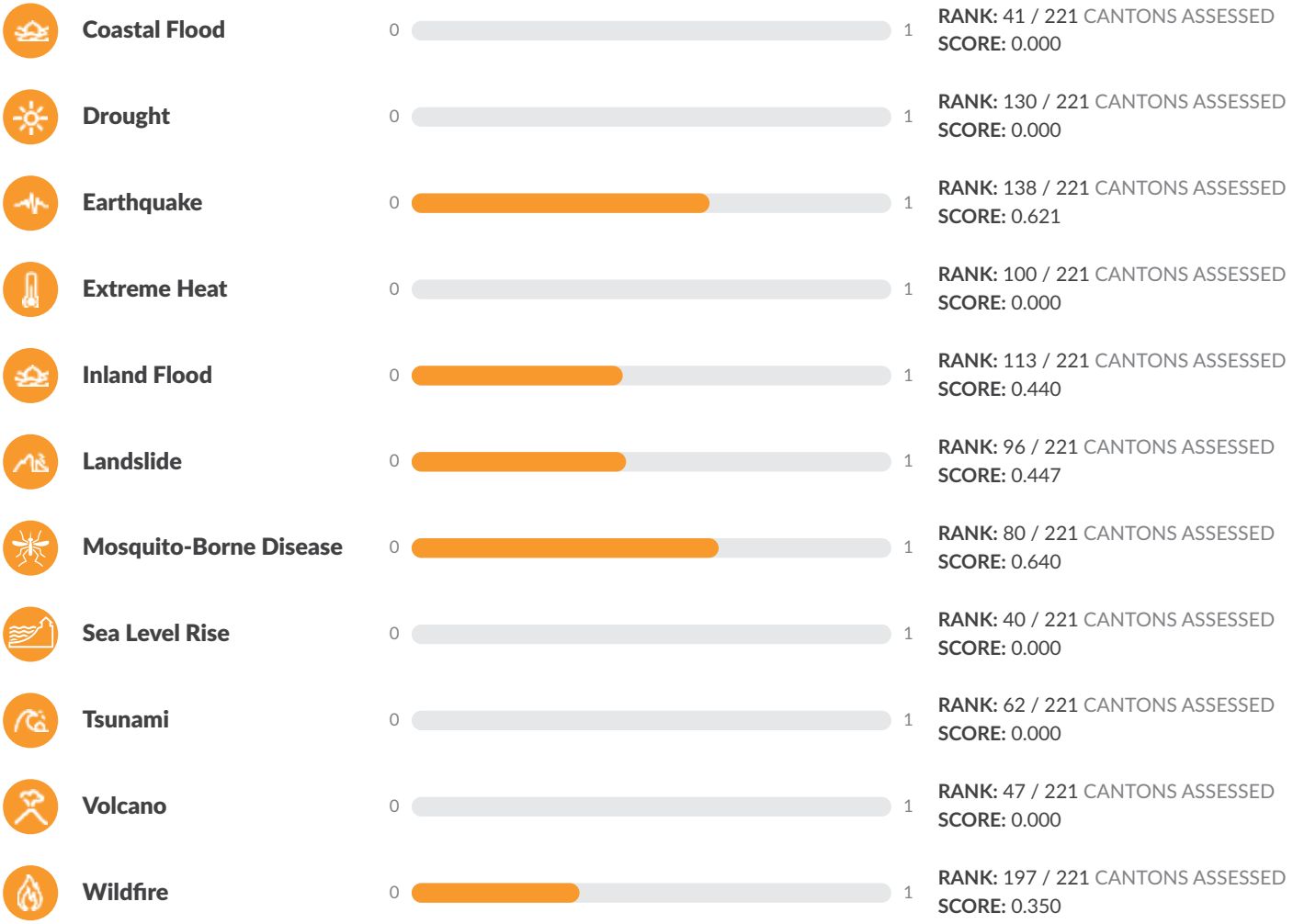
The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

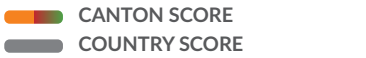


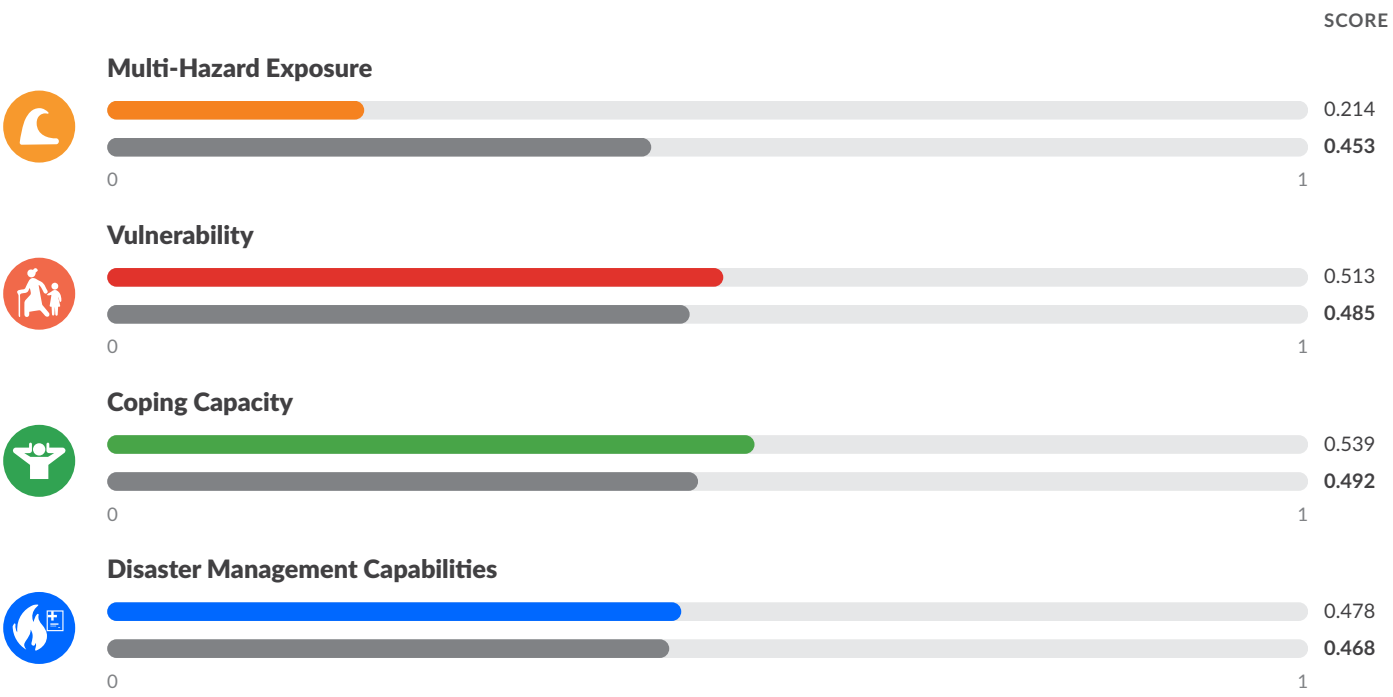
MULTI-HAZARD RISK (MHR)

RANKED
176 / 221
CANTONS ASSESSED
SCORE: 0.428

El Pangui's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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NDPBA SUBNATIONAL PROFILE

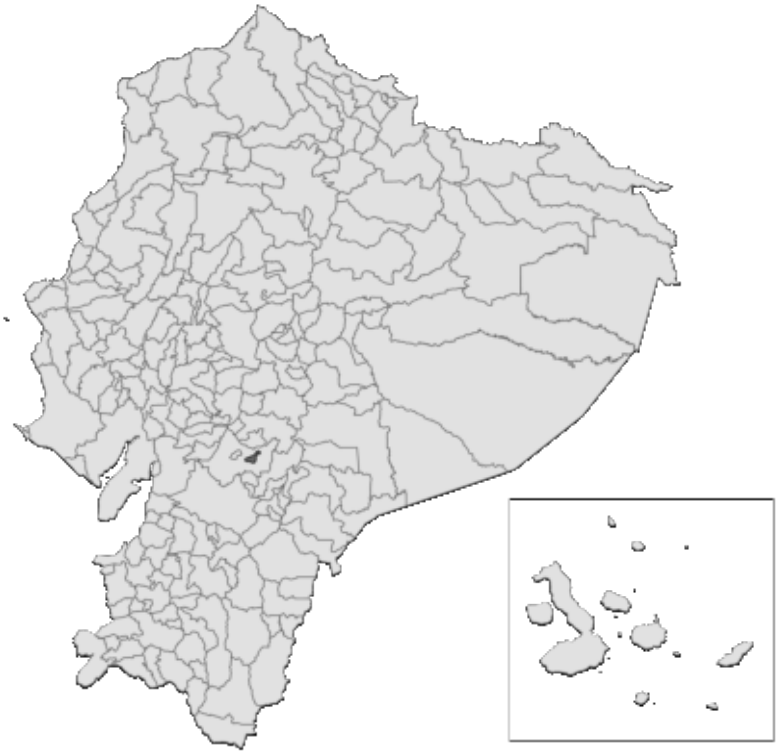
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PROVINCE: CAÑAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.399 • RANK: 200/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.560 • RANK: 51/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.278 • RANK: 186/221 CANTONS ASSESSED

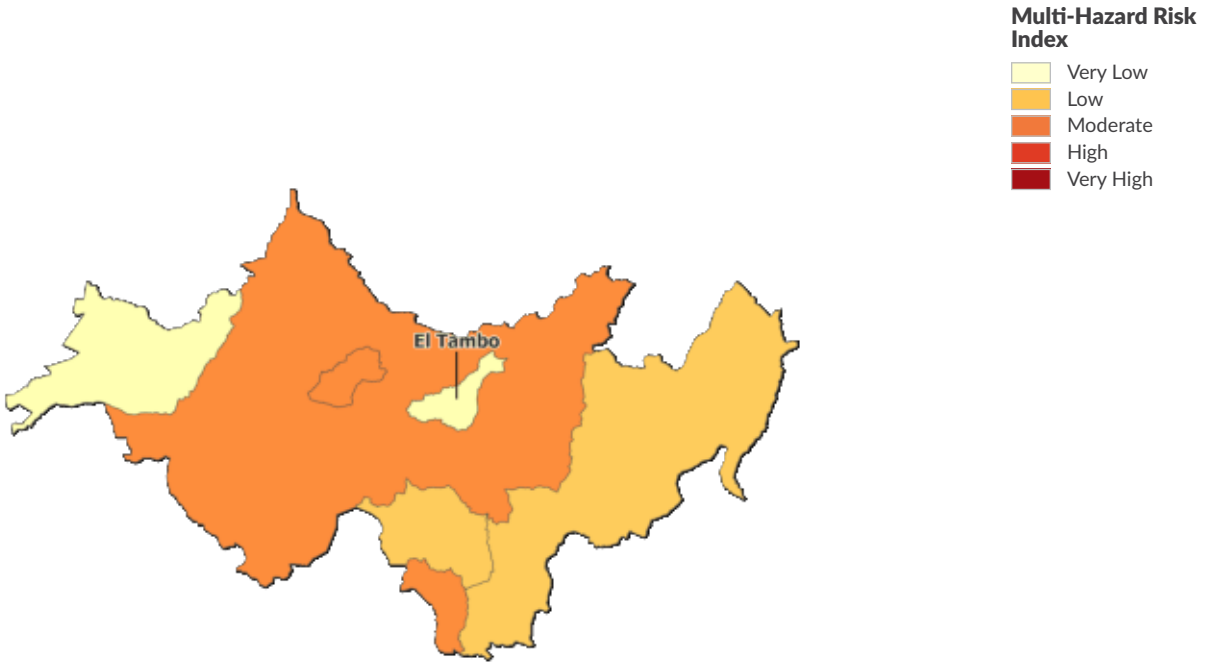
Vulnerability (V) - Low
SCORE: 0.415 • RANK: 175/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.481 • RANK: 117/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.614 • RANK: 25/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CAÑAR PROVINCE

EL TAMBO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Suscal	0.506
Cañar	0.504
Déleg	0.479
Biblián	0.457
Azogues	0.445
La Troncal	0.426
El Tambo	**0.399**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 186 / 221 CANTONS ASSESSED
SCORE: 0.278



MHE
0.278

Raw MHE
0.325

Relative MHE
0.232

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
81%
- **8,743** people exposed
- **7,324** structures exposed (84%)
- **Critical Infrastructure Exposed:** 74%

Earthquake
100%
- **10,732** people exposed
- **8,685** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
0%
- **0** people exposed
- **3** structures exposed (<1%)
- **Critical Infrastructure Exposed:** <1%

Landslide
52%
- **5,596** people exposed
- **4,810** structures exposed (55%)
- **Critical Infrastructure Exposed:** 37%

Mosquito-Borne Disease
<1%
- **54** people exposed
- **94** structures exposed (1%)
- **Critical Infrastructure Exposed:** 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
74%
- **7,913** people exposed
- **6,712** structures exposed (77%)
- **Critical Infrastructure Exposed:** 86%

VULNERABILITY (V)

RANK: 175 / 221 CANTONS ASSESSED **SCORE: 0.415**

Vulnerability in El Tambo is primarily driven by Economic Constraints and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.497

- **9.2** Average Years of Schooling
- **43.2%** Population (age 24 and over) with General Basic Education Schooling
- **11.8%** Population (age 24 and over) with No Schooling
- **10.4%** Adult Illiteracy Rate
- **34.9%** Households with No Internet Access
- **75.5%** Households with No Access to Television
- **71.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.272

- **96.3%** Homes with Access to Public Water Source
- **77.7%** Homes Connected to the Public Sewage System
- **21.2%** Homes without Piped Water
- **4.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.501

- **64.7** Age Dependency Ratio
- **13.8%** Unemployment Rate
- **34.6%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.174

- **0.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.376

- **0.4** Female to Male Labor Ratio (distance from parity)
- **59.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **47.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **25%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.457

- **10.2%** Prevalence of Disability (among persons age 5 and over)
- **8.2** Perinatal Mortality Rate (per 1,000 births)
- **4.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.161

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **32.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.519

18
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

13
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

48
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

73
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.354

9.9%
Homes with Exterior Walls in Poor Condition

1.8%
Homes with Inadequate Materials Used in Outer Walls

19.1%
Homes with Roofs in Poor Condition

71.9%
Households with No Access to Vehicle for Private Use

4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.418

147.2
Population Density (persons per sq km)

-0.1
Average Annual Population Change (2010-2022)

3.1
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.482

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 117 / 221 CANTONS ASSESSED **SCORE: 0.481**

El Tambo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.326

51.8%
Labor Force Participation

23,825
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.734

33.1%
Protected Area (% of land area)

-311.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.472

75.2%
Voter Participation

93%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.562

Communications Capacity

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.638

10.8%
Household Access to Fixed Phones

89.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.887

98.6%
Homes Served by the Public Electricity Network

91.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.295

7.5
Nurses and Midwives per 10,000 persons

9.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.426

41.9
Average Distance to Airport (km)

103.6
Average Distance to Sea or River Port (km)

2.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 25 / 221 CANTONS ASSESSED **SCORE: 0.614**

El Tambo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.461

1.3	6.7%	0	42.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.768

7.1	2	2	2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 51 / 221 CANTONS ASSESSED
SCORE: 0.560

El Tambo's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Economic Capacity



Transportation Capacity



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Transportation Capacity

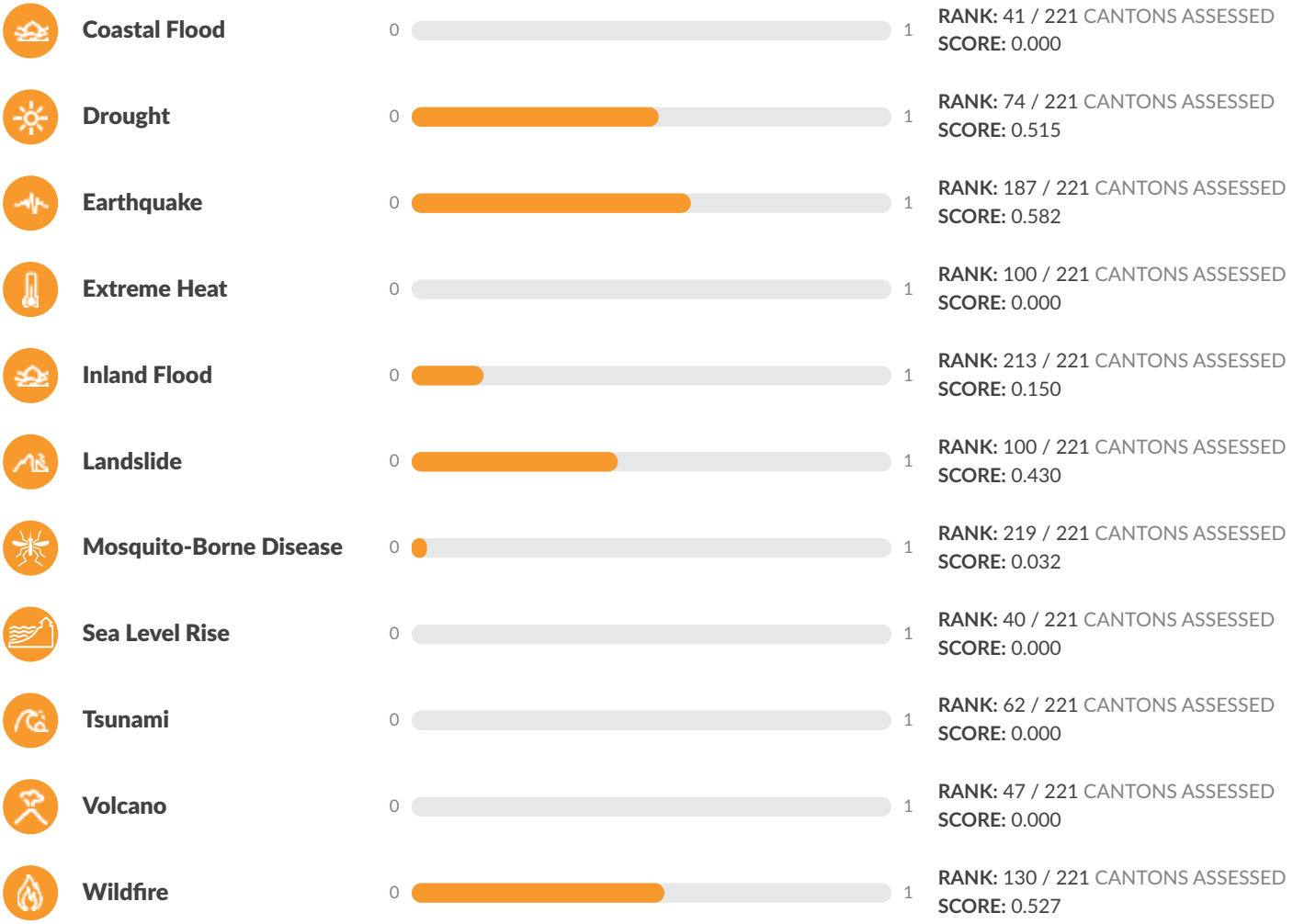
Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

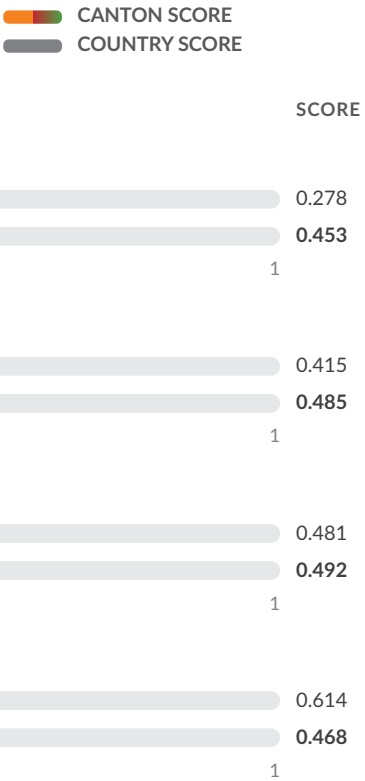


MULTI-HAZARD RISK (MHR)

RANKED
200 / 221
CANTONS ASSESSED
SCORE: 0.399

El Tambo's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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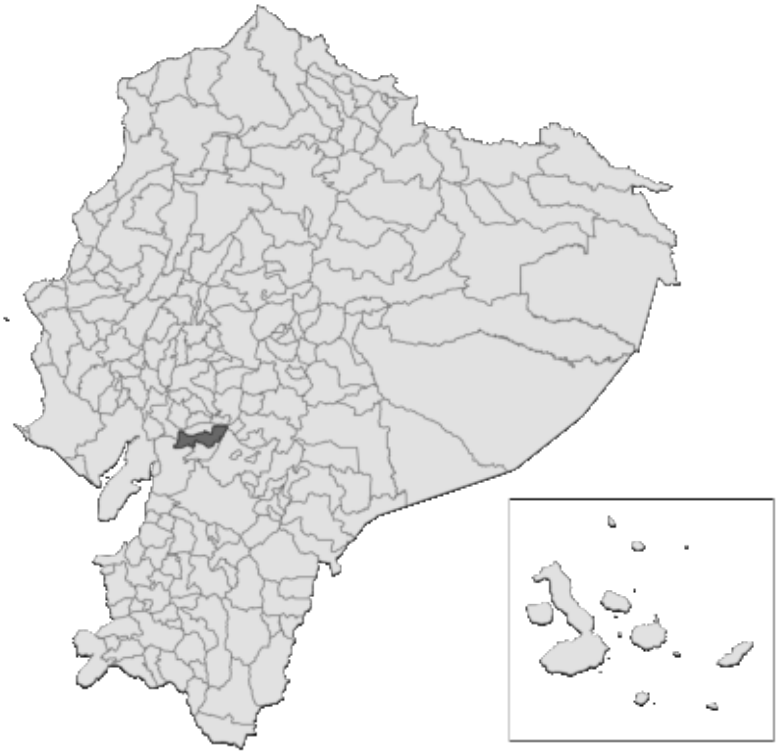
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ECUADOR

EL TRIUNFO

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.543 • RANK: 60/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.534 • RANK: 70/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.452 • RANK: 144/221 CANTONS ASSESSED

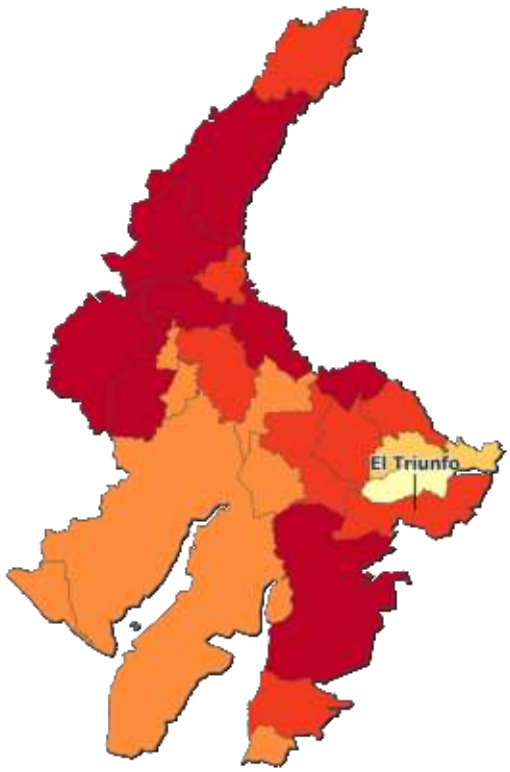
Coping Capacity (CC) - Moderate
SCORE: 0.485 • RANK: 114/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.529 • RANK: 70/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.405 • RANK: 156/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

EL TRIUNFO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	**0.543**
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 70 / 221 CANTONS ASSESSED
SCORE: 0.529



MHE
0.529

Raw MHE
0.613

Relative MHE
0.446

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
7%
- **4,526** people exposed
- **1,800** structures exposed (8%)

Critical Infrastructure Exposed: 14%

Earthquake
100%
- **61,665** people exposed
- **23,974** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
67%
- **41,166** people exposed
- **16,171** structures exposed (67%)

Critical Infrastructure Exposed: 74%

Inland Flood
39%
- **23,932** people exposed
- **8,560** structures exposed (36%)

Critical Infrastructure Exposed: 54%

Landslide
1%
- **819** people exposed
- **466** structures exposed (2%)

Critical Infrastructure Exposed: 3%

Mosquito-Borne Disease
99%
- **61,176** people exposed
- **23,711** structures exposed (99%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
2%
- **931** people exposed
- **550** structures exposed (2%)

Critical Infrastructure Exposed: 3%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
61%
- **37,416** people exposed
- **13,890** structures exposed (58%)

Critical Infrastructure Exposed: 53%

VULNERABILITY (V)

RANK: 70 / 221 CANTONS ASSESSED **SCORE: 0.534**

Vulnerability in El Triunfo is primarily driven by Housing and Transportation Vulnerability and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.530

- **9.4** Average Years of Schooling
- **50.1%** Population (age 24 and over) with General Basic Education Schooling
- **6.3%** Population (age 24 and over) with No Schooling
- **5.1%** Adult Illiteracy Rate
- **55.6%** Households with No Internet Access
- **72.7%** Households with No Access to Television
- **85.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.549

- **74.5%** Homes with Access to Public Water Source
- **35.4%** Homes Connected to the Public Sewage System
- **30.2%** Homes without Piped Water
- **6.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.487

- **61.2** Age Dependency Ratio
- **12.7%** Unemployment Rate
- **56.1%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.574

- **5.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.574

- **0.5** Female to Male Labor Ratio (distance from parity)
- **56.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **60.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **58%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.579

- **10.2%** Prevalence of Disability (among persons age 5 and over)
- **8.1** Perinatal Mortality Rate (per 1,000 births)
- **8.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.583

- **18** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **24.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.489

42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

27
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

59
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.590

16.1%
Homes with Exterior Walls in Poor Condition

9.2%
Homes with Inadequate Materials Used in Outer Walls

20.6%
Homes with Roofs in Poor Condition

89.5%
Households with No Access to Vehicle for Private Use

11.3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.588

108.1
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

18
Net Migration Rate (per 1,000 persons)

0.32
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.367

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 114 / 221 CANTONS ASSESSED **SCORE: 0.485**

El Triunfo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.547

56.2%
Labor Force Participation

212,958
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.289

0%
Protected Area (% of land area)

-4,563.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.534

81.6%
Voter Participation

90.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.439

Communications Capacity

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.407

3.7%
Household Access to Fixed Phones

85.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.549

97.8%
Homes Served by the Public Electricity Network

63.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.164

4.6
Nurses and Midwives per 10,000 persons

6.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.634

9.2
Average Distance to Airport (km)

50.7
Average Distance to Sea or River Port (km)

1.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 156 / 221 CANTONS ASSESSED **SCORE: 0.405**

El Triunfo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.283

4.8	0.4%	0.3	54.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.527

7.4	6.1	4	5.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 144 / 221 CANTONS ASSESSED
SCORE: 0.452

El Triunfo's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Communications Capacity

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

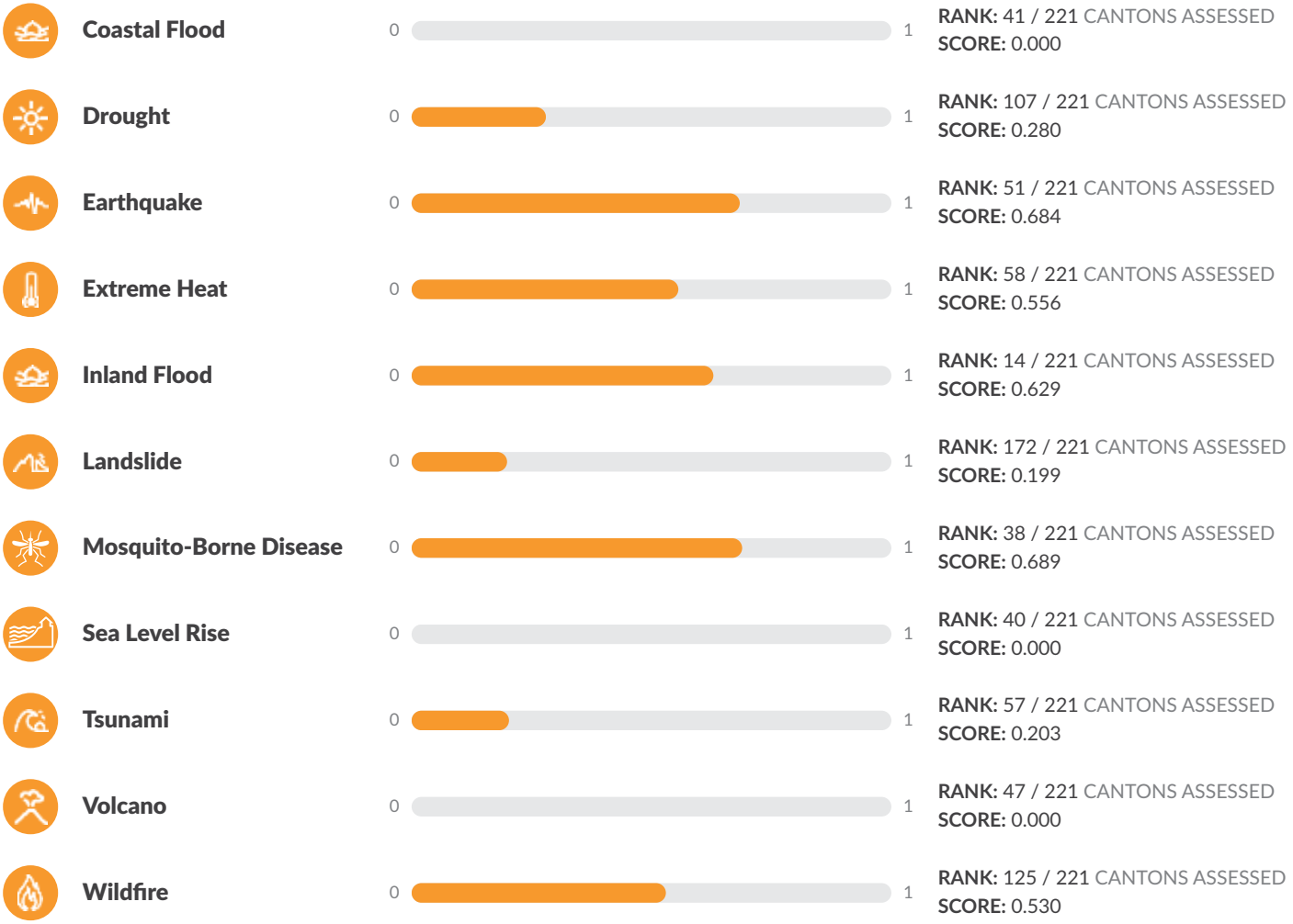
Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

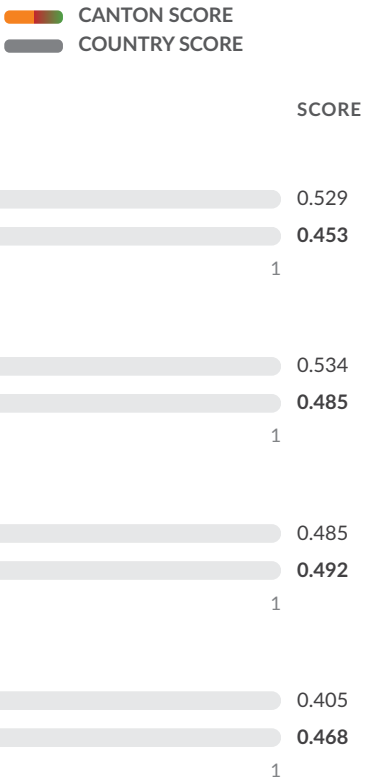


MULTI-HAZARD RISK (MHR)

RANKED
60 / 221
CANTONS ASSESSED
SCORE: 0.543

El Triunfo's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ESMERALDAS

NDPBA SUBNATIONAL PROFILE

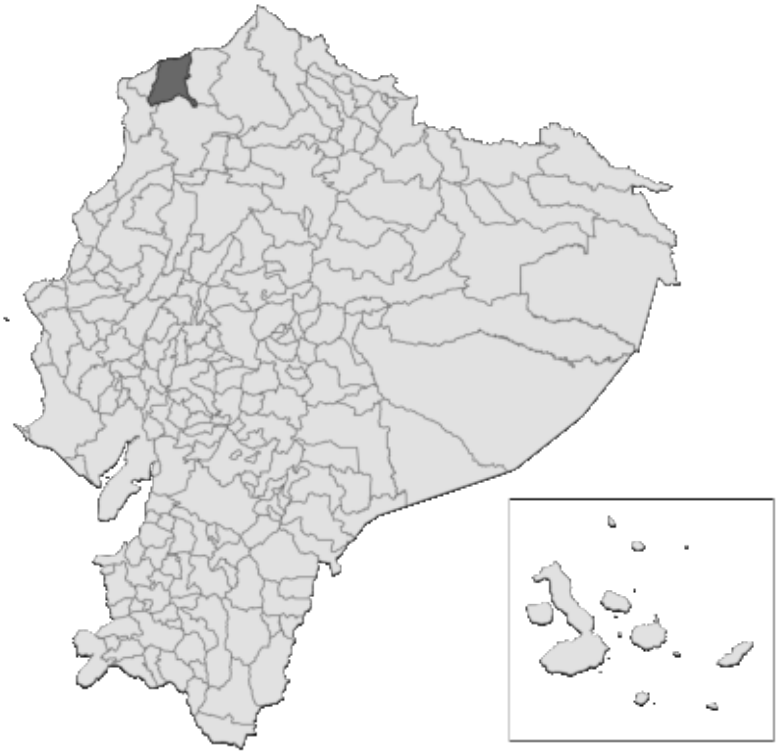
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ESMERALDAS

PROVINCE: ESMERALDAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.523 • RANK: 83/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.459 • RANK: 140/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.584 • RANK: 40/221 CANTONS ASSESSED

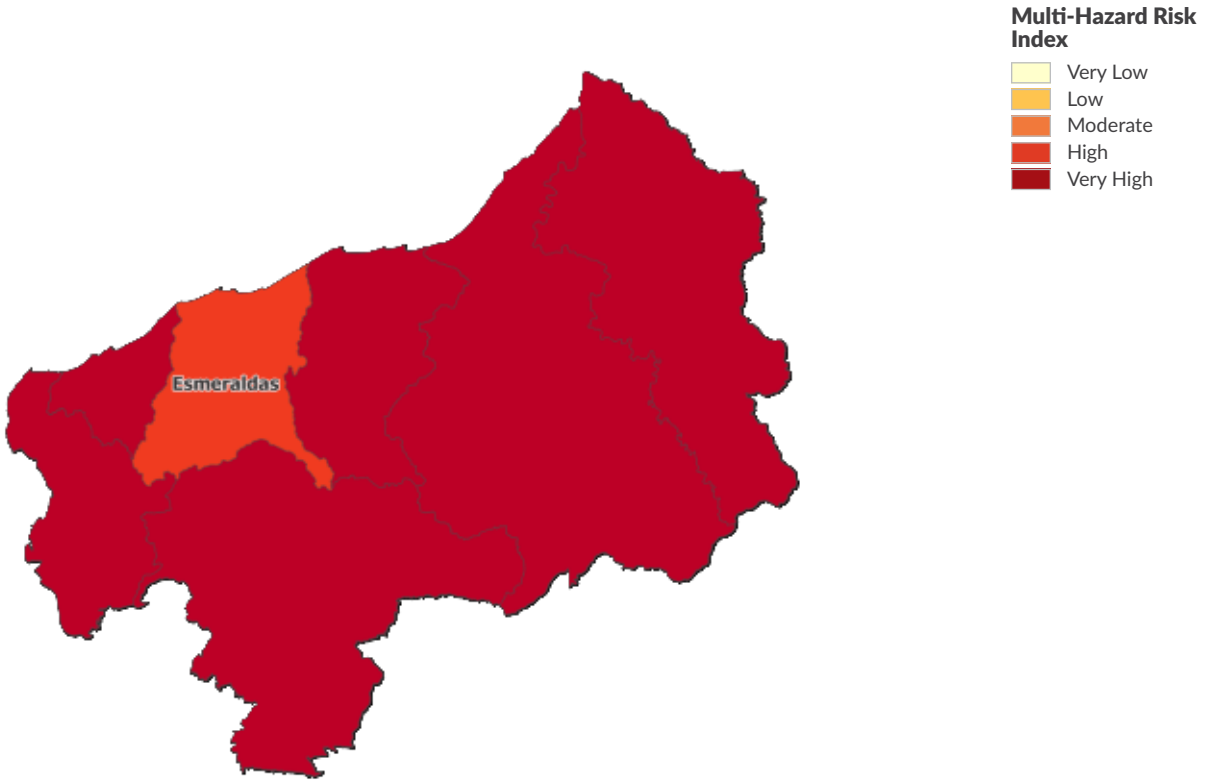
Coping Capacity (CC) - High
SCORE: 0.565 • RANK: 57/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.845 • RANK: 7/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.647 • RANK: 17/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ESMERALDAS PROVINCE

ESMERALDAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Rioverde	0.636
Eloy Alfaro	0.631
Muisne	0.614
Atacames	0.585
San Lorenzo	0.572
Quinindé	0.568
Esmeraldas	**0.523**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 7 / 221 CANTONS ASSESSED
SCORE: 0.845



MHE
0.845

Raw MHE
0.919

Relative MHE
0.770

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
4%
- **8,619** people exposed
- **2,938** structures exposed (3%)
- **Critical Infrastructure Exposed:** 13%

Drought
93%
- **223,007** people exposed
- **99,814** structures exposed (92%)
- **Critical Infrastructure Exposed:** 78%

Earthquake
100%
- **240,196** people exposed
- **108,846** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
39%
- **93,876** people exposed
- **46,579** structures exposed (43%)
- **Critical Infrastructure Exposed:** 50%

Inland Flood
4%
- **9,105** people exposed
- **4,610** structures exposed (4%)
- **Critical Infrastructure Exposed:** 13%

Landslide
13%
- **32,121** people exposed
- **13,165** structures exposed (12%)
- **Critical Infrastructure Exposed:** 13%

Mosquito-Borne Disease
99%
- **238,469** people exposed
- **108,614** structures exposed (100%)
- **Critical Infrastructure Exposed:** 88%

Sea Level Rise
<1%
- **1,149** people exposed
- **464** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 7%

Tsunami
35%
- **84,064** people exposed
- **40,246** structures exposed (37%)
- **Critical Infrastructure Exposed:** 54%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
79%
- **189,371** people exposed
- **79,977** structures exposed (73%)
- **Critical Infrastructure Exposed:** 77%

VULNERABILITY (V)

RANK: 140 / 221 CANTONS ASSESSED **SCORE: 0.459**

Vulnerability in Esmeraldas is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.320

- **12.3** Average Years of Schooling
- **27.3%** Population (age 24 and over) with General Basic Education Schooling
- **3.6%** Population (age 24 and over) with No Schooling
- **2.9%** Adult Illiteracy Rate
- **49.5%** Households with No Internet Access
- **74.2%** Households with No Access to Television
- **67.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.326

- **87.5%** Homes with Access to Public Water Source
- **74.5%** Homes Connected to the Public Sewage System
- **23.3%** Homes without Piped Water
- **3.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.515

- **60** Age Dependency Ratio
- **27.8%** Unemployment Rate
- **38.4%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.720

- **9.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.394

- **0.4** Female to Male Labor Ratio (distance from parity)
- **51.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **42.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.469

- **6.8%** Prevalence of Disability (among persons age 5 and over)
- **2.6** Perinatal Mortality Rate (per 1,000 births)
- **8.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.529

- **23.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **8.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.528

52	13	44	42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.499

15.1%	5.5%	16.9%	85.8%	8.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.521

157.4	0.9%	14.1	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.587

0.5	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 57 / 221 CANTONS ASSESSED **SCORE: 0.565**

Esmeraldas exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.612

52.9%
Labor Force Participation

1,032,042
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.402

5.8%
Protected Area (% of land area)

-10,973.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.488

78.1%
Voter Participation

90.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.649

Communications Capacity

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.621

20.7%
Household Access to Fixed Phones

81.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.633

97.1%
Homes Served by the Public Electricity Network

78.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.623

23.8
Nurses and Midwives per 10,000 persons

23.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.721

10.1
Average Distance to Airport (km)

10
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 17 / 221 CANTONS ASSESSED **SCORE: 0.647**

Esmeraldas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.638

2	3.4%	1.7	9.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.657

5.6	4.1	1.9	5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 40 / 221 CANTONS ASSESSED
SCORE: 0.584

Esmeraldas's score and ranking are due to Low Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts **Population Pressures** **Economic Constraints** **Governance**

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

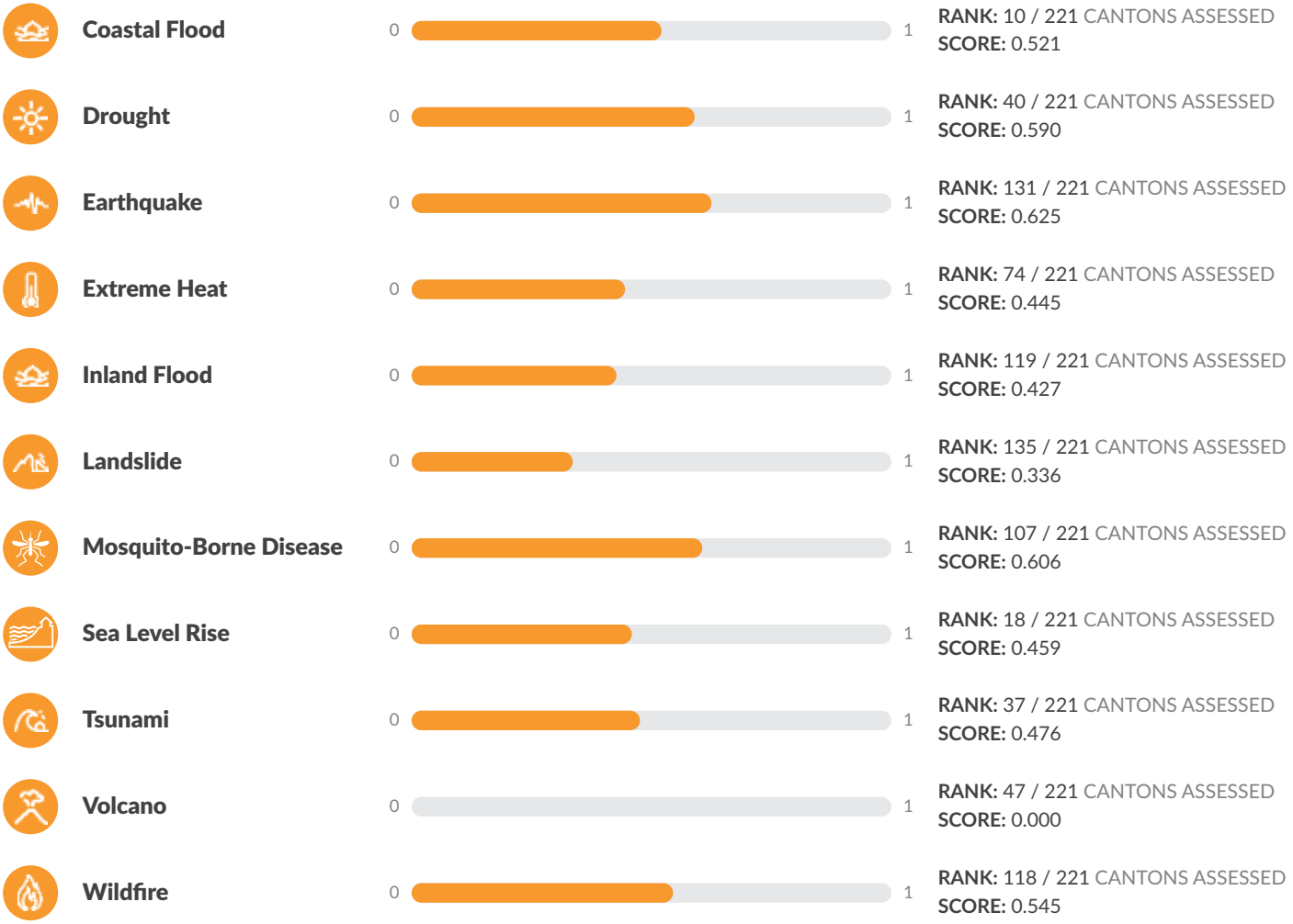
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

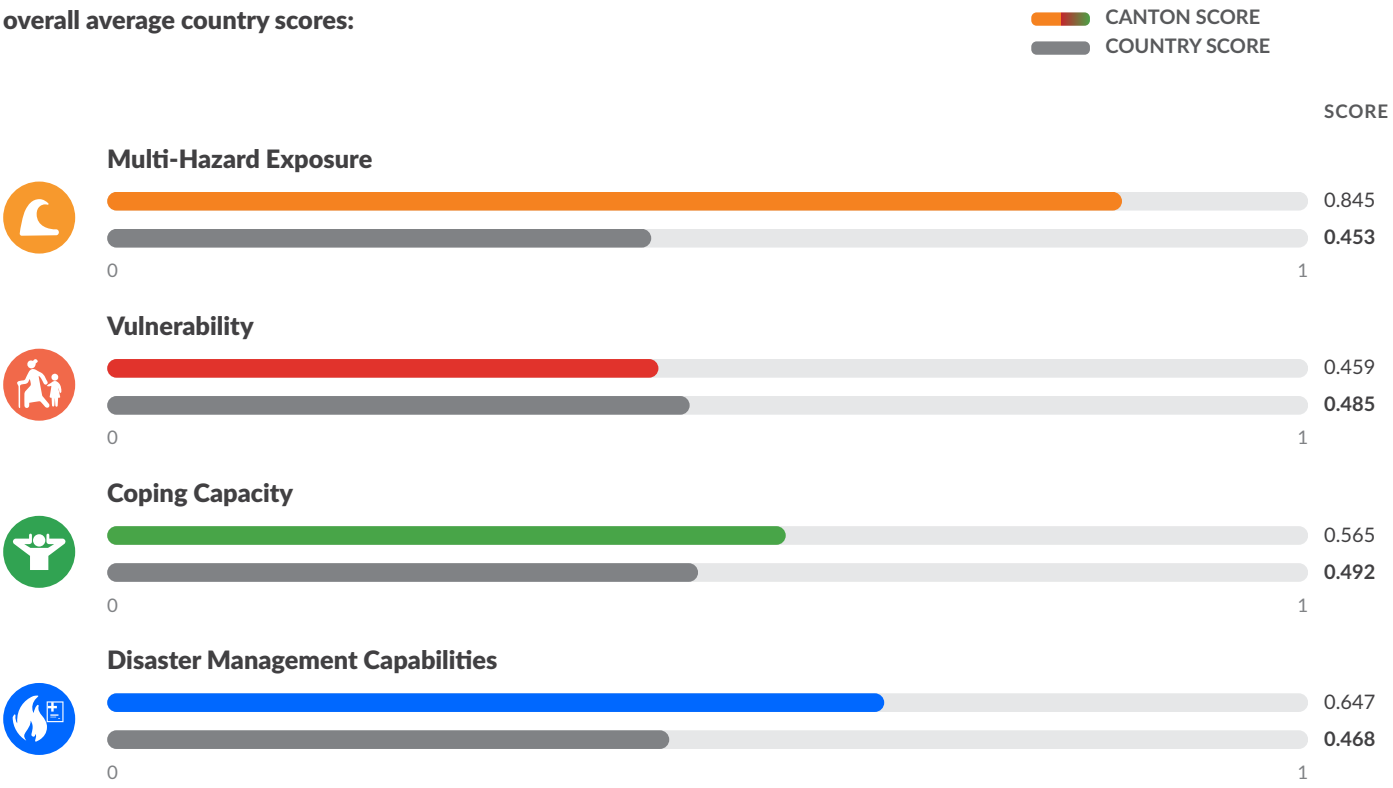


MULTI-HAZARD RISK (MHR)

RANKED
83 / 221
CANTONS ASSESSED
SCORE: 0.523

Esmeraldas's score and ranking are due to Very High Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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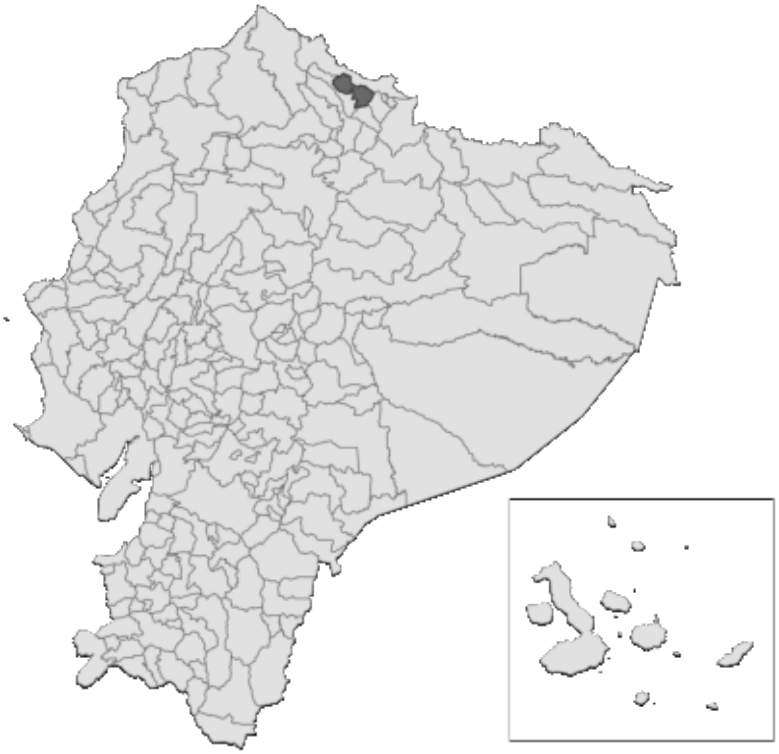
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ESPEJO

PROVINCE: CARCHI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.361 • RANK: 216/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.439 • RANK: 154/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.596 • RANK: 31/221 CANTONS ASSESSED

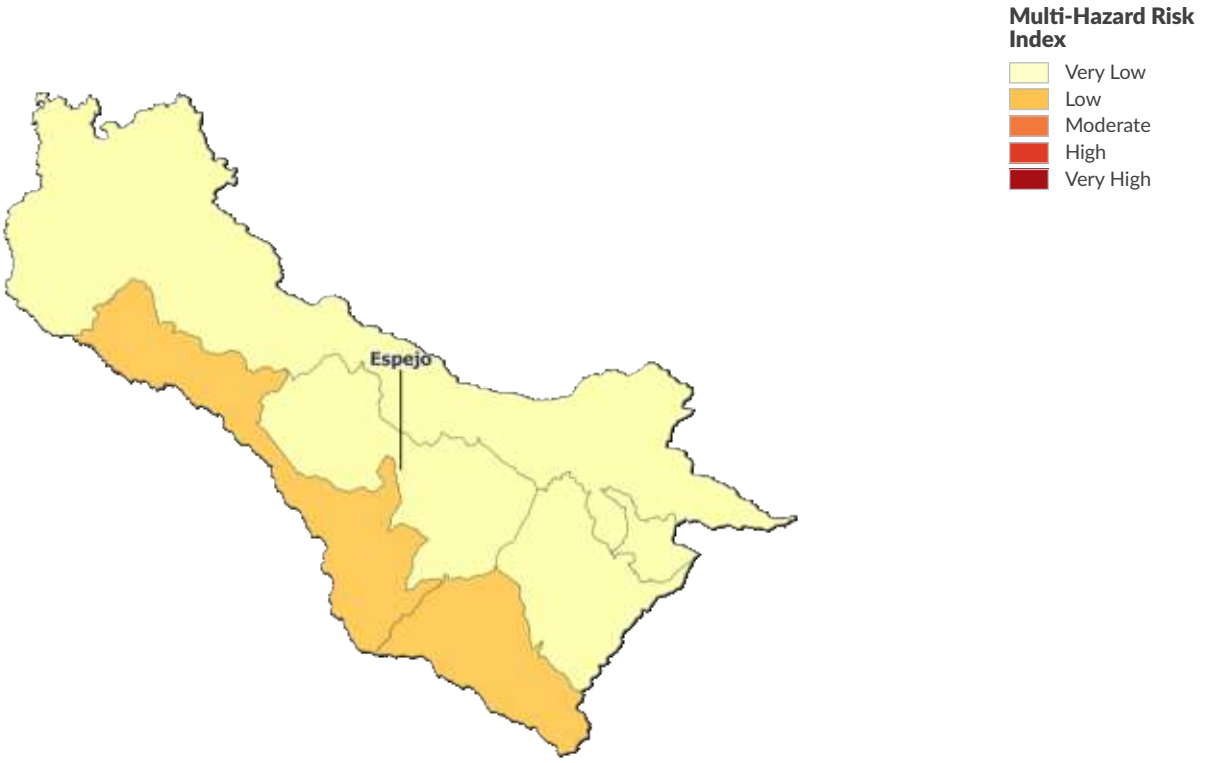
Coping Capacity (CC) - Very High
SCORE: 0.589 • RANK: 45/221 CANTONS ASSESSED

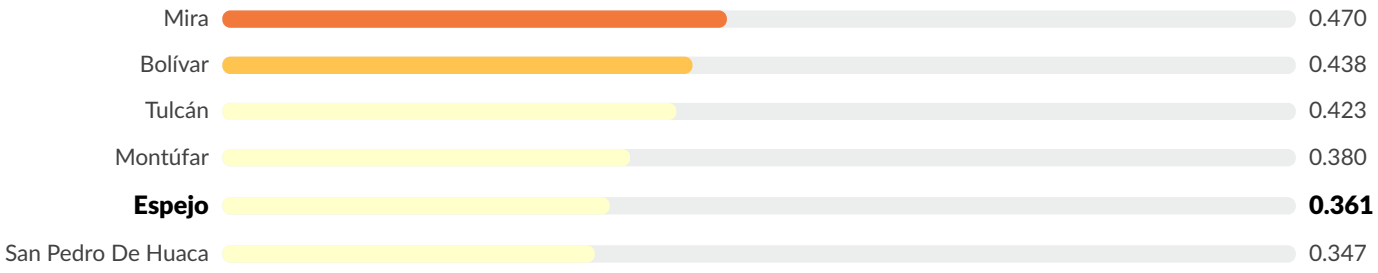
Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.235 • RANK: 201/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.640 • RANK: 19/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CARCHI PROVINCE

ESPEJO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 201 / 221 CANTONS ASSESSED
SCORE: 0.235



MHE
0.235

Raw MHE
0.326

Relative MHE
0.145

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
18%
- **2,507** people exposed
- **1,043** structures exposed (11%)

Critical Infrastructure Exposed: 6%

Earthquake
100%
- **14,309** people exposed
- **9,629** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
6%
- **894** people exposed
- **437** structures exposed (5%)

Critical Infrastructure Exposed: 8%

Landslide
59%
- **8,390** people exposed
- **5,545** structures exposed (58%)

Critical Infrastructure Exposed: 79%

Mosquito-Borne Disease
30%
- **4,291** people exposed
- **2,276** structures exposed (24%)

Critical Infrastructure Exposed: 56%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
<1%
- **27** people exposed
- **22** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Wildfire
61%
- **8,778** people exposed
- **4,640** structures exposed (48%)

Critical Infrastructure Exposed: 51%

VULNERABILITY (V)

RANK: 154 / 221 CANTONS ASSESSED **SCORE: 0.439**

Vulnerability in Espejo is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.439

- **10.2** Average Years of Schooling
- **48.1%** Population (age 24 and over) with General Basic Education Schooling
- **3.8%** Population (age 24 and over) with No Schooling
- **3.4%** Adult Illiteracy Rate
- **42.5%** Households with No Internet Access
- **82.7%** Households with No Access to Television
- **71.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.324

- **94.1%** Homes with Access to Public Water Source
- **85.7%** Homes Connected to the Public Sewage System
- **23%** Homes without Piped Water
- **7.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.351

- **55** Age Dependency Ratio
- **7.2%** Unemployment Rate
- **37.6%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.697

- **8.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.407

- **0.4** Female to Male Labor Ratio (distance from parity)
- **36.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **55.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **49.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.455

- **9.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.186

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.846

58
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

60
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

78
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

165
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.474

20.5%
Homes with Exterior Walls in Poor Condition

0.4%
Homes with Inadequate Materials Used in Outer Walls

23.6%
Homes with Roofs in Poor Condition

77.5%
Households with No Access to Vehicle for Private Use

7.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.495

25.6
Population Density (persons per sq km)

0.8%
Average Annual Population Change (2010-2022)

34.4
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.527

0.2
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 45 / 221 CANTONS ASSESSED **SCORE: 0.589**

Espejo exhibits weaker Coping Capacity in the areas of Transportation Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.488

59%
Labor Force Participation

49,976
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.649

17.4%
Protected Area (% of land area)

-1,462.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.644

87.7%
Voter Participation

89.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.615

Communications Capacity

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.662

24.3%
Household Access to Fixed Phones

83.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.841

98.8%
Homes Served by the Public Electricity Network

88.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.675

29.6
Nurses and Midwives per 10,000 persons

24.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.280

35.6
Average Distance to Airport (km)

162.9
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 19 / 221 CANTONS ASSESSED **SCORE: 0.640**

Espejo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.610

1.7	15.4%	1	37.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.670

6.1	4	2.1	3.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 31 / 221 CANTONS ASSESSED
SCORE: 0.596

Espejo's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Transportation Capacity



Disaster Impacts



Economic Capacity



Population Pressures

KEY FACTORS INFLUENCING RESILIENCE



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Economic Capacity

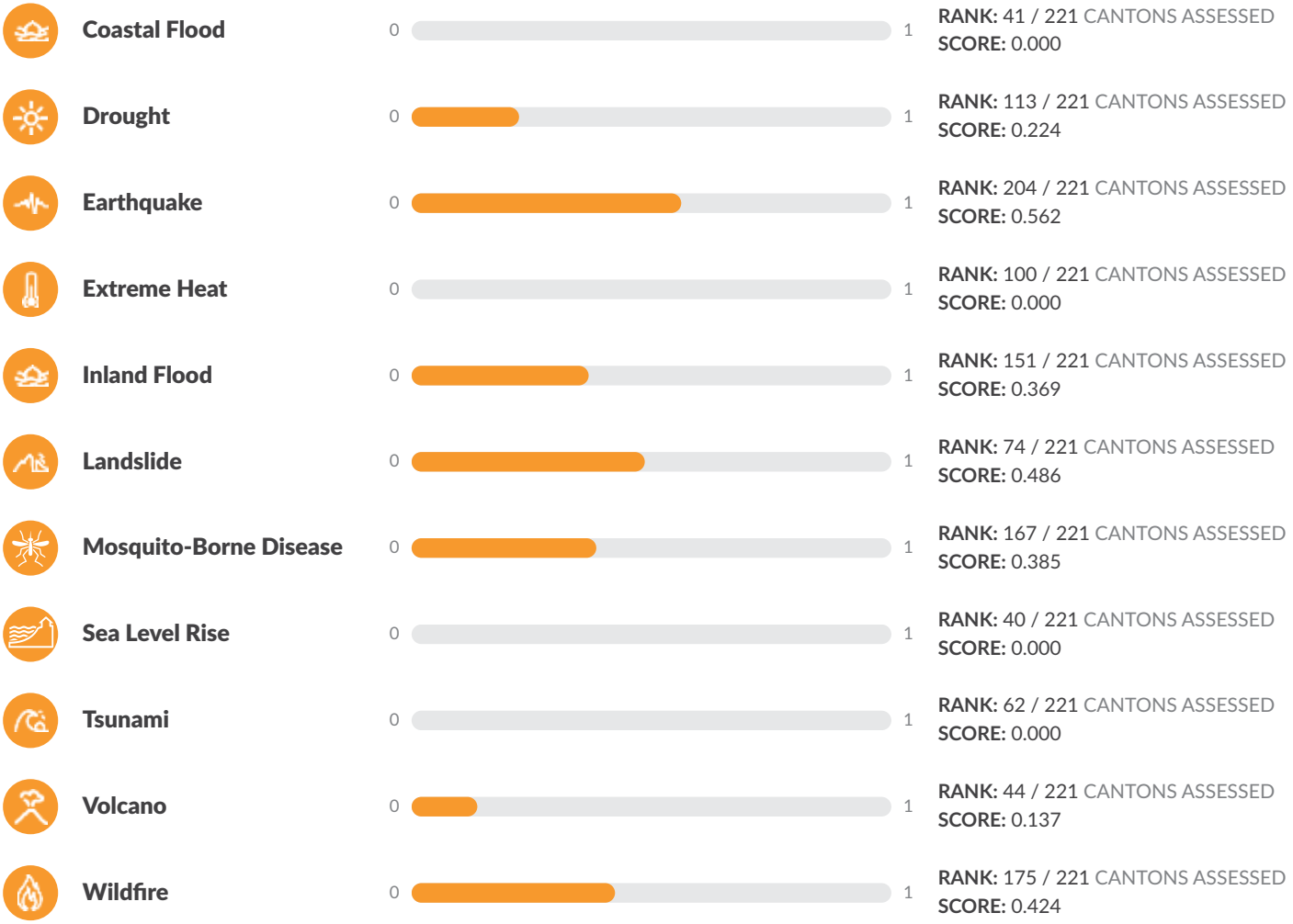
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

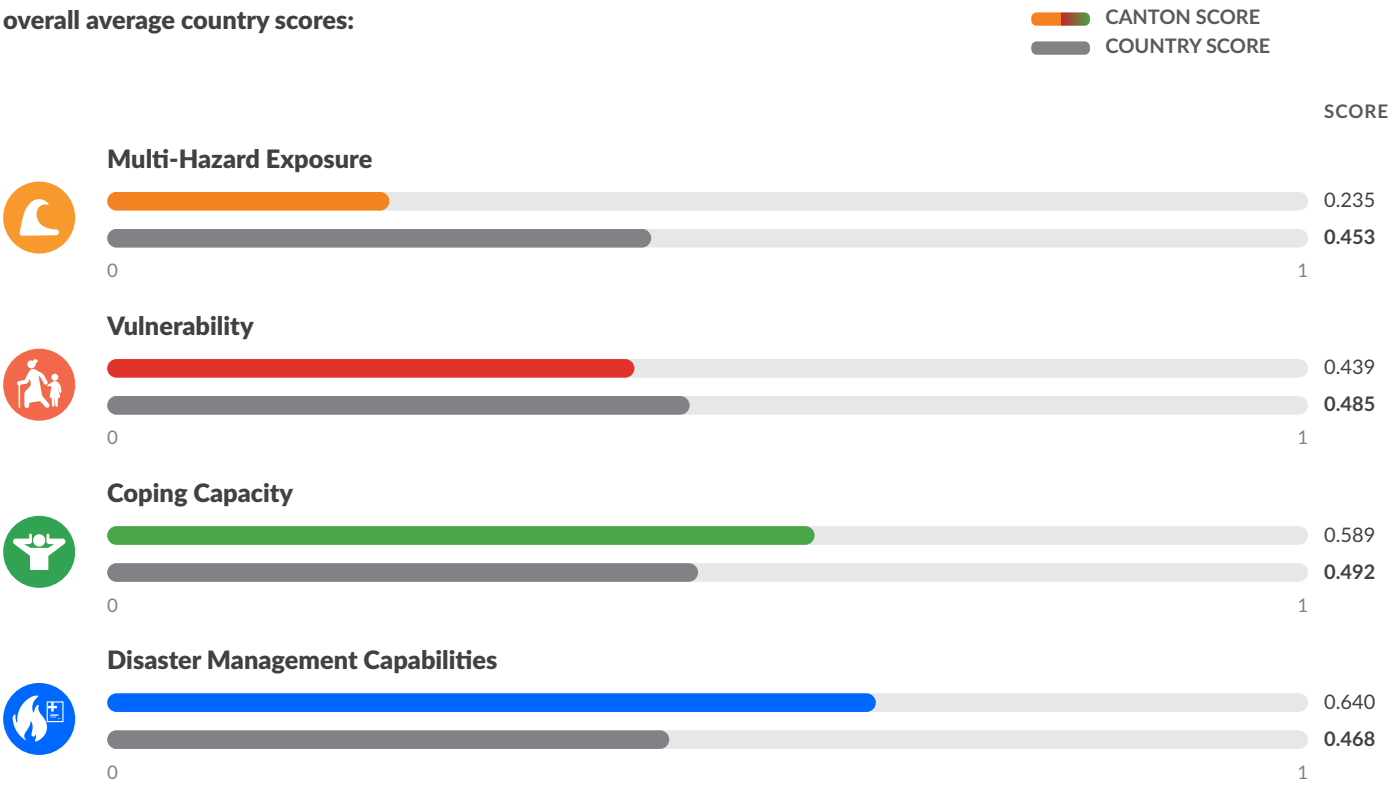


MULTI-HAZARD RISK (MHR)

RANKED
216 / 221
CANTONS ASSESSED
SCORE: 0.361

Espejo's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ESPÍNDOLA

NDPBA SUBNATIONAL PROFILE

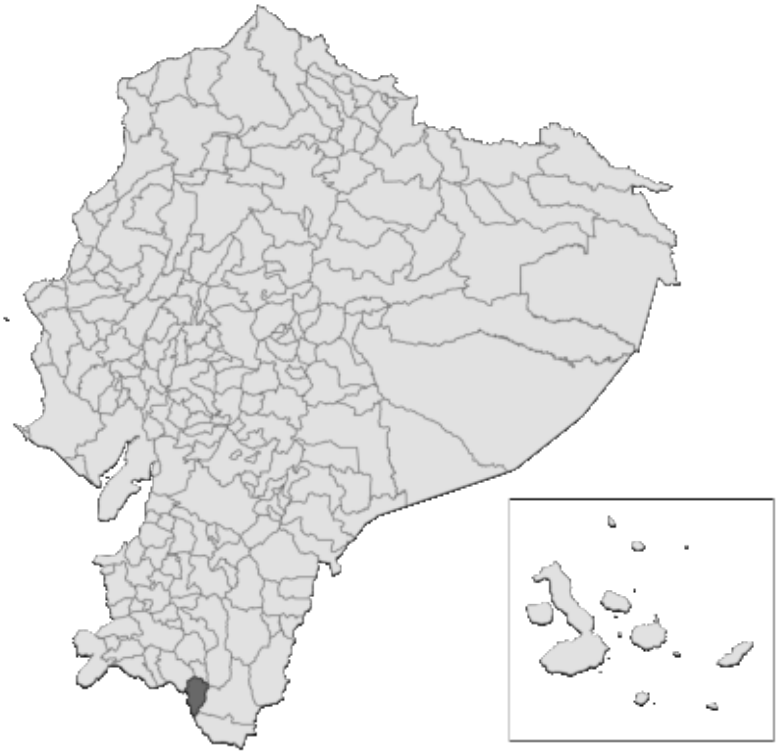
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ECUADOR

ESPÍNDOLA

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.548 • RANK: 52/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.582 • RANK: 29/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.405 • RANK: 180/221 CANTONS ASSESSED

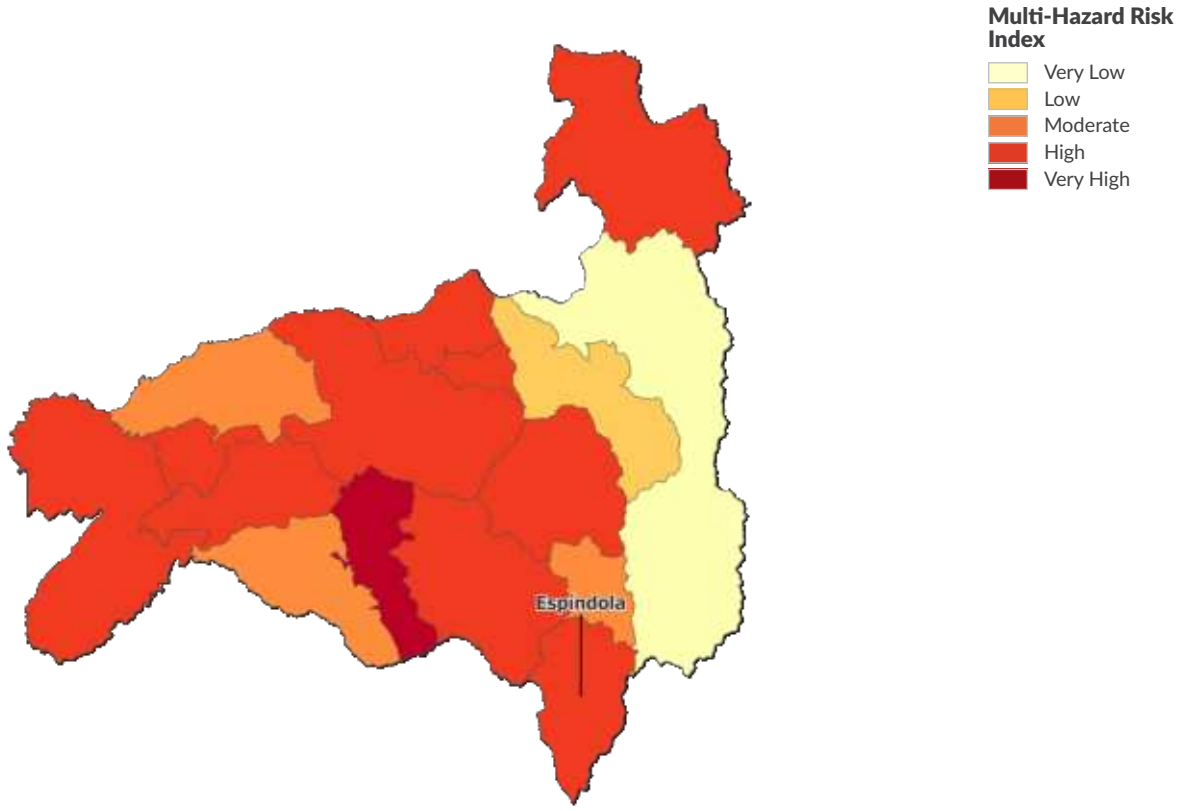
Coping Capacity (CC) - Very Low
SCORE: 0.343 • RANK: 206/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.409 • RANK: 129/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.455 • RANK: 114/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

ESPÍNDOLA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	**0.548**
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 129 / 221 CANTONS ASSESSED
SCORE: 0.409



MHE
0.409

Raw MHE
0.415

Relative MHE
0.403

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
72%
11,967 people exposed
6,887 structures exposed (72%)
Critical Infrastructure Exposed: 61%

Earthquake
100%
16,533 people exposed
9,589 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
51 people exposed
125 structures exposed (1%)
Critical Infrastructure Exposed: 3%

Landslide
92%
15,286 people exposed
8,985 structures exposed (94%)
Critical Infrastructure Exposed: 84%

Mosquito-Borne Disease
33%
5,470 people exposed
3,219 structures exposed (34%)
Critical Infrastructure Exposed: 18%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
91%
15,011 people exposed
8,852 structures exposed (92%)
Critical Infrastructure Exposed: 83%

VULNERABILITY (V)

RANK: 29 / 221 CANTONS ASSESSED **SCORE: 0.582**

Vulnerability in Espíndola is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.685

- **8.2** Average Years of Schooling
- **62.2%** Population (age 24 and over) with General Basic Education Schooling
- **6.2%** Population (age 24 and over) with No Schooling
- **6.3%** Adult Illiteracy Rate
- **63.3%** Households with No Internet Access
- **90.4%** Households with No Access to Television
- **86.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.674

- **70.6%** Homes with Access to Public Water Source
- **30.4%** Homes Connected to the Public Sewage System
- **53%** Homes without Piped Water
- **9.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.656

- **66.3** Age Dependency Ratio
- **26.5%** Unemployment Rate
- **71.3%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.426

- **3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.378

- **0.5** Female to Male Labor Ratio (distance from parity)
- **31.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **0%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **54.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.537

- **15.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.306

- **2.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.817

114	60	61	75
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.637

27.5%	0.6%	32.6%	91.5%	8.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.377

27.4	-0.5	8.1	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.737

0.3	0.2	0.3
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 206 / 221 CANTONS ASSESSED **SCORE: 0.343**

Espíndola exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.242

46.7%
Labor Force Participation

19,477
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.600

15.1%
Protected Area (% of land area)

-3,711.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.243

74%
Voter Participation

60.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.458

Communications Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.443

8.5%
Household Access to Fixed Phones

76.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.422

95.4%
Homes Served by the Public Electricity Network

56.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.652

24.1
Nurses and Midwives per 10,000 persons

27.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.314

55.1
Average Distance to Airport (km)

96.8
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 114 / 221 CANTONS ASSESSED **SCORE: 0.455**

Espíndola exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.476

2.2	3.6%	1.1	62
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.435

9.9	9.9	4	9.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 180 / 221 CANTONS ASSESSED
SCORE: 0.405

Espíndola's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Disaster Impacts

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

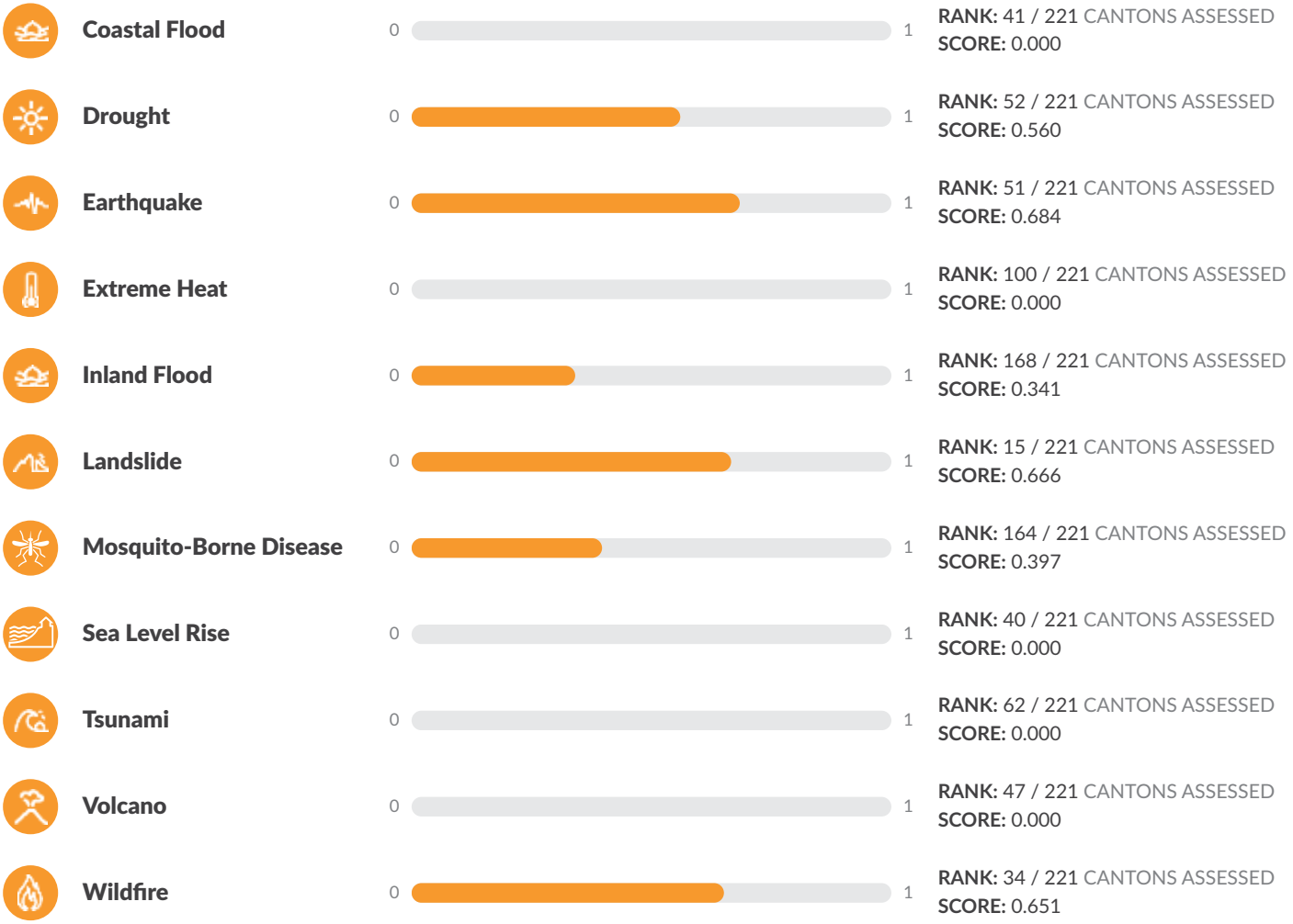
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
52 / 221
CANTONS ASSESSED
SCORE: 0.548

Espíndola's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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FLAVIO ALFARO

NDPBA SUBNATIONAL PROFILE

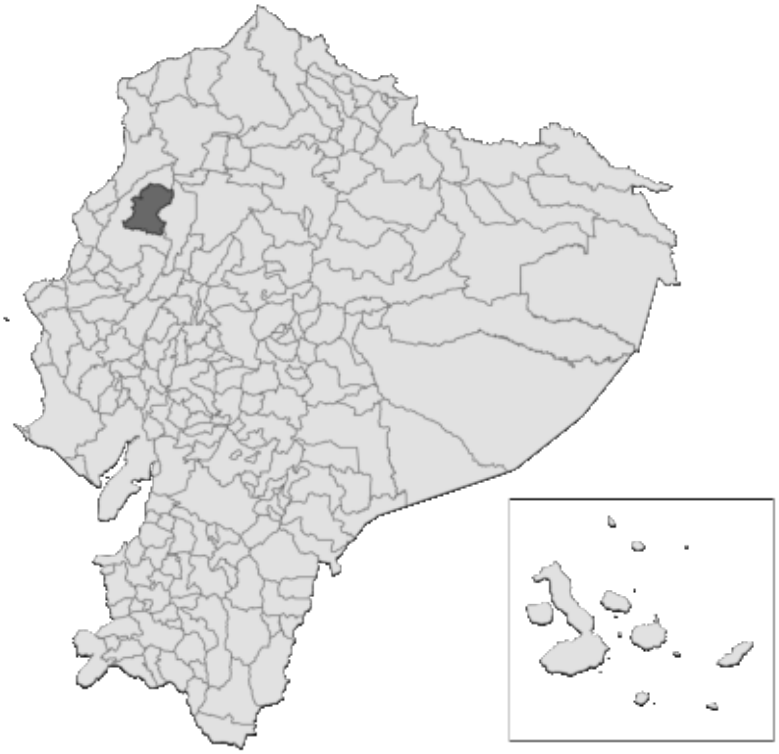
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FLAVIO ALFARO

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.581 • RANK: 29/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.594 • RANK: 21/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.363 • RANK: 206/221 CANTONS ASSESSED

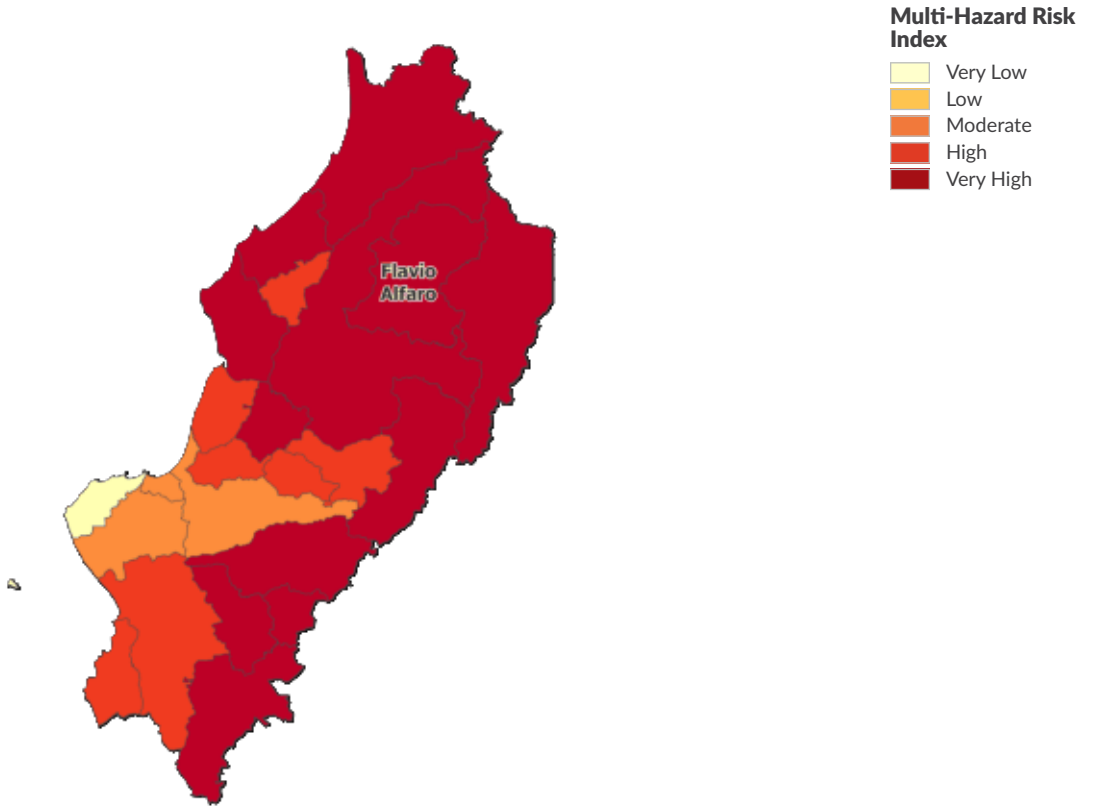
Coping Capacity (CC) - Very Low
SCORE: 0.371 • RANK: 187/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.415 • RANK: 127/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.312 • RANK: 200/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

FLAVIO ALFARO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	**Flavio Alfaro**	**0.581**	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 127 / 221 CANTONS ASSESSED
SCORE: 0.415



MHE
0.415

Raw MHE
0.516

Relative MHE
0.314

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
3%
- **886** people exposed
- **337** structures exposed (2%)

Critical Infrastructure Exposed: <1%

Earthquake
100%
- **29,261** people exposed
- **19,922** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
5%
- **1,379** people exposed
- **746** structures exposed (4%)

Critical Infrastructure Exposed: 2%

Inland Flood
17%
- **5,060** people exposed
- **3,412** structures exposed (17%)

Critical Infrastructure Exposed: 25%

Landslide
31%
- **9,123** people exposed
- **7,113** structures exposed (36%)

Critical Infrastructure Exposed: 27%

Mosquito-Borne Disease
100%
- **29,229** people exposed
- **19,901** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
95%
- **27,748** people exposed
- **18,644** structures exposed (94%)

Critical Infrastructure Exposed: 78%

VULNERABILITY (V)

RANK: 21 / 221 CANTONS ASSESSED **SCORE: 0.594**

Vulnerability in Flavio Alfaro is primarily driven by Marginalization and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.679

- **8.4** Average Years of Schooling
- **51.9%** Population (age 24 and over) with General Basic Education Schooling
- **11.4%** Population (age 24 and over) with No Schooling
- **8.2%** Adult Illiteracy Rate
- **77.4%** Households with No Internet Access
- **79.4%** Households with No Access to Television
- **91.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.703

- **27.9%** Homes with Access to Public Water Source
- **10.6%** Homes Connected to the Public Sewage System
- **68.2%** Homes without Piped Water
- **1.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.590

- **57.7** Age Dependency Ratio
- **13.6%** Unemployment Rate
- **85.2%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.652

- **7.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.788

- **0.6** Female to Male Labor Ratio (distance from parity)
- **64.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **9.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **86.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **95.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.460

- **7.2%** Prevalence of Disability (among persons age 5 and over)
- **2.6** Perinatal Mortality Rate (per 1,000 births)
- **7.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.344

- **27.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **23.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.690

53	36	47	108
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.598

18.2%	22.1%	17.1%	92.2%	7.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.359

19.6	0.4%	1.8	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.564

0.4	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 187 / 221 CANTONS ASSESSED **SCORE: 0.371**

Flavio Alfaro exhibits weaker Coping Capacity in the areas of Communications Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.382

52.7%
Labor Force Participation

43,552
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.151

0%
Protected Area (% of land area)

-14,195.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.443

87.5%
Voter Participation

55.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.361

Communications Capacity

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.174

2.3%
Household Access to Fixed Phones

62.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.412

92.2%
Homes Served by the Public Electricity Network

65.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.440

12.9
Nurses and Midwives per 10,000 persons

14.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.419

53.4
Average Distance to Airport (km)

44.3
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 200 / 221 CANTONS ASSESSED **SCORE: 0.312**

Flavio Alfaro exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.362

6.1	5.9%	1.2	115
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.261

13.2	30.5	6.2	13.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 206 / 221 CANTONS ASSESSED
SCORE: 0.363

Flavio Alfaro's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Communications Capacity



Marginalization



Emergency Services



Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Emergency Services

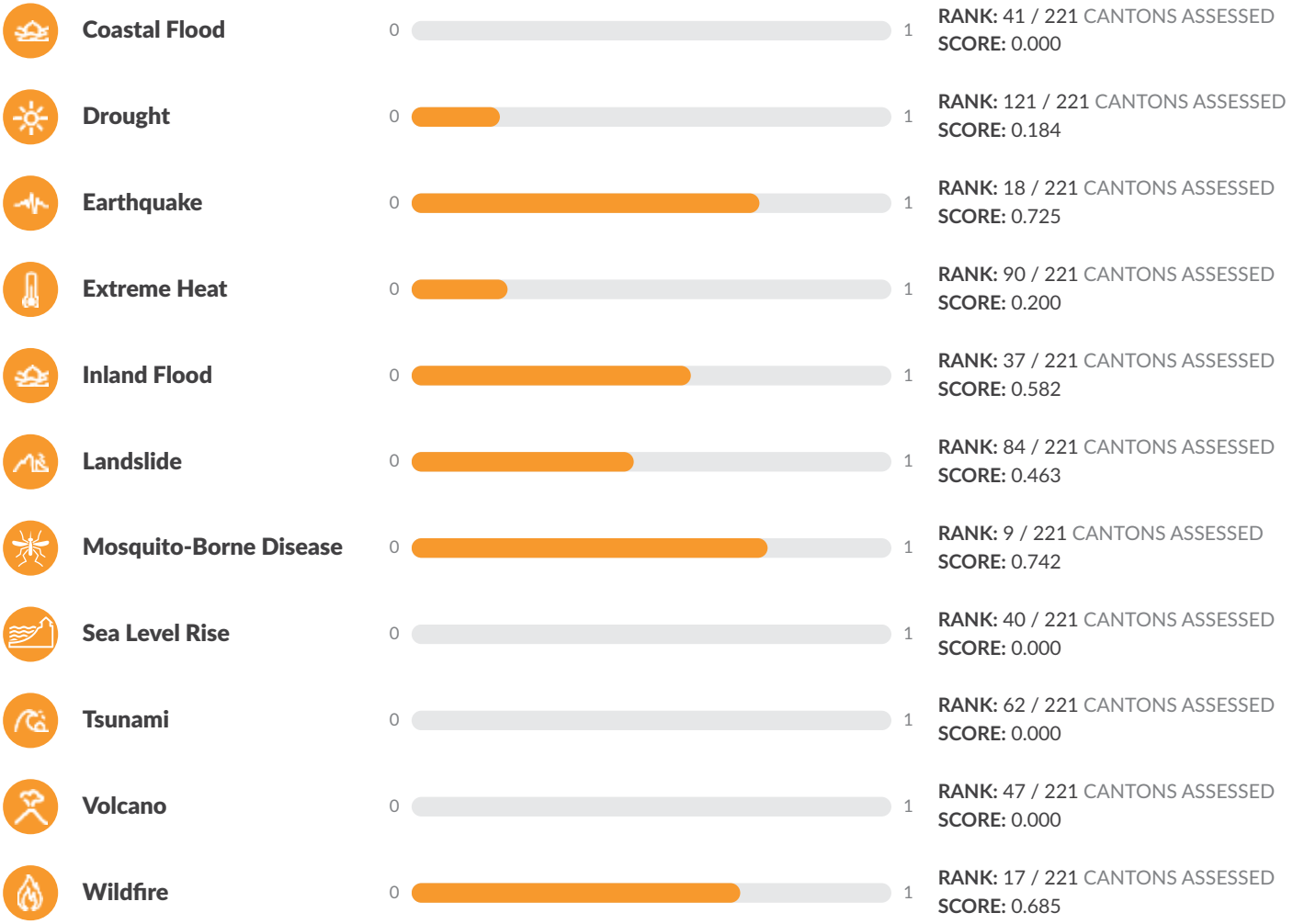
Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
29 / 221
CANTONS ASSESSED
SCORE: 0.581

Flavio Alfaro's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

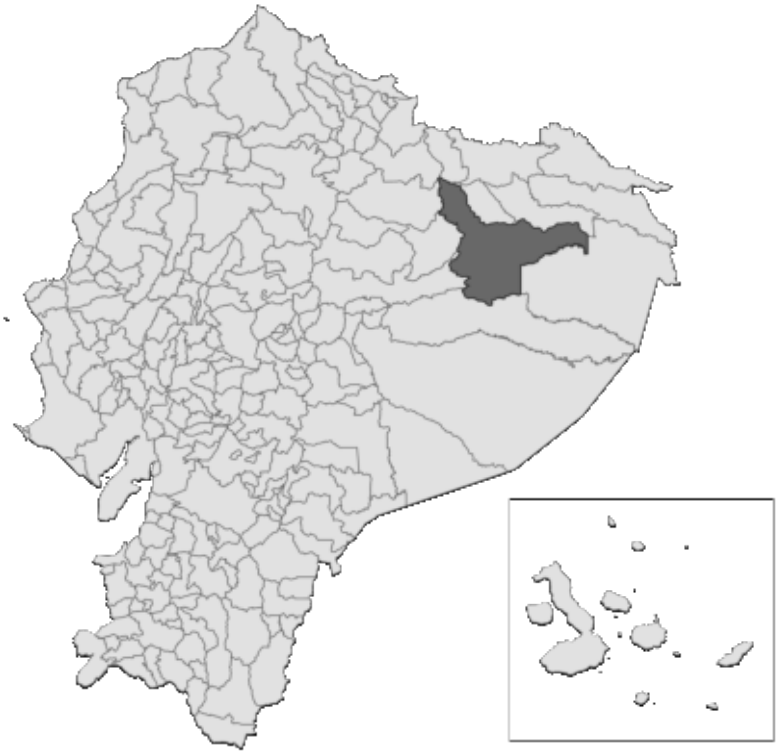
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FRANCISCO DE ORELLANA

PROVINCE: ORELLANA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.526 • RANK: 77/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.517 • RANK: 81/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.521 • RANK: 83/221 CANTONS ASSESSED

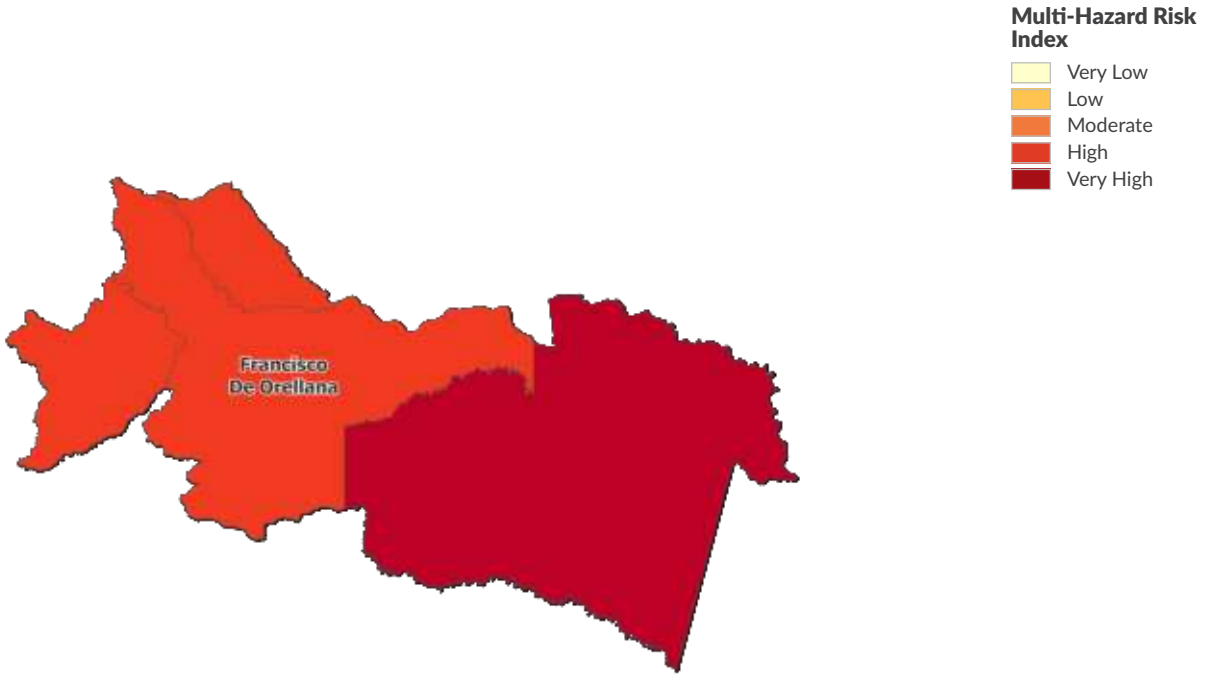
Coping Capacity (CC) - Very High
SCORE: 0.639 • RANK: 25/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.667 • RANK: 25/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.441 • RANK: 135/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ORELLANA PROVINCE

FRANCISCO DE ORELLANA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 25 / 221 CANTONS ASSESSED
SCORE: 0.667



MHE
0.667

Raw MHE
0.768

Relative MHE
0.566

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
120,518 people exposed
59,048 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
98%
118,584 people exposed
57,455 structures exposed (97%)
Critical Infrastructure Exposed: 98%

Inland Flood
14%
16,753 people exposed
9,438 structures exposed (16%)
Critical Infrastructure Exposed: 18%

Landslide
<1%
189 people exposed
119 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
100%
120,514 people exposed
58,860 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
79%
94,638 people exposed
49,107 structures exposed (83%)
Critical Infrastructure Exposed: 72%

VULNERABILITY (V)

RANK: 81 / 221 CANTONS ASSESSED **SCORE: 0.517**

Vulnerability in Francisco De Orellana is primarily driven by Economic Constraints and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.367

- **11** Average Years of Schooling
- **37.9%** Population (age 24 and over) with General Basic Education Schooling
- **3.2%** Population (age 24 and over) with No Schooling
- **2.5%** Adult Illiteracy Rate
- **52.8%** Households with No Internet Access
- **71.2%** Households with No Access to Television
- **72.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.558

- **69%** Homes with Access to Public Water Source
- **48.3%** Homes Connected to the Public Sewage System
- **42.2%** Homes without Piped Water
- **5.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.626

- **59.7** Age Dependency Ratio
- **23.9%** Unemployment Rate
- **58.2%** Poverty Rate (based on UBN)
- **1.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.760

- **10.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.568

- **0.4** Female to Male Labor Ratio (distance from parity)
- **64** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **85%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **47%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.415

- **6.6%** Prevalence of Disability (among persons age 5 and over)
- **3.1** Perinatal Mortality Rate (per 1,000 births)
- **6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.556

- **31.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.357

26	8	24	26
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.520

17.8%	0.8%	20.6%	85.7%	11.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.596

13.4	2.3%	31.9	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.449

0.2	0.1	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 25 / 221 CANTONS ASSESSED **SCORE: 0.639**

Francisco De Orellana exhibits weaker Coping Capacity in the areas of Energy Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.797

59.4%
Labor Force Participation

3,303,019
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.883

32.9%
Protected Area (% of land area)

30,552.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.523

84.4%
Voter Participation

83%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.514

Communications Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.519

10.1%
Household Access to Fixed Phones

82.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.365

89.9%
Homes Served by the Public Electricity Network

63.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.581

20
Nurses and Midwives per 10,000 persons

22.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.592

12.8
Average Distance to Airport (km)

15.9
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 135 / 221 CANTONS ASSESSED **SCORE: 0.441**

Francisco De Orellana exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.509

4.1	4.3%	1	19.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.372

16.6	16.6	5.3	6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 83 / 221 CANTONS ASSESSED
SCORE: 0.521

Francisco De Orellana's score and ranking are due to High Vulnerability combined with Very High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Energy Capacity


Emergency Services


Economic Constraints


Population Pressures

KEY FACTORS INFLUENCING RESILIENCE



Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Economic Constraints

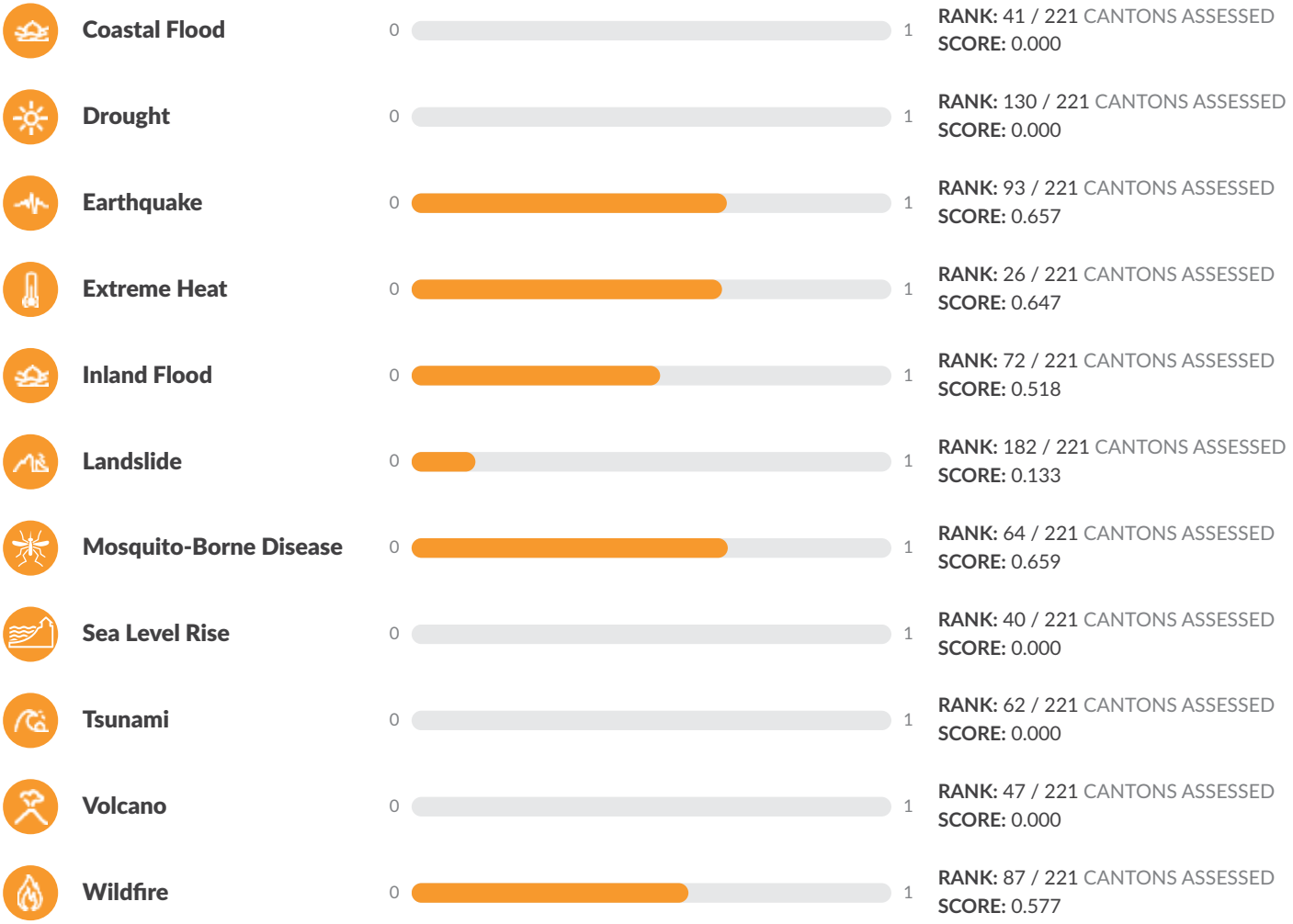
Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

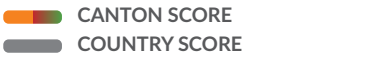


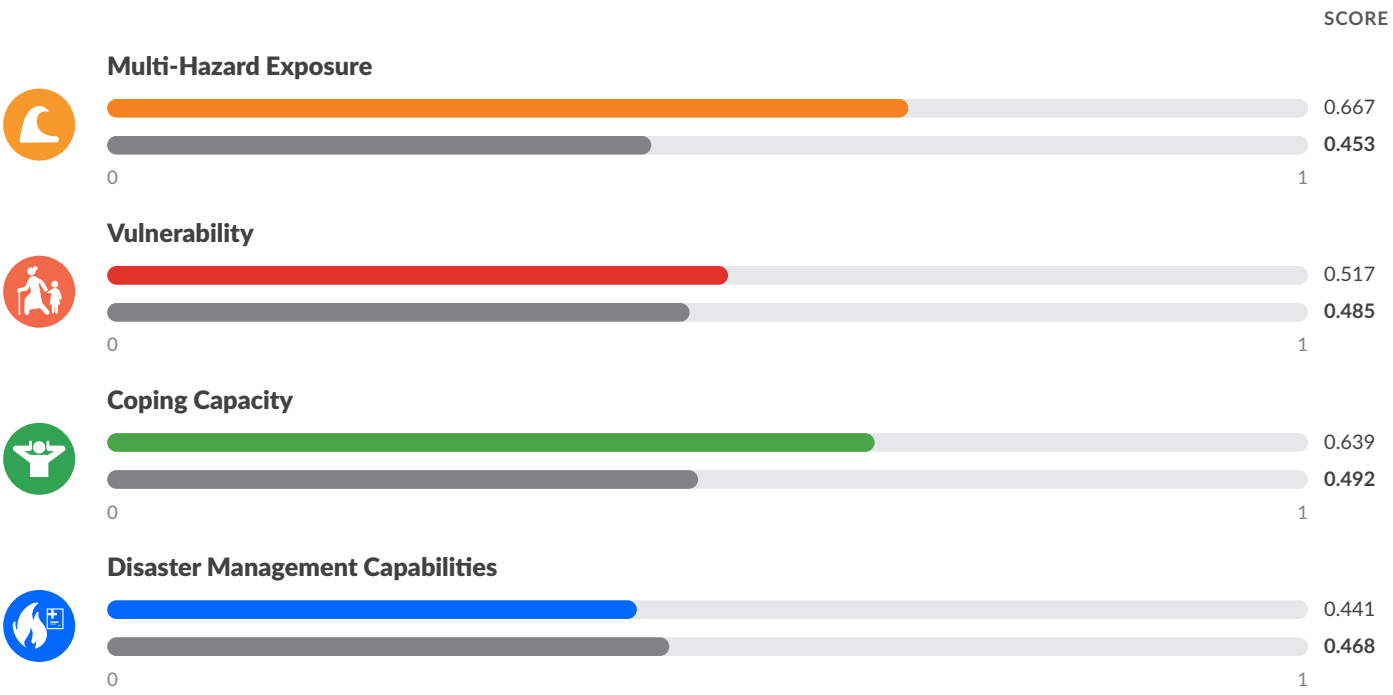
MULTI-HAZARD RISK (MHR)

RANKED
77 / 221
CANTONS ASSESSED
SCORE: 0.526

Francisco De Orellana's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, Very High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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GENERAL ANTONIO ELIZALDE

NDPBA SUBNATIONAL PROFILE

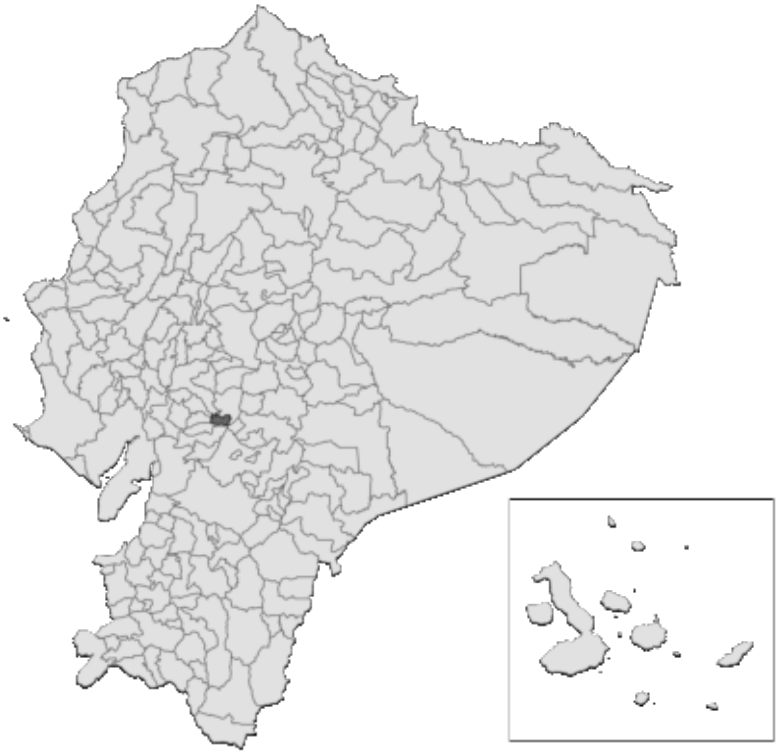
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GENERAL ANTONIO ELIZALDE

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.453 • RANK: 150/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.470 • RANK: 131/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.476 • RANK: 119/221 CANTONS ASSESSED

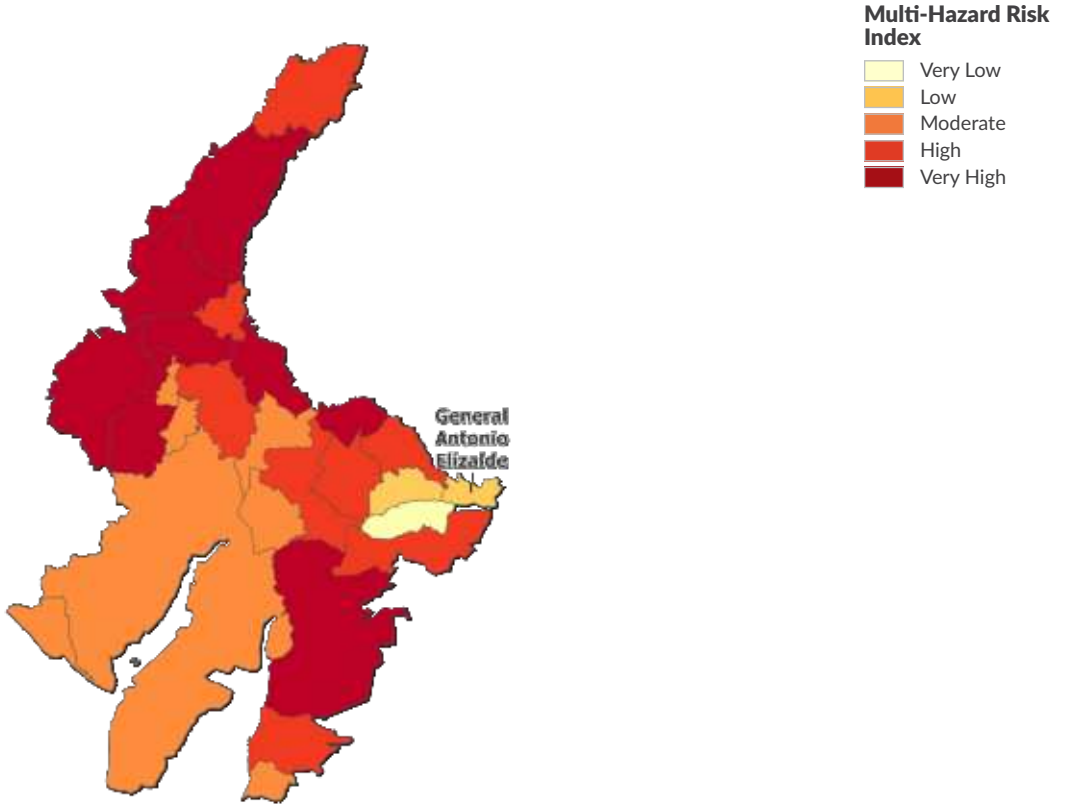
Coping Capacity (CC) - High
SCORE: 0.514 • RANK: 89/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.241 • RANK: 198/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.382 • RANK: 170/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

GENERAL ANTONIO ELIZALDE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	**0.453**
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 198 / 221 CANTONS ASSESSED
SCORE: 0.241



MHE
0.241

Raw MHE
0.293

Relative MHE
0.188

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
12,170 people exposed
6,175 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
45%
5,465 people exposed
2,026 structures exposed (33%)
Critical Infrastructure Exposed: 45%

Landslide
5%
597 people exposed
405 structures exposed (7%)
Critical Infrastructure Exposed: 6%

Mosquito-Borne Disease
100%
12,165 people exposed
6,166 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
54%
6,584 people exposed
2,844 structures exposed (46%)
Critical Infrastructure Exposed: 55%

VULNERABILITY (V)

RANK: 131 / 221 CANTONS ASSESSED **SCORE: 0.470**

Vulnerability in General Antonio Elizalde is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.428

- **10.3** Average Years of Schooling
- **40.3%** Population (age 24 and over) with General Basic Education Schooling
- **5.9%** Population (age 24 and over) with No Schooling
- **4.1%** Adult Illiteracy Rate
- **41.6%** Households with No Internet Access
- **78.2%** Households with No Access to Television
- **74.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.463

- **73.9%** Homes with Access to Public Water Source
- **55.6%** Homes Connected to the Public Sewage System
- **28.9%** Homes without Piped Water
- **4.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.468

- **55.9** Age Dependency Ratio
- **15.5%** Unemployment Rate
- **46.5%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.596

- **5.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.460

- **0.4** Female to Male Labor Ratio (distance from parity)
- **41.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **69.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **46.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.381

- **10.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **5.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.462

- **20.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **6.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.470

67	13	31	22
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.369

8.3%	2%	12.8%	83.2%	6.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.542

83.5	0.9%	24.9	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.625

0.5	0.3	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 89 / 221 CANTONS ASSESSED **SCORE: 0.514**

General Antonio Elizalde exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.507

60.7%
Labor Force Participation

43,864
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.332

0%
Protected Area (% of land area)

-1,446.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.550

82.9%
Voter Participation

89.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.547

Communications Capacity

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.516

8%
Household Access to Fixed Phones

84.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.684

97.9%
Homes Served by the Public Electricity Network

80.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.369

10.2
Nurses and Midwives per 10,000 persons

11.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.618

6.9
Average Distance to Airport (km)

55.7
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 170 / 221 CANTONS ASSESSED **SCORE: 0.382**

General Antonio Elizalde exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.292

4.8	4%	0	66.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.472

25.9	7.9	3.4	4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 119 / 221 CANTONS ASSESSED
SCORE: 0.476

General Antonio Elizalde's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Mass Care Support


Healthcare Capacity


Disaster Impacts


Population Pressures

KEY FACTORS INFLUENCING RESILIENCE



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Disaster Impacts

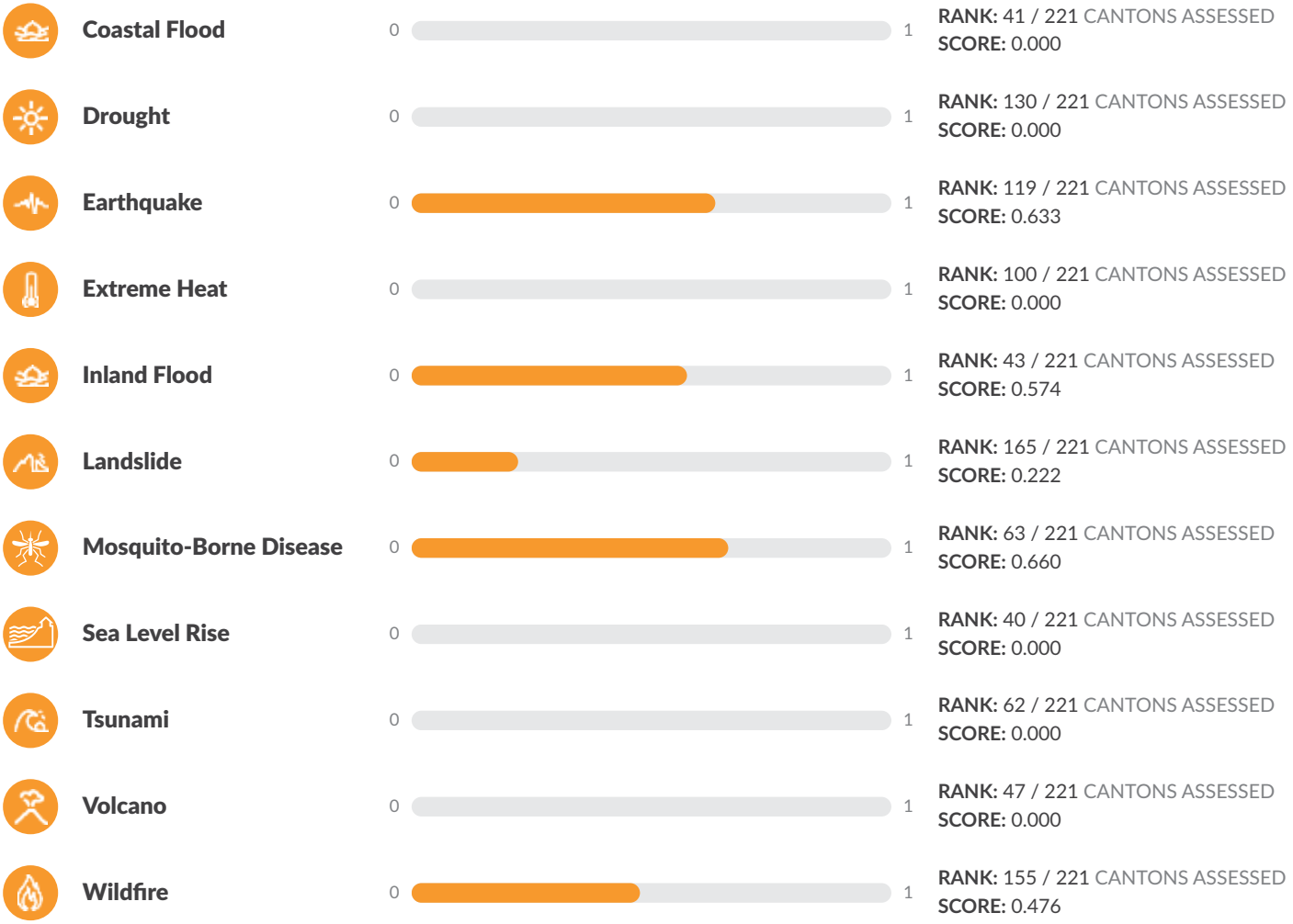
Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
150 / 221
CANTONS ASSESSED
SCORE: 0.453

General Antonio Elizalde's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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GIRÓN

NDPBA SUBNATIONAL PROFILE

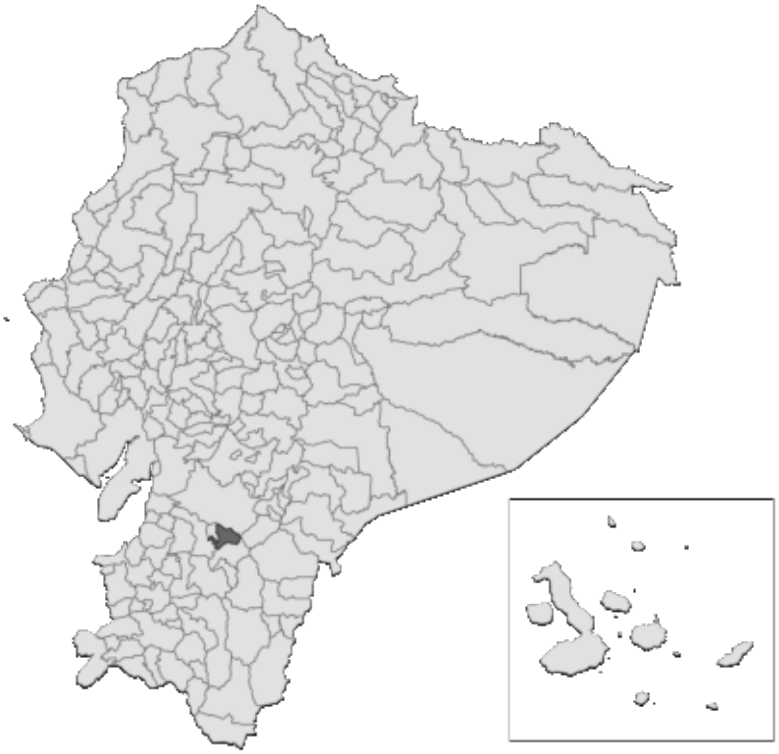
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ECUADOR

GIRÓN

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.457 • RANK: 145/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.507 • RANK: 89/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.348 • RANK: 155/221 CANTONS ASSESSED

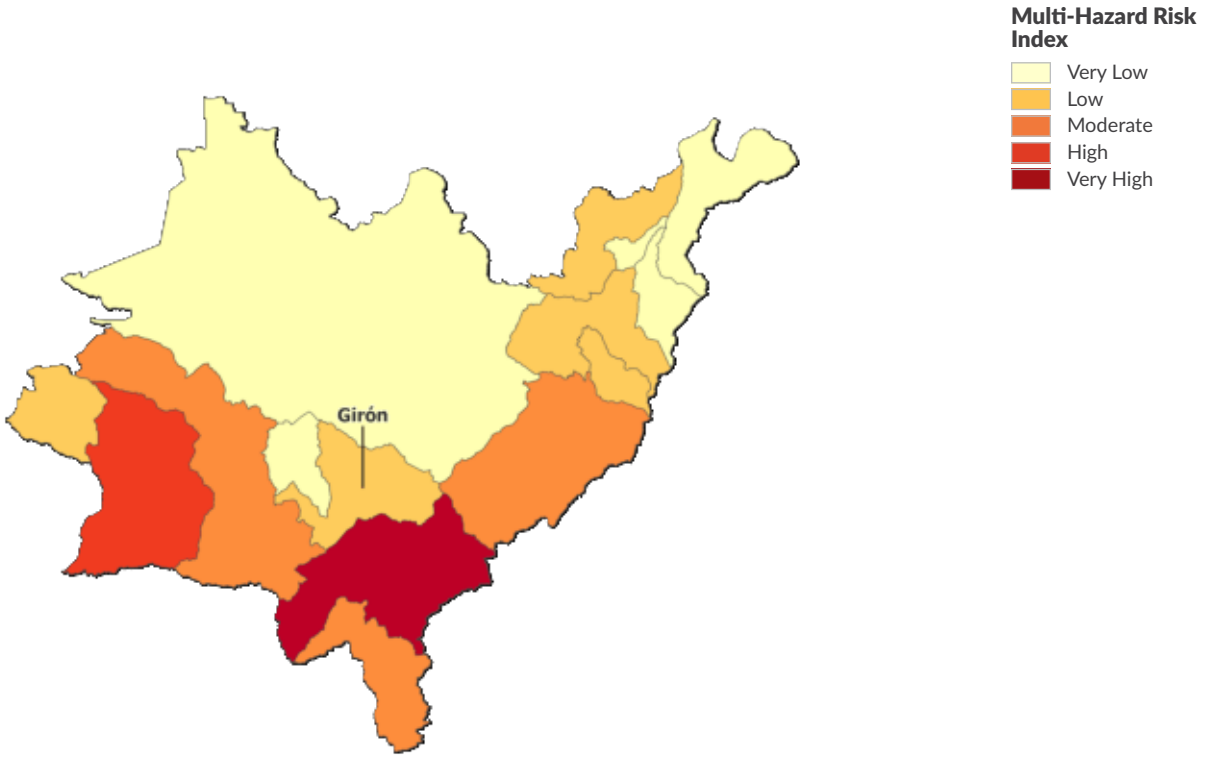
Vulnerability (V) - Low
SCORE: 0.427 • RANK: 164/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.388 • RANK: 179/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.561 • RANK: 53/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

GIRÓN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	**0.457**
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 155 / 221 CANTONS ASSESSED
SCORE: 0.348



MHE
0.348

Raw MHE
0.418

Relative MHE
0.278

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
96%
14,631 people exposed
13,622 structures exposed (95%)
Critical Infrastructure Exposed: 93%

Earthquake
100%
15,238 people exposed
14,356 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: <1%

Landslide
78%
11,835 people exposed
11,041 structures exposed (77%)
Critical Infrastructure Exposed: 50%

Mosquito-Borne Disease
5%
696 people exposed
723 structures exposed (5%)
Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
64%
9,801 people exposed
8,407 structures exposed (59%)
Critical Infrastructure Exposed: 44%

VULNERABILITY (V)

RANK: 164 / 221 CANTONS ASSESSED **SCORE: 0.427**

Vulnerability in Girón is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.529

- **8.2** Average Years of Schooling
- **60.3%** Population (age 24 and over) with General Basic Education Schooling
- **5.5%** Population (age 24 and over) with No Schooling
- **6.1%** Adult Illiteracy Rate
- **31.8%** Households with No Internet Access
- **76.4%** Households with No Access to Television
- **74.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.378

- **91.5%** Homes with Access to Public Water Source
- **46.4%** Homes Connected to the Public Sewage System
- **16.7%** Homes without Piped Water
- **4.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.476

- **67.8** Age Dependency Ratio
- **10.3%** Unemployment Rate
- **33.1%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.300

- **1.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.411

- **0.3** Female to Male Labor Ratio (distance from parity)
- **48.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **70.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **34.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.361

- **8.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.221

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **31.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.589

37
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

22
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

35
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

119
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.359

10.1%
Homes with Exterior Walls in Poor Condition

0.5%
Homes with Inadequate Materials Used in Outer Walls

16.8%
Homes with Roofs in Poor Condition

78.7%
Households with No Access to Vehicle for Private Use

5.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.387

35.6
Population Density (persons per sq km)

-0.2
Average Annual Population Change (2010-2022)

5.3
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.536

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 179 / 221 CANTONS ASSESSED **SCORE: 0.388**

Girón exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.342

53.7%
Labor Force Participation

20,533
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.318

0%
Protected Area (% of land area)

-2,356.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.234

69.6%
Voter Participation

70.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.612

Communications Capacity

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.757

31.7%
Household Access to Fixed Phones

87.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.708

98.3%
Homes Served by the Public Electricity Network

80.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.563

13.1
Nurses and Midwives per 10,000 persons

30.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.419

39.4
Average Distance to Airport (km)

91.7
Average Distance to Sea or River Port (km)

1.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 53 / 221 CANTONS ASSESSED **SCORE: 0.561**

Girón exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.515

2.5	3.9%	1.2	40.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.606

5.3	4.9	3.1	4.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 89 / 221 CANTONS ASSESSED
SCORE: 0.507

Girón's score and ranking are due to Low Vulnerability combined with Very Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Governance
- Economic Capacity
- Transportation Capacity
- Disaster Impacts

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

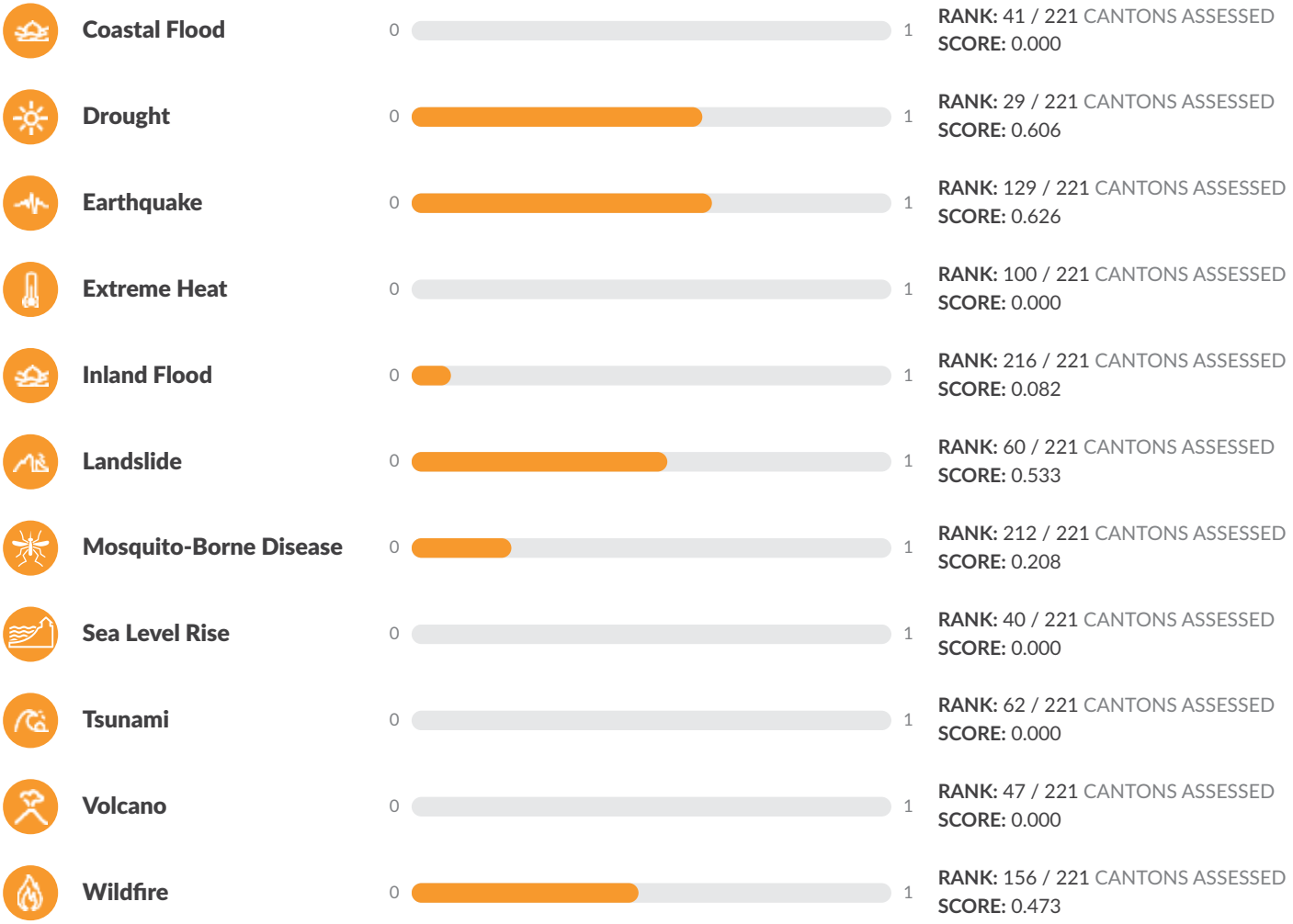
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

HAZARD-SPECIFIC RISK (HSR)

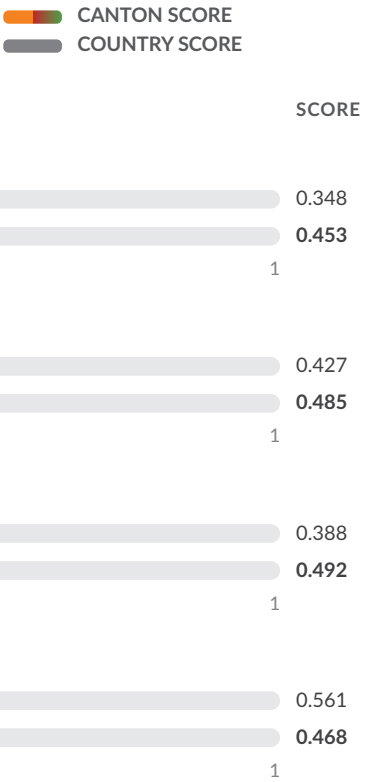


MULTI-HAZARD RISK (MHR)

RANKED
145 / 221
CANTONS ASSESSED
SCORE: 0.457

Girón's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Very Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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GONZALO PIZARRO

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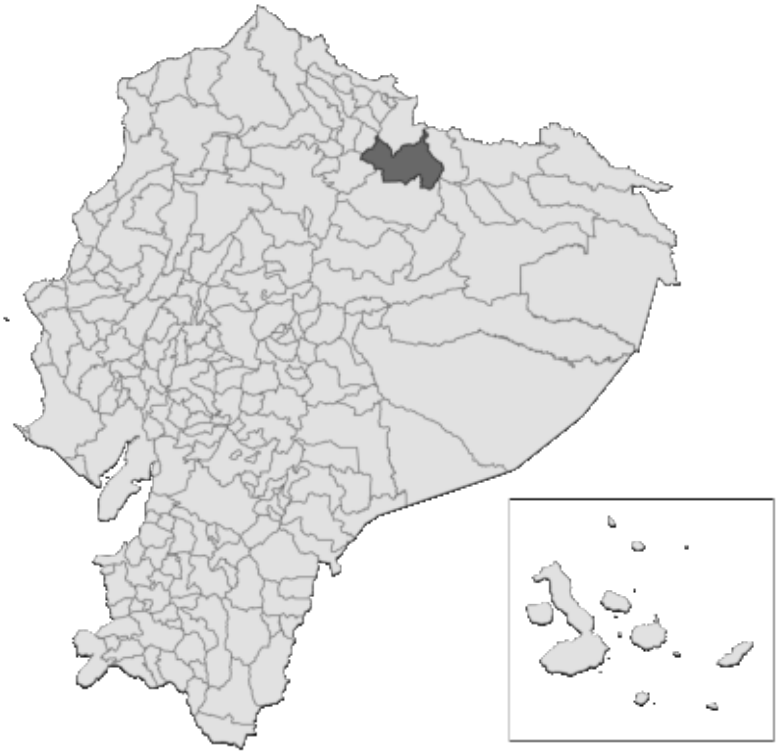
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GONZALO PIZARRO

PROVINCE: SUCUMBÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.468 • RANK: 135/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.475 • RANK: 124/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.299 • RANK: 175/221 CANTONS ASSESSED

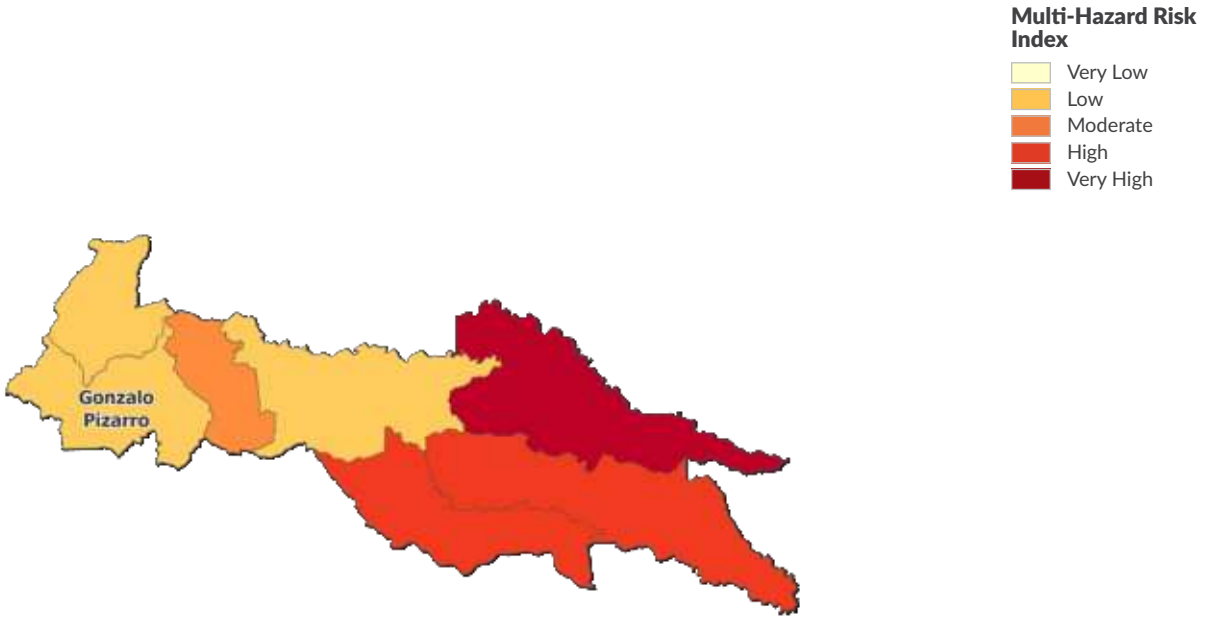
Vulnerability (V) - Low
SCORE: 0.462 • RANK: 137/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.509 • RANK: 93/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.378 • RANK: 173/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SUCUMBÍOS PROVINCE

GONZALO PIZARRO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Putumayo	0.567
Cuyabeno	0.539
Shushufindi	0.531
Cascales	0.485
Gonzalo Pizarro	**0.468**
Lago Agrio	0.461
Sucumbíos	0.445

MULTI-HAZARD EXPOSURE (MHE)

RANK: 175 / 221 CANTONS ASSESSED
SCORE: 0.299



MHE
0.299

Raw MHE
0.341

Relative MHE
0.257

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
12,157 people exposed
8,787 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
8%
980 people exposed
639 structures exposed (7%)
Critical Infrastructure Exposed: 23%

Landslide
28%
3,415 people exposed
2,837 structures exposed (32%)
Critical Infrastructure Exposed: 27%

Mosquito-Borne Disease
100%
12,112 people exposed
8,591 structures exposed (98%)
Critical Infrastructure Exposed: 98%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
1%
125 people exposed
117 structures exposed (1%)
Critical Infrastructure Exposed: 3%

Wildfire
78%
9,537 people exposed
7,368 structures exposed (84%)
Critical Infrastructure Exposed: 63%

VULNERABILITY (V)

RANK: 137 / 221 CANTONS ASSESSED **SCORE: 0.462**

Vulnerability in Gonzalo Pizarro is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.460

- **10** Average Years of Schooling
- **39.3%** Population (age 24 and over) with General Basic Education Schooling
- **4.6%** Population (age 24 and over) with No Schooling
- **3.9%** Adult Illiteracy Rate
- **51.5%** Households with No Internet Access
- **83.2%** Households with No Access to Television
- **77.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.499

- **77.9%** Homes with Access to Public Water Source
- **42.7%** Homes Connected to the Public Sewage System
- **37.1%** Homes without Piped Water
- **3.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.608

- **61** Age Dependency Ratio
- **24%** Unemployment Rate
- **54.6%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.439

- **3.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.568

- **0.4** Female to Male Labor Ratio (distance from parity)
- **64.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **89%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.219

- **6.2%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **3.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.134

- **27.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.406

27	11	69	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.485

15.3%	0.3%	18.6%	89.4%	9.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.465

4.6	1.7%	20.7	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.399

0.1	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 93 / 221 CANTONS ASSESSED **SCORE: 0.509**

Gonzalo Pizarro exhibits weaker Coping Capacity in the areas of Transportation Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.421

56.5%
Labor Force Participation

33,926
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.713

72.6%
Protected Area (% of land area)

-7,311.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.606

85.1%
Voter Participation

91.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.431

Communications Capacity

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.497

5.5%
Household Access to Fixed Phones

87.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.532

92.7%
Homes Served by the Public Electricity Network

79.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.444

12.6
Nurses and Midwives per 10,000 persons

15.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.252

60.3
Average Distance to Airport (km)

72.4
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 173 / 221 CANTONS ASSESSED **SCORE: 0.378**

Gonzalo Pizarro exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.449

4.5	50.4%	0	57.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.308

53.3	11.6	4.6	8.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 124 / 221 CANTONS ASSESSED
SCORE: 0.475

Gonzalo Pizarro's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Emergency Services

Economic Constraints

Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

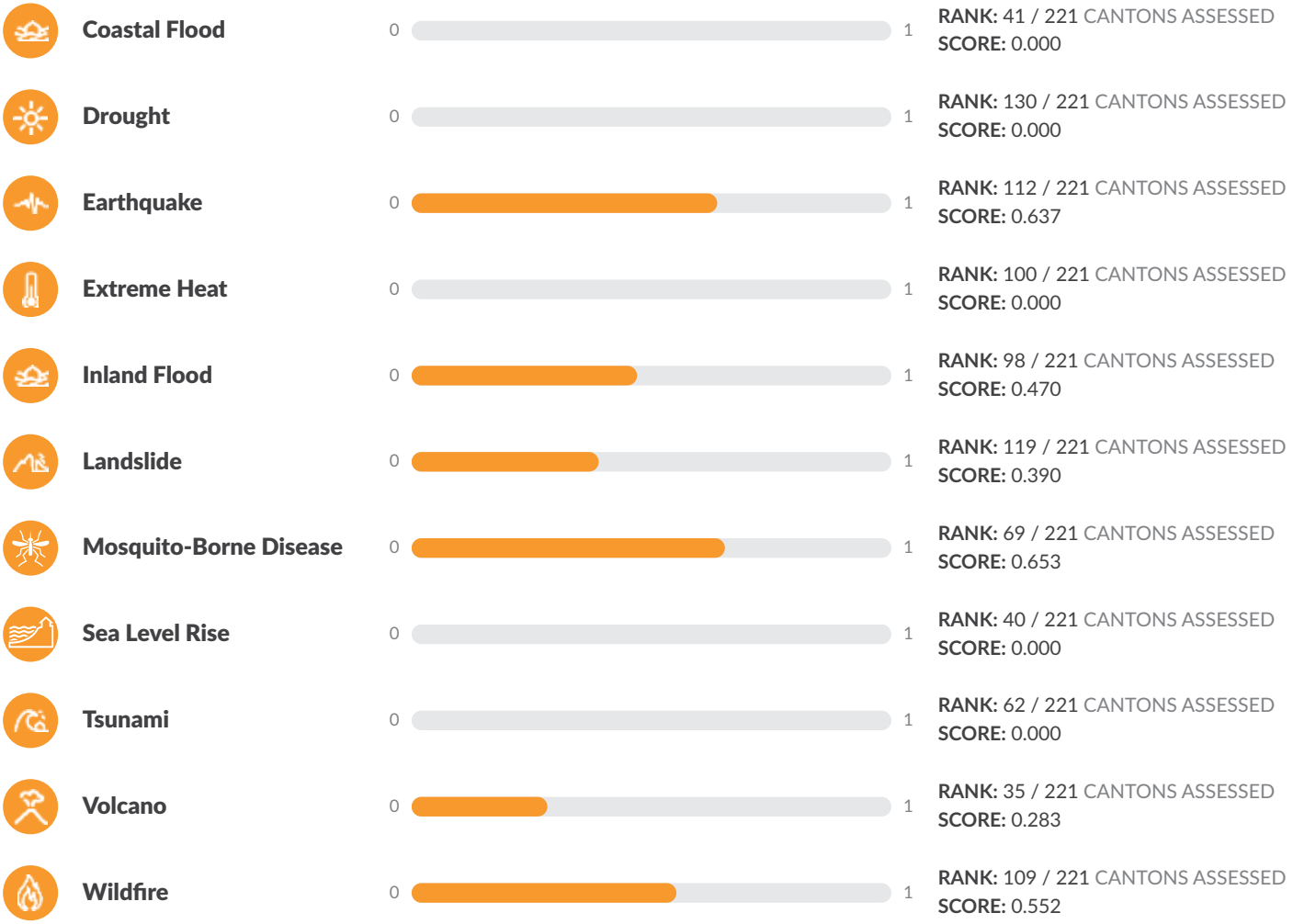
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
135 / 221
CANTONS ASSESSED
SCORE: 0.468

Gonzalo Pizarro's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE

SCORE

Multi-Hazard Exposure

0.299
0.453

0 1

Vulnerability

0.462
0.485

0 1

Coping Capacity

0.509
0.492

0 1

Disaster Management Capabilities

0.378
0.468

0 1

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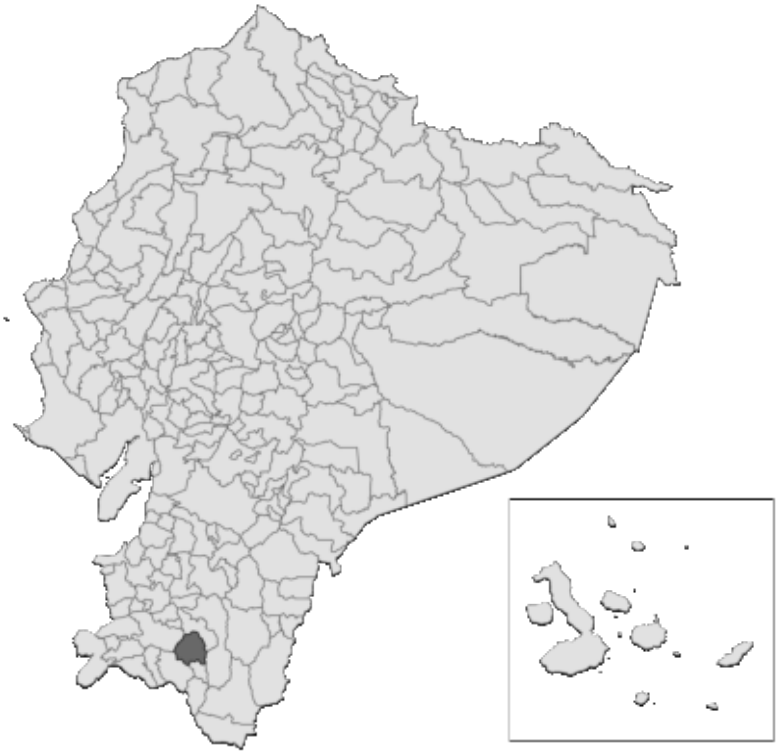
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PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.544 • RANK: 58/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.513 • RANK: 84/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.394 • RANK: 193/221 CANTONS ASSESSED

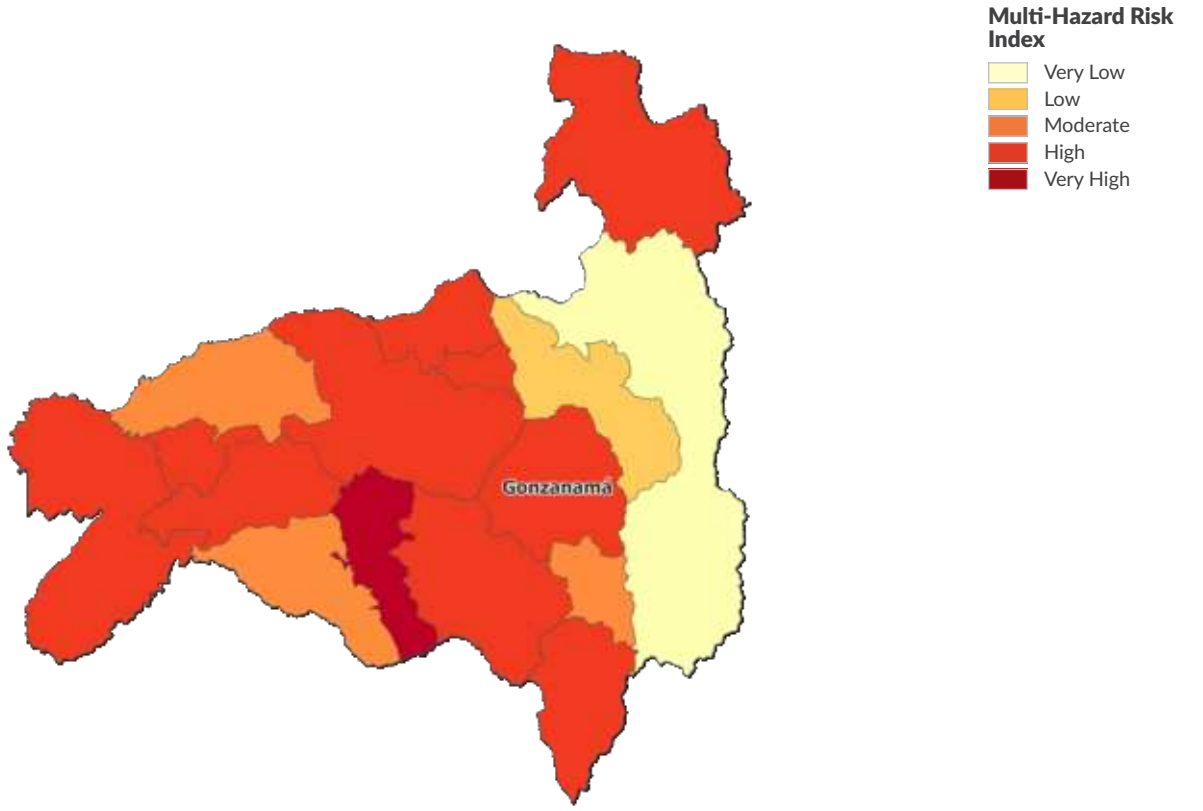
Coping Capacity (CC) - Very Low
SCORE: 0.321 • RANK: 214/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.357 • RANK: 145/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.375 • RANK: 174/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

GONZANAMÁ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	**0.544**
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 145 / 221 CANTONS ASSESSED
SCORE: 0.357



MHE
0.357

Raw MHE
0.402

Relative MHE
0.313

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
63%
- **8,667** people exposed
- **6,860** structures exposed (59%)

Critical Infrastructure Exposed: 45%

Earthquake
100%
- **13,753** people exposed
- **11,672** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **21** people exposed
- **57** structures exposed (<1%)

Critical Infrastructure Exposed: 2%

Landslide
76%
- **10,517** people exposed
- **9,264** structures exposed (79%)

Critical Infrastructure Exposed: 61%

Mosquito-Borne Disease
33%
- **4,534** people exposed
- **3,983** structures exposed (34%)

Critical Infrastructure Exposed: 24%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
90%
- **12,342** people exposed
- **10,387** structures exposed (89%)

Critical Infrastructure Exposed: 88%

VULNERABILITY (V)

RANK: 84 / 221 CANTONS ASSESSED **SCORE: 0.513**

Vulnerability in Gonzanamá is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.598

- **9.2** Average Years of Schooling
- **58.2%** Population (age 24 and over) with General Basic Education Schooling
- **4.7%** Population (age 24 and over) with No Schooling
- **4.6%** Adult Illiteracy Rate
- **64.9%** Households with No Internet Access
- **85.5%** Households with No Access to Television
- **83.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.602

- **76.7%** Homes with Access to Public Water Source
- **29.6%** Homes Connected to the Public Sewage System
- **48.4%** Homes without Piped Water
- **5.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.647

- **70.9** Age Dependency Ratio
- **13.2%** Unemployment Rate
- **63.2%** Poverty Rate (based on UBN)
- **2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.562

- **5.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.509

- **0.4** Female to Male Labor Ratio (distance from parity)
- **29.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **81.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **85.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.511

- **18.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **10.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.307

- **3.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.630

95	21	54	36
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.537

19.1%	1.6%	24.8%	85.6%	8.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.334

18	-0.3	5.3	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.360

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 214 / 221 CANTONS ASSESSED **SCORE: 0.321**

Gonzanamá exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.320

51.2%
Labor Force Participation

24,818
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.288

0%
Protected Area (% of land area)

-4,338
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.191

75%
Voter Participation

42%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.463

Communications Capacity

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.566

14.8%
Household Access to Fixed Phones

81.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.449

95.5%
Homes Served by the Public Electricity Network

60.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.405

9
Nurses and Midwives per 10,000 persons

16.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.431

23.3
Average Distance to Airport (km)

90.6
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 174 / 221 CANTONS ASSESSED **SCORE: 0.375**

Gonzanamá exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.400

3.7	7.9%	0	35.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.349

17.7	9.5	4.9	13.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 193 / 221 CANTONS ASSESSED
SCORE: 0.394

Gonzanamá's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance | **Economic Capacity** | **Emergency Services** | **Economic Constraints**

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

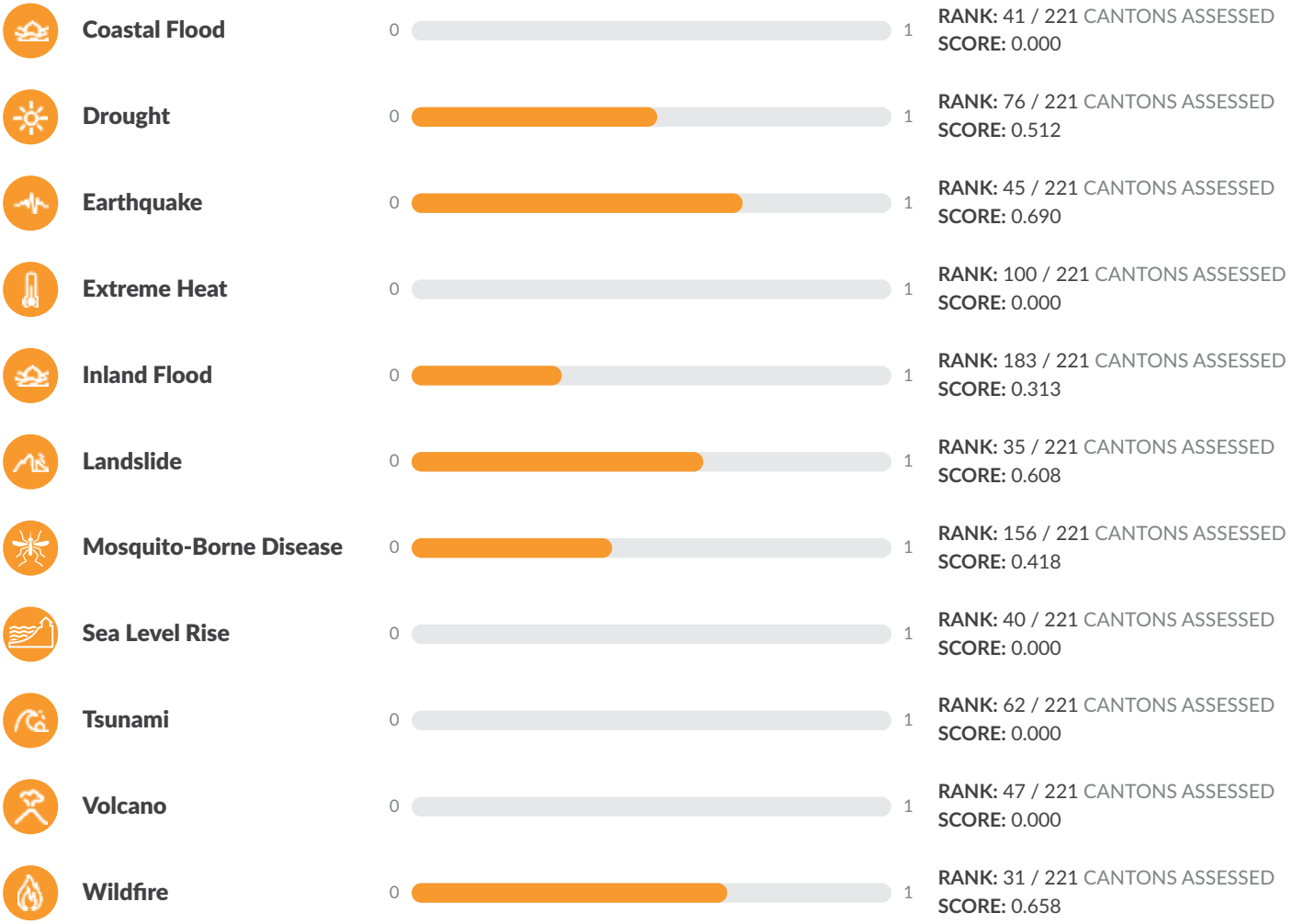
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

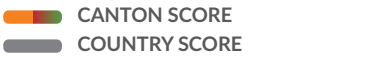


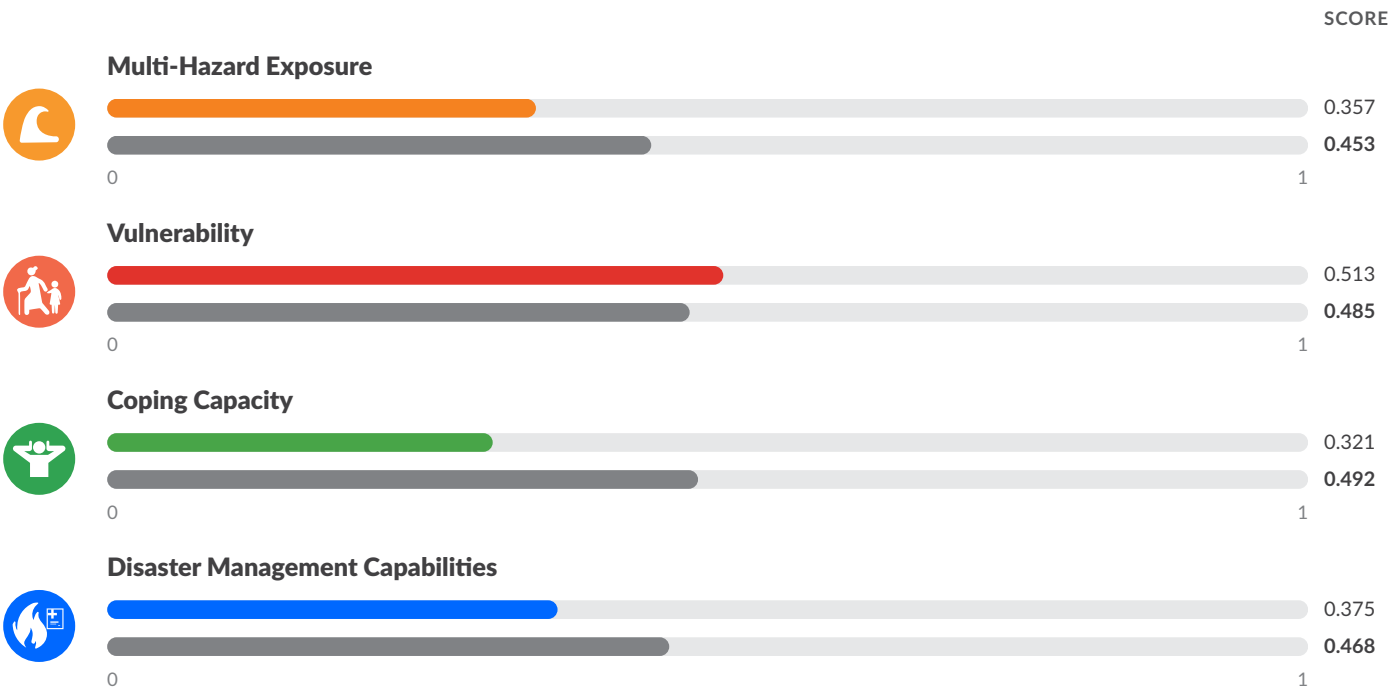
MULTI-HAZARD RISK (MHR)

RANKED
58 / 221
CANTONS ASSESSED
SCORE: 0.544

Gonzanamá's score and ranking are due to Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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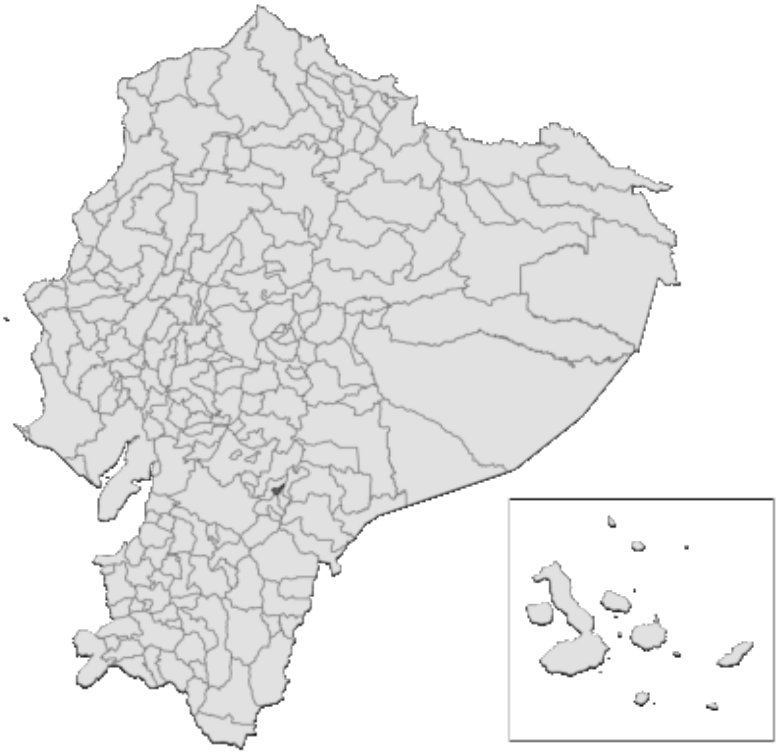
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GUACHAPALA

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.385 • RANK: 206/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.559 • RANK: 53/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.219 • RANK: 204/221 CANTONS ASSESSED

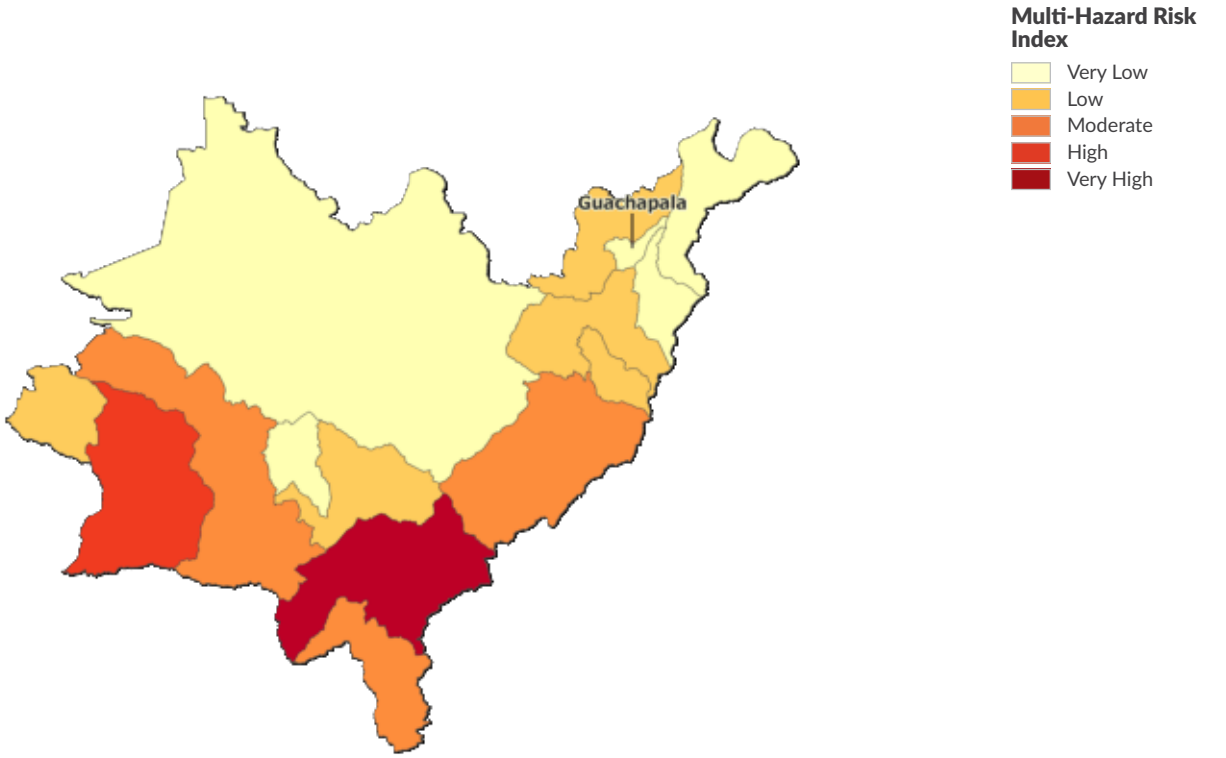
Vulnerability (V) - Very Low
SCORE: 0.388 • RANK: 194/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.449 • RANK: 145/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.617 • RANK: 24/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

GUACHAPALA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	**0.385**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 204 / 221 CANTONS ASSESSED
SCORE: 0.219



MHE
0.219

Raw MHE
0.175

Relative MHE
0.263

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
21%
- **887** people exposed
- **802** structures exposed (22%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **4,131** people exposed
- **3,640** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **14** people exposed
- **11** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
94%
- **3,873** people exposed
- **3,467** structures exposed (95%)

Critical Infrastructure Exposed: 99%

Mosquito-Borne Disease
44%
- **1,818** people exposed
- **1,641** structures exposed (45%)

Critical Infrastructure Exposed: 83%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
85%
- **3,525** people exposed
- **3,144** structures exposed (86%)

Critical Infrastructure Exposed: 82%

VULNERABILITY (V)

RANK: 194 / 221 CANTONS ASSESSED **SCORE: 0.388**

Vulnerability in Guachapala is primarily driven by Vulnerable Health Status and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.451

- **9.3** Average Years of Schooling
- **52.1%** Population (age 24 and over) with General Basic Education Schooling
- **5.7%** Population (age 24 and over) with No Schooling
- **4.6%** Adult Illiteracy Rate
- **32.8%** Households with No Internet Access
- **75%** Households with No Access to Television
- **68.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.323

- **95%** Homes with Access to Public Water Source
- **36.9%** Homes Connected to the Public Sewage System
- **23.1%** Homes without Piped Water
- **1.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.396

- **61.6** Age Dependency Ratio
- **9.4%** Unemployment Rate
- **31.9%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.446

- **3.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.269

- **0.3** Female to Male Labor Ratio (distance from parity)
- **32.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **54.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **11.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.464

- **14.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **20%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.141

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **24.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.345

80	0	15	50
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.401

11%	10.9%	17.8%	73.7%	3.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.428

88.5	0.6%	7.5	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.365

0.1	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 145 / 221 CANTONS ASSESSED **SCORE: 0.449**

Guachapala exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.373

61.8%
Labor Force Participation

5,116
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.353

0%
Protected Area (% of land area)

-151.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.449

79.4%
Voter Participation

84.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.559

Communications Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.703

22.9%
Household Access to Fixed Phones

87.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.755

97.7%
Homes Served by the Public Electricity Network

87.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.332

8.4
Nurses and Midwives per 10,000 persons

11.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.445

33.6
Average Distance to Airport (km)

110.9
Average Distance to Sea or River Port (km)

2.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 24 / 221 CANTONS ASSESSED **SCORE: 0.617**

Guachapala exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.505

1.5	12.7%	0	31.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.729

6.9	2	1.6	4.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 53 / 221 CANTONS ASSESSED
SCORE: 0.559

Guachapala's score and ranking are due to Very Low Vulnerability combined with Low Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Healthcare Capacity
- Economic Capacity
- Transportation Capacity
- Governance

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

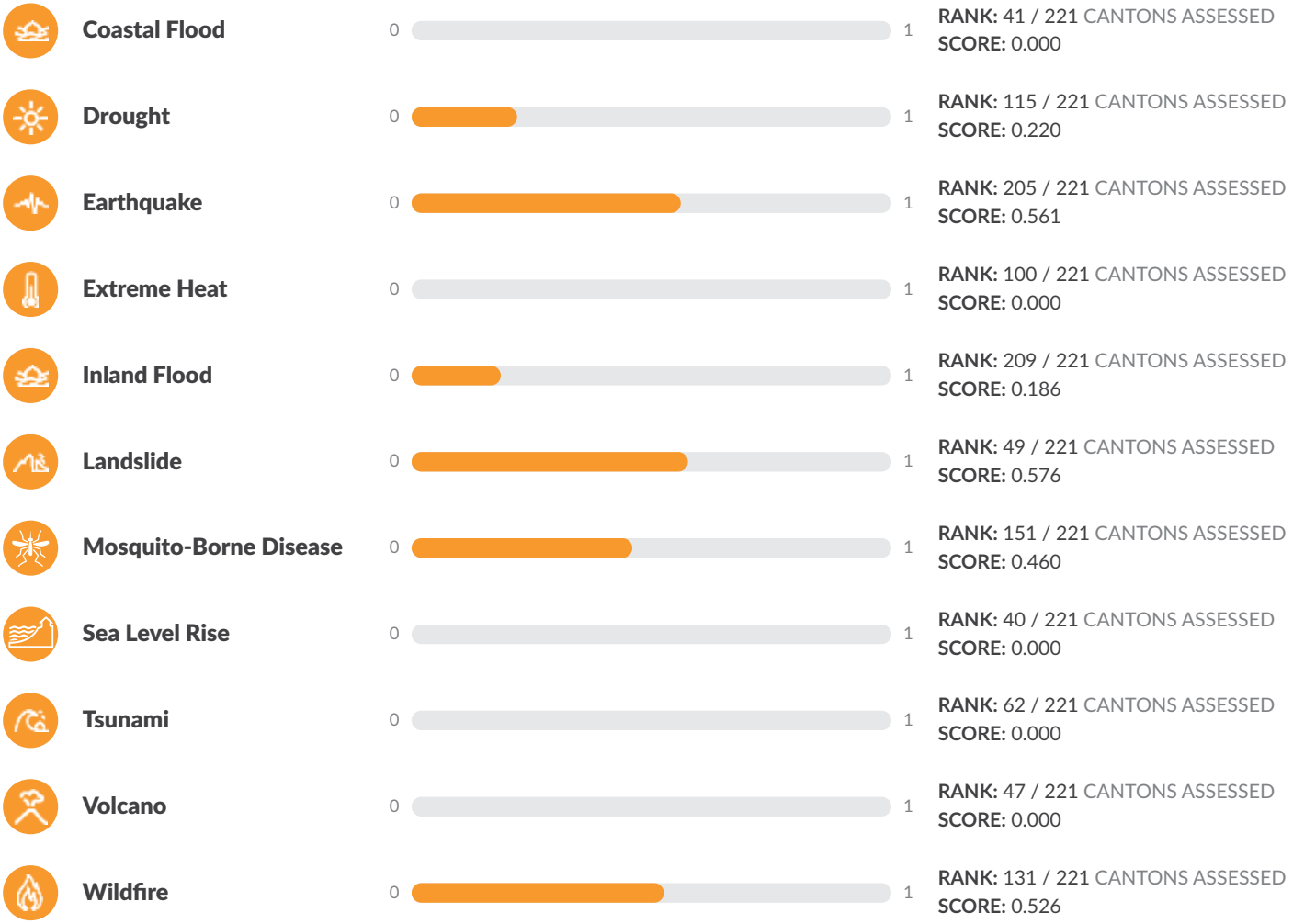
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

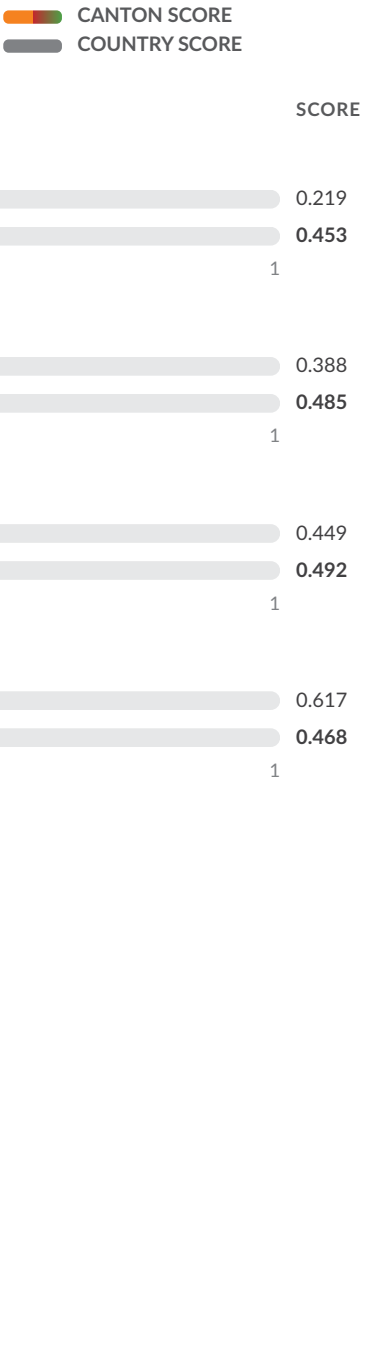


MULTI-HAZARD RISK (MHR)

RANKED
206 / 221
CANTONS ASSESSED
SCORE: 0.385

Guachapala's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, Low Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.469 • RANK: 133/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.536 • RANK: 71/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.482 • RANK: 86/221 CANTONS ASSESSED

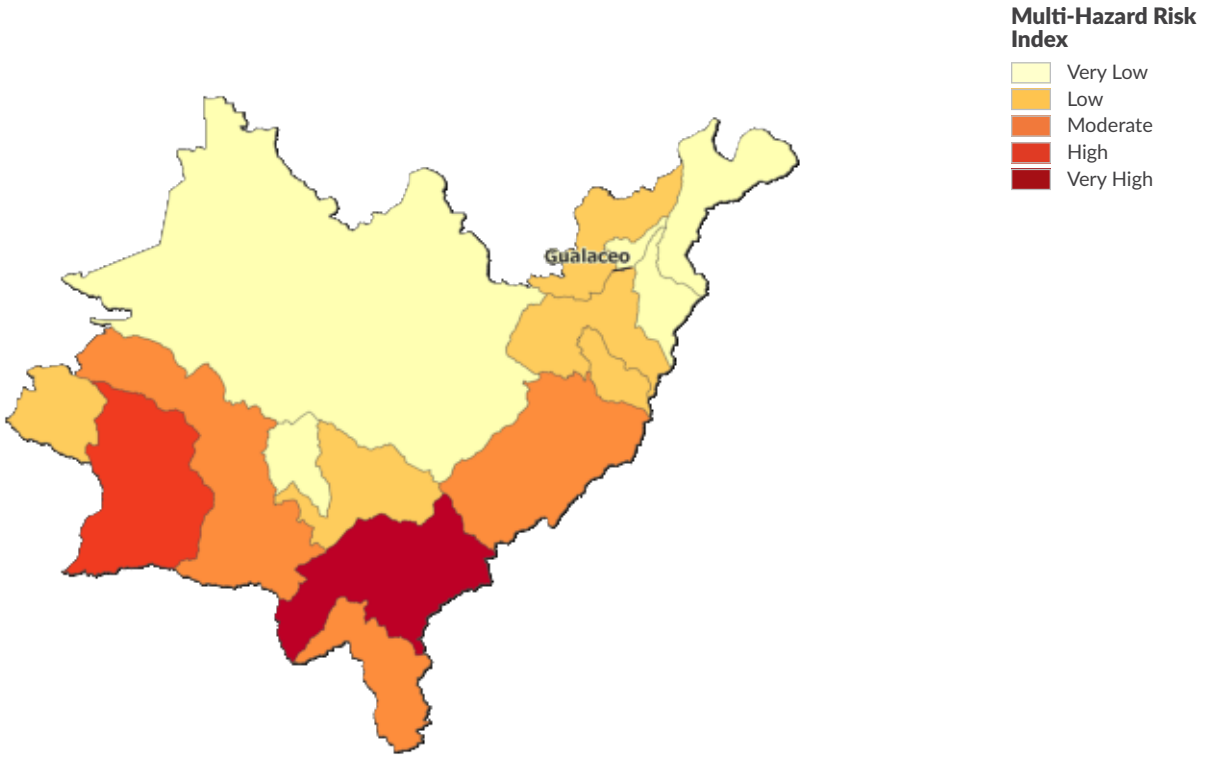
Vulnerability (V) - Low
SCORE: 0.439 • RANK: 154/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.460 • RANK: 133/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.586 • RANK: 37/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

GUALACEO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	**0.469**
Paute	0.461
Girón	0.457

Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 86 / 221 CANTONS ASSESSED
SCORE: 0.482



MHE
0.482

Raw MHE
0.632

Relative MHE
0.333

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
91%
- **46,917** people exposed
- **35,240** structures exposed (89%)
- **Critical Infrastructure Exposed:** 88%

Earthquake
100%
- **51,546** people exposed
- **39,390** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
6%
- **3,101** people exposed
- **1,754** structures exposed (4%)
- **Critical Infrastructure Exposed:** 3%

Landslide
71%
- **36,817** people exposed
- **29,213** structures exposed (74%)
- **Critical Infrastructure Exposed:** 52%

Mosquito-Borne Disease
4%
- **2,048** people exposed
- **1,776** structures exposed (5%)
- **Critical Infrastructure Exposed:** 5%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
78%
- **40,401** people exposed
- **32,398** structures exposed (82%)
- **Critical Infrastructure Exposed:** 70%

VULNERABILITY (V)

RANK: 154 / 221 CANTONS ASSESSED **SCORE: 0.439**

Vulnerability in Gualaceo is primarily driven by Vulnerable Health Status and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.475

- **8.8** Average Years of Schooling
- **54.8%** Population (age 24 and over) with General Basic Education Schooling
- **7.3%** Population (age 24 and over) with No Schooling
- **6.5%** Adult Illiteracy Rate
- **29%** Households with No Internet Access
- **70.5%** Households with No Access to Television
- **68.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.420

- **93.4%** Homes with Access to Public Water Source
- **37.5%** Homes Connected to the Public Sewage System
- **27.9%** Homes without Piped Water
- **4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.442

- **65.9** Age Dependency Ratio
- **9.1%** Unemployment Rate
- **42.6%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.313

- **1.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.370

- **0.3** Female to Male Labor Ratio (distance from parity)
- **44.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **59.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **29%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.566

- **10.9%** Prevalence of Disability (among persons age 5 and over)
- **4.1** Perinatal Mortality Rate (per 1,000 births)
- **12.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.268

- **0.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **25.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.649

66
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

22
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

33
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

168
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.405

11%
Homes with Exterior Walls in Poor Condition

3.1%
Homes with Inadequate Materials Used in Outer Walls

17.9%
Homes with Roofs in Poor Condition

76.4%
Households with No Access to Vehicle for Private Use

5.9%
Household Overcrowding

Population Pressures

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.433

124.8
Population Density (persons per sq km)

0.2%
Average Annual Population Change (2010-2022)

-3.2
Net Migration Rate (per 1,000 persons)

0.31
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.423

0.4
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 133 / 221 CANTONS ASSESSED **SCORE: 0.460**

Gualaceo exhibits weaker Coping Capacity in the areas of Governance and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.531

57.9%
Labor Force Participation

115,455
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.317

0%
Protected Area (% of land area)

-2,452.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.300

72%
Voter Participation

77.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.597

Communications Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.703

15.7%
Household Access to Fixed Phones

90.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.771

97.6%
Homes Served by the Public Electricity Network

88.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.439

9.7
Nurses and Midwives per 10,000 persons

18.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.475

21
Average Distance to Airport (km)

117.7
Average Distance to Sea or River Port (km)

2.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 37 / 221 CANTONS ASSESSED **SCORE: 0.586**

Gualaceo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.505

2	1.6%	0.8	19
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.667

4.7	3.9	1.9	5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 71 / 221 CANTONS ASSESSED
SCORE: 0.536

Gualaceo's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Vulnerable Health Status

Healthcare Capacity

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

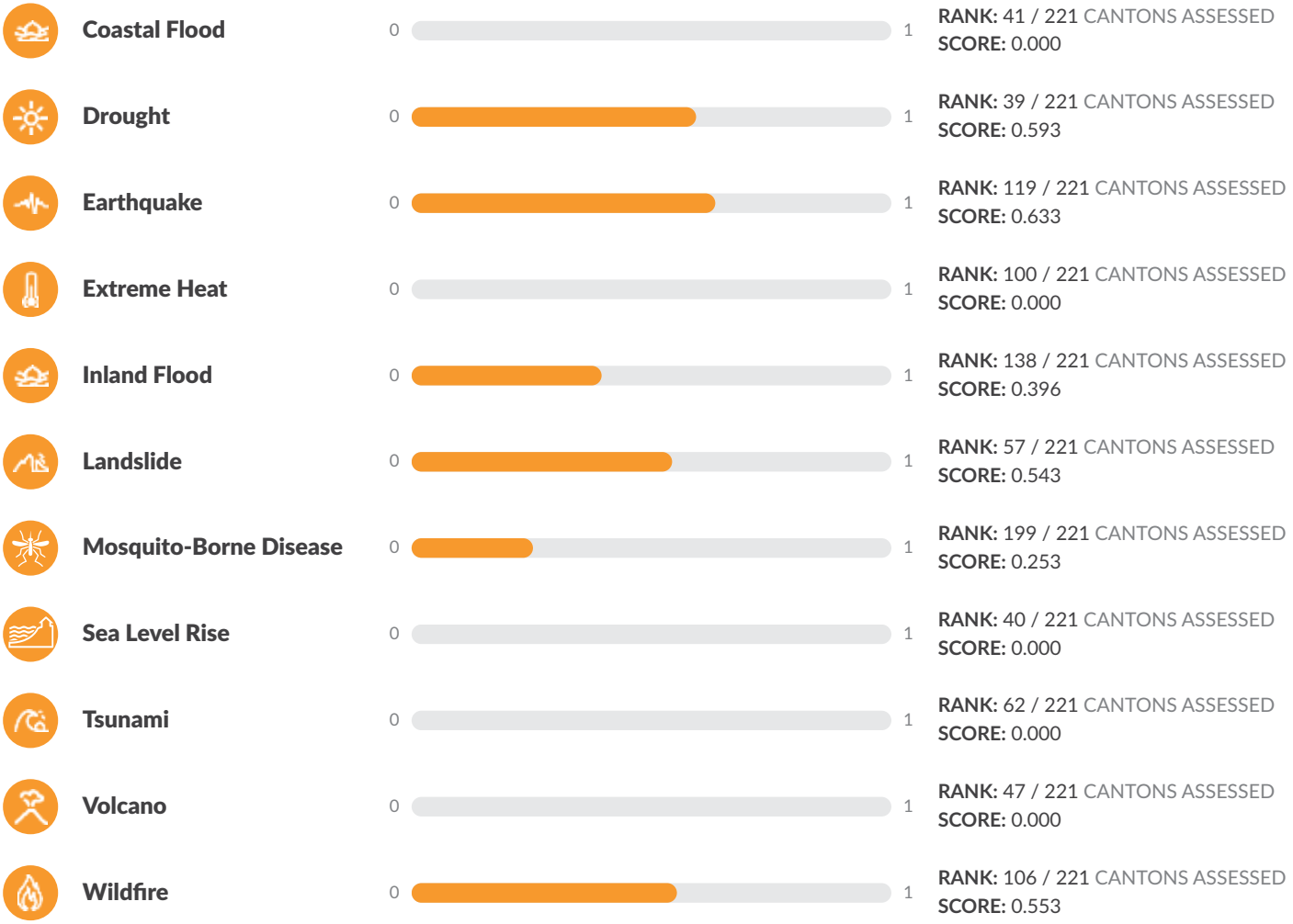
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

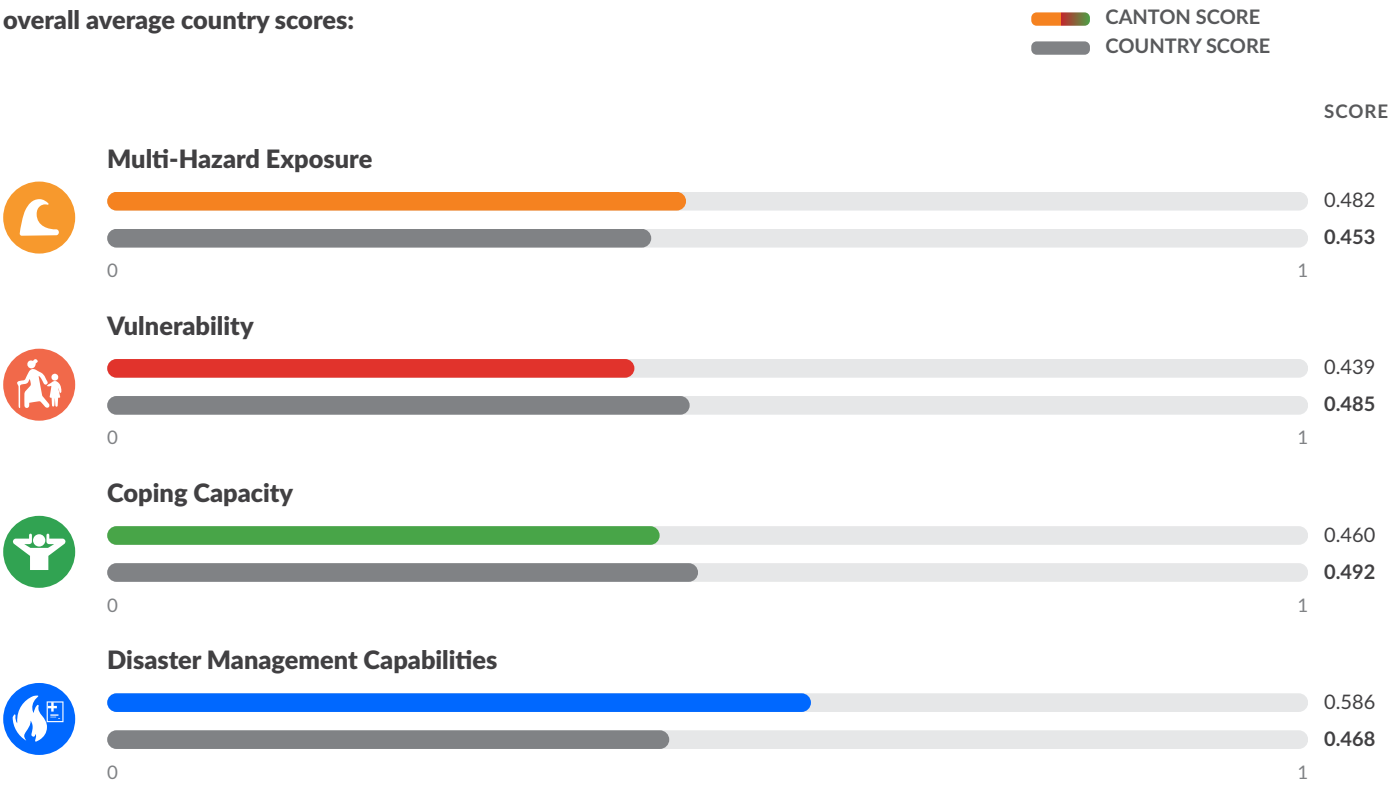


MULTI-HAZARD RISK (MHR)

RANKED
133 / 221
CANTONS ASSESSED
SCORE: 0.469

Gualaceo's score and ranking are due to High Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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GUALAQUIZA

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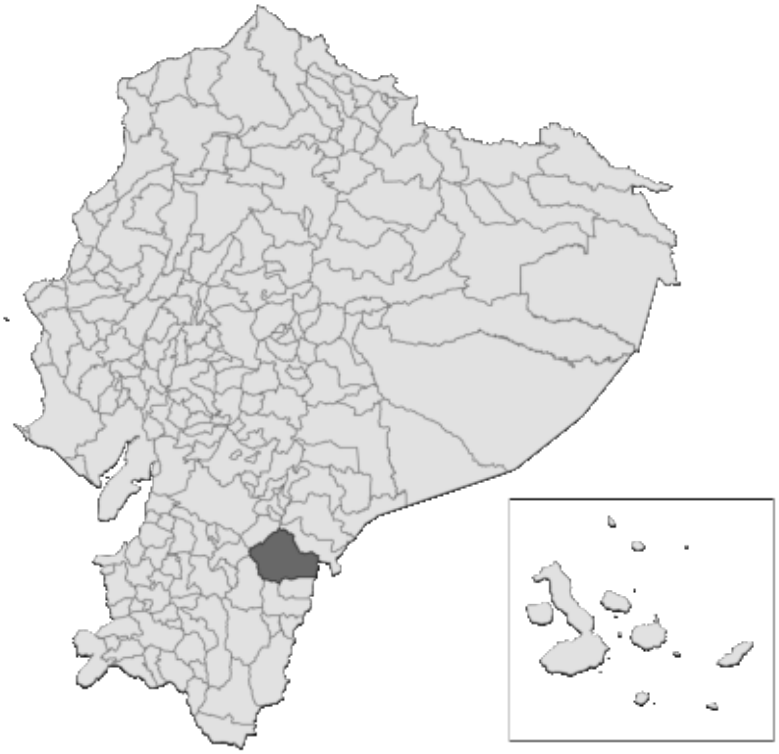
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GUALAQUIZA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.484 • RANK: 120/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.475 • RANK: 124/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.360 • RANK: 144/221 CANTONS ASSESSED

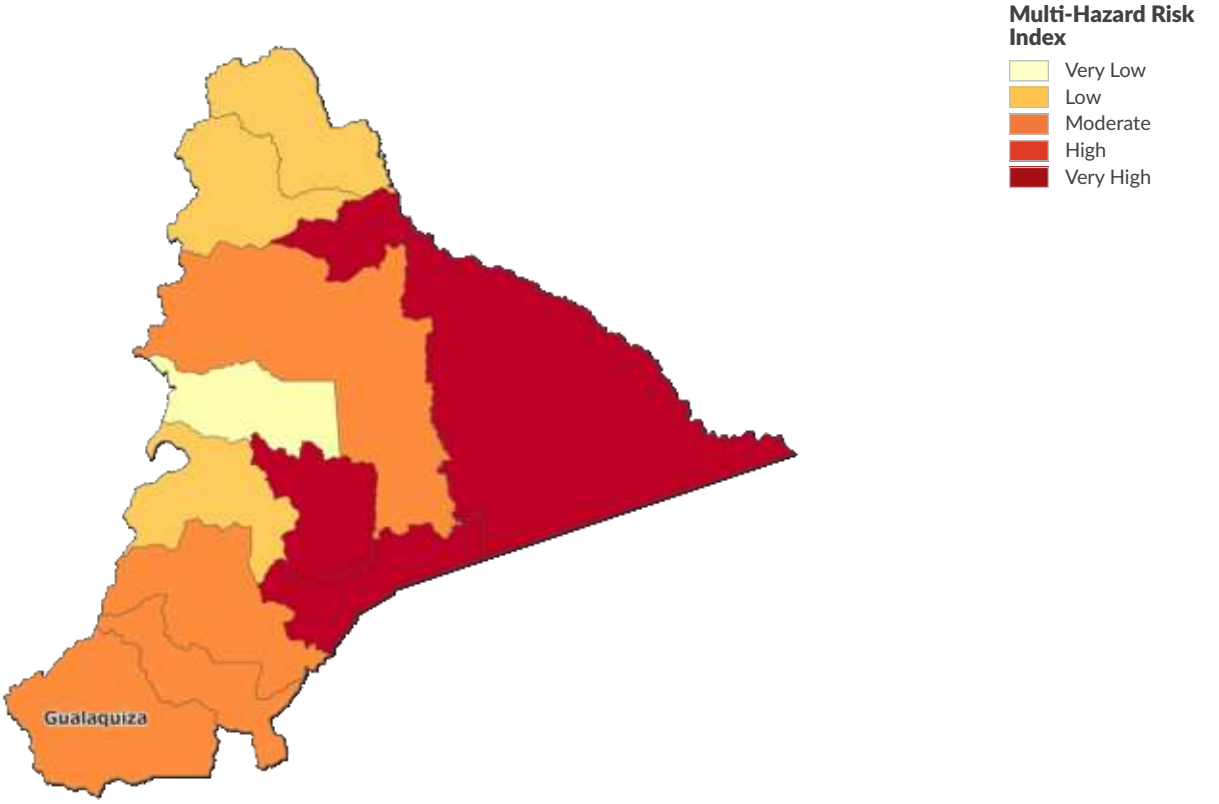
Vulnerability (V) - Moderate
SCORE: 0.483 • RANK: 116/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.458 • RANK: 135/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.448 • RANK: 124/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

GUALAQUIZA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491

Gualaquiza	**0.484**
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 144 / 221 CANTONS ASSESSED
SCORE: 0.360



MHE
0.360

Raw MHE
0.446

Relative MHE
0.275

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
22,572 people exposed
14,614 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
14%
3,185 people exposed
2,116 structures exposed (14%)
Critical Infrastructure Exposed: 22%

Landslide
62%
14,067 people exposed
9,755 structures exposed (67%)
Critical Infrastructure Exposed: 55%

Mosquito-Borne Disease
91%
20,480 people exposed
12,135 structures exposed (83%)
Critical Infrastructure Exposed: 96%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
52%
11,635 people exposed
8,502 structures exposed (58%)
Critical Infrastructure Exposed: 36%

VULNERABILITY (V)

RANK: 116 / 221 CANTONS ASSESSED **SCORE: 0.483**

Vulnerability in Gualaquiza is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.407

- **10.1** Average Years of Schooling
- **45.2%** Population (age 24 and over) with General Basic Education Schooling
- **4.5%** Population (age 24 and over) with No Schooling
- **2.8%** Adult Illiteracy Rate
- **35.9%** Households with No Internet Access
- **80.3%** Households with No Access to Television
- **70.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.555

- **69.8%** Homes with Access to Public Water Source
- **52%** Homes Connected to the Public Sewage System
- **37.2%** Homes without Piped Water
- **7.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.602

- **67.5** Age Dependency Ratio
- **15.1%** Unemployment Rate
- **56.5%** Poverty Rate (based on UBN)
- **1.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.426

- **3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.576

- **0.4** Female to Male Labor Ratio (distance from parity)
- **82.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **87.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **36.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.346

- **6.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.461

- **13** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **57.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.392

21
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

22
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.396

11.7%
Homes with Exterior Walls in Poor Condition

0.7%
Homes with Inadequate Materials Used in Outer Walls

12.3%
Homes with Roofs in Poor Condition

80.3%
Households with No Access to Vehicle for Private Use

9.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.473

10.1
Population Density (persons per sq km)

2%
Average Annual Population Change (2010-2022)

8.1
Net Migration Rate (per 1,000 persons)

0.31
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.515

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 135 / 221 CANTONS ASSESSED **SCORE: 0.458**

Gualaquiza exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.432

54.7%
Labor Force Participation

58,558
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.499

14.4%
Protected Area (% of land area)

-10,393.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.354

75%
Voter Participation

79.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.574

Communications Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.532

15.3%
Household Access to Fixed Phones

76.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.549

93%
Homes Served by the Public Electricity Network

80.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.761

29.7
Nurses and Midwives per 10,000 persons

41.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.455

10.5
Average Distance to Airport (km)

82.6
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.448**

Gualaquiza exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.505

3.8	26.1%	0.8	69.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.391

9.9	9.1	8.1	8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 124 / 221 CANTONS ASSESSED
SCORE: 0.475

Gualaquiza's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Governance


Emergency Services


Economic Constraints


Marginalization

KEY FACTORS INFLUENCING RESILIENCE



Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Economic Constraints

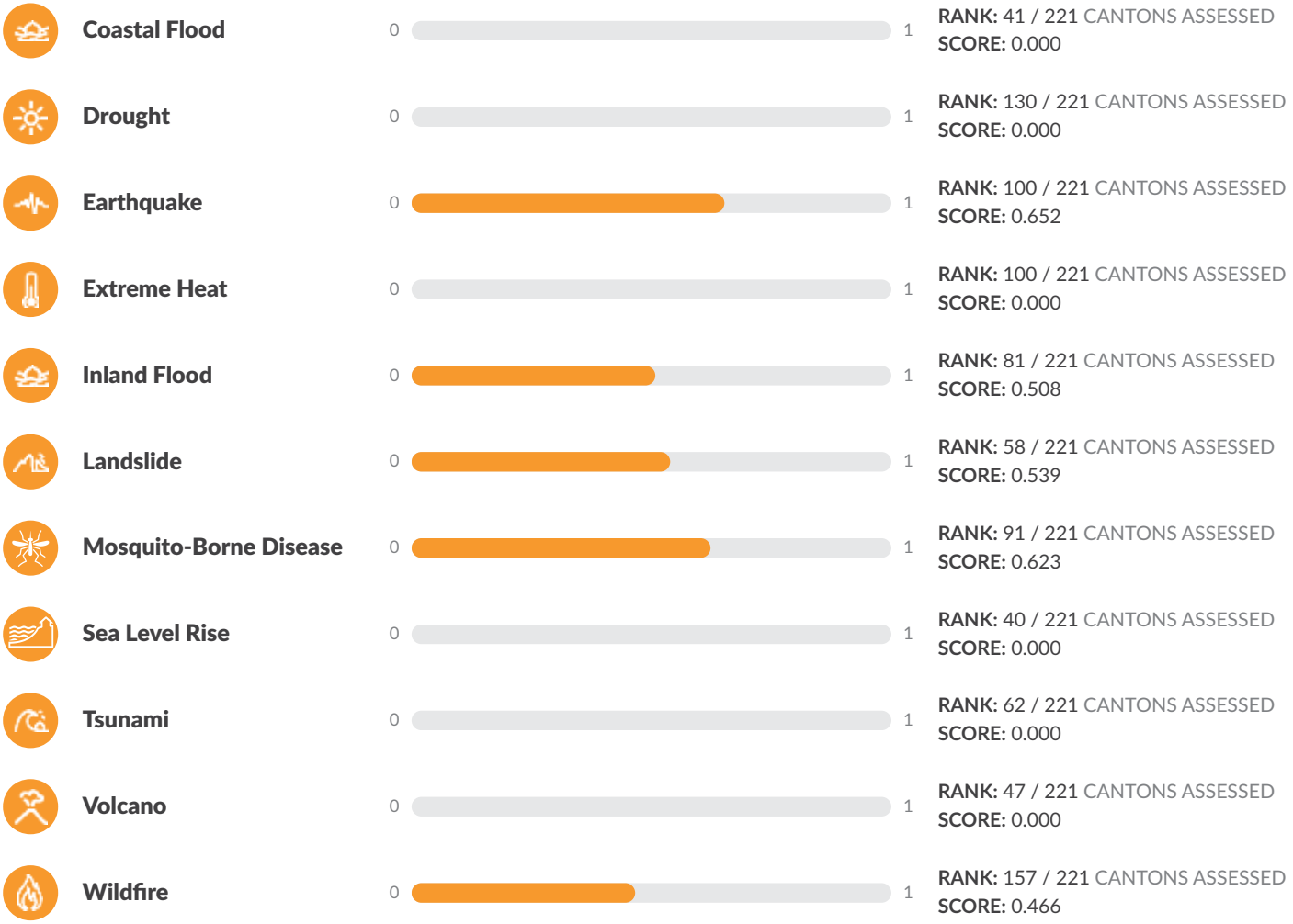
Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

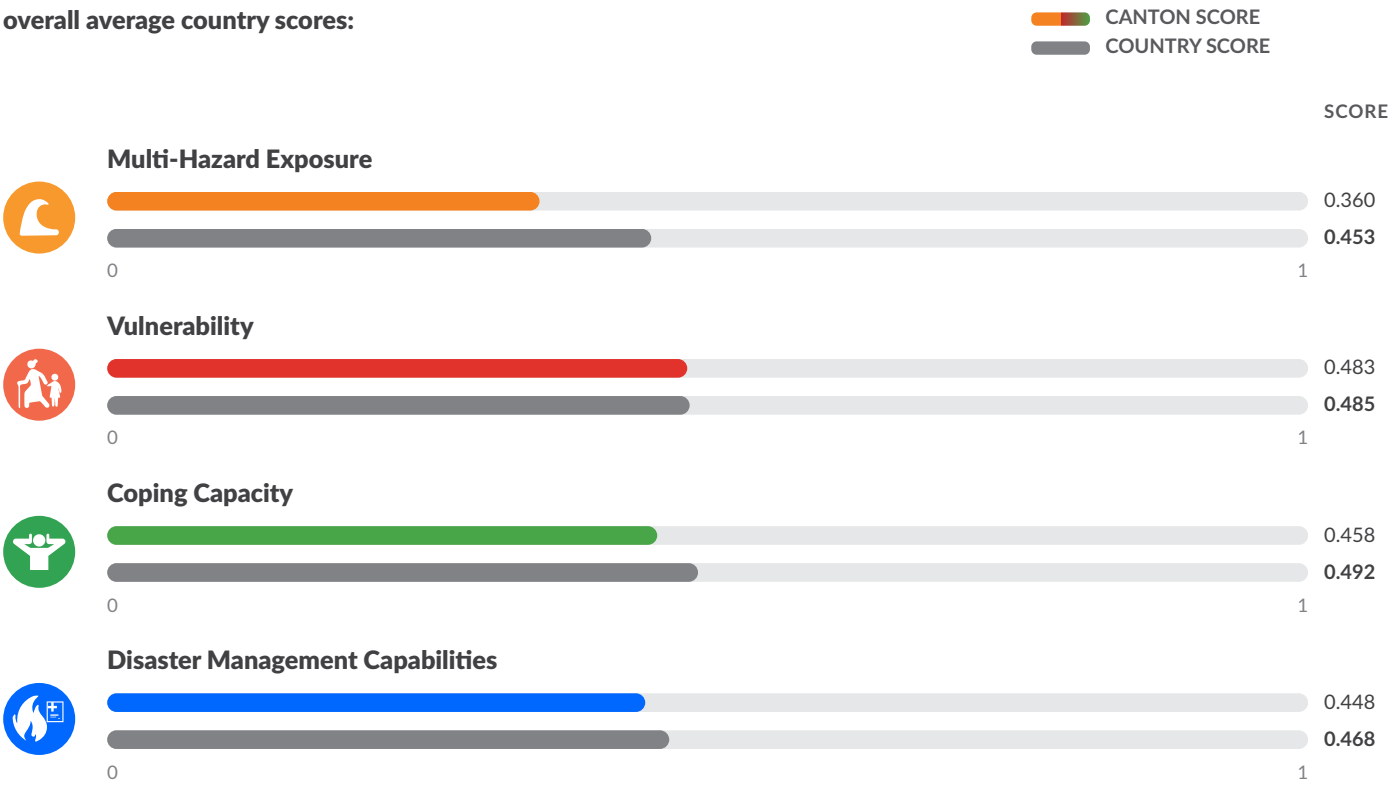


MULTI-HAZARD RISK (MHR)

RANKED
120 / 221
CANTONS ASSESSED
SCORE: 0.484

Gualaquiza's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.606 • RANK: 18/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.600 • RANK: 17/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.350 • RANK: 213/221 CANTONS ASSESSED

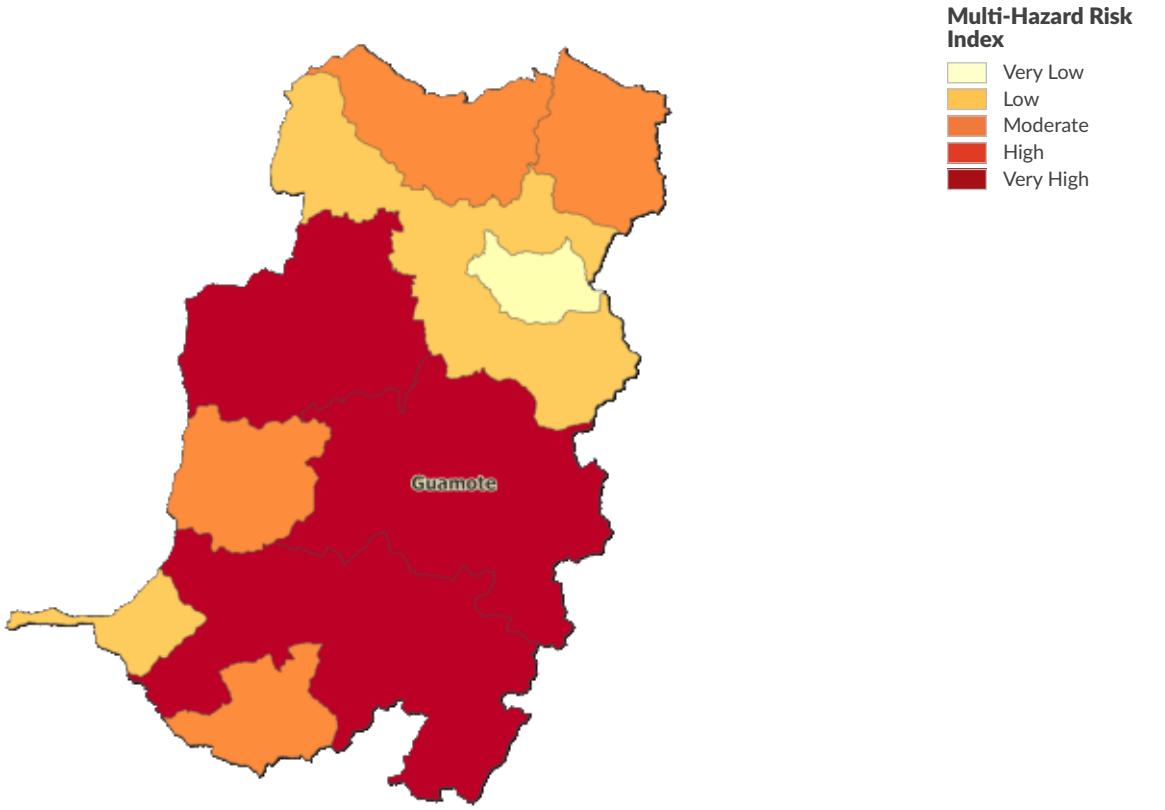
Coping Capacity (CC) - Very Low
SCORE: 0.356 • RANK: 197/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.475 • RANK: 89/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.294 • RANK: 208/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

GUAMOTE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	**0.606**
Alausí	0.590
Colta	0.571
Guano	0.512
Penipe	0.500
Pallatanga	0.487
Chunchi	0.483
Cumandá	0.442
Riobamba	0.442
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 89 / 221 CANTONS ASSESSED
SCORE: 0.475



MHE
0.475

Raw MHE
0.618

Relative MHE
0.332

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
65%
33,465 people exposed
21,813 structures exposed (64%)
Critical Infrastructure Exposed: 72%

Earthquake
100%
51,866 people exposed
34,103 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
2%
960 people exposed
667 structures exposed (2%)
Critical Infrastructure Exposed: 6%

Landslide
82%
42,691 people exposed
28,428 structures exposed (83%)
Critical Infrastructure Exposed: 87%

Mosquito-Borne Disease
3%
1,676 people exposed
1,217 structures exposed (4%)
Critical Infrastructure Exposed: 1%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
97%
50,530 people exposed
33,185 structures exposed (97%)
Critical Infrastructure Exposed: 98%

VULNERABILITY (V)

RANK: 17 / 221 CANTONS ASSESSED **SCORE: 0.600**

Vulnerability in Guamote is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.830

- **6.3** Average Years of Schooling
- **46.9%** Population (age 24 and over) with General Basic Education Schooling
- **20.9%** Population (age 24 and over) with No Schooling
- **17.1%** Adult Illiteracy Rate
- **77.6%** Households with No Internet Access
- **93.8%** Households with No Access to Television
- **93.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.685

- **89.3%** Homes with Access to Public Water Source
- **16.7%** Homes Connected to the Public Sewage System
- **80.5%** Homes without Piped Water
- **7.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.749

- **65.7** Age Dependency Ratio
- **13.7%** Unemployment Rate
- **88.5%** Poverty Rate (based on UBN)
- **14.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.670

- **7.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.604

- **0.3** Female to Male Labor Ratio (distance from parity)
- **63.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **90%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **78.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.473

- **10.4%** Prevalence of Disability (among persons age 5 and over)
- **3.7** Perinatal Mortality Rate (per 1,000 births)
- **10%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.292

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.367

17	7	20	62
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.458

10.2%	0.4%	13.2%	94.7%	9.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.353

30	-1.9	-4.6	0.33
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.639

0.5	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 197 / 221 CANTONS ASSESSED **SCORE: 0.356**

Guamote exhibits weaker Coping Capacity in the areas of Governance and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.467

57.5%
Labor Force Participation

51,511
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.513

8.4%
Protected Area (% of land area)

-5,648
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.221

77.3%
Voter Participation

41.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.329

Communications Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.276

3%
Household Access to Fixed Phones

74.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.234

90.9%
Homes Served by the Public Electricity Network

36.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.423

11.2
Nurses and Midwives per 10,000 persons

15.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.381

37.8
Average Distance to Airport (km)

94.4
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 208 / 221 CANTONS ASSESSED **SCORE: 0.294**

Guamote exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.211

16.6	0%	0.4	35.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.377

9.9	9.9	7.6	9.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 213 / 221 CANTONS ASSESSED
SCORE: 0.350

Guamote's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Information Access Vulnerability



Mass Care Support



Governance



Energy Capacity

KEY FACTORS INFLUENCING RESILIENCE



Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Governance

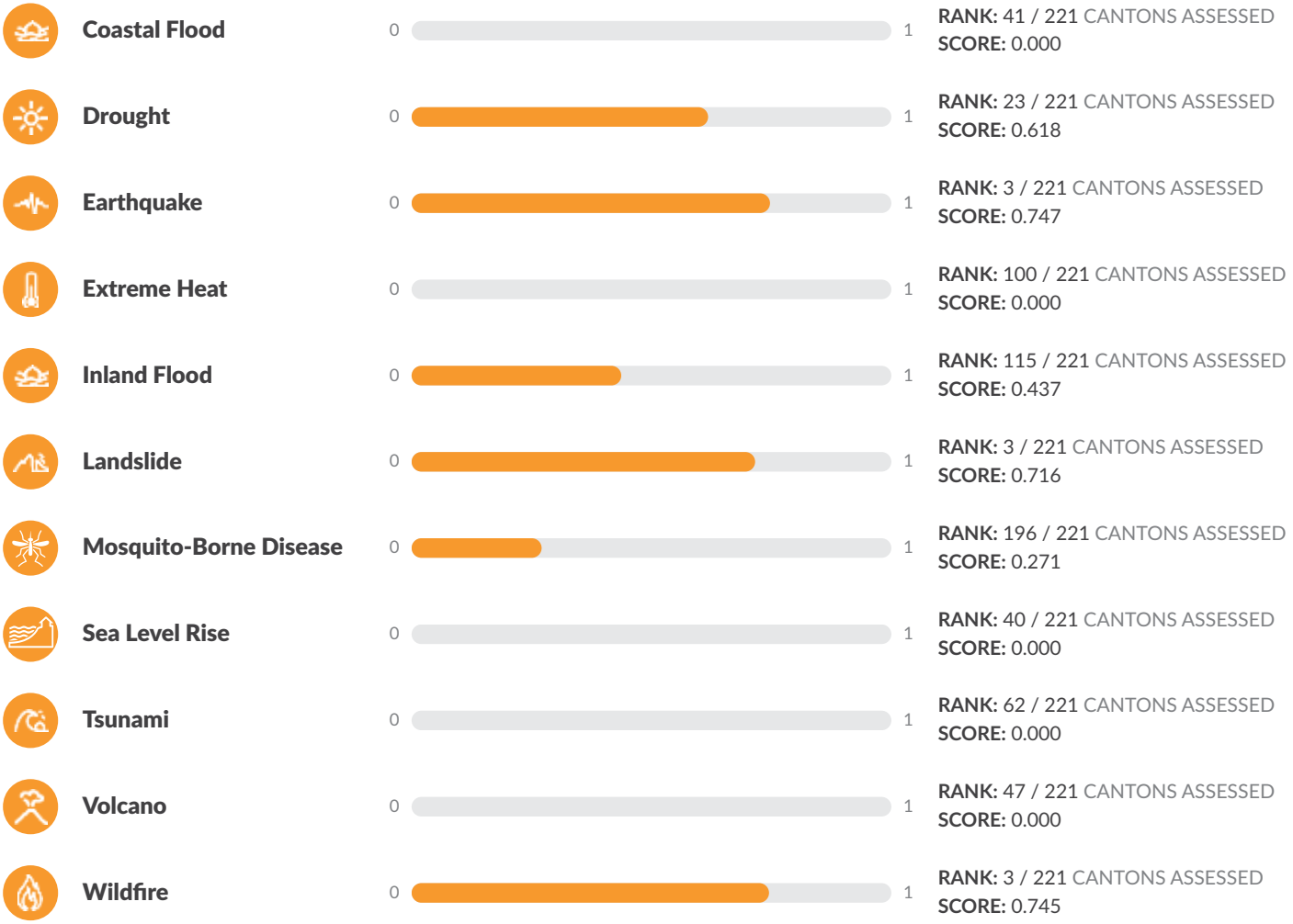
The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

HAZARD-SPECIFIC RISK (HSR)

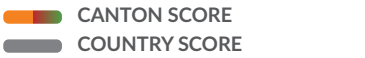


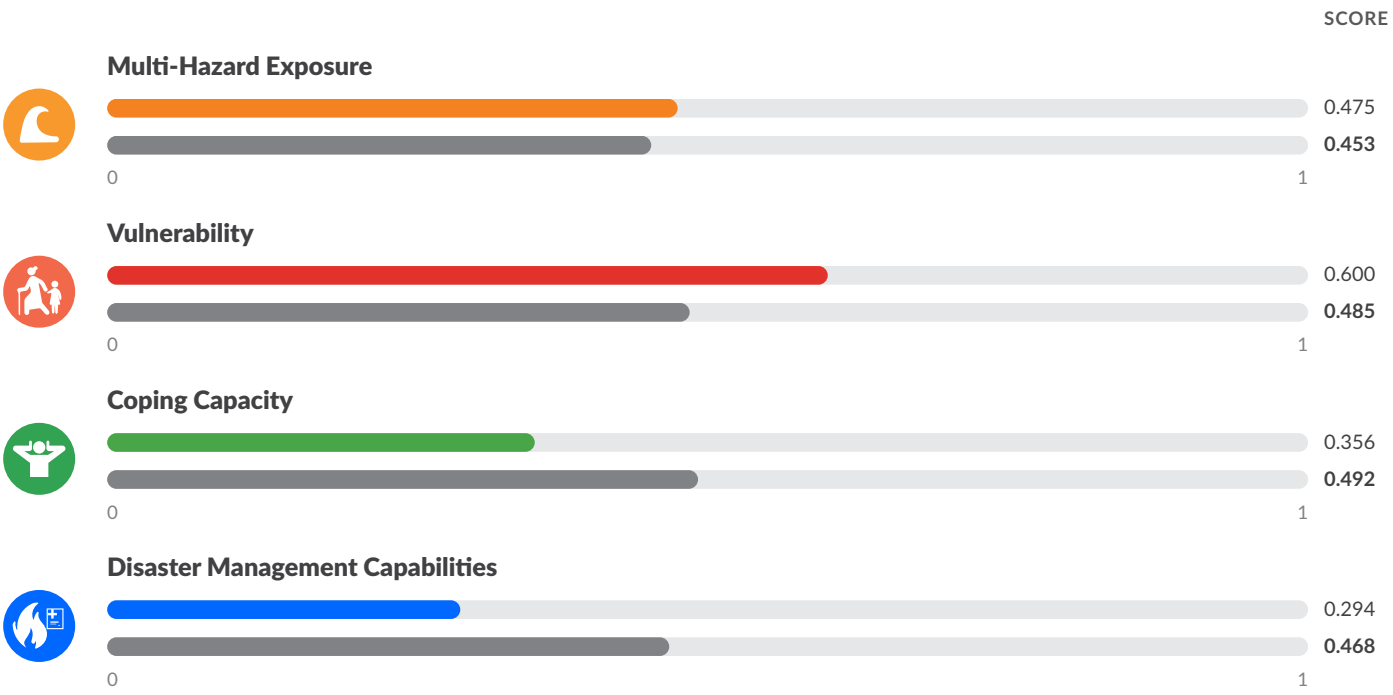
MULTI-HAZARD RISK (MHR)

RANKED
18 / 221
CANTONS ASSESSED
SCORE: 0.606

Guamote's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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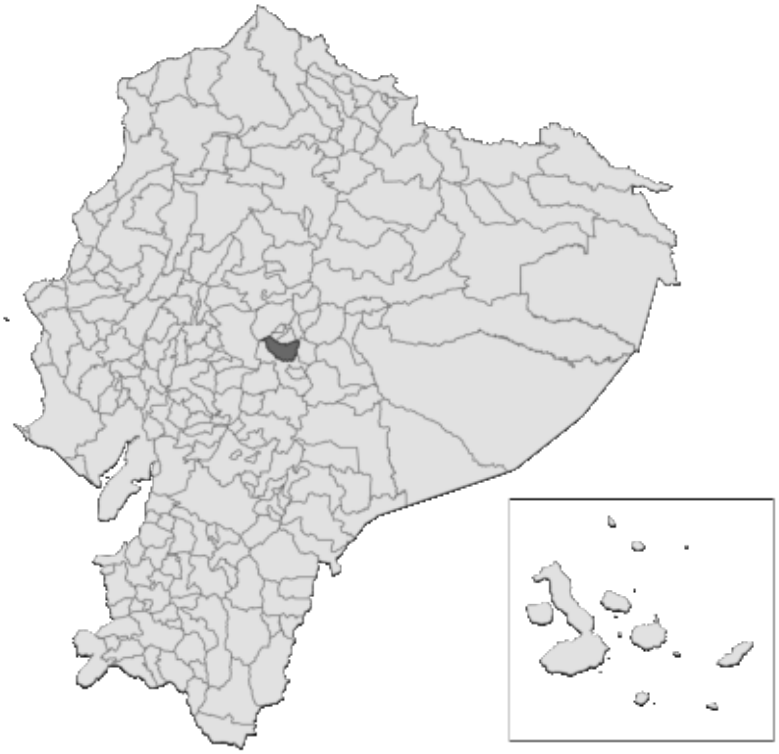
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GUANO

PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.512 • RANK: 91/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.491 • RANK: 101/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.520 • RANK: 73/221 CANTONS ASSESSED

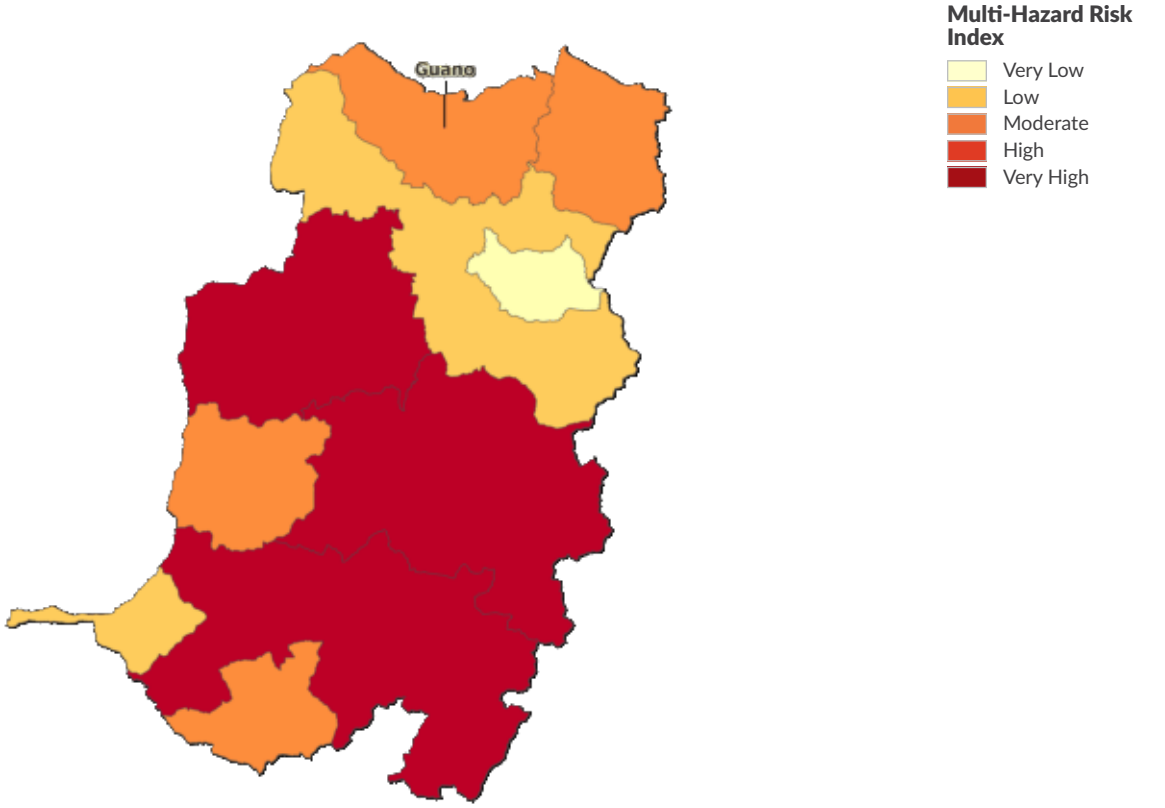
Vulnerability (V) - Low
SCORE: 0.464 • RANK: 134/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.487 • RANK: 107/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.451 • RANK: 120/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

GUANO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	0.571
Guano	**0.512**
Penipe	0.500
Pallatanga	0.487
Chunchi	0.483
Cumandá	0.442
Riobamba	0.442
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 73 / 221 CANTONS ASSESSED
SCORE: 0.520



MHE
0.520

Raw MHE
0.654

Relative MHE
0.387

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
81%
- **40,525** people exposed
- **37,957** structures exposed (84%)
- **Critical Infrastructure Exposed:** 70%

Earthquake
100%
- **49,789** people exposed
- **45,295** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
4%
- **1,896** people exposed
- **1,497** structures exposed (3%)
- **Critical Infrastructure Exposed:** 6%

Landslide
37%
- **18,266** people exposed
- **16,150** structures exposed (36%)
- **Critical Infrastructure Exposed:** 61%

Mosquito-Borne Disease
7%
- **3,269** people exposed
- **2,977** structures exposed (7%)
- **Critical Infrastructure Exposed:** 2%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
50%
- **24,710** people exposed
- **21,102** structures exposed (47%)
- **Critical Infrastructure Exposed:** 69%

Wildfire
100%
- **49,748** people exposed
- **45,282** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

VULNERABILITY (V)

RANK: 134 / 221 CANTONS ASSESSED **SCORE: 0.464**

Vulnerability in Guano is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.534

- **9.9** Average Years of Schooling
- **46.9%** Population (age 24 and over) with General Basic Education Schooling
- **7.3%** Population (age 24 and over) with No Schooling
- **6.2%** Adult Illiteracy Rate
- **52.7%** Households with No Internet Access
- **89.3%** Households with No Access to Television
- **70.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.477

- **93.7%** Homes with Access to Public Water Source
- **43%** Homes Connected to the Public Sewage System
- **40.6%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.471

- **54.5** Age Dependency Ratio
- **10.1%** Unemployment Rate
- **49.4%** Poverty Rate (based on UBN)
- **1.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.447

- **3.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.356

- **0.3** Female to Male Labor Ratio (distance from parity)
- **28** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **71.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.467

- **9.7%** Prevalence of Disability (among persons age 5 and over)
- **2** Perinatal Mortality Rate (per 1,000 births)
- **10.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.233

- **0.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.550

40
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

17
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

48
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

48
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.313

10.6%
Homes with Exterior Walls in Poor Condition

0.3%
Homes with Inadequate Materials Used in Outer Walls

14.5%
Homes with Roofs in Poor Condition

74.8%
Households with No Access to Vehicle for Private Use

4.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.456

103.9
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

4.3
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.645

0.5
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 107 / 221 CANTONS ASSESSED **SCORE: 0.487**

Guano exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.502

57.4%
Labor Force Participation

85,497
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.612

13.6%
Protected Area (% of land area)

-2,215.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.398

82.1%
Voter Participation

68.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.517

Communications Capacity

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.556

17.2%
Household Access to Fixed Phones

77.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.605

97%
Homes Served by the Public Electricity Network

75.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.315

6.8
Nurses and Midwives per 10,000 persons

11.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.594

10.1
Average Distance to Airport (km)

91.2
Average Distance to Sea or River Port (km)

3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 120 / 221 CANTONS ASSESSED **SCORE: 0.451**

Guano exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.340

4.8	0.8%	0	13.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.563

9.1	6.1	3.6	3.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 101 / 221 CANTONS ASSESSED
SCORE: 0.491

Guano's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity **Mass Care Support** **Disaster Impacts** **Governance**

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

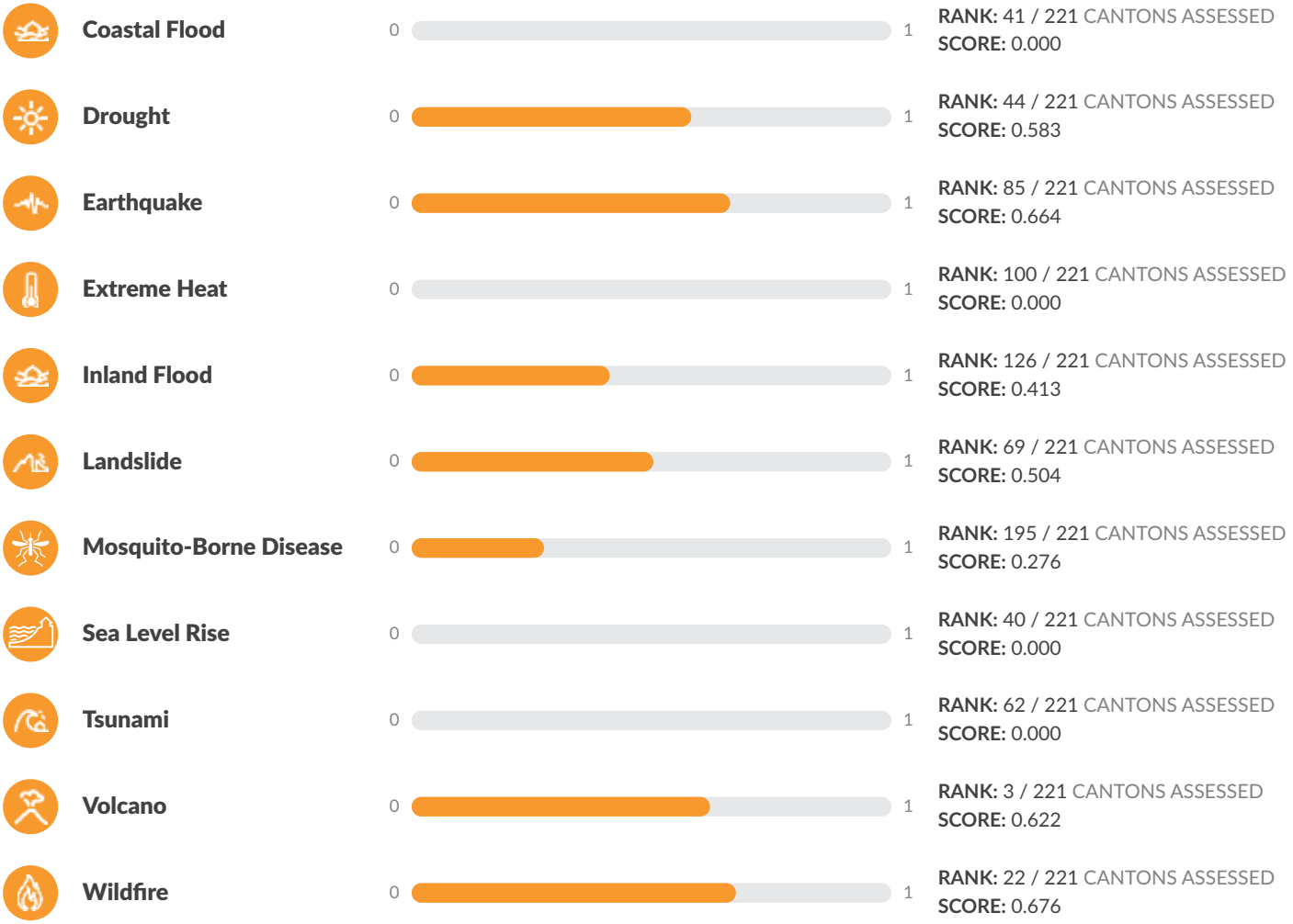
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

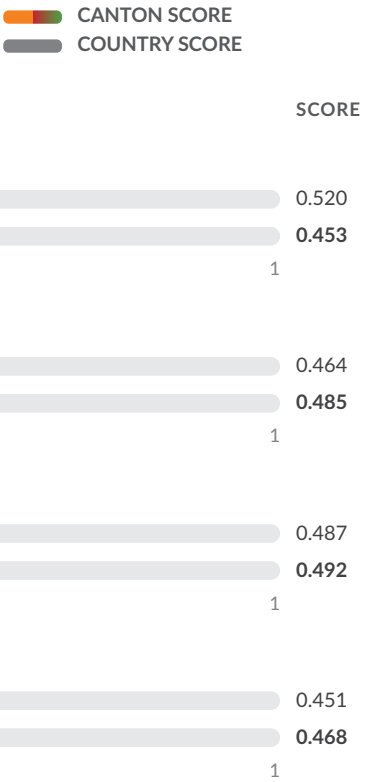


MULTI-HAZARD RISK (MHR)

RANKED
91 / 221
CANTONS ASSESSED
SCORE: 0.512

Guano's score and ranking are due to High Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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GUARANDA

PROVINCE: BOLÍVAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.505 • RANK: 97/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.530 • RANK: 73/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.471 • RANK: 131/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.443 • RANK: 147/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.433 • RANK: 115/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.501 • RANK: 80/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN BOLÍVAR PROVINCE

GUARANDA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Chillanes	0.522
Guaranda	**0.505**
San Miguel	0.462
Echeandía	0.445
Chimbo	0.443
Caluma	0.427
Las Naves	0.421

MULTI-HAZARD EXPOSURE (MHE)

RANK: 115 / 221 CANTONS ASSESSED
SCORE: 0.433



MHE
0.433

Raw MHE
0.682

Relative MHE
0.185

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
<1%
- **167** people exposed
- **40** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Earthquake
100%
- **99,882** people exposed
- **60,188** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
3%
- **3,043** people exposed
- **1,525** structures exposed (3%)

Critical Infrastructure Exposed: 5%

Landslide
73%
- **73,267** people exposed
- **47,511** structures exposed (79%)

Critical Infrastructure Exposed: 90%

Mosquito-Borne Disease
13%
- **13,240** people exposed
- **7,824** structures exposed (13%)

Critical Infrastructure Exposed: 7%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
1%
- **1,408** people exposed
- **911** structures exposed (2%)

Critical Infrastructure Exposed: 1%

Wildfire
75%
- **74,690** people exposed
- **45,454** structures exposed (76%)

Critical Infrastructure Exposed: 76%

VULNERABILITY (V)

RANK: 73 / 221 CANTONS ASSESSED **SCORE: 0.530**

Vulnerability in Guaranda is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.572

- **9.7** Average Years of Schooling
- **35%** Population (age 24 and over) with General Basic Education Schooling
- **15.1%** Population (age 24 and over) with No Schooling
- **11.9%** Adult Illiteracy Rate
- **60.4%** Households with No Internet Access
- **87.4%** Households with No Access to Television
- **74.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.582

- **80.1%** Homes with Access to Public Water Source
- **42%** Homes Connected to the Public Sewage System
- **51.7%** Homes without Piped Water
- **6.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.588

- **58.6** Age Dependency Ratio
- **17.9%** Unemployment Rate
- **61.5%** Poverty Rate (based on UBN)
- **1.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.411

- **2.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.461

- **0.3** Female to Male Labor Ratio (distance from parity)
- **41.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **84.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **45.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.523

- **9.2%** Prevalence of Disability (among persons age 5 and over)
- **6.3** Perinatal Mortality Rate (per 1,000 births)
- **7.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.439

- **7.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **25.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.539

42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

42
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

59
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.452

14.3%
Homes with Exterior Walls in Poor Condition

0.5%
Homes with Inadequate Materials Used in Outer Walls

17.6%
Homes with Roofs in Poor Condition

84.3%
Households with No Access to Vehicle for Private Use

9.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.453

52.8
Population Density (persons per sq km)

0.6%
Average Annual Population Change (2010-2022)

1.9
Net Migration Rate (per 1,000 persons)

0.32
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.628

0.6
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 147 / 221 CANTONS ASSESSED **SCORE: 0.443**

Guaranda exhibits weaker Coping Capacity in the areas of Energy Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.446

49.2%
Labor Force Participation

211,182
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.370

7.3%
Protected Area (% of land area)

-15,049.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.415

83.2%
Voter Participation

68.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.494

Communications Capacity

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.505

15.5%
Household Access to Fixed Phones

72.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.348

91.7%
Homes Served by the Public Electricity Network

56.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.667

26.4
Nurses and Midwives per 10,000 persons

27.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.454

38.9
Average Distance to Airport (km)

52.8
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 80 / 221 CANTONS ASSESSED **SCORE: 0.501**

Guaranda exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.535

4.1	2.1%	1.7	16.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.466

10.1	9	3.7	7.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 131 / 221 CANTONS ASSESSED
SCORE: 0.471

Guaranda's score and ranking are due to High Vulnerability combined with Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Energy Capacity | **Disaster Impacts** | **Economic Constraints** | **Governance**

KEY FACTORS INFLUENCING RESILIENCE

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

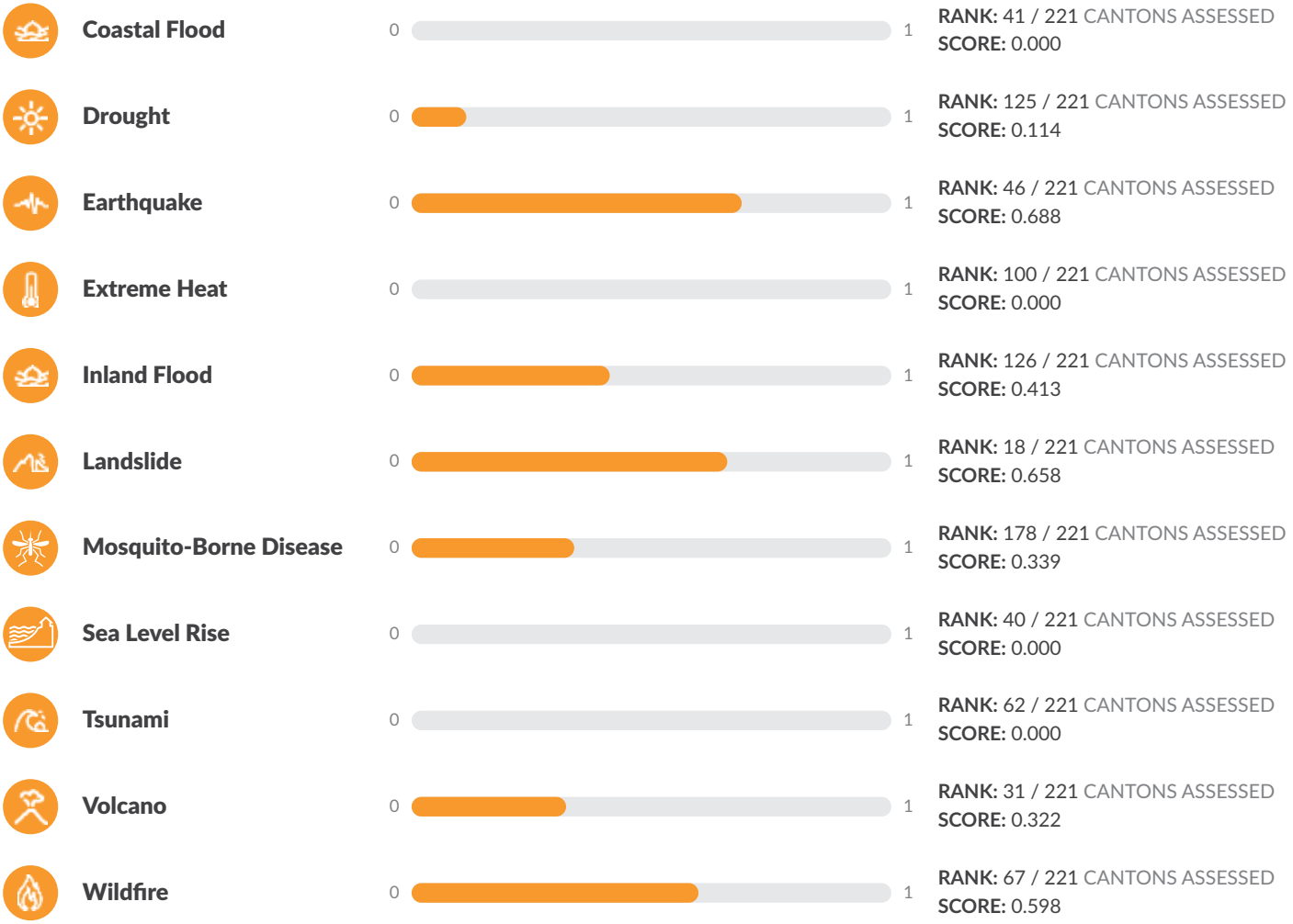
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

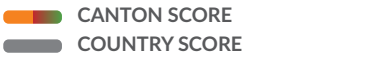


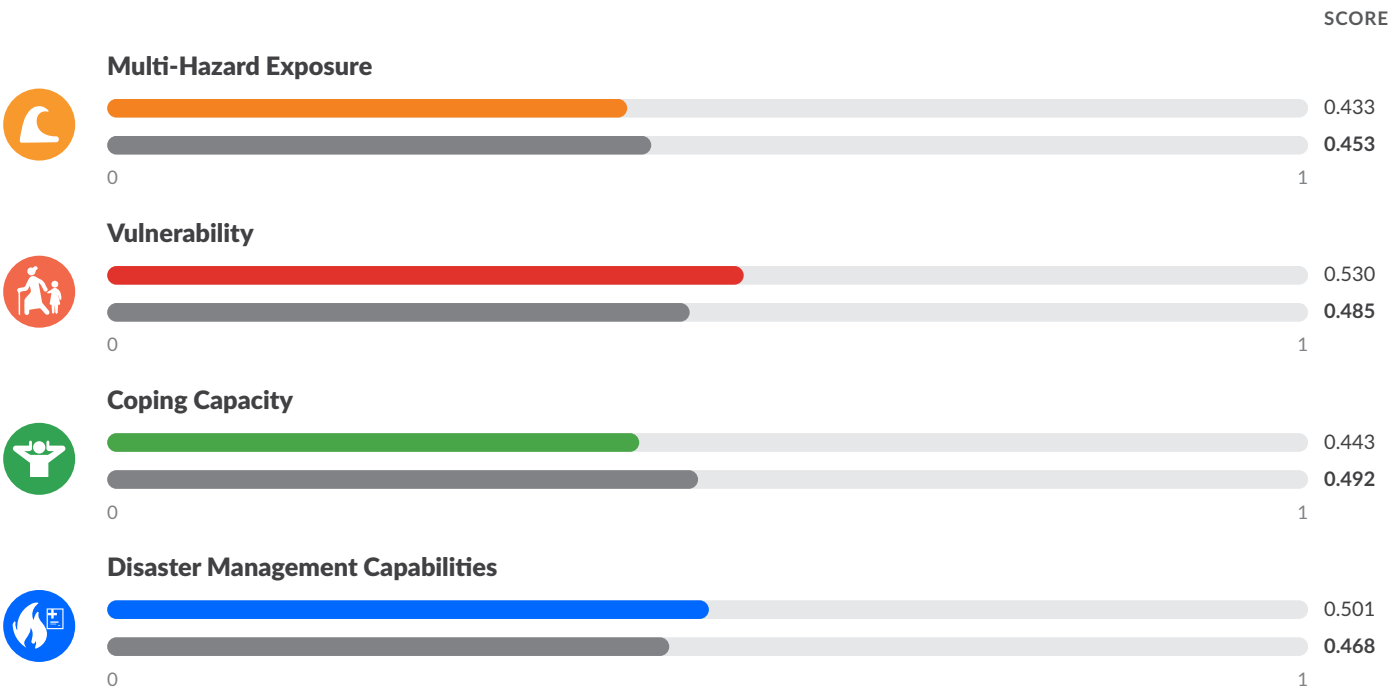
MULTI-HAZARD RISK (MHR)

RANKED
97 / 221
CANTONS ASSESSED
SCORE: 0.505

Guaranda's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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GUAYAQUIL

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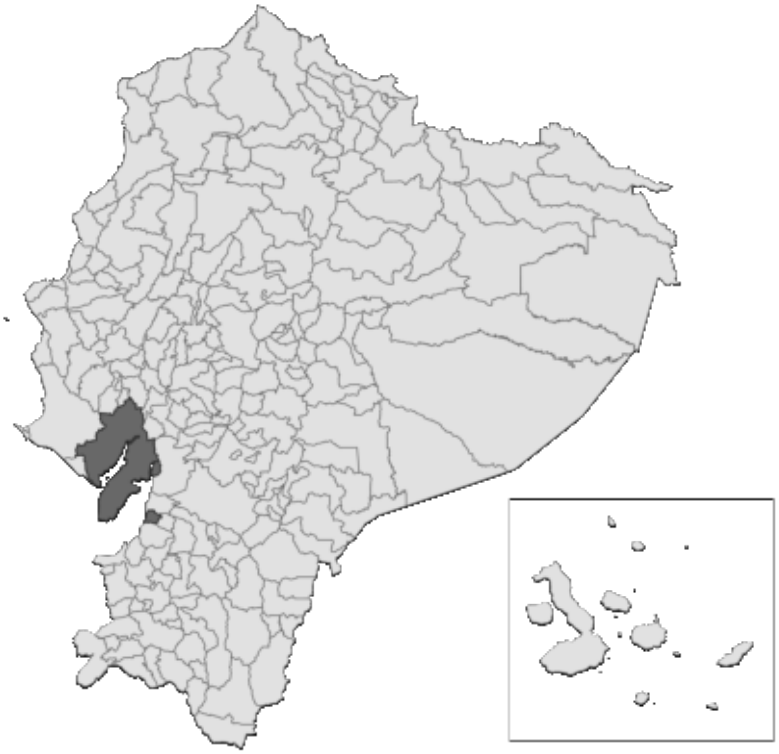
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GUAYAQUIL

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.483 • RANK: 123/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.388 • RANK: 194/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.662 • RANK: 9/221 CANTONS ASSESSED

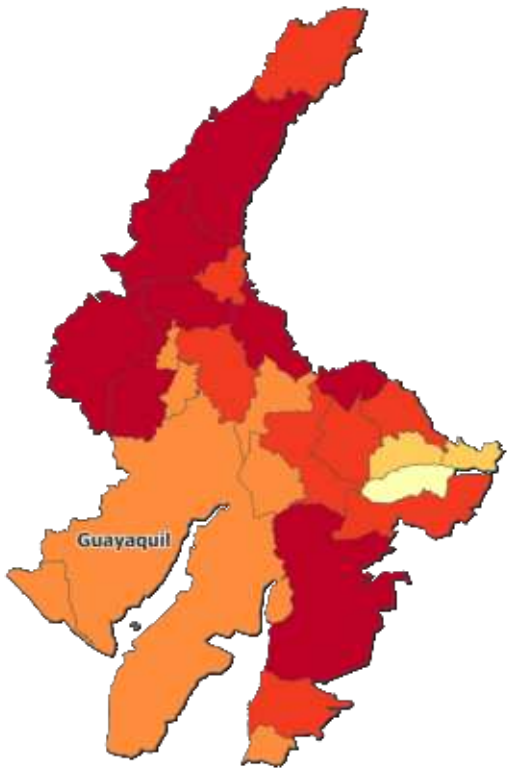
Coping Capacity (CC) - Very High
SCORE: 0.704 • RANK: 6/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.916 • RANK: 3/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.669 • RANK: 11/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

GUAYAQUIL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	**0.483**
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 3 / 221 CANTONS ASSESSED
SCORE: 0.916



MHE
0.916

Raw MHE
1.000

Relative MHE
0.832

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **63,690** people exposed
- **14,679** structures exposed (3%)
- **Critical Infrastructure Exposed:** 12%

Drought
100%
- **2,839,461** people exposed
- **537,563** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **2,839,461** people exposed
- **537,563** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
100%
- **2,838,300** people exposed
- **537,183** structures exposed (100%)
- **Critical Infrastructure Exposed:** 99%

Inland Flood
8%
- **240,416** people exposed
- **51,148** structures exposed (10%)
- **Critical Infrastructure Exposed:** 16%

Landslide
6%
- **165,847** people exposed
- **26,785** structures exposed (5%)
- **Critical Infrastructure Exposed:** 4%

Mosquito-Borne Disease
97%
- **2,764,317** people exposed
- **518,723** structures exposed (96%)
- **Critical Infrastructure Exposed:** 96%

Sea Level Rise
<1%
- **22,356** people exposed
- **5,811** structures exposed (1%)
- **Critical Infrastructure Exposed:** 9%

Tsunami
65%
- **1,848,040** people exposed
- **338,287** structures exposed (63%)
- **Critical Infrastructure Exposed:** 58%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
18%
- **507,015** people exposed
- **125,775** structures exposed (23%)
- **Critical Infrastructure Exposed:** 24%

VULNERABILITY (V)

RANK: 194 / 221 CANTONS ASSESSED **SCORE: 0.388**

Vulnerability in Guayaquil is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.232

- **12.2** Average Years of Schooling
- **30.4%** Population (age 24 and over) with General Basic Education Schooling
- **2.1%** Population (age 24 and over) with No Schooling
- **1.6%** Adult Illiteracy Rate
- **32.2%** Households with No Internet Access
- **73.6%** Households with No Access to Television
- **58.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.180

- **93.7%** Homes with Access to Public Water Source
- **83.5%** Homes Connected to the Public Sewage System
- **8.9%** Homes without Piped Water
- **2.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.338

- **49.9** Age Dependency Ratio
- **15.1%** Unemployment Rate
- **28.7%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.392

- **2.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.348

- **0.4** Female to Male Labor Ratio (distance from parity)
- **33.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **39.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **37.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.541

- **5.8%** Prevalence of Disability (among persons age 5 and over)
- **12.4** Perinatal Mortality Rate (per 1,000 births)
- **9.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.541

- **5.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.487

50	14	30	45
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.359

5.9%	3.7%	8.3%	78.1%	9.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.579

611.6	1.3%	24.3	0.26
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.529

0.5	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 6 / 221 CANTONS ASSESSED **SCORE: 0.704**

Guayaquil exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.851

61.6%
Labor Force Participation

27,273,605
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.285

12.7%
Protected Area (% of land area)

-84,600.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.688

82.9%
Voter Participation

98.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.714

Communications Capacity

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.716

21.1%
Household Access to Fixed Phones

88.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.712

98.7%
Homes Served by the Public Electricity Network

78.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.624

19.1
Nurses and Midwives per 10,000 persons

30.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.804

7.2
Average Distance to Airport (km)

7.2
Average Distance to Sea or River Port (km)

2.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 11 / 221 CANTONS ASSESSED **SCORE: 0.669**

Guayaquil exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.516

3.5	0.2%	1.8	11.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.821

4.3	2.3	1.4	1.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 9 / 221 CANTONS ASSESSED
SCORE: 0.662

Guayaquil's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Population Pressures



Vulnerable Health Status



Disaster Impacts



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).



Disaster Impacts

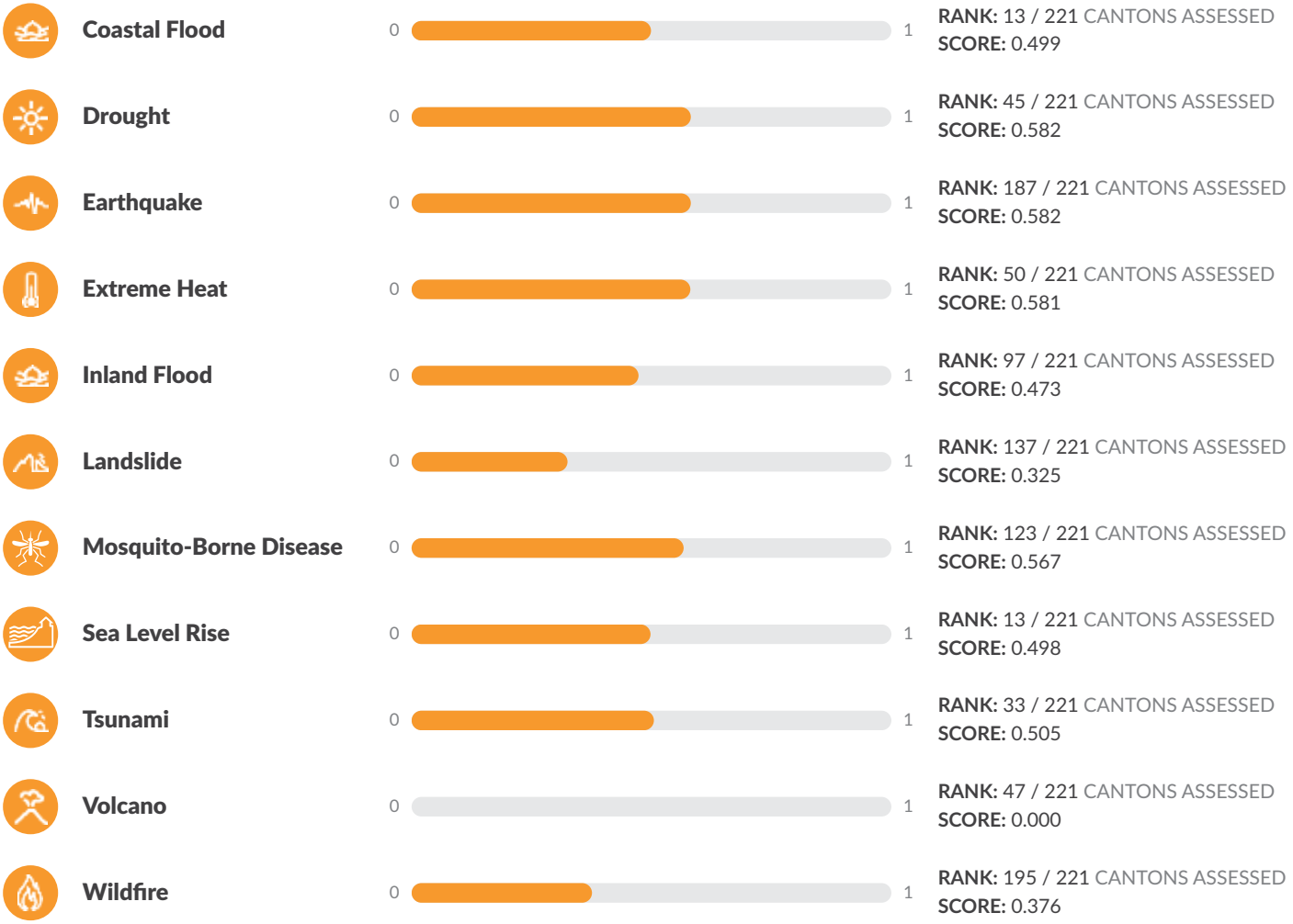
Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

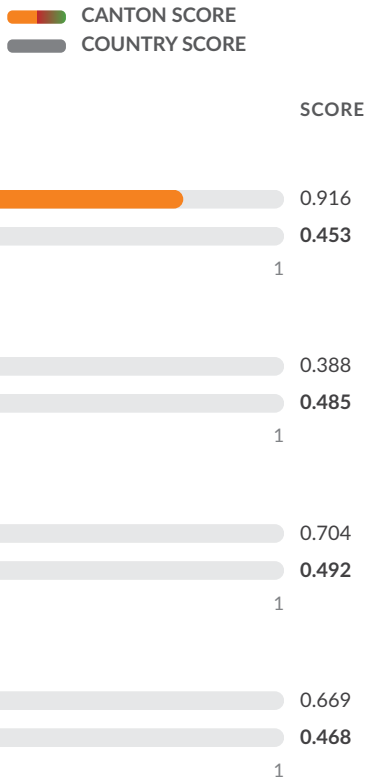


MULTI-HAZARD RISK (MHR)

RANKED
123 / 221
CANTONS ASSESSED
SCORE: 0.483

Guayaquil's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

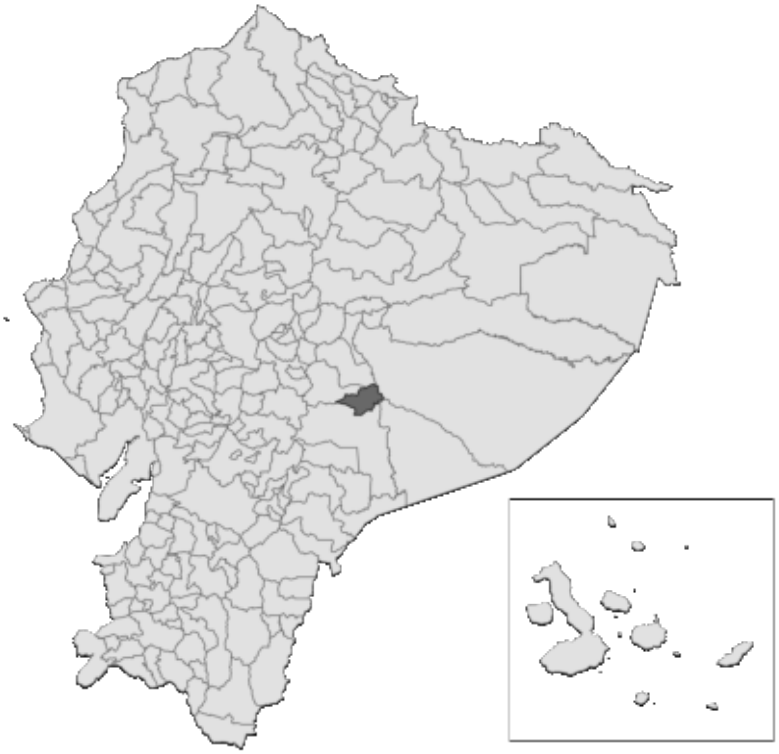
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HUAMBOYA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.577 • RANK: 30/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.607 • RANK: 13/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.308 • RANK: 217/221 CANTONS ASSESSED

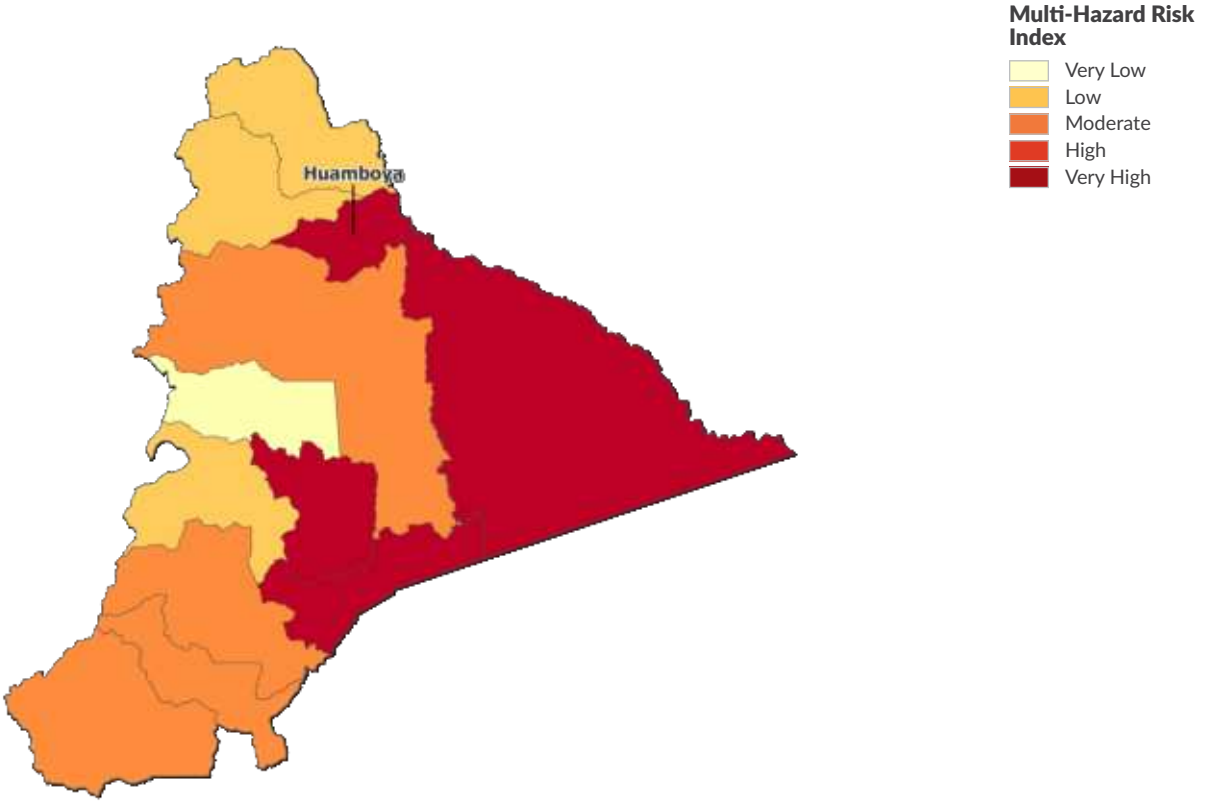
Coping Capacity (CC) - Very Low
SCORE: 0.259 • RANK: 218/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.230 • RANK: 203/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.271 • RANK: 214/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

HUAMBOYA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	**0.577**
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 203 / 221 CANTONS ASSESSED
SCORE: 0.230



MHE
0.230

Raw MHE
0.295

Relative MHE
0.165

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Earthquake
100%
- **11,000** people exposed
- **6,760** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
<1%
- **74** people exposed
- **90** structures exposed (1%)
- **Critical Infrastructure Exposed:** 11%

Landslide
14%
- **1,523** people exposed
- **906** structures exposed (13%)
- **Critical Infrastructure Exposed:** 14%

Mosquito-Borne Disease
100%
- **10,983** people exposed
- **6,727** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
0%
- **0** people exposed
- **16** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 2%

Wildfire
82%
- **9,030** people exposed
- **5,902** structures exposed (87%)
- **Critical Infrastructure Exposed:** 96%

VULNERABILITY (V)

RANK: 13 / 221 CANTONS ASSESSED **SCORE: 0.607**

Vulnerability in Huamboya is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.568

- **9.3** Average Years of Schooling
- **47%** Population (age 24 and over) with General Basic Education Schooling
- **5.6%** Population (age 24 and over) with No Schooling
- **3.3%** Adult Illiteracy Rate
- **80.7%** Households with No Internet Access
- **81.3%** Households with No Access to Television
- **86.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.741

- **54.9%** Homes with Access to Public Water Source
- **13.6%** Homes Connected to the Public Sewage System
- **79.3%** Homes without Piped Water
- **4.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.878

- **87.6** Age Dependency Ratio
- **32.8%** Unemployment Rate
- **87.7%** Poverty Rate (based on UBN)
- **1.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.815

- **13.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.710

- **0.5** Female to Male Labor Ratio (distance from parity)
- **79.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **94.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **60.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.322

- **7.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **3.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.577

- **7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **72.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.373

7	28	19	23
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.723

28.3%	3%	27.1%	93.6%	18%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.550

16.5	2%	0.1	0.37
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.329

0.3	0.1	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 218 / 221 CANTONS ASSESSED **SCORE: 0.259**

Huamboya exhibits weaker Coping Capacity in the areas of Economic Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.117

36.8%
Labor Force Participation

18,235
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.498

1.8%
Protected Area (% of land area)

1,965.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.266

75.7%
Voter Participation

60%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.317

Communications Capacity

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.306

5.6%
Household Access to Fixed Phones

63.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.178

74.1%
Homes Served by the Public Electricity Network

53.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.462

13.9
Nurses and Midwives per 10,000 persons

15.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.321

33.5
Average Distance to Airport (km)

104.6
Average Distance to Sea or River Port (km)

0.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 214 / 221 CANTONS ASSESSED **SCORE: 0.271**

Huamboya exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.321

5.7	3.7%	0	39.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.221

37.5	30.4	6.2	9.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 217 / 221 CANTONS ASSESSED
SCORE: 0.308

Huamboya's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity | **Economic Constraints** | **Energy Capacity** | **Emergency Services**

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

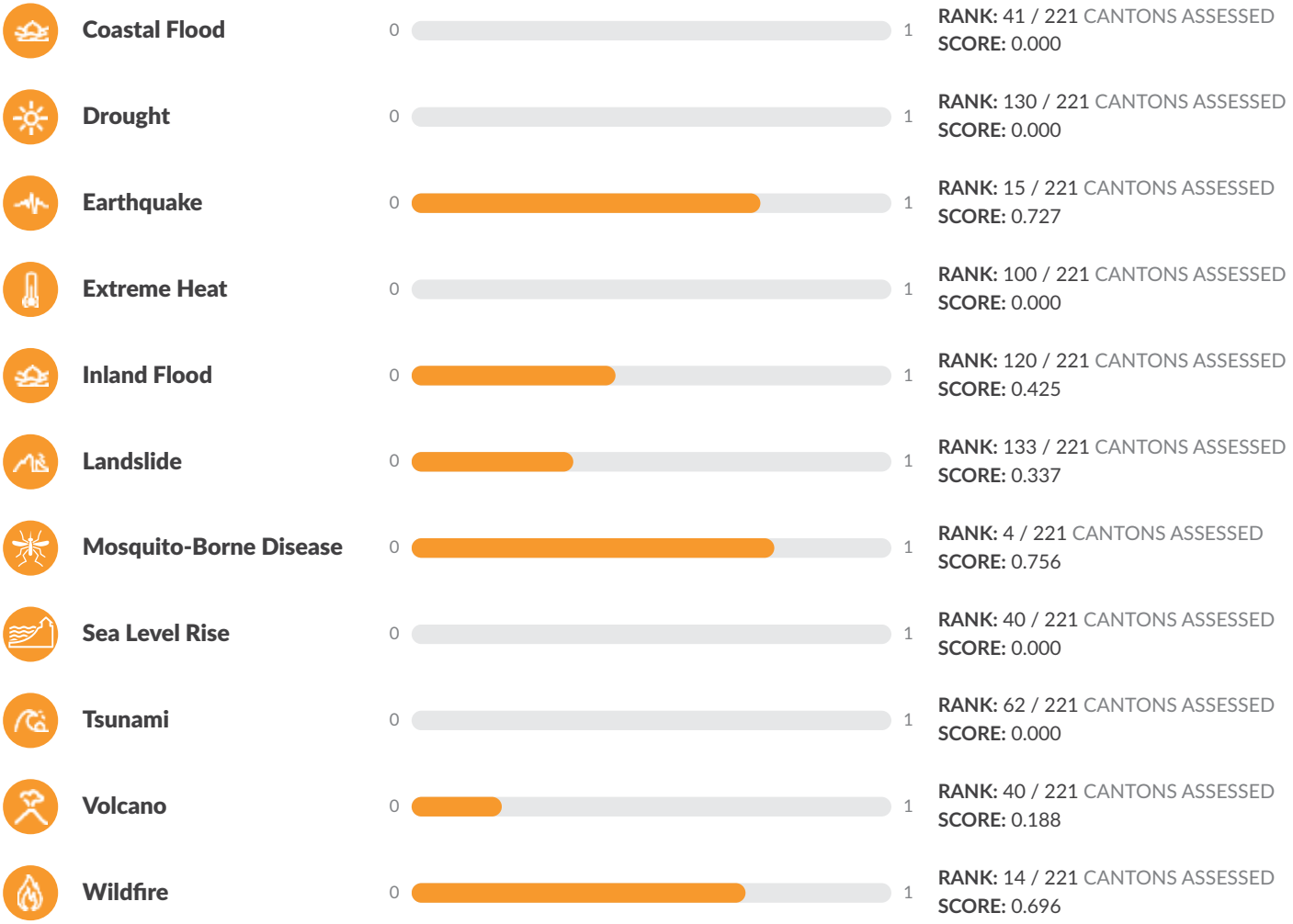
Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
30 / 221
CANTONS ASSESSED
SCORE: 0.577

Huamboya's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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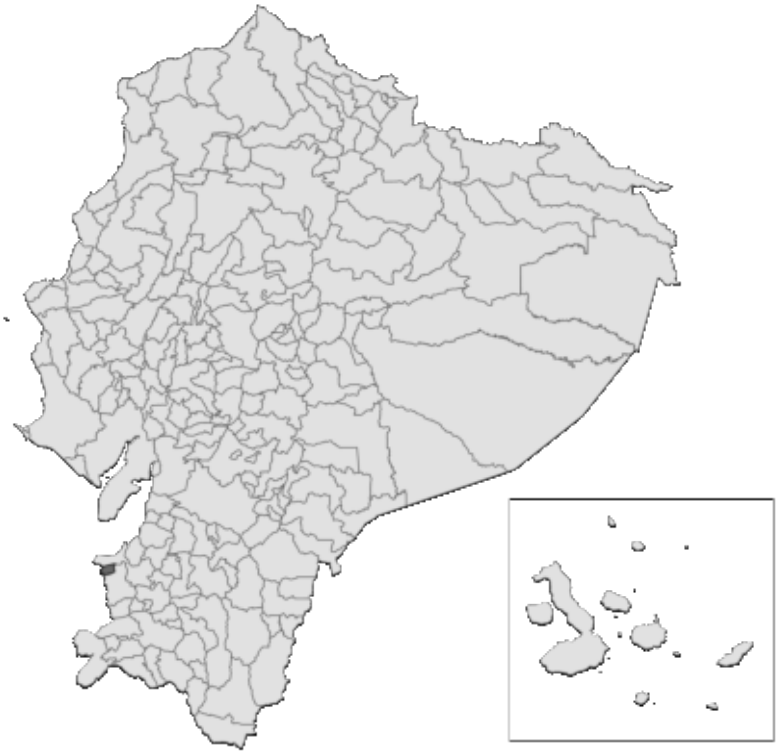
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HUAQUILLAS

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.435 • RANK: 171/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.653 • RANK: 12/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.701 • RANK: 21/221 CANTONS ASSESSED

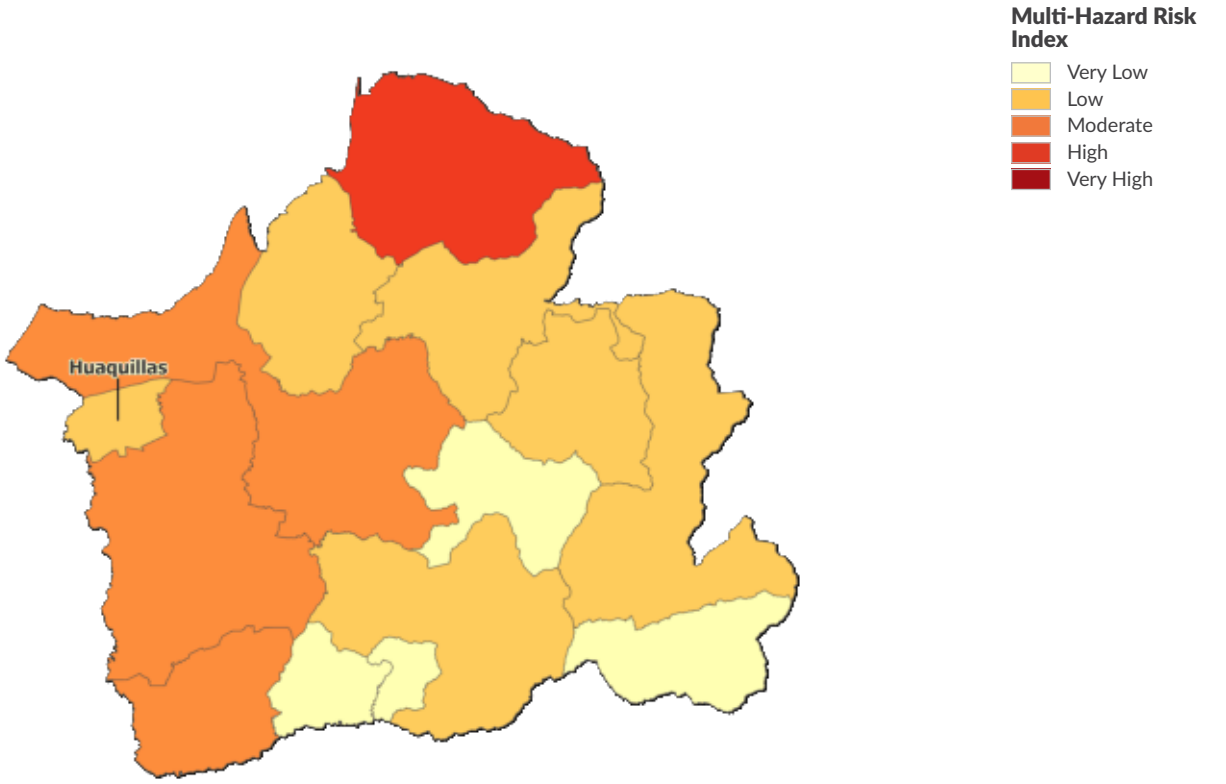
Vulnerability (V) - Low
SCORE: 0.428 • RANK: 163/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.626 • RANK: 29/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.761 • RANK: 3/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

HUAQUILLAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	**0.435**
Portovelo	0.424
Balsas	0.420
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 21 / 221 CANTONS ASSESSED
SCORE: 0.701



MHE
0.701

Raw MHE
0.688

Relative MHE
0.715

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **558** people exposed
- **271** structures exposed (<1%)

Critical Infrastructure Exposed: 2%

Drought
100%
- **57,797** people exposed
- **30,938** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **57,797** people exposed
- **30,938** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **57,797** people exposed
- **30,938** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
4%
- **2,308** people exposed
- **1,297** structures exposed (4%)

Critical Infrastructure Exposed: 11%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
92%
- **53,341** people exposed
- **29,038** structures exposed (94%)

Critical Infrastructure Exposed: 98%

Sea Level Rise
<1%
- **225** people exposed
- **128** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
100%
- **57,600** people exposed
- **30,821** structures exposed (100%)

Critical Infrastructure Exposed: 88%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
9%
- **5,087** people exposed
- **3,890** structures exposed (13%)

Critical Infrastructure Exposed: 17%

VULNERABILITY (V)

RANK: 163 / 221 CANTONS ASSESSED **SCORE: 0.428**

Vulnerability in Huaquillas is primarily driven by Population Pressures and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.371

- **10.6** Average Years of Schooling
- **43.1%** Population (age 24 and over) with General Basic Education Schooling
- **2.7%** Population (age 24 and over) with No Schooling
- **2%** Adult Illiteracy Rate
- **40.7%** Households with No Internet Access
- **77.1%** Households with No Access to Television
- **76.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.356

- **97.7%** Homes with Access to Public Water Source
- **75%** Homes Connected to the Public Sewage System
- **28.6%** Homes without Piped Water
- **8.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.387

- **51.1** Age Dependency Ratio
- **12.7%** Unemployment Rate
- **41.3%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.133

- **0.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.403

- **0.4** Female to Male Labor Ratio (distance from parity)
- **32.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **44.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **52%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.402

- **6.1%** Prevalence of Disability (among persons age 5 and over)
- **1.4** Perinatal Mortality Rate (per 1,000 births)
- **6.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.506

- **15.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **41** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.514

49	43	23	22
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.487

11.3%	15.8%	11.7%	87.5%	7.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.734

570.7	1.3%	63.9	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.329

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 29 / 221 CANTONS ASSESSED **SCORE: 0.626**

Huaquillas exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.607

60.6%
Labor Force Participation

179,051
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.720

28.9%
Protected Area (% of land area)

-324.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.649

83.7%
Voter Participation

96.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.591

Communications Capacity

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.594

8.5%
Household Access to Fixed Phones

89.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.666

98.4%
Homes Served by the Public Electricity Network

75.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.376

10.7
Nurses and Midwives per 10,000 persons

11.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.727

25
Average Distance to Airport (km)

15.1
Average Distance to Sea or River Port (km)

4.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 3 / 221 CANTONS ASSESSED **SCORE: 0.761**

Huaquillas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.570

0.7	1.9%	0.9	38.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.952

1.7	2.6	0.9	1.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 12 / 221 CANTONS ASSESSED
SCORE: 0.653

Huaquillas's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Healthcare Capacity

Housing and Transportation Vulnerability

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

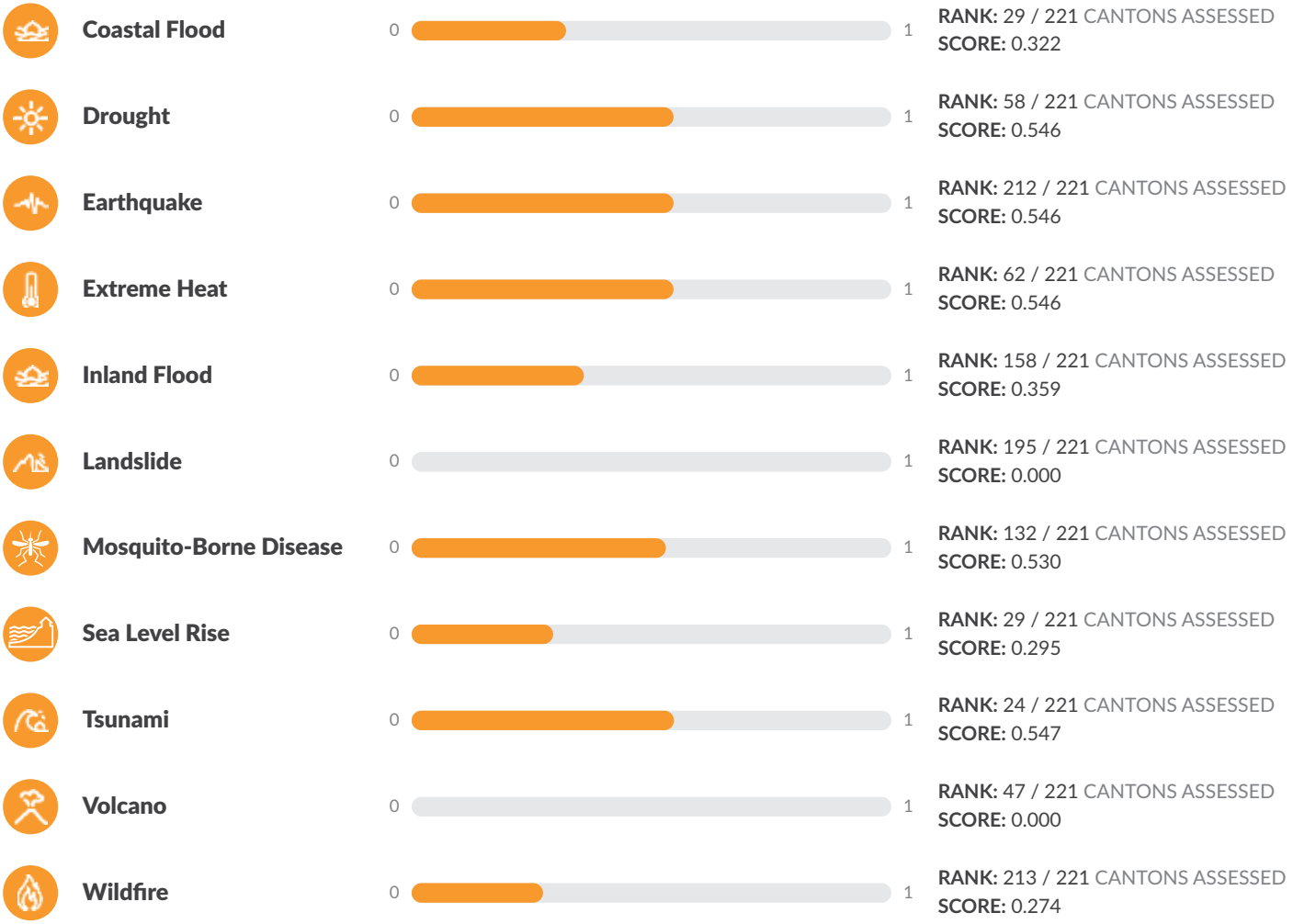
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

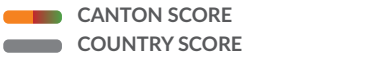


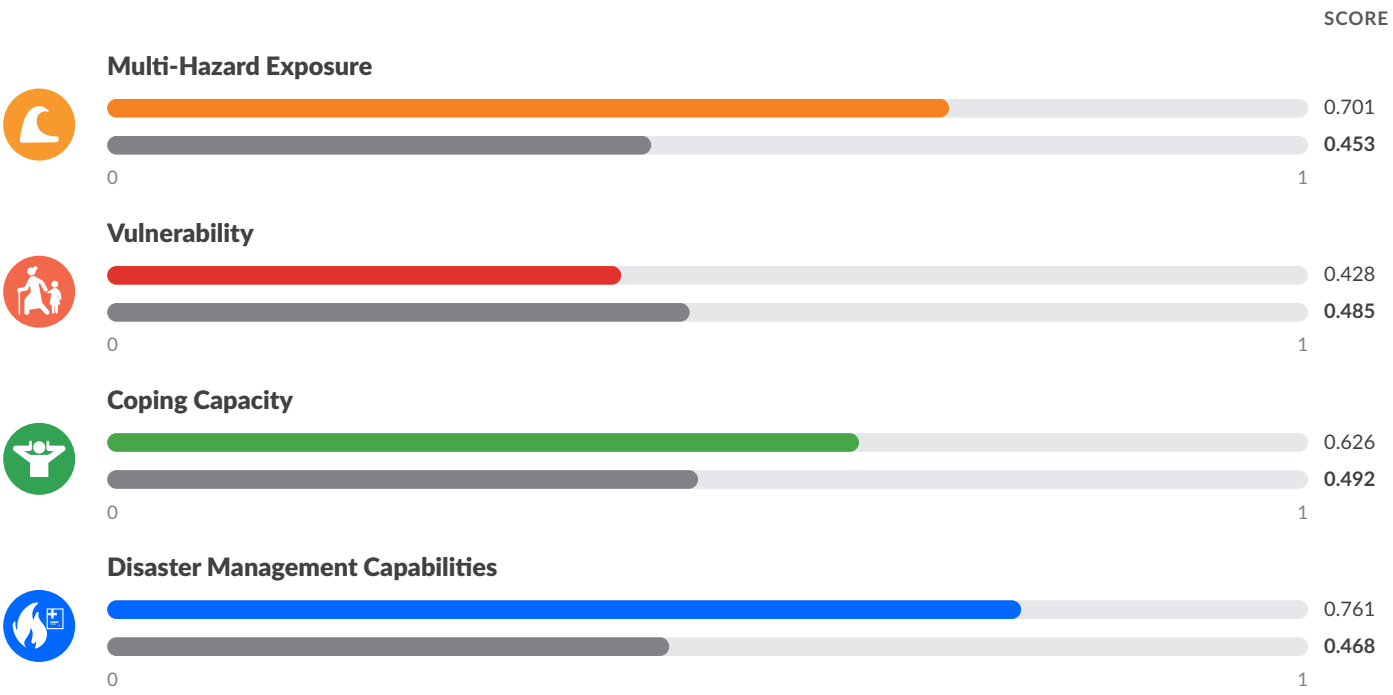
MULTI-HAZARD RISK (MHR)

RANKED
171 / 221
CANTONS ASSESSED
SCORE: 0.435

Huaquillas's score and ranking are due to Very High Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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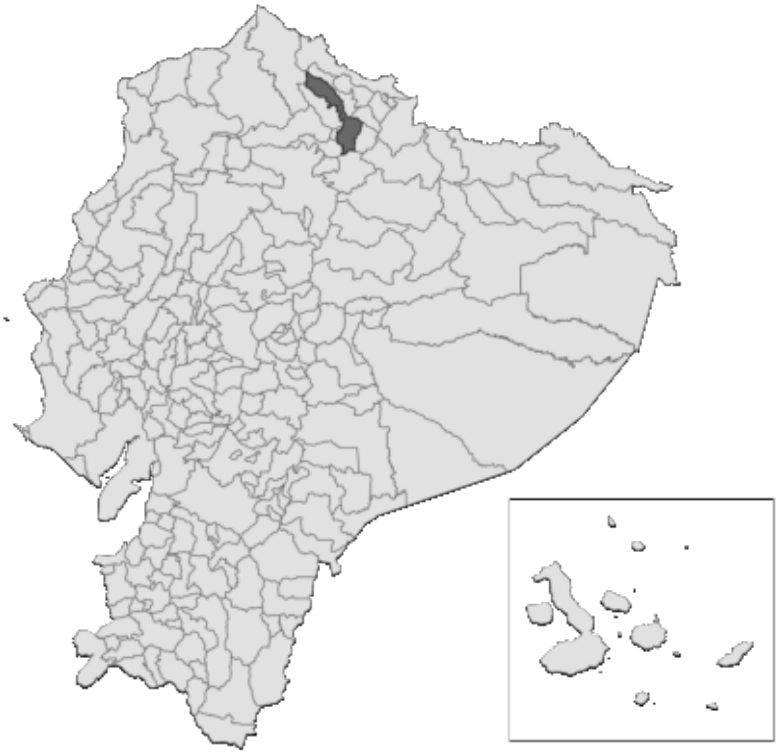
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PROVINCE: IMBABURA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.417 • RANK: 191/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.349 • RANK: 211/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.668 • RANK: 8/221 CANTONS ASSESSED

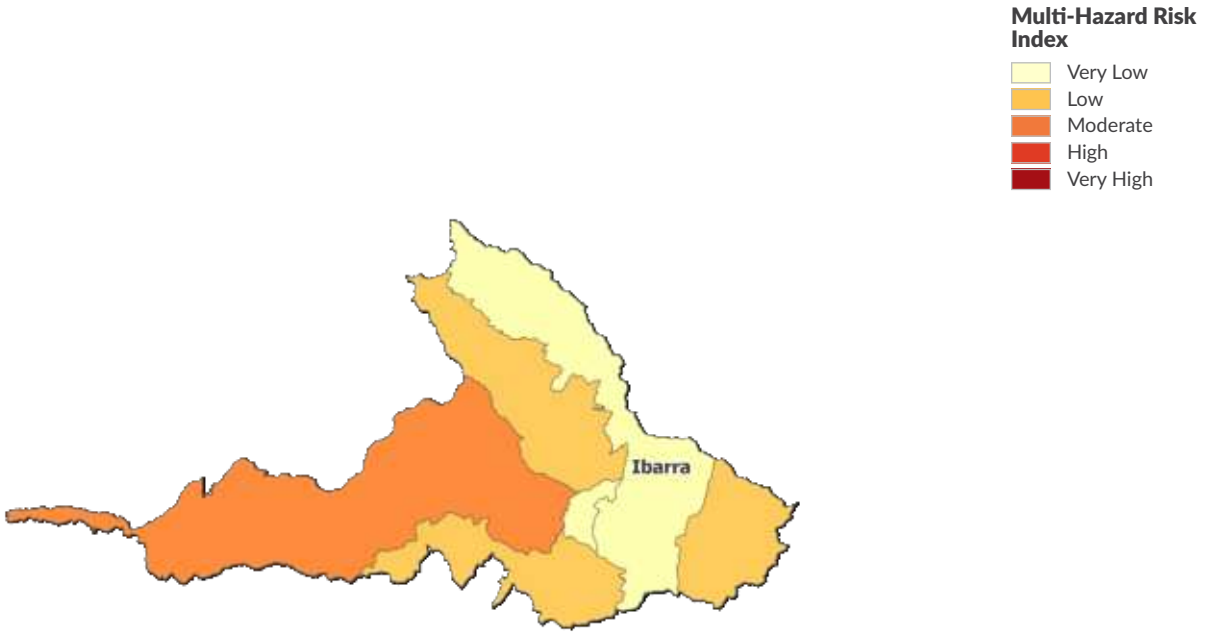
Coping Capacity (CC) - Very High
SCORE: 0.664 • RANK: 15/221 CANTONS ASSESSED

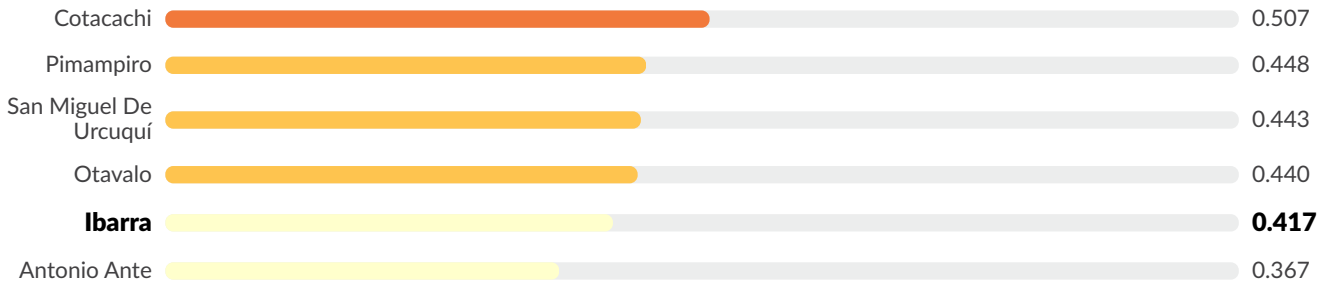
Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.671 • RANK: 23/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.689 • RANK: 8/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN IMBABURA PROVINCE

IBARRA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 23 / 221 CANTONS ASSESSED
SCORE: 0.671



MHE
0.671

Raw MHE
0.852

Relative MHE
0.490

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
77%
- **161,912** people exposed
- **59,444** structures exposed (68%)

Critical Infrastructure Exposed: 62%

Earthquake
100%
- **211,552** people exposed
- **86,880** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
4%
- **8,095** people exposed
- **4,441** structures exposed (5%)

Critical Infrastructure Exposed: 8%

Landslide
37%
- **77,363** people exposed
- **35,515** structures exposed (41%)

Critical Infrastructure Exposed: 38%

Mosquito-Borne Disease
27%
- **56,371** people exposed
- **22,819** structures exposed (26%)

Critical Infrastructure Exposed: 66%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
88%
- **187,151** people exposed
- **73,029** structures exposed (84%)

Critical Infrastructure Exposed: 72%

Wildfire
52%
- **110,860** people exposed
- **53,121** structures exposed (61%)

Critical Infrastructure Exposed: 60%

VULNERABILITY (V)

RANK: 211 / 221 CANTONS ASSESSED **SCORE: 0.349**

Vulnerability in Ibarra is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.235

- **12.1** Average Years of Schooling
- **32.9%** Population (age 24 and over) with General Basic Education Schooling
- **3.6%** Population (age 24 and over) with No Schooling
- **3%** Adult Illiteracy Rate
- **29.6%** Households with No Internet Access
- **58.8%** Households with No Access to Television
- **47.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.210

- **98%** Homes with Access to Public Water Source
- **89.4%** Homes Connected to the Public Sewage System
- **12%** Homes without Piped Water
- **5.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.306

- **48.5** Age Dependency Ratio
- **12.3%** Unemployment Rate
- **20.7%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.575

- **5.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.261

- **0.2** Female to Male Labor Ratio (distance from parity)
- **30** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **60.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **21.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.469

- **6.2%** Prevalence of Disability (among persons age 5 and over)
- **5.8** Perinatal Mortality Rate (per 1,000 births)
- **10.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.304

- **0.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **16** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.505

42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

20
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

36
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

32
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.196

5.4%
Homes with Exterior Walls in Poor Condition

0.1%
Homes with Inadequate Materials Used in Outer Walls

7%
Homes with Roofs in Poor Condition

67.7%
Households with No Access to Vehicle for Private Use

4.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.625

190.9
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

43.9
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.452

0.5
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 15 / 221 CANTONS ASSESSED **SCORE: 0.664**

Ibarra exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.775

63.4%
Labor Force Participation

925,940
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.356

1.3%
Protected Area (% of land area)

-5,854.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.673

84.8%
Voter Participation

96.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.647

Communications Capacity

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.824

30.7%
Household Access to Fixed Phones

91.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.795

99.1%
Homes Served by the Public Electricity Network

84%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.627

22.9
Nurses and Midwives per 10,000 persons

25.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.344

35
Average Distance to Airport (km)

155.6
Average Distance to Sea or River Port (km)

1.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 8 / 221 CANTONS ASSESSED **SCORE: 0.689**

Ibarra exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.641

1.9	2.2%	1.9	8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.737

6.5	3.5	1.7	2.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 8 / 221 CANTONS ASSESSED
SCORE: 0.668

Ibarra's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Population Pressures

Vulnerable Health Status

Disaster Impacts

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

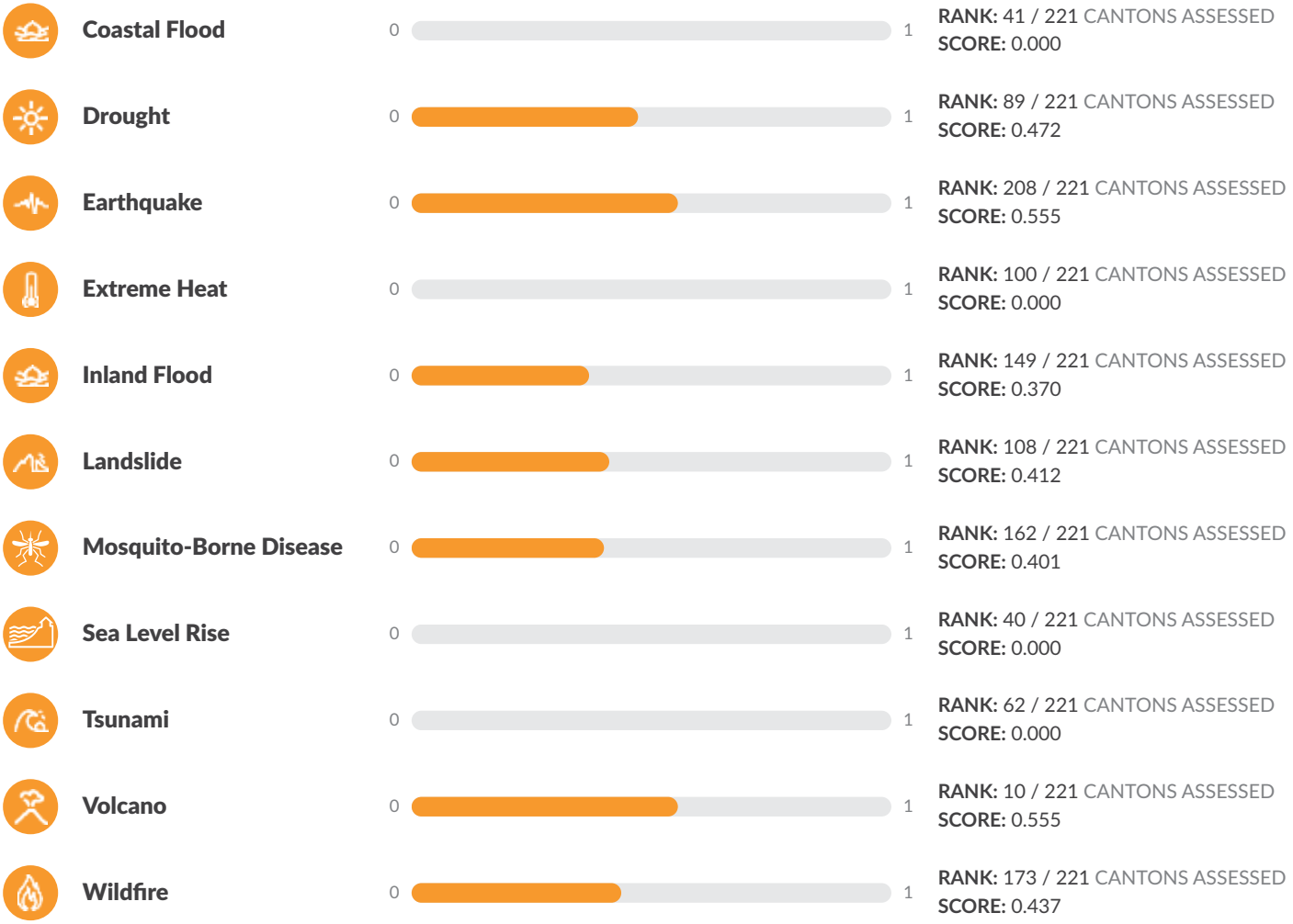
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

HAZARD-SPECIFIC RISK (HSR)

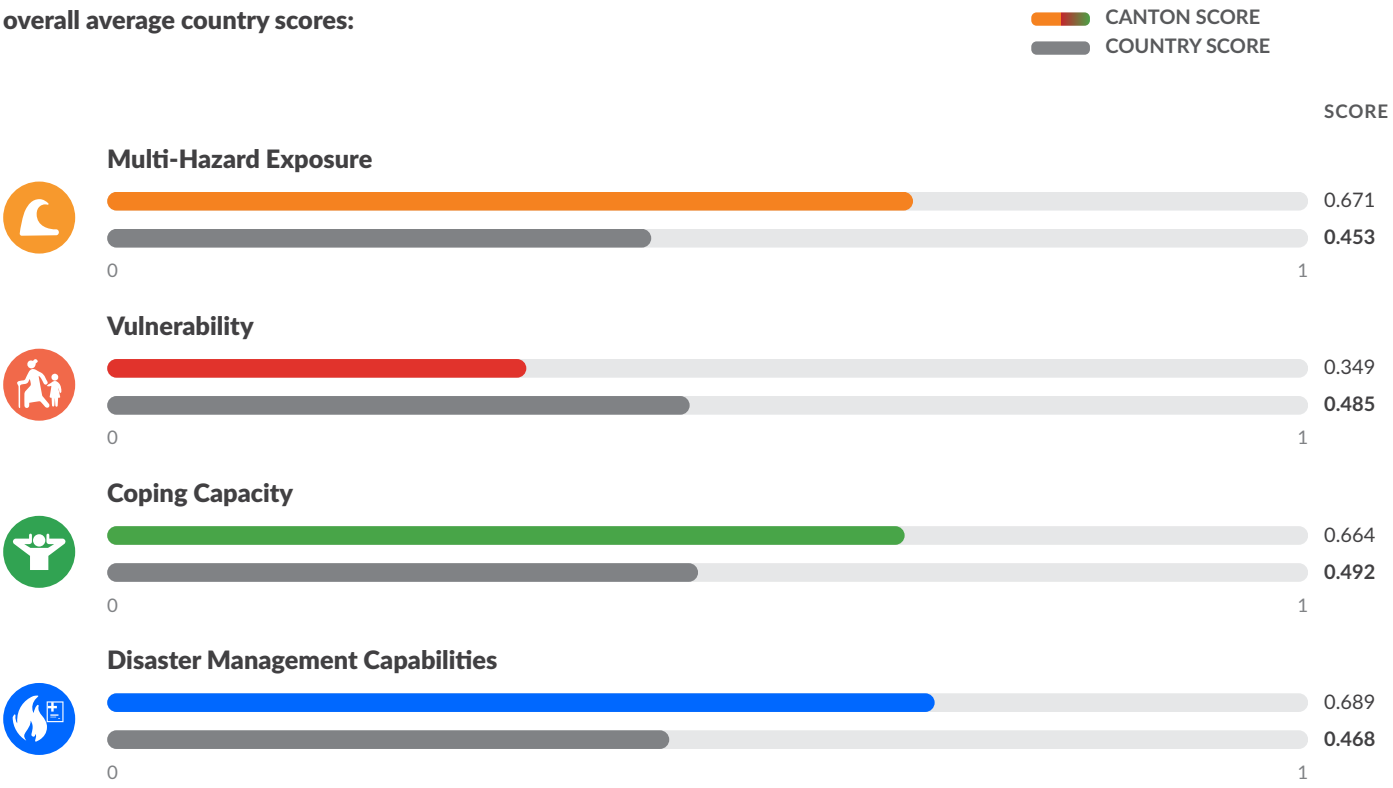


MULTI-HAZARD RISK (MHR)

RANKED
191 / 221
CANTONS ASSESSED
SCORE: 0.417

Ibarra's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ISABELA

NDPBA SUBNATIONAL PROFILE

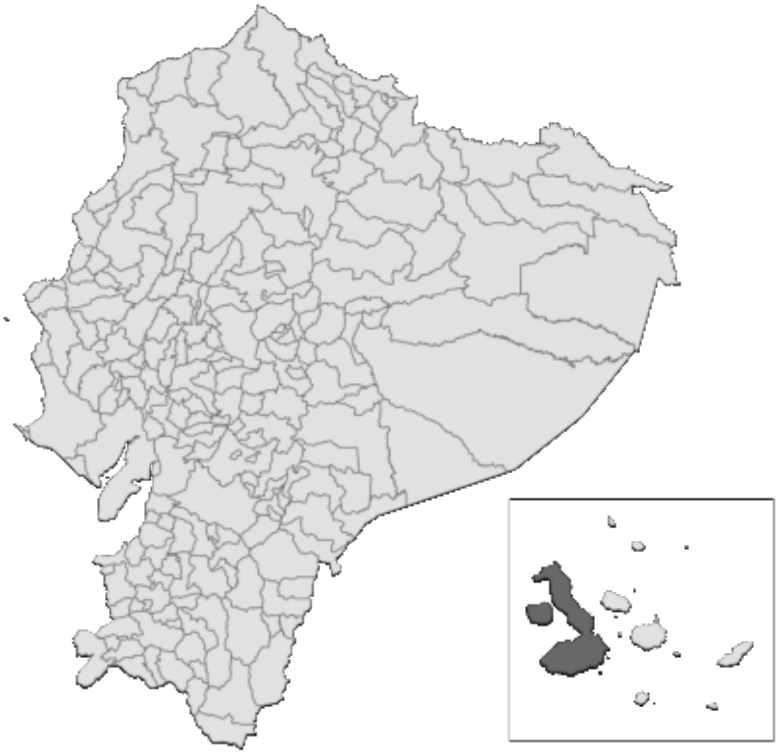
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ECUADOR

ISABELA

PROVINCE: GALÁPAGOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.419 • RANK: 189/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.597 • RANK: 30/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.466 • RANK: 98/221 CANTONS ASSESSED

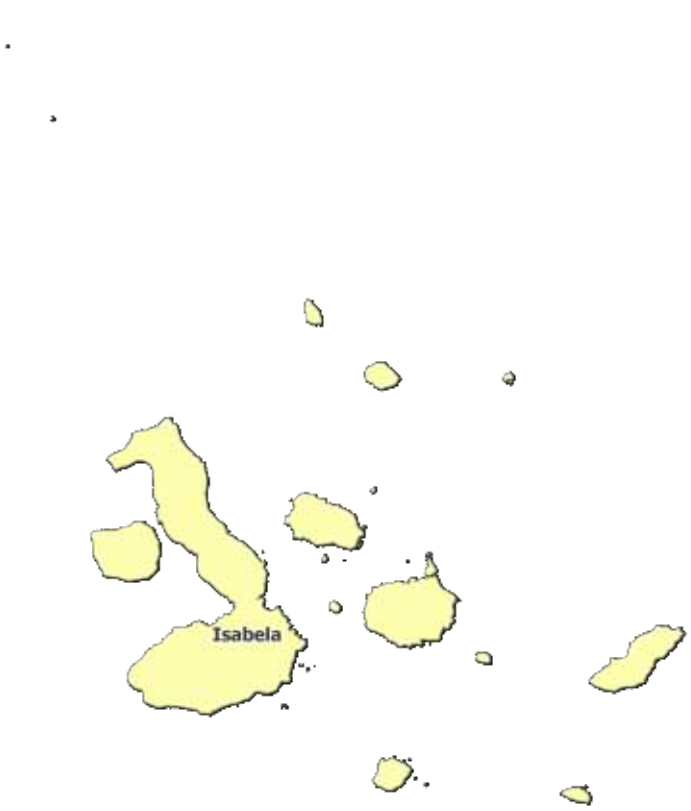
Vulnerability (V) - Very Low
SCORE: 0.241 • RANK: 220/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.679 • RANK: 13/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.352 • RANK: 188/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GALÁPAGOS PROVINCE

ISABELA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Isabela	**0.419**
Santa Cruz	0.386
San Cristóbal	0.325

MULTI-HAZARD EXPOSURE (MHE)

RANK: 98 / 221 CANTONS ASSESSED
SCORE: 0.466



MHE
0.466

Raw MHE
0.181

Relative MHE
0.751

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **69** people exposed
- **27** structures exposed (1%)
- **Critical Infrastructure Exposed:** 9%

Drought
4%
- **116** people exposed
- **304** structures exposed (13%)
- **Critical Infrastructure Exposed:** 16%

Earthquake
100%
- **3,137** people exposed
- **2,291** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
93%
- **2,932** people exposed
- **1,687** structures exposed (74%)
- **Critical Infrastructure Exposed:** 69%

Inland Flood
49%
- **1,544** people exposed
- **1,176** structures exposed (51%)
- **Critical Infrastructure Exposed:** 72%

Landslide
<1%
- **1** people exposed
- **9** structures exposed (<1%)
- **Critical Infrastructure Exposed:** <1%

Mosquito-Borne Disease
100%
- **3,133** people exposed
- **2,113** structures exposed (92%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
2%
- **74** people exposed
- **26** structures exposed (1%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
92%
- **2,892** people exposed
- **1,516** structures exposed (66%)
- **Critical Infrastructure Exposed:** 68%

Volcano
100%
- **3,134** people exposed
- **2,150** structures exposed (94%)
- **Critical Infrastructure Exposed:** 98%

Wildfire
<1%
- **1** people exposed
- **28** structures exposed (1%)
- **Critical Infrastructure Exposed:** <1%

VULNERABILITY (V)

RANK: 220 / 221 CANTONS ASSESSED **SCORE: 0.241**

Vulnerability in Isabela is primarily driven by Marginalization and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.172

- **12.7** Average Years of Schooling
- **25.4%** Population (age 24 and over) with General Basic Education Schooling
- **0.6%** Population (age 24 and over) with No Schooling
- **0.3%** Adult Illiteracy Rate
- **62.6%** Households with No Internet Access
- **54.3%** Households with No Access to Television
- **55.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.304

- **85.6%** Homes with Access to Public Water Source
- **32.2%** Homes Connected to the Public Sewage System
- **8.4%** Homes without Piped Water
- **0.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.286

- **45** Age Dependency Ratio
- **6.8%** Unemployment Rate
- **30.1%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.373

- **2.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.324

- **0.2** Female to Male Labor Ratio (distance from parity)
- **27.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **76.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **42.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.101

- **3.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.000

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.144

0 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**41** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.275

3.2% Homes with Exterior Walls in Poor Condition	**0.2%** Homes with Inadequate Materials Used in Outer Walls	**4.7%** Homes with Roofs in Poor Condition	**88.5%** Households with No Access to Vehicle for Private Use	**7.5%** Household Overcrowding

Population Pressures

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.324

0.6 Population Density (persons per sq km)	**2.7%** Average Annual Population Change (2010-2022)	**13.8** Net Migration Rate (per 1,000 persons)	**0.23** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.117

0.1 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 13 / 221 CANTONS ASSESSED **SCORE: 0.679**

Isabela exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.635

78.5%
Labor Force Participation

26,040
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.868

96.9%
Protected Area (% of land area)

891.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.542

78.6%
Voter Participation

94.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.797

Communications Capacity

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.930

33.4%
Household Access to Fixed Phones

97.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.818

99.7%
Homes Served by the Public Electricity Network

79.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.810

32.8
Nurses and Midwives per 10,000 persons

49.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.630

5.7
Average Distance to Airport (km)

5.6
Average Distance to Sea or River Port (km)

0
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 188 / 221 CANTONS ASSESSED **SCORE: 0.352**

Isabela exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.405

1.1 Average Distance to Shelter (km)	**23.9%** Shelter Capacity as a Percent of Population	**0** Hospital Beds per 1,000 Persons	**153.2** Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.300

77.6 Average Distance to Hospital (km)	**5.1** Average Distance to Fire Station (km)	**5** Average Distance to Police Station (km)	**13.5** Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 30 / 221 CANTONS ASSESSED
SCORE: 0.597

Isabela's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Emergency Services

Mass Care Support

Governance

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

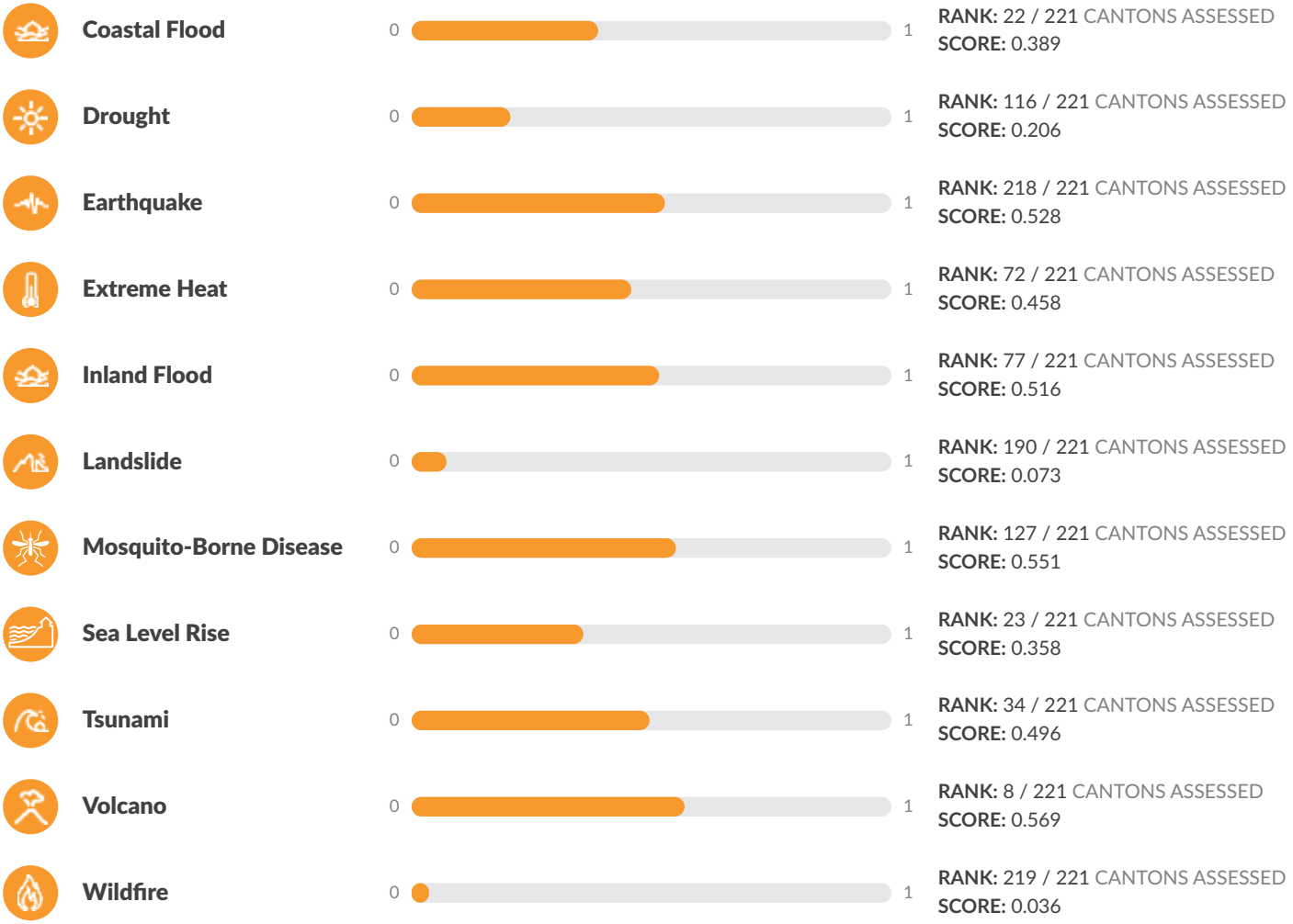
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
189 / 221
CANTONS ASSESSED
SCORE: 0.419

Isabela's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ISIDRO AYORA

NDPBA SUBNATIONAL PROFILE

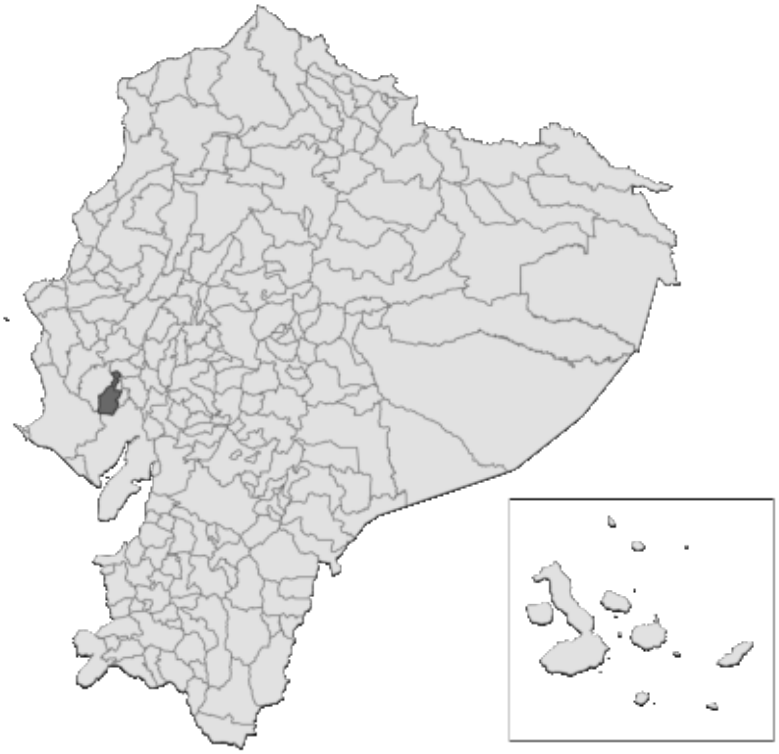
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ISIDRO AYORA

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.569 • RANK: 40/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.558 • RANK: 48/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.424 • RANK: 168/221 CANTONS ASSESSED

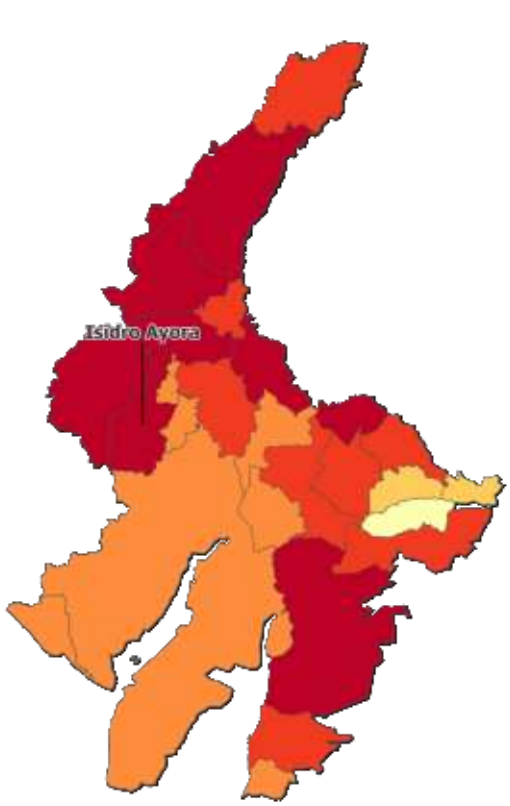
Coping Capacity (CC) - Low
SCORE: 0.455 • RANK: 138/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.549 • RANK: 65/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.375 • RANK: 174/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

ISIDRO AYORA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	**0.569**
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 65 / 221 CANTONS ASSESSED
SCORE: 0.549



MHE
0.549

Raw MHE
0.416

Relative MHE
0.683

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
100%
- **13,287** people exposed
- **7,422** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **13,287** people exposed
- **7,422** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **13,235** people exposed
- **7,392** structures exposed (100%)

Critical Infrastructure Exposed: 99%

Inland Flood
20%
- **2,723** people exposed
- **1,242** structures exposed (17%)

Critical Infrastructure Exposed: 21%

Landslide
<1%
- **23** people exposed
- **11** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
88%
- **11,757** people exposed
- **6,380** structures exposed (86%)

Critical Infrastructure Exposed: 96%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
2%
- **250** people exposed
- **196** structures exposed (3%)

Critical Infrastructure Exposed: <1%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
89%
- **11,785** people exposed
- **6,896** structures exposed (93%)

Critical Infrastructure Exposed: 92%

VULNERABILITY (V)

RANK: 48 / 221 CANTONS ASSESSED **SCORE: 0.558**

Vulnerability in Isidro Ayora is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.632

- **8.3** Average Years of Schooling
- **52.5%** Population (age 24 and over) with General Basic Education Schooling
- **10.9%** Population (age 24 and over) with No Schooling
- **8.9%** Adult Illiteracy Rate
- **67%** Households with No Internet Access
- **75.1%** Households with No Access to Television
- **85.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.756

- **67.4%** Homes with Access to Public Water Source
- **0.7%** Homes Connected to the Public Sewage System
- **66%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.568

- **58.3** Age Dependency Ratio
- **16.6%** Unemployment Rate
- **77.5%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.495

- **4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.611

- **0.6** Female to Male Labor Ratio (distance from parity)
- **58.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **9.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **3.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **74.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.461

- **10.9%** Prevalence of Disability (among persons age 5 and over)
- **4.6** Perinatal Mortality Rate (per 1,000 births)
- **9.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.171

- **10.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **6.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.397

10 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**10** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**24** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**69** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.642

19.5% Homes with Exterior Walls in Poor Condition	**9.9%** Homes with Inadequate Materials Used in Outer Walls	**18%** Homes with Roofs in Poor Condition	**91.4%** Households with No Access to Vehicle for Private Use	**16.3%** Household Overcrowding

Population Pressures

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.520

29.1 Population Density (persons per sq km)	**2.3%** Average Annual Population Change (2010-2022)	**5.5** Net Migration Rate (per 1,000 persons)	**0.31** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.284

0.2 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 138 / 221 CANTONS ASSESSED **SCORE: 0.455**

Isidro Ayora exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.315

49.4%
Labor Force Participation

33,042
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.261

0%
Protected Area (% of land area)

-6,190.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.758

95%
Voter Participation

81.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.356

Communications Capacity

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.372

3.5%
Household Access to Fixed Phones

82.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.347

92.6%
Homes Served by the Public Electricity Network

53.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.204

4.9
Nurses and Midwives per 10,000 persons

7.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.502

34.5
Average Distance to Airport (km)

20.1
Average Distance to Sea or River Port (km)

0.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 174 / 221 CANTONS ASSESSED **SCORE: 0.375**

Isidro Ayora exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.282

4.8	0.8%	0	35.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.467

19.7	5.4	4.8	5.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 168 / 221 CANTONS ASSESSED
SCORE: 0.424

Isidro Ayora's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Healthcare Capacity
- Clean Water Access Vulnerability
- Mass Care Support
- Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

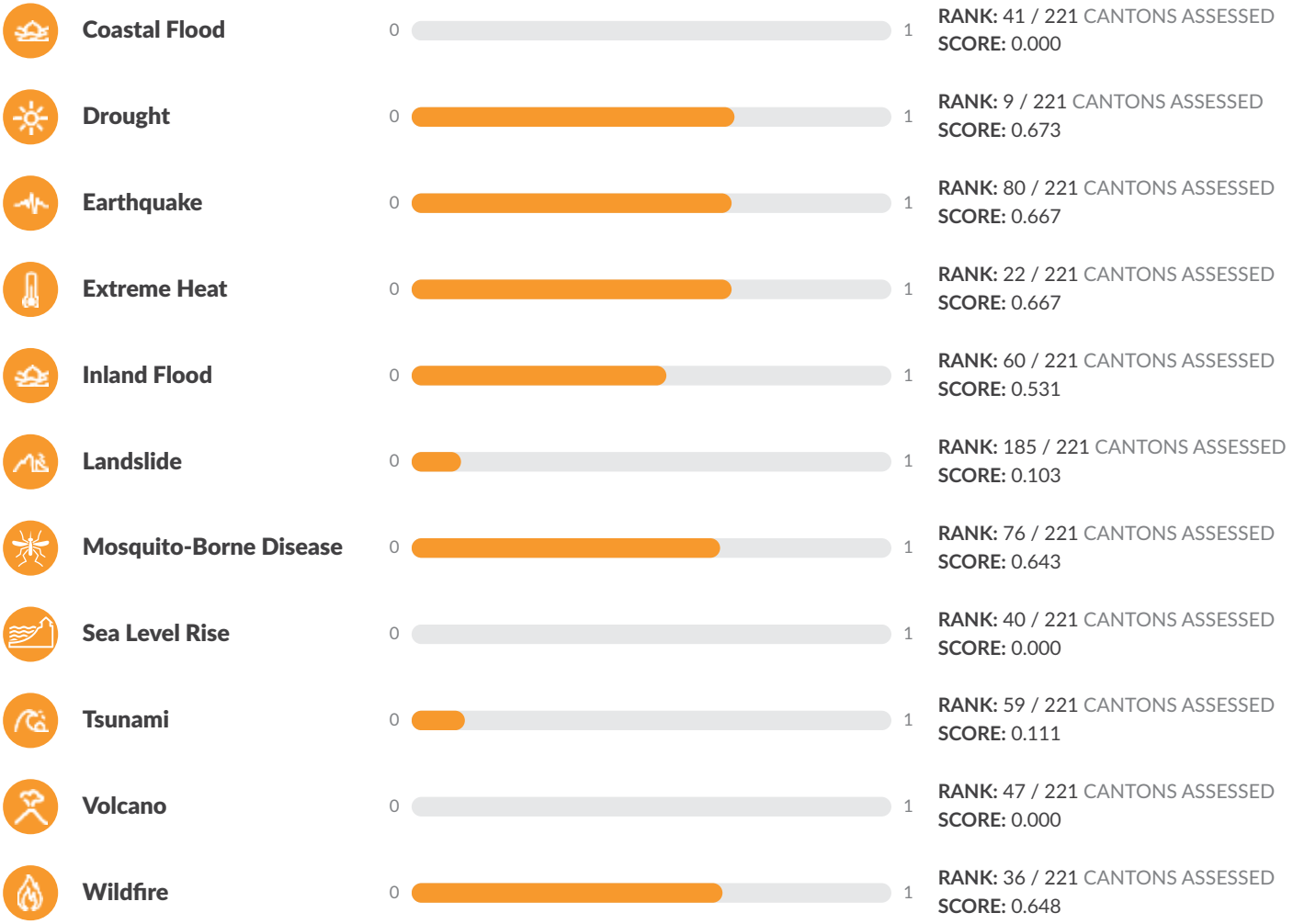
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)

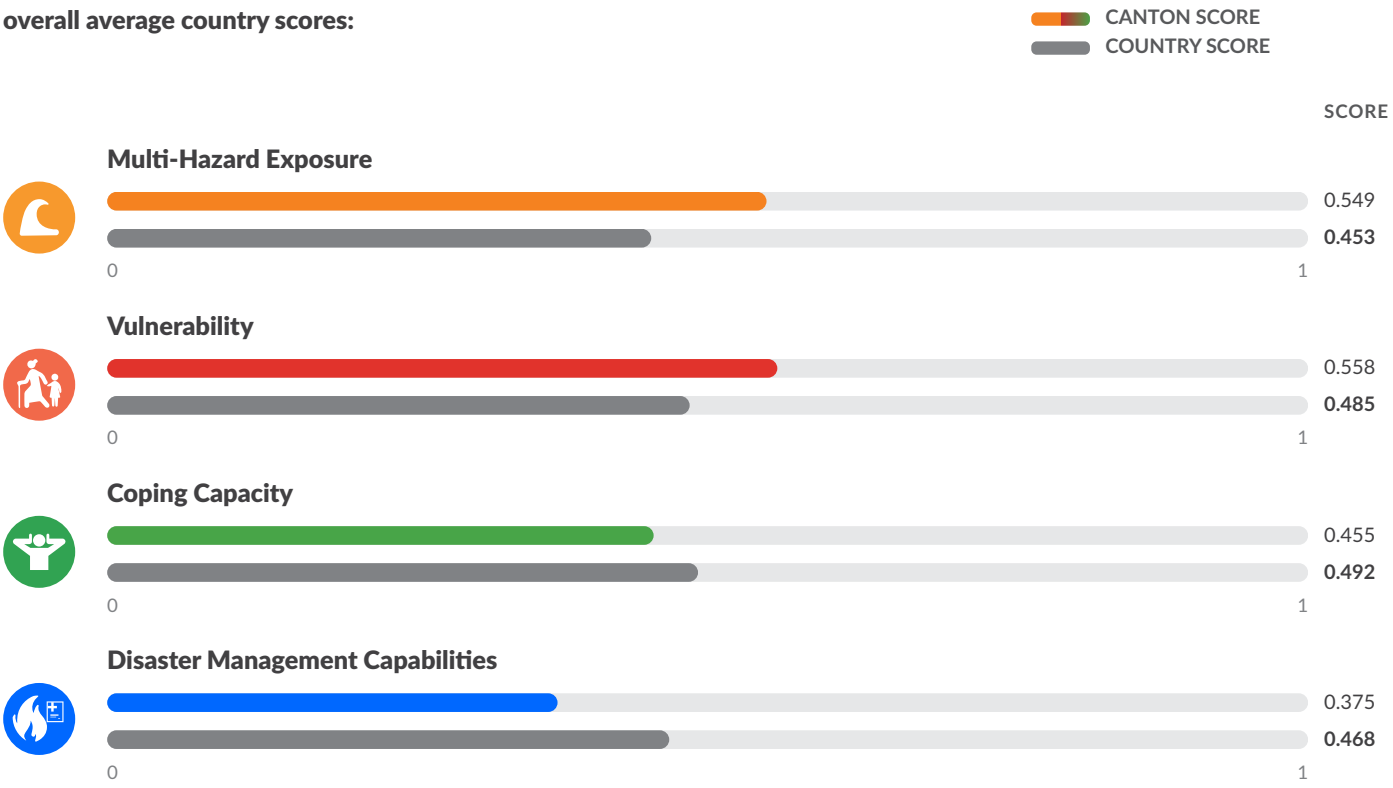


MULTI-HAZARD RISK (MHR)

RANKED
40 / 221
CANTONS ASSESSED
SCORE: 0.569

Isidro Ayora's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

JAMA

NDPBA SUBNATIONAL PROFILE

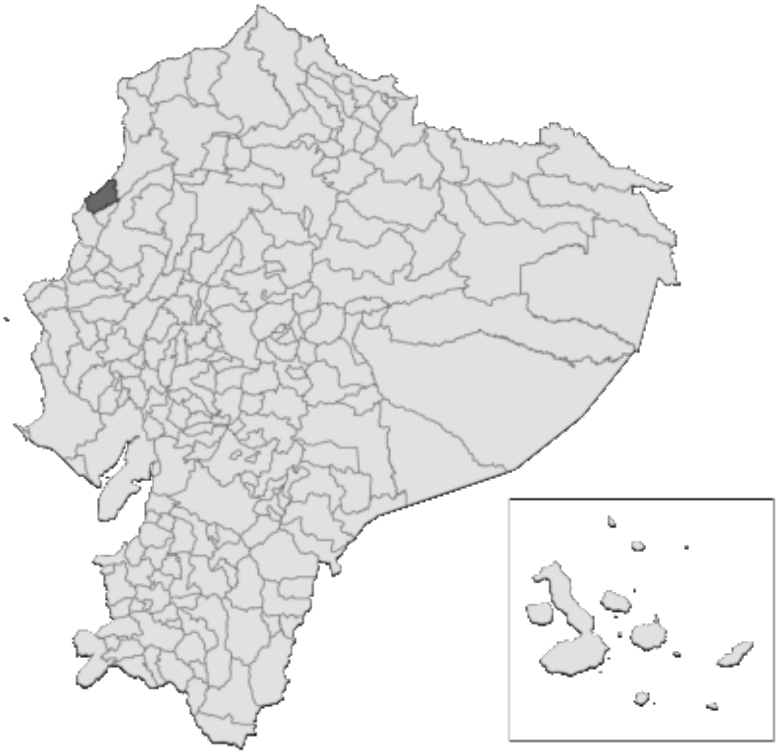
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ECUADOR

JAMA

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.625 • RANK: 7/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.607 • RANK: 13/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.370 • RANK: 203/221 CANTONS ASSESSED

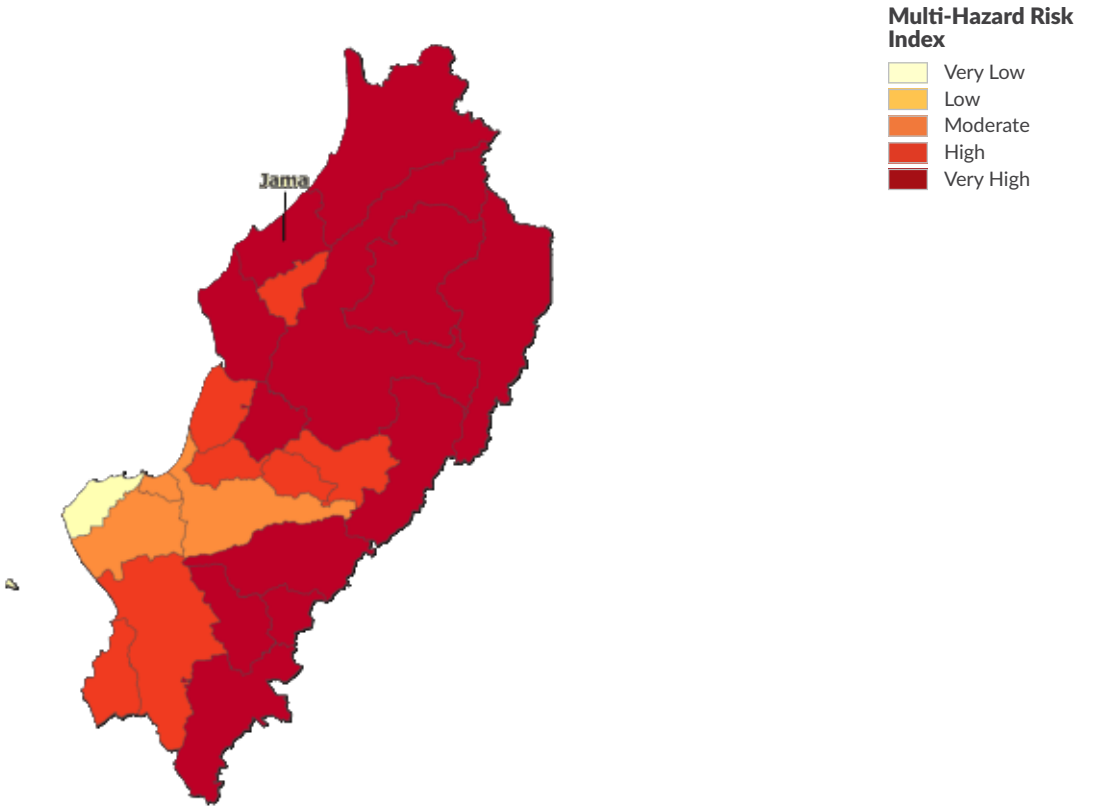
Coping Capacity (CC) - Low
SCORE: 0.398 • RANK: 174/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.609 • RANK: 44/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.318 • RANK: 196/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

JAMA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	**0.625**	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 44 / 221 CANTONS ASSESSED
SCORE: 0.609



MHE
0.609

Raw MHE
0.493

Relative MHE
0.724

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **462** people exposed
- **357** structures exposed (5%)

Critical Infrastructure Exposed: <1%

Drought
100%
- **26,718** people exposed
- **7,803** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **26,718** people exposed
- **7,803** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
59%
- **15,749** people exposed
- **4,898** structures exposed (63%)

Critical Infrastructure Exposed: 79%

Inland Flood
22%
- **5,907** people exposed
- **1,589** structures exposed (20%)

Critical Infrastructure Exposed: 23%

Landslide
28%
- **7,536** people exposed
- **2,155** structures exposed (28%)

Critical Infrastructure Exposed: 24%

Mosquito-Borne Disease
94%
- **25,090** people exposed
- **7,297** structures exposed (94%)

Critical Infrastructure Exposed: 99%

Sea Level Rise
1%
- **384** people exposed
- **277** structures exposed (4%)

Critical Infrastructure Exposed: <1%

Tsunami
34%
- **9,148** people exposed
- **3,117** structures exposed (40%)

Critical Infrastructure Exposed: 52%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
76%
- **20,211** people exposed
- **5,749** structures exposed (74%)

Critical Infrastructure Exposed: 81%

VULNERABILITY (V)

RANK: 13 / 221 CANTONS ASSESSED **SCORE: 0.607**

Vulnerability in Jama is primarily driven by Disaster Impacts and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.655

- **8.5** Average Years of Schooling
- **50%** Population (age 24 and over) with General Basic Education Schooling
- **11.8%** Population (age 24 and over) with No Schooling
- **9.7%** Adult Illiteracy Rate
- **69.5%** Households with No Internet Access
- **78.2%** Households with No Access to Television
- **90.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.723

- **61.7%** Homes with Access to Public Water Source
- **28.2%** Homes Connected to the Public Sewage System
- **50.5%** Homes without Piped Water
- **11.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.569

- **59.7** Age Dependency Ratio
- **19.4%** Unemployment Rate
- **67.3%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.691

- **8.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.714

- **0.6** Female to Male Labor Ratio (distance from parity)
- **77.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **10.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **44.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **83.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.356

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.301

- **41.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.468

7	15	39	69
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.720

30%	24.5%	25.6%	91.8%	9.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.339

29.2	-2.8	10.4	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.762

0.6	0.5	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 174 / 221 CANTONS ASSESSED **SCORE: 0.398**

Jama exhibits weaker Coping Capacity in the areas of Communications Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.350

52.1%
Labor Force Participation

31,369
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.234

0%
Protected Area (% of land area)

-8,028.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.542

85.6%
Voter Participation

82.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.357

Communications Capacity

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.261

2.9%
Household Access to Fixed Phones

72.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.310

91.6%
Homes Served by the Public Electricity Network

49.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.448

20.5
Nurses and Midwives per 10,000 persons

9.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.408

49
Average Distance to Airport (km)

82
Average Distance to Sea or River Port (km)

2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 196 / 221 CANTONS ASSESSED **SCORE: 0.318**

Jama exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.321

4.1	14.5%	0	106.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.314

34.2	9.1	6.7	9.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 203 / 221 CANTONS ASSESSED
SCORE: 0.370

Jama's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Communications Capacity

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

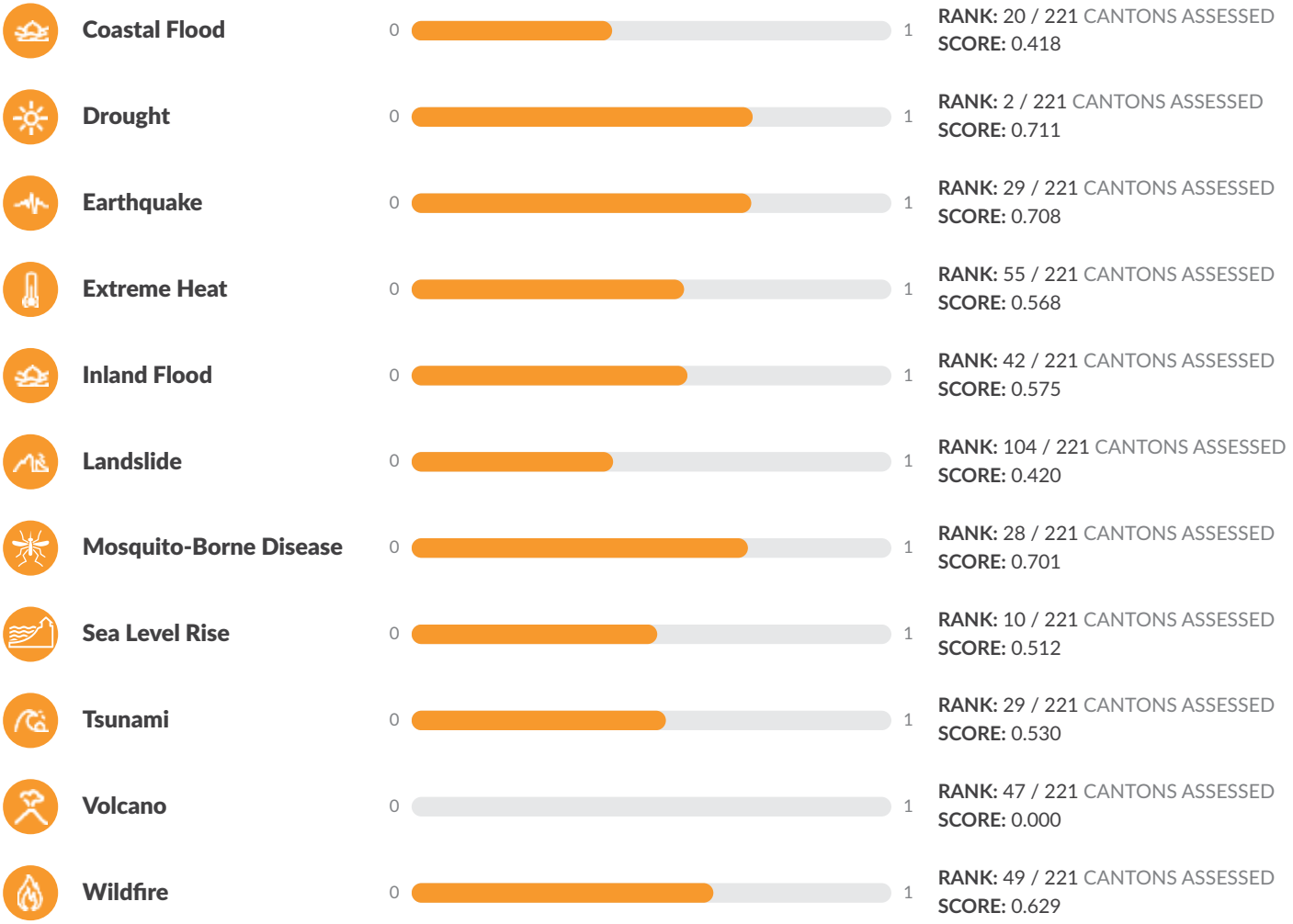
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

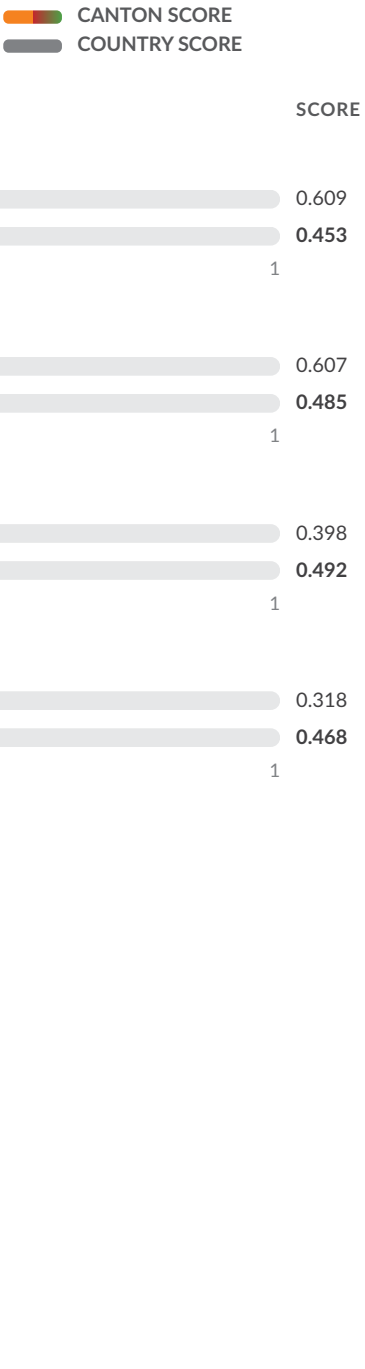


MULTI-HAZARD RISK (MHR)

RANKED
7 / 221
CANTONS ASSESSED
SCORE: 0.625

Jama's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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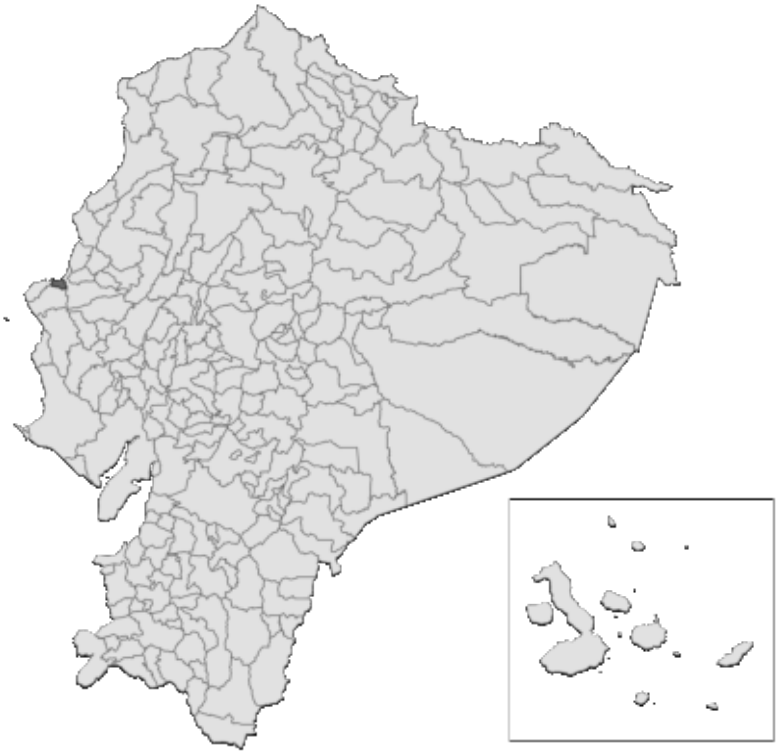
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JARAMIJÓ

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.471 • RANK: 131/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.550 • RANK: 55/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.556 • RANK: 57/221 CANTONS ASSESSED

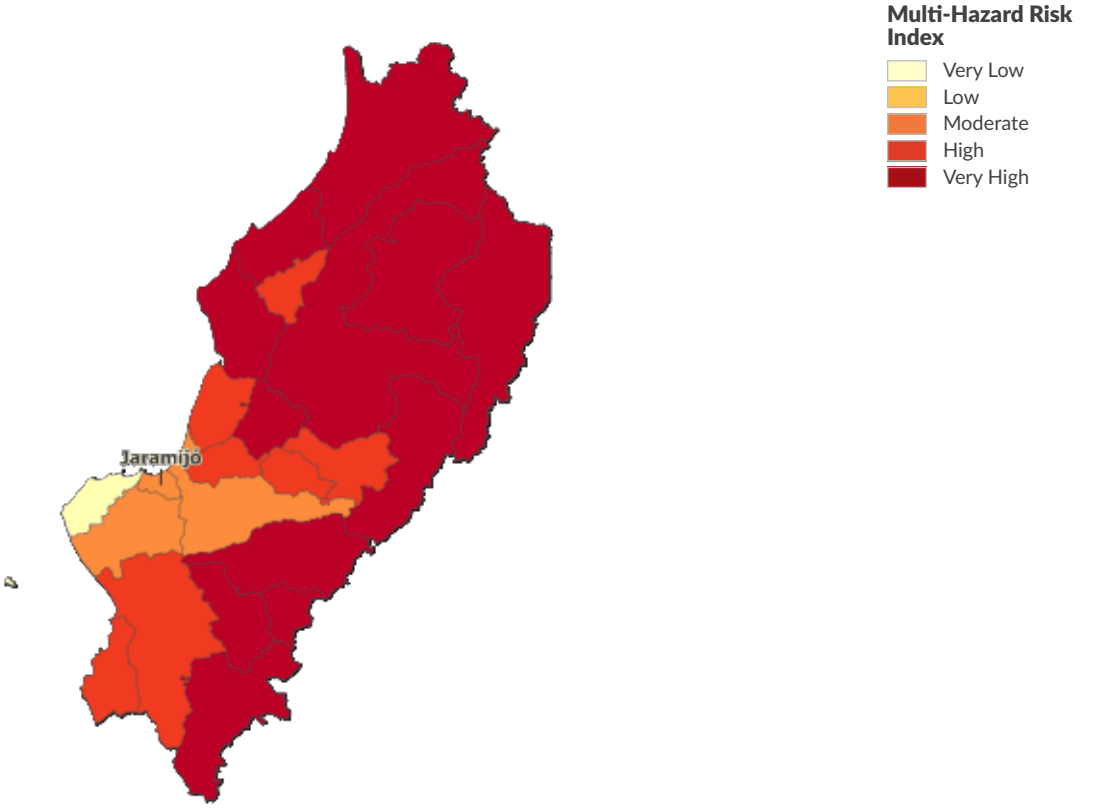
Coping Capacity (CC) - Very High
SCORE: 0.629 • RANK: 27/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.552 • RANK: 62/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.587 • RANK: 36/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

JARAMIJÓ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	**Jaramijó**	**0.471**
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 62 / 221 CANTONS ASSESSED
SCORE: 0.552



MHE
0.552

Raw MHE
0.493

Relative MHE
0.612

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **26** people exposed
- **61** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
100%
- **22,920** people exposed
- **12,326** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **22,920** people exposed
- **12,326** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
99%
- **22,740** people exposed
- **12,204** structures exposed (99%)

Critical Infrastructure Exposed: 97%

Inland Flood
13%
- **2,935** people exposed
- **1,374** structures exposed (11%)

Critical Infrastructure Exposed: 13%

Landslide
0%
- **0** people exposed
- **2** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
52%
- **12,013** people exposed
- **6,424** structures exposed (52%)

Critical Infrastructure Exposed: 77%

Sea Level Rise
<1%
- **4** people exposed
- **41** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
12%
- **2,636** people exposed
- **1,249** structures exposed (10%)

Critical Infrastructure Exposed: 15%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
76%
- **17,356** people exposed
- **8,387** structures exposed (68%)

Critical Infrastructure Exposed: 84%

VULNERABILITY (V)

RANK: 55 / 221 CANTONS ASSESSED **SCORE: 0.550**

Vulnerability in Jaramijó is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.533

- **9.6** Average Years of Schooling
- **51.4%** Population (age 24 and over) with General Basic Education Schooling
- **4.7%** Population (age 24 and over) with No Schooling
- **4.8%** Adult Illiteracy Rate
- **54.7%** Households with No Internet Access
- **84.4%** Households with No Access to Television
- **80.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.643

- **68%** Homes with Access to Public Water Source
- **55.5%** Homes Connected to the Public Sewage System
- **39.3%** Homes without Piped Water
- **14.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.461

- **55.6** Age Dependency Ratio
- **17.9%** Unemployment Rate
- **56%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.276

- **1.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.537

- **0.6** Female to Male Labor Ratio (distance from parity)
- **46** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **19.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **60.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.376

- **6.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **13.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.330

- **17.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.460

20
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

36
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

40
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.547

17.3%
Homes with Exterior Walls in Poor Condition

13.1%
Homes with Inadequate Materials Used in Outer Walls

15.6%
Homes with Roofs in Poor Condition

83.4%
Households with No Access to Vehicle for Private Use

10.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.705

308.3
Population Density (persons per sq km)

4.1%
Average Annual Population Change (2010-2022)

17.4
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.643

0.5
Hazard Susceptibility (recent events 2015-2025)

0.4
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 27 / 221 CANTONS ASSESSED **SCORE: 0.629**

Jaramijó exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.541

54.2%
Labor Force Participation

292,745
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.353

0%
Protected Area (% of land area)

-151.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.863

92%
Voter Participation

97.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.577

Communications Capacity

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.380

3.4%
Household Access to Fixed Phones

83.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.551

97.9%
Homes Served by the Public Electricity Network

63.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.513

11.4
Nurses and Midwives per 10,000 persons

25.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.864

4.6
Average Distance to Airport (km)

9.5
Average Distance to Sea or River Port (km)

3.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 36 / 221 CANTONS ASSESSED **SCORE: 0.587**

Jaramijó exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.452

1.5	1.7%	0	13.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.722

6.2	2.6	2	2.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 57 / 221 CANTONS ASSESSED
SCORE: 0.556

Jaramijó's score and ranking are due to High Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Clean Water Access Vulnerability

Disaster Impacts

Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

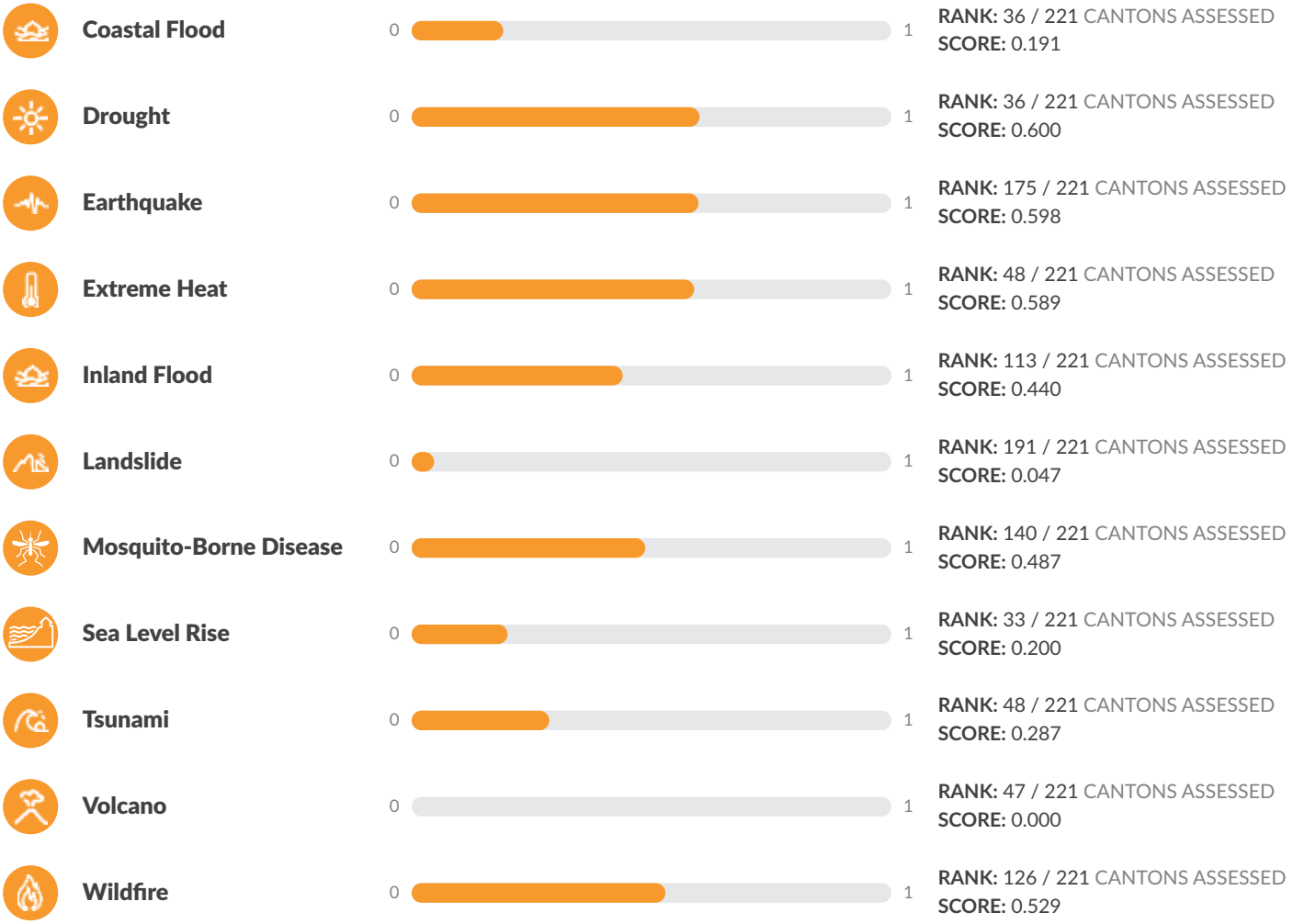
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

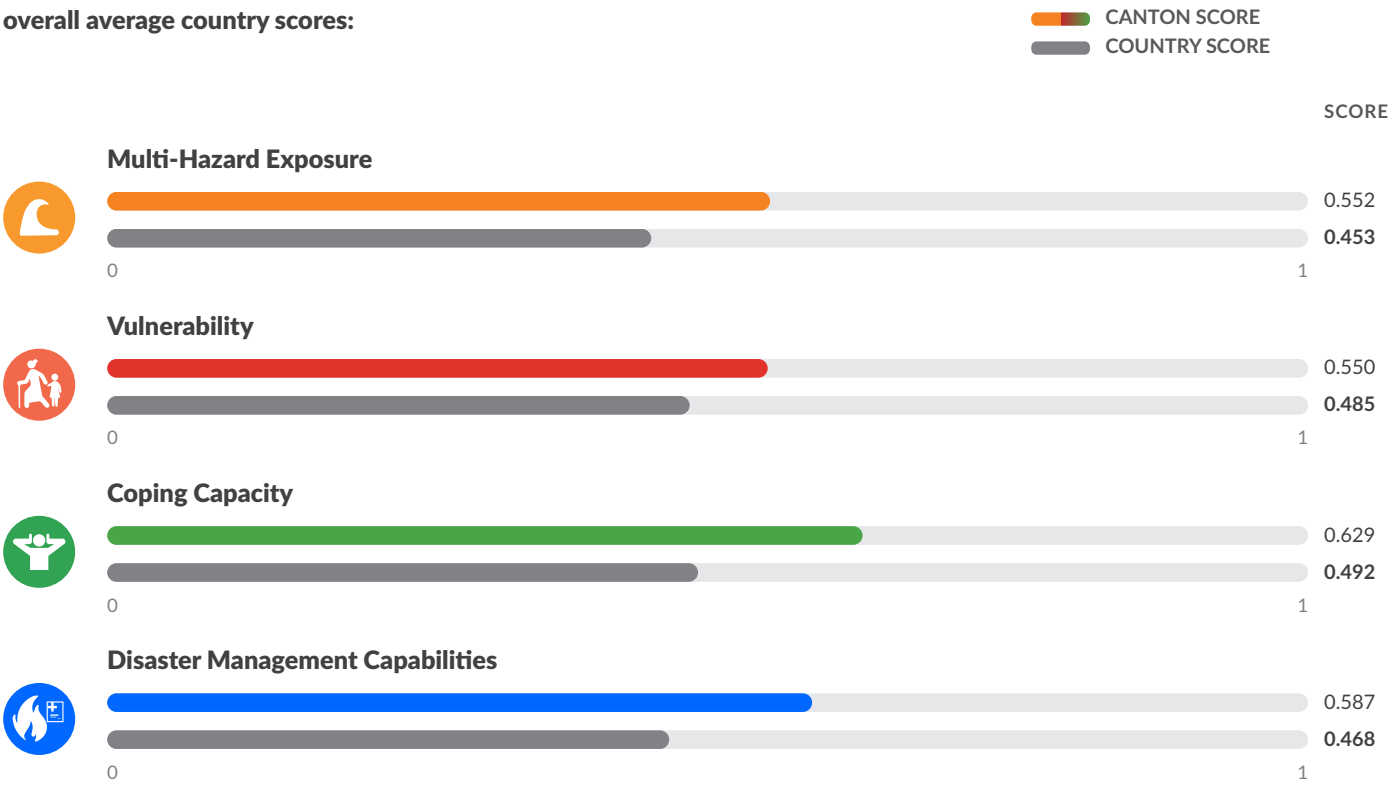


MULTI-HAZARD RISK (MHR)

RANKED
131 / 221
CANTONS ASSESSED
SCORE: 0.471

Jaramijó's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

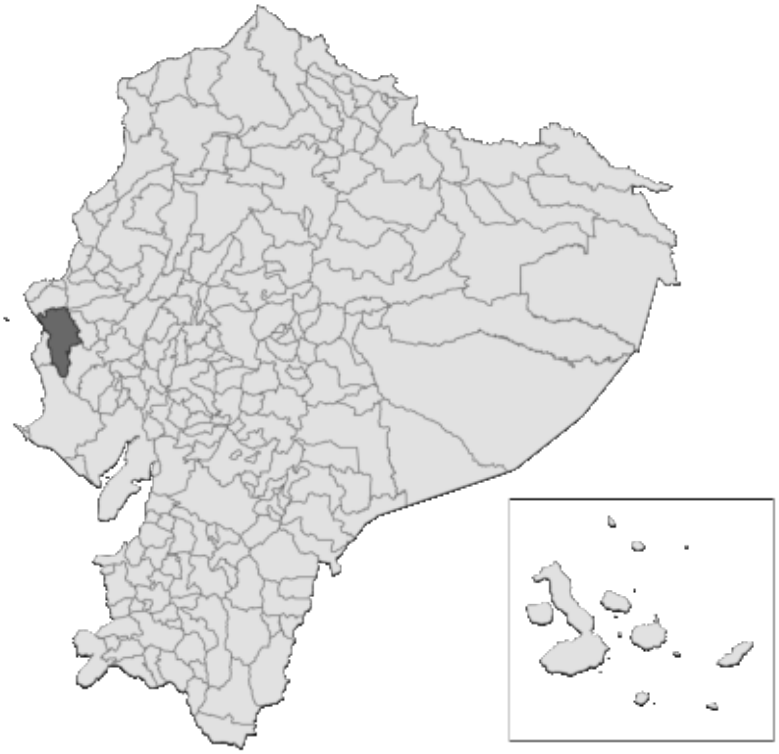
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JIPIJAPA

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.532 • RANK: 70/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.527 • RANK: 74/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.476 • RANK: 119/221 CANTONS ASSESSED

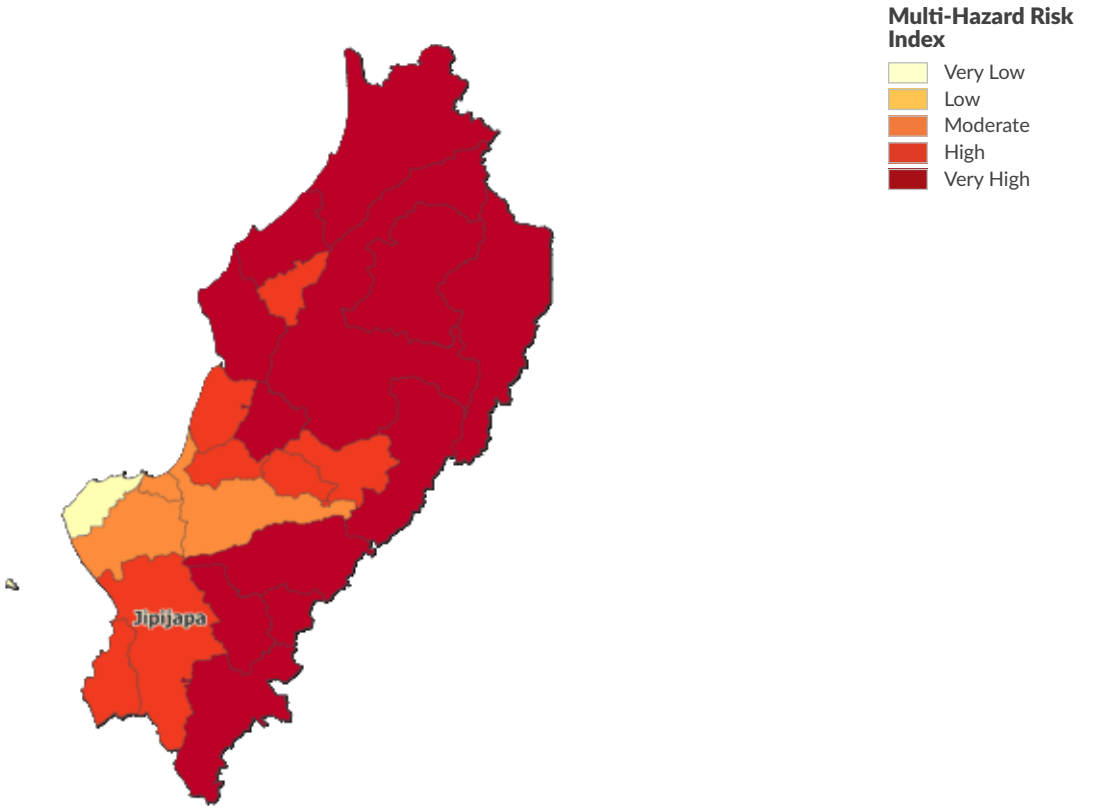
Coping Capacity (CC) - Moderate
SCORE: 0.483 • RANK: 116/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.558 • RANK: 59/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.473 • RANK: 96/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

JIPIJAPA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	**Jipijapa**	**0.532**
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 59 / 221 CANTONS ASSESSED
SCORE: 0.558



MHE
0.558

Raw MHE
0.696

Relative MHE
0.419

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **78** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
94%
- **78,489** people exposed
- **42,769** structures exposed (95%)

Critical Infrastructure Exposed: 96%

Earthquake
100%
- **83,208** people exposed
- **45,234** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
6%
- **5,201** people exposed
- **4,248** structures exposed (9%)

Critical Infrastructure Exposed: 22%

Inland Flood
14%
- **11,433** people exposed
- **6,510** structures exposed (14%)

Critical Infrastructure Exposed: 12%

Landslide
18%
- **14,713** people exposed
- **8,116** structures exposed (18%)

Critical Infrastructure Exposed: 14%

Mosquito-Borne Disease
91%
- **75,773** people exposed
- **40,475** structures exposed (89%)

Critical Infrastructure Exposed: 97%

Sea Level Rise
<1%
- **12** people exposed
- **42** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
2%
- **1,586** people exposed
- **1,473** structures exposed (3%)

Critical Infrastructure Exposed: 9%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
38%
- **31,494** people exposed
- **18,904** structures exposed (42%)

Critical Infrastructure Exposed: 38%

VULNERABILITY (V)

RANK: 74 / 221 CANTONS ASSESSED **SCORE: 0.527**

Vulnerability in Jipijapa is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.478

- **10.5** Average Years of Schooling
- **39.8%** Population (age 24 and over) with General Basic Education Schooling
- **7.5%** Population (age 24 and over) with No Schooling
- **6.9%** Adult Illiteracy Rate
- **56.6%** Households with No Internet Access
- **72.3%** Households with No Access to Television
- **78.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.674

- **59.7%** Homes with Access to Public Water Source
- **47%** Homes Connected to the Public Sewage System
- **60.8%** Homes without Piped Water
- **9.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.534

- **57.4** Age Dependency Ratio
- **16.4%** Unemployment Rate
- **72.8%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.566

- **5.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.571

- **0.5** Female to Male Labor Ratio (distance from parity)
- **44** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **62.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **74.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.546

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **6.4** Perinatal Mortality Rate (per 1,000 births)
- **11.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.508

- **48.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **45** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.449

56	18	30	14
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.640

20.7%	25.8%	19.3%	86.6%	11.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.432

52.9	0.8%	8.2	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.337

0.3	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 116 / 221 CANTONS ASSESSED **SCORE: 0.483**

Jipijapa exhibits weaker Coping Capacity in the areas of Economic Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.434

50.7%
Labor Force Participation

133,727
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.353

9.9%
Protected Area (% of land area)

-18,751
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.562

88.2%
Voter Participation

77.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.498

Communications Capacity

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.569

8.8%
Household Access to Fixed Phones

87.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.442

96.3%
Homes Served by the Public Electricity Network

55.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.529

16.5
Nurses and Midwives per 10,000 persons

19.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.452

38.4
Average Distance to Airport (km)

52.6
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 96 / 221 CANTONS ASSESSED **SCORE: 0.473**

Jipijapa exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.522

2.5	10.1%	0.6	35.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.423

10.6	10.2	3.9	9.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 119 / 221 CANTONS ASSESSED
SCORE: 0.476

Jipijapa's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

Emergency Services

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

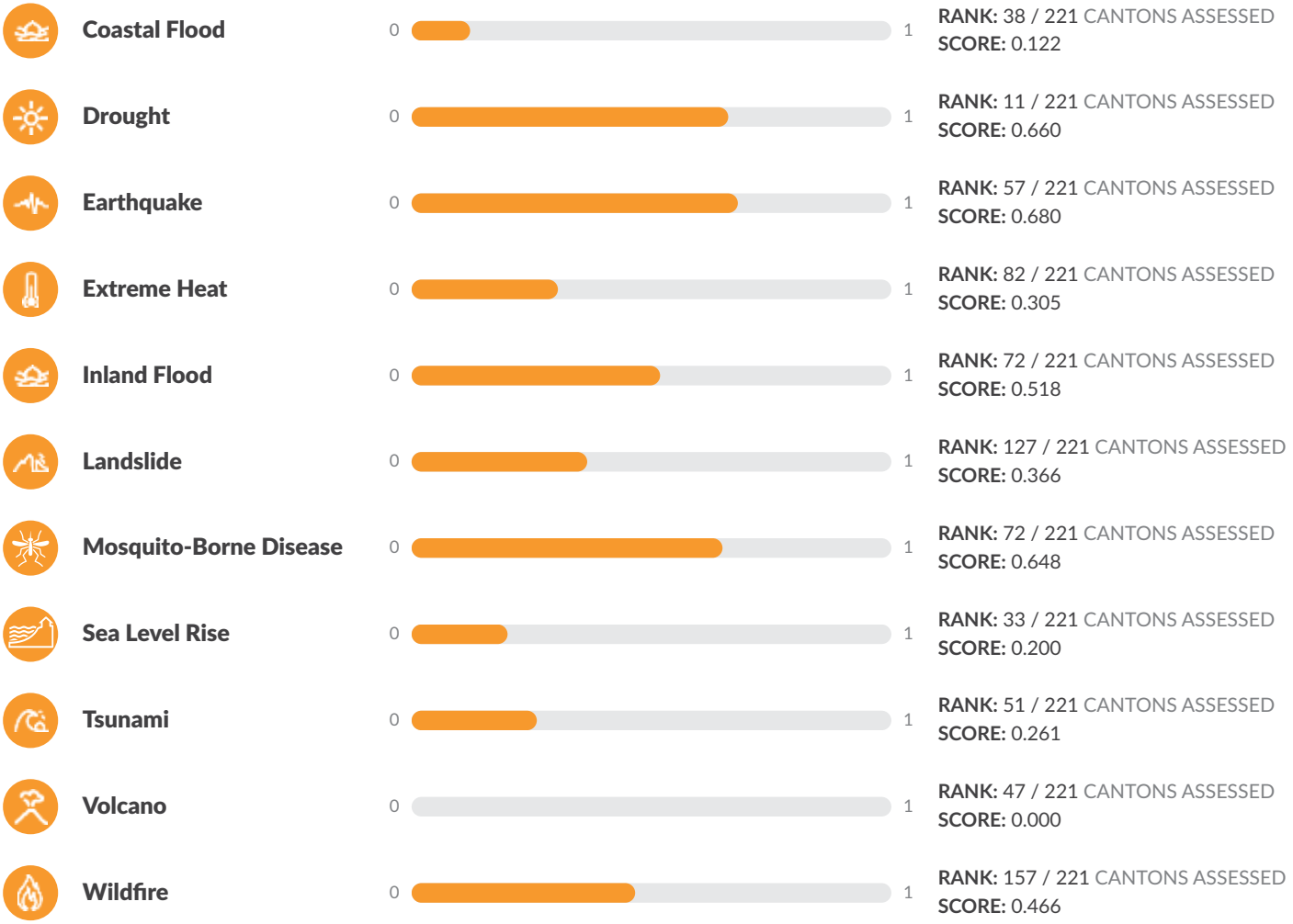
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

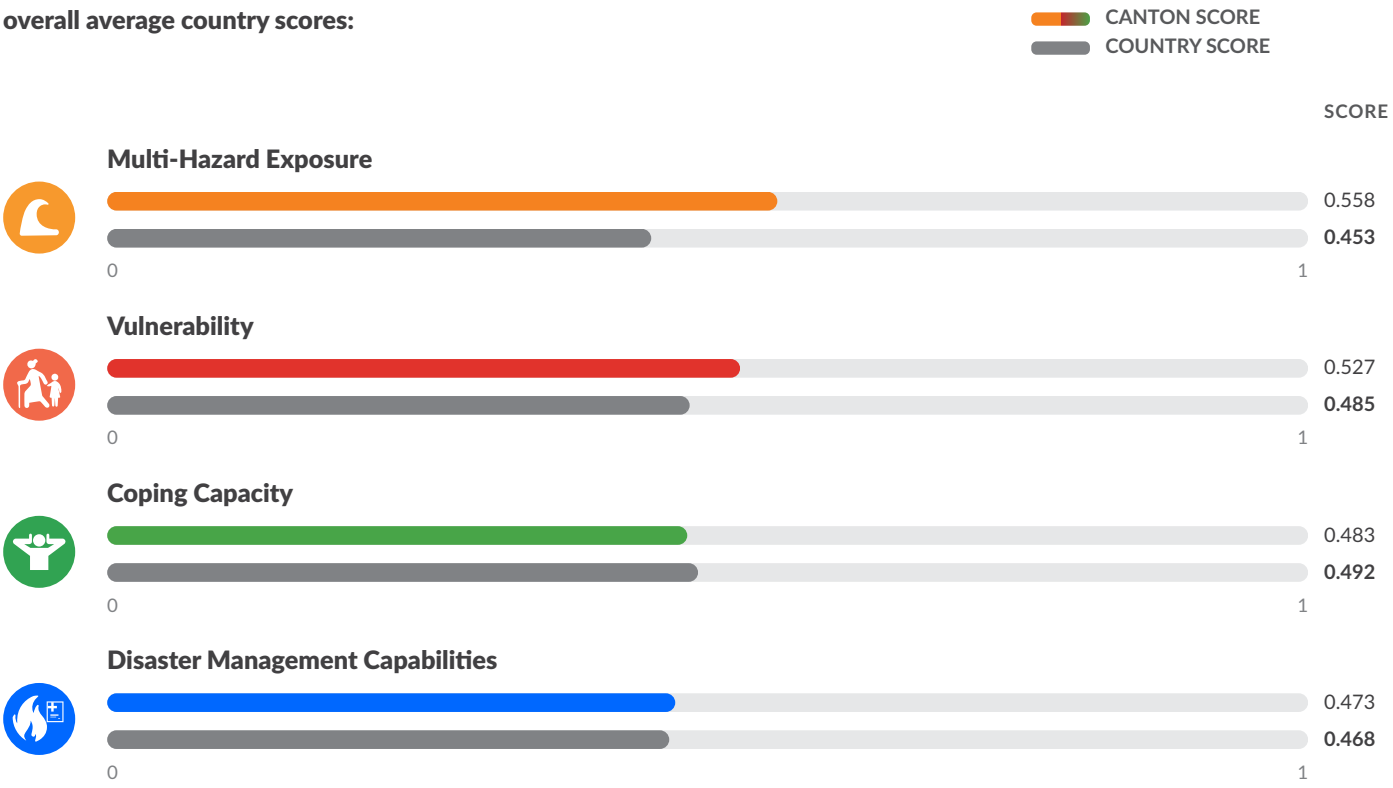


MULTI-HAZARD RISK (MHR)

RANKED
70 / 221
CANTONS ASSESSED
SCORE: 0.532

Jipijapa's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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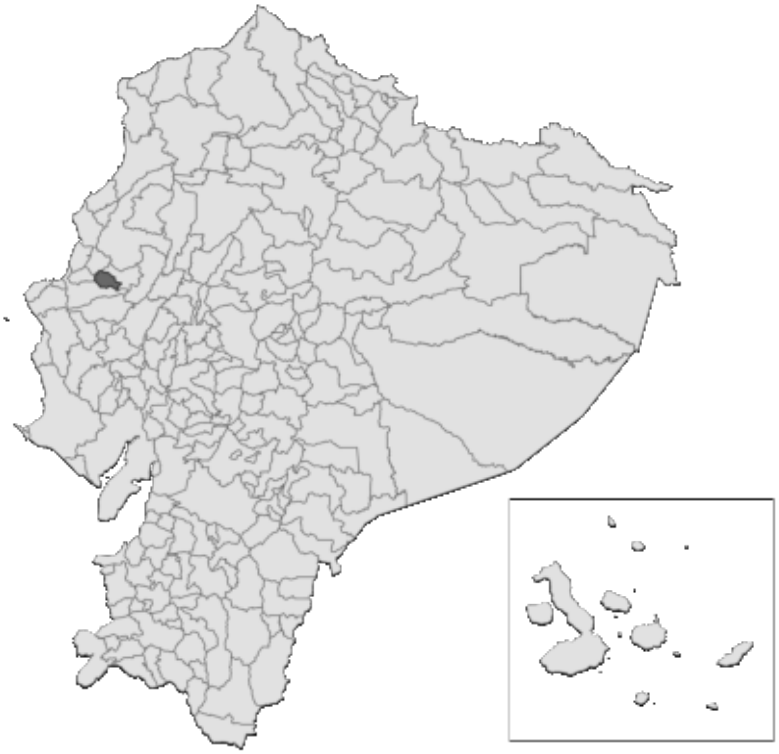
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JUNÍN

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.565 • RANK: 45/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.574 • RANK: 33/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.423 • RANK: 170/221 CANTONS ASSESSED

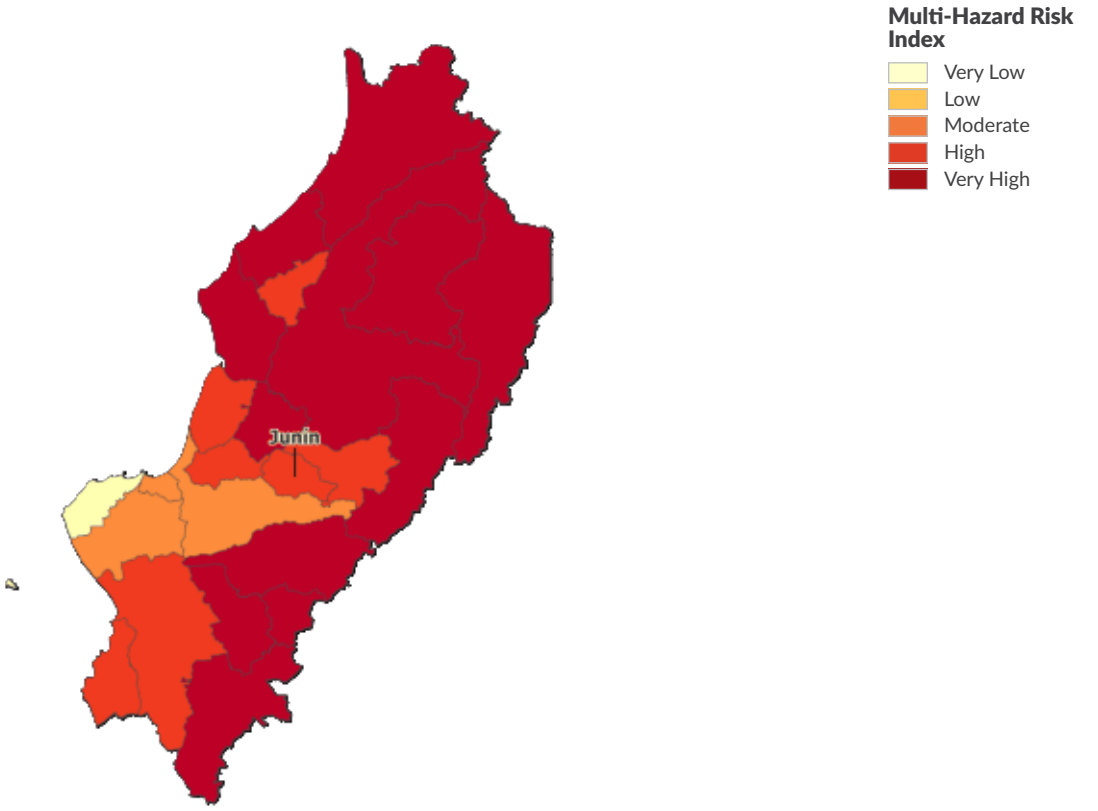
Coping Capacity (CC) - Low
SCORE: 0.418 • RANK: 162/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.529 • RANK: 70/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.425 • RANK: 144/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

JUNÍN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	**Junín**	**0.565**	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 70 / 221 CANTONS ASSESSED
SCORE: 0.529



MHE
0.529

Raw MHE
0.498

Relative MHE
0.561

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
79%
- **18,483** people exposed
- **8,787** structures exposed (78%)

Critical Infrastructure Exposed: 77%

Earthquake
100%
- **23,319** people exposed
- **11,256** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **23,319** people exposed
- **11,256** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
27%
- **6,363** people exposed
- **3,628** structures exposed (32%)

Critical Infrastructure Exposed: 24%

Landslide
35%
- **8,091** people exposed
- **3,747** structures exposed (33%)

Critical Infrastructure Exposed: 25%

Mosquito-Borne Disease
91%
- **21,300** people exposed
- **10,457** structures exposed (93%)

Critical Infrastructure Exposed: 94%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
44%
- **10,243** people exposed
- **4,355** structures exposed (39%)

Critical Infrastructure Exposed: 48%

VULNERABILITY (V)

RANK: 33 / 221 CANTONS ASSESSED **SCORE: 0.574**

Vulnerability in Junín is primarily driven by Marginalization and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.569

- **9.2** Average Years of Schooling
- **51.2%** Population (age 24 and over) with General Basic Education Schooling
- **7.8%** Population (age 24 and over) with No Schooling
- **7.1%** Adult Illiteracy Rate
- **58.5%** Households with No Internet Access
- **74.1%** Households with No Access to Television
- **85.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.694

- **44.5%** Homes with Access to Public Water Source
- **24.8%** Homes Connected to the Public Sewage System
- **60.2%** Homes without Piped Water
- **4.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.522

- **56.6** Age Dependency Ratio
- **13.7%** Unemployment Rate
- **75.4%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.586

- **5.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.781

- **0.6** Female to Male Labor Ratio (distance from parity)
- **49.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **100%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **79.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.517

- **9.8%** Prevalence of Disability (among persons age 5 and over)
- **3.5** Perinatal Mortality Rate (per 1,000 births)
- **8.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.344

- **13** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.646

98	13	53	84
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.677

27.1%	34.4%	25.3%	87.9%	6.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.443

83.6	1.3%	4.1	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.385

0.3	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 162 / 221 CANTONS ASSESSED **SCORE: 0.418**

Junín exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.354

50.8%
Labor Force Participation

43,058
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.302

0%
Protected Area (% of land area)

-3,428.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.480

85%
Voter Participation

74.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.458

Communications Capacity

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.498

7.7%
Household Access to Fixed Phones

83.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.521

97%
Homes Served by the Public Electricity Network

64.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.317

6.7
Nurses and Midwives per 10,000 persons

12.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.497

31.3
Average Distance to Airport (km)

54.6
Average Distance to Sea or River Port (km)

1.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 144 / 221 CANTONS ASSESSED **SCORE: 0.425**

Junín exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.418

2.7	11.2%	0	48
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.431

12.6	11.8	5	5.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 170 / 221 CANTONS ASSESSED
SCORE: 0.423

Junín's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Marginalization

Clean Water Access Vulnerability

Healthcare Capacity

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

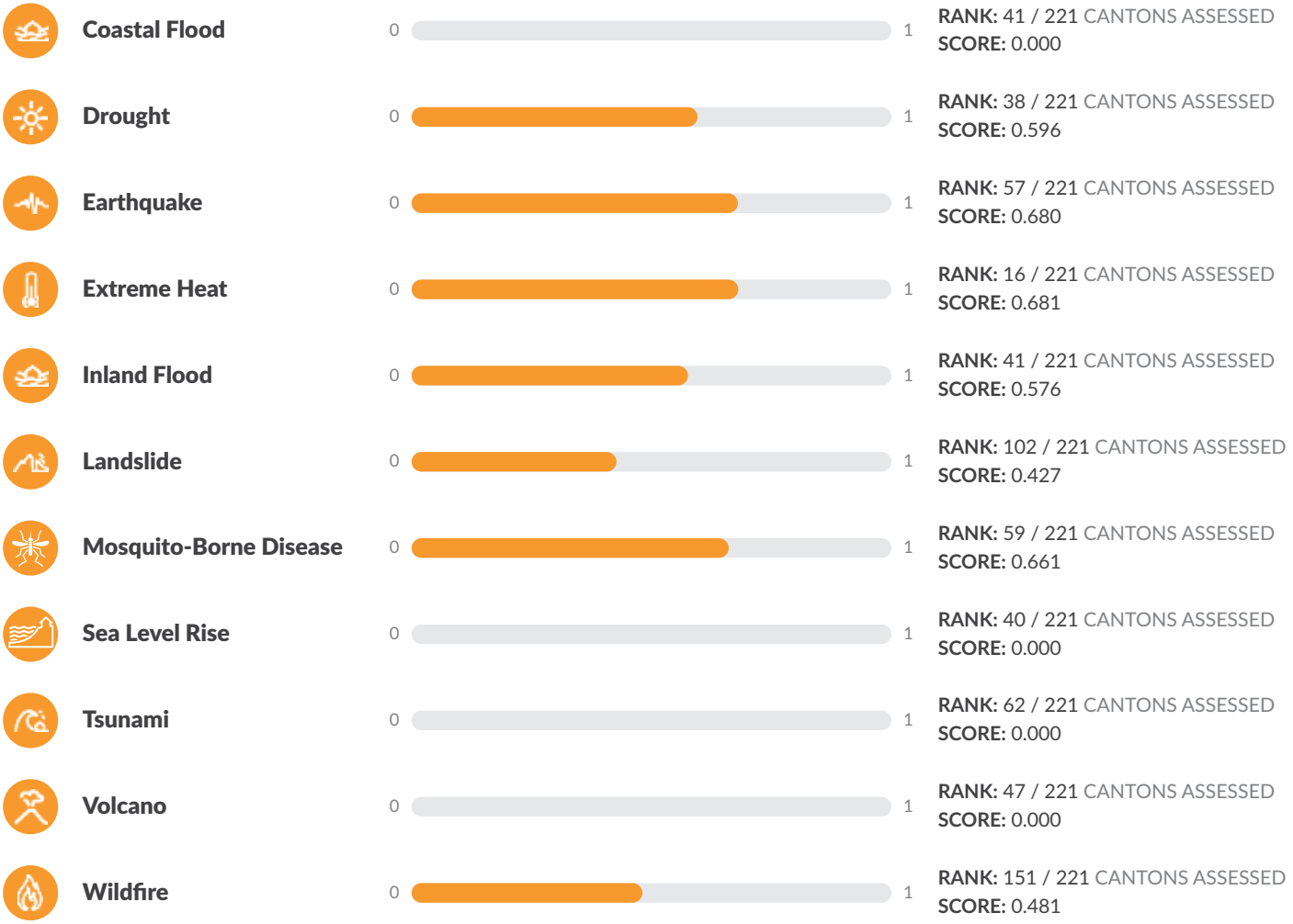
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

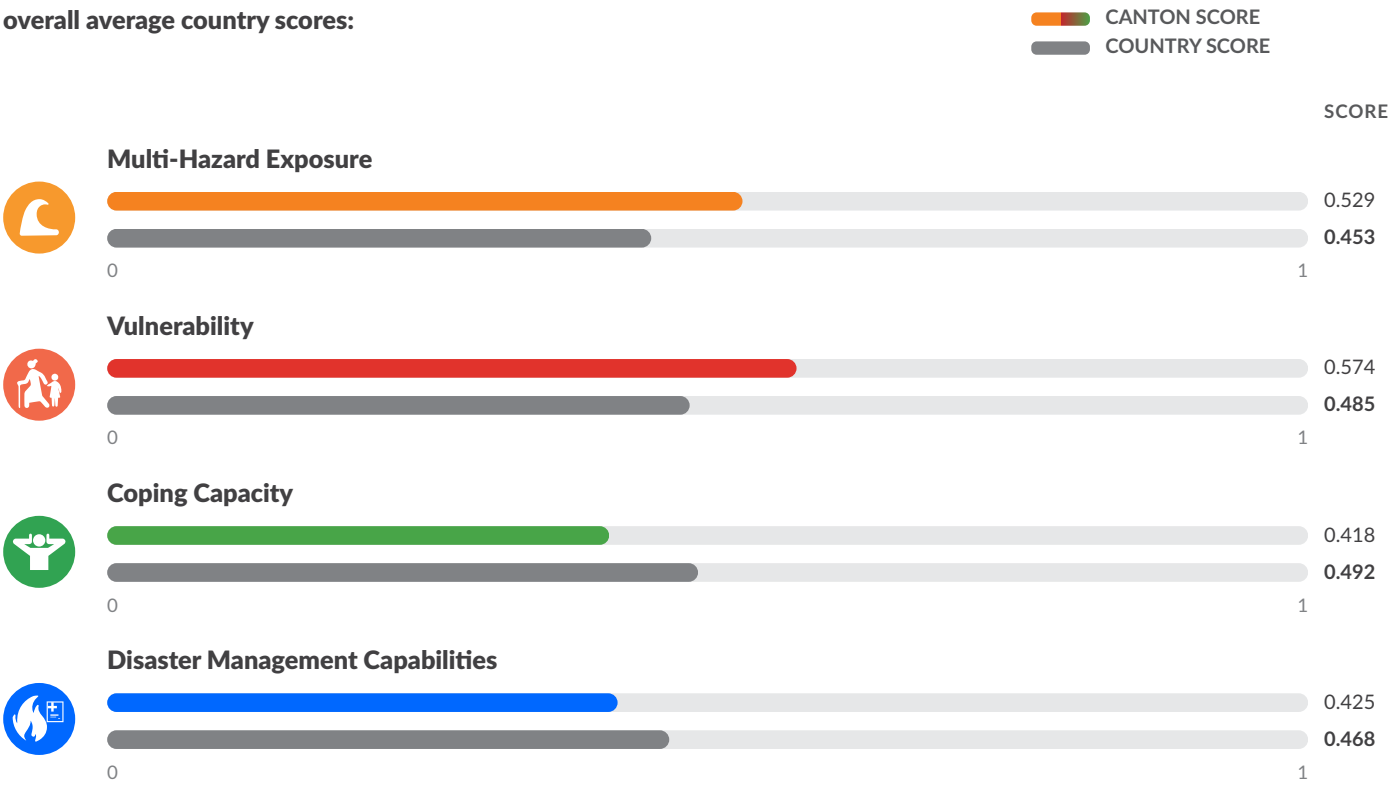


MULTI-HAZARD RISK (MHR)

RANKED
45 / 221
CANTONS ASSESSED
SCORE: 0.565

Junín's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

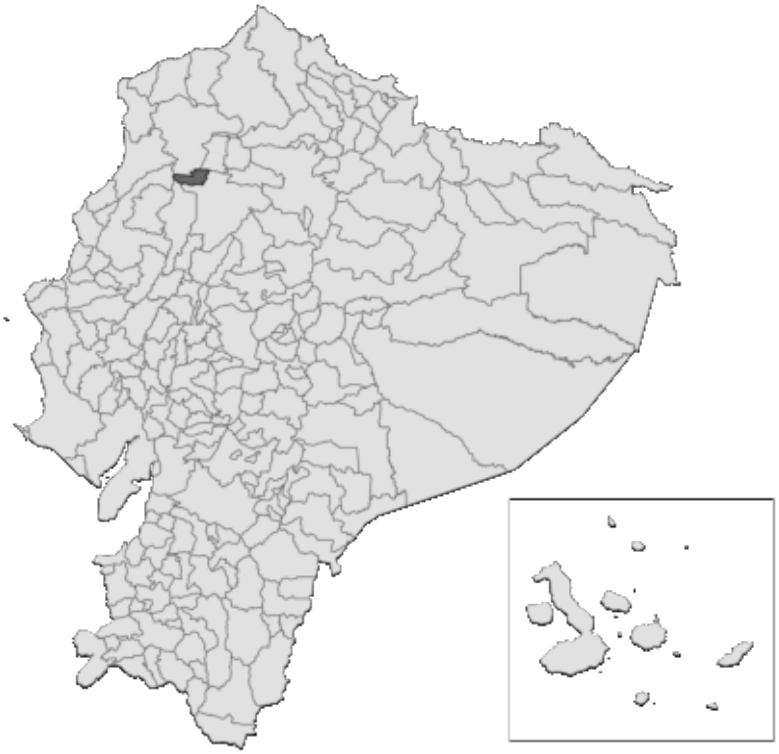
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PROVINCE: SANTO DOMINGO DE LOS TSÁCHILAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.473 • RANK: 129/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.561 • RANK: 45/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.458 • RANK: 139/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.513 • RANK: 90/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.269 • RANK: 189/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.424 • RANK: 145/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SANTO DOMINGO DE LOS TSÁCHILAS PROVINCE

LA CONCORDIA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Santo Domingo	0.501
La Concordia	**0.473**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 189 / 221 CANTONS ASSESSED
SCORE: 0.269



MHE
0.269

Raw MHE
0.488

Relative MHE
0.049

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
54,157 people exposed
19,049 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
4%
2,284 people exposed
691 structures exposed (4%)
Critical Infrastructure Exposed: 8%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
54,157 people exposed
19,049 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
1%
727 people exposed
262 structures exposed (1%)
Critical Infrastructure Exposed: 7%

Wildfire
25%
13,558 people exposed
3,866 structures exposed (20%)
Critical Infrastructure Exposed: 21%

VULNERABILITY (V)

RANK: 45 / 221 CANTONS ASSESSED **SCORE: 0.561**

Vulnerability in La Concordia is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.530

- **9.7** Average Years of Schooling
- **45%** Population (age 24 and over) with General Basic Education Schooling
- **7.4%** Population (age 24 and over) with No Schooling
- **5.8%** Adult Illiteracy Rate
- **53%** Households with No Internet Access
- **83.1%** Households with No Access to Television
- **81.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.644

- **59.8%** Homes with Access to Public Water Source
- **14.4%** Homes Connected to the Public Sewage System
- **38.1%** Homes without Piped Water
- **5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.529

- **60.6** Age Dependency Ratio
- **17%** Unemployment Rate
- **61%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.819

- **13.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.642

- **0.5** Female to Male Labor Ratio (distance from parity)
- **64.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **83.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **74%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.500

- **7.7%** Prevalence of Disability (among persons age 5 and over)
- **4.3** Perinatal Mortality Rate (per 1,000 births)
- **8.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.405

- **31** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **9.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.624

37
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

19
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

56
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

103
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.520

15.9%
Homes with Exterior Walls in Poor Condition

4.7%
Homes with Inadequate Materials Used in Outer Walls

19.5%
Homes with Roofs in Poor Condition

88.5%
Households with No Access to Vehicle for Private Use

7.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.558

158.4
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

10.7
Net Migration Rate (per 1,000 persons)

0.31
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.524

0.3
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 90 / 221 CANTONS ASSESSED **SCORE: 0.513**

La Concordia exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.531

55.6%
Labor Force Participation

190,594
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.305

0%
Protected Area (% of land area)

-3,195.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.598

85.8%
Voter Participation

89%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.480

Communications Capacity

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.528

6.9%
Household Access to Fixed Phones

87.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.564

97.8%
Homes Served by the Public Electricity Network

65.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.225

4.9
Nurses and Midwives per 10,000 persons

8.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.602

7.2
Average Distance to Airport (km)

74
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 145 / 221 CANTONS ASSESSED **SCORE: 0.424**

La Concordia exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.360

1.8	8.9%	0.1	114.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.488

29.6	6.3	2.2	5.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 139 / 221 CANTONS ASSESSED
SCORE: 0.458

La Concordia's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Clean Water Access Vulnerability

Marginalization

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

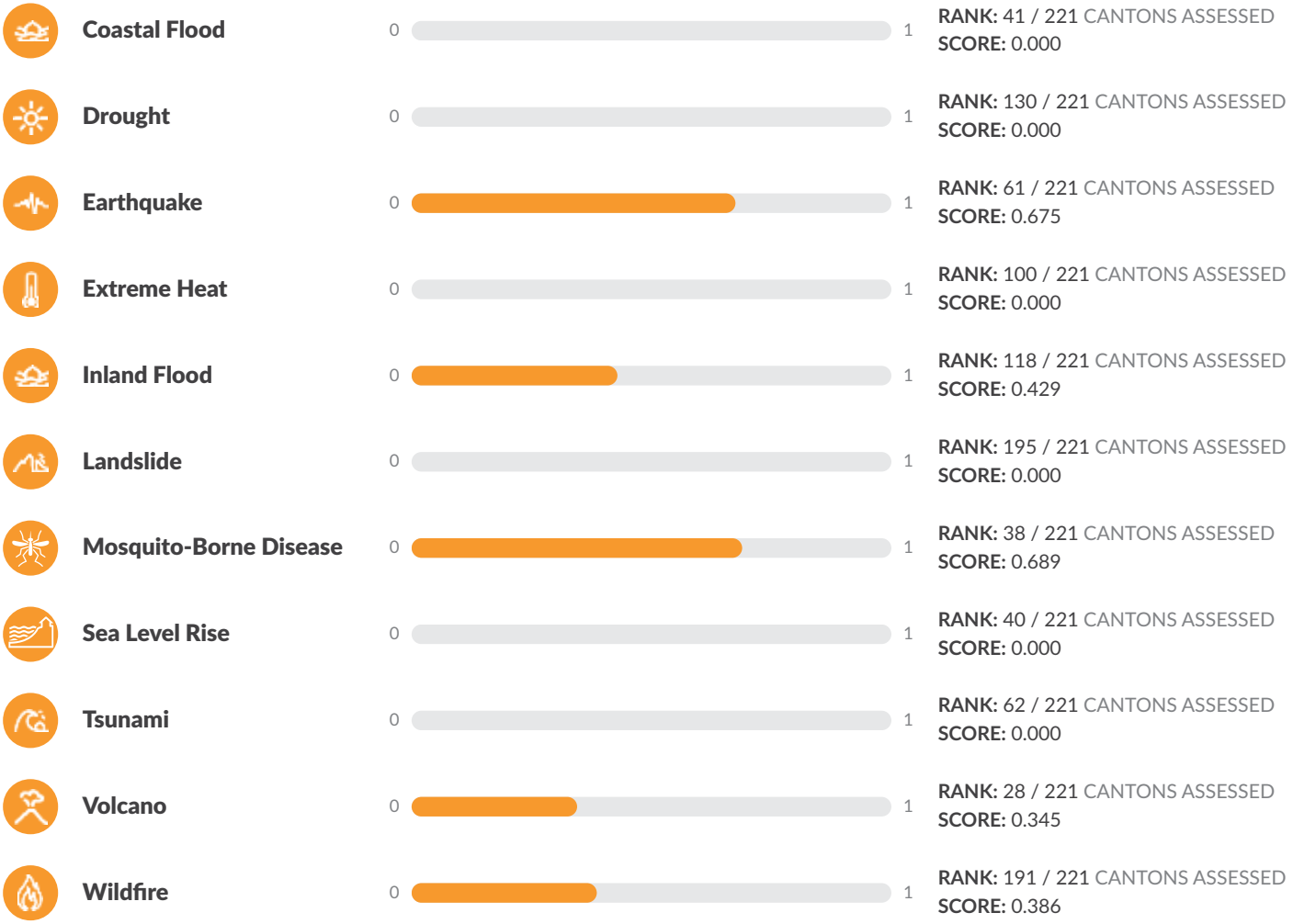
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

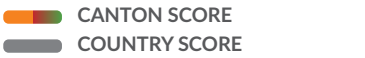


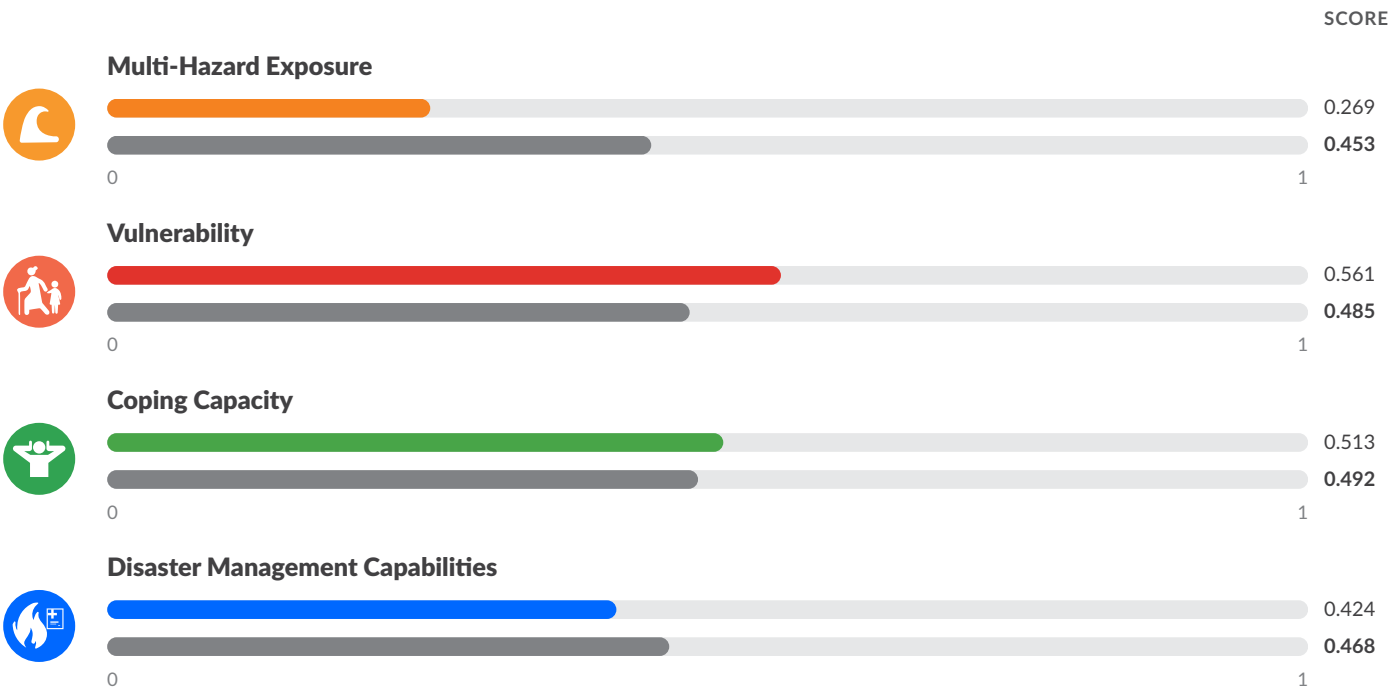
MULTI-HAZARD RISK (MHR)

RANKED
129 / 221
CANTONS ASSESSED
SCORE: 0.473

La Concordia's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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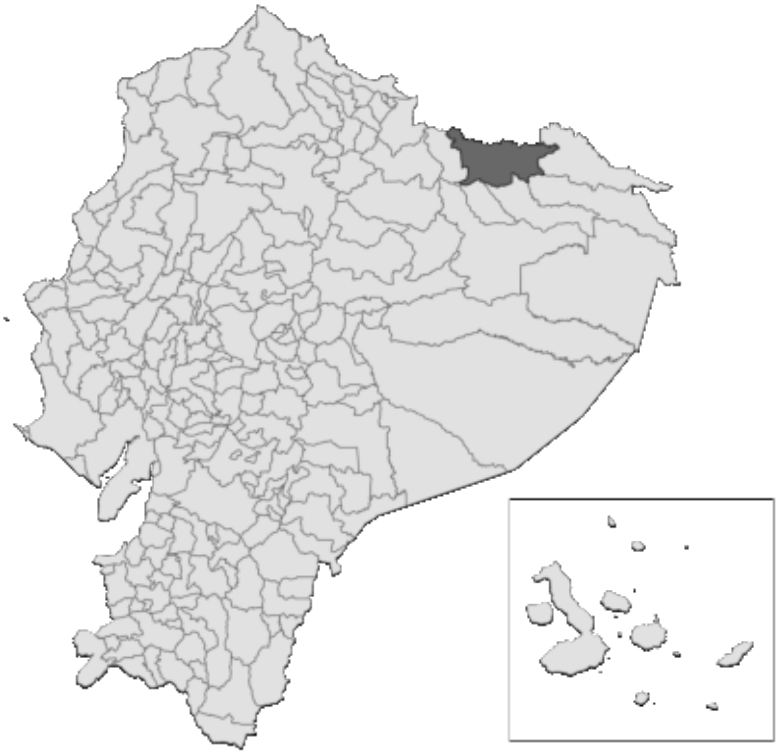
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LAGO AGRIO

PROVINCE: SUCUMBÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.461 • RANK: 140/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.555 • RANK: 59/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.508 • RANK: 79/221 CANTONS ASSESSED

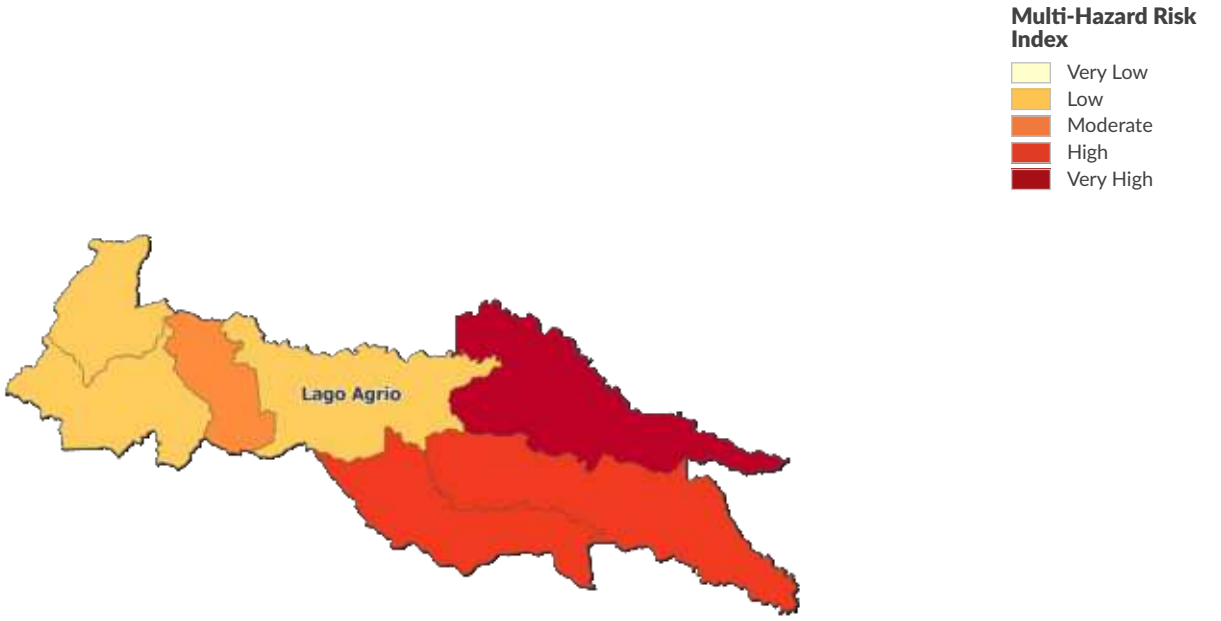
Vulnerability (V) - Moderate
SCORE: 0.492 • RANK: 104/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.632 • RANK: 26/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.525 • RANK: 71/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SUCUMBÍOS PROVINCE

LAGO AGRIO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Putumayo	0.567
Cuyabeno	0.539
Shushufindi	0.531
Cascales	0.485
Gonzalo Pizarro	0.468
Lago Agrio	**0.461**
Sucumbíos	0.445

MULTI-HAZARD EXPOSURE (MHE)

RANK: 79 / 221 CANTONS ASSESSED
SCORE: 0.508



MHE
0.508

Raw MHE
0.728

Relative MHE
0.288

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
129,868 people exposed
64,971 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
13%
16,256 people exposed
11,881 structures exposed (18%)
Critical Infrastructure Exposed: 29%

Inland Flood
18%
22,792 people exposed
14,021 structures exposed (22%)
Critical Infrastructure Exposed: 28%

Landslide
0%
0 people exposed
1 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
100%
129,868 people exposed
64,968 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
52%
67,194 people exposed
38,339 structures exposed (59%)
Critical Infrastructure Exposed: 47%

VULNERABILITY (V)

RANK: 104 / 221 CANTONS ASSESSED **SCORE: 0.492**

Vulnerability in Lago Agrio is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.334

- **10.9** Average Years of Schooling
- **36.1%** Population (age 24 and over) with General Basic Education Schooling
- **4.1%** Population (age 24 and over) with No Schooling
- **2.9%** Adult Illiteracy Rate
- **43.5%** Households with No Internet Access
- **60.1%** Households with No Access to Television
- **69.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.534

- **67.5%** Homes with Access to Public Water Source
- **58.6%** Homes Connected to the Public Sewage System
- **35.7%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.513

- **52.7** Age Dependency Ratio
- **17.5%** Unemployment Rate
- **54.9%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 1.000

- **24.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.523

- **0.4** Female to Male Labor Ratio (distance from parity)
- **53.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **82%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **52.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.409

- **6.3%** Prevalence of Disability (among persons age 5 and over)
- **2.1** Perinatal Mortality Rate (per 1,000 births)
- **8.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.432

- **24.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **8.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.443

25	14	43	19
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.422

12.4%	0.5%	16.3%	83.7%	8.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.617

33.3	1.1%	76	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.501

0.4	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 26 / 221 CANTONS ASSESSED **SCORE: 0.632**

Lago Agrio exhibits weaker Coping Capacity in the areas of Governance and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.742

61.5%
Labor Force Participation

934,113
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.726

7%
Protected Area (% of land area)

62,921.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.515

83.6%
Voter Participation

83.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.606

Communications Capacity

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.596

11.5%
Household Access to Fixed Phones

86.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.563

95.8%
Homes Served by the Public Electricity Network

75.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.653

23.3
Nurses and Midwives per 10,000 persons

28.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.613

9.7
Average Distance to Airport (km)

28.9
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 71 / 221 CANTONS ASSESSED **SCORE: 0.525**

Lago Agrio exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.583

5.1	4.6%	2	12.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.468

10	8.5	4.5	6.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 59 / 221 CANTONS ASSESSED
SCORE: 0.555

Lago Agrio's score and ranking are due to Moderate Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Population Pressures



Clean Water Access Vulnerability



Emergency Services



Marginalization

KEY FACTORS INFLUENCING RESILIENCE



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Emergency Services

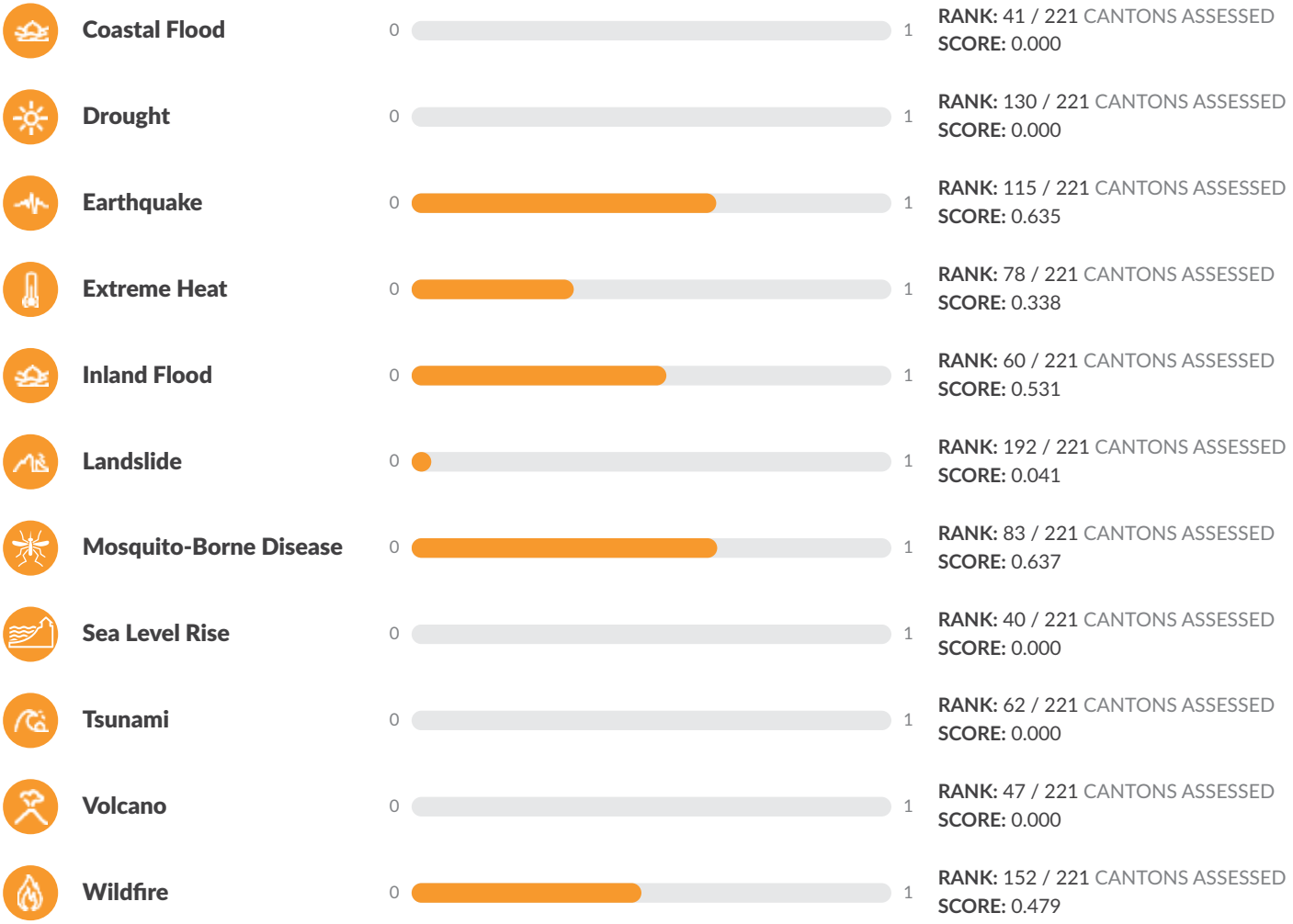
Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

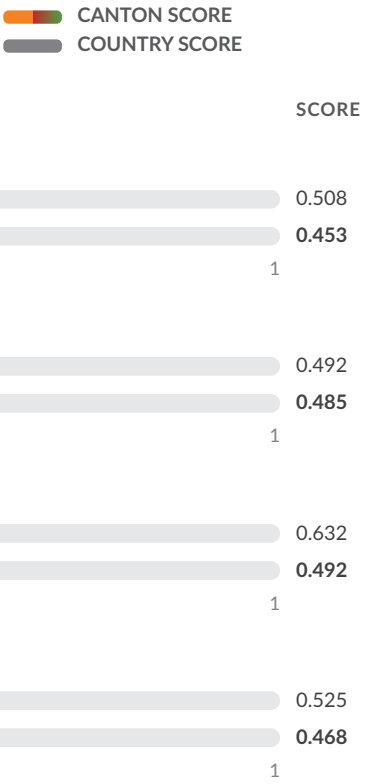


MULTI-HAZARD RISK (MHR)

RANKED
140 / 221
CANTONS ASSESSED
SCORE: 0.461

Lago Agrio's score and ranking are due to High Multi-Hazard Exposure combined with Moderate Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

LA JOYA DE LOS SACHAS

NDPBA SUBNATIONAL PROFILE

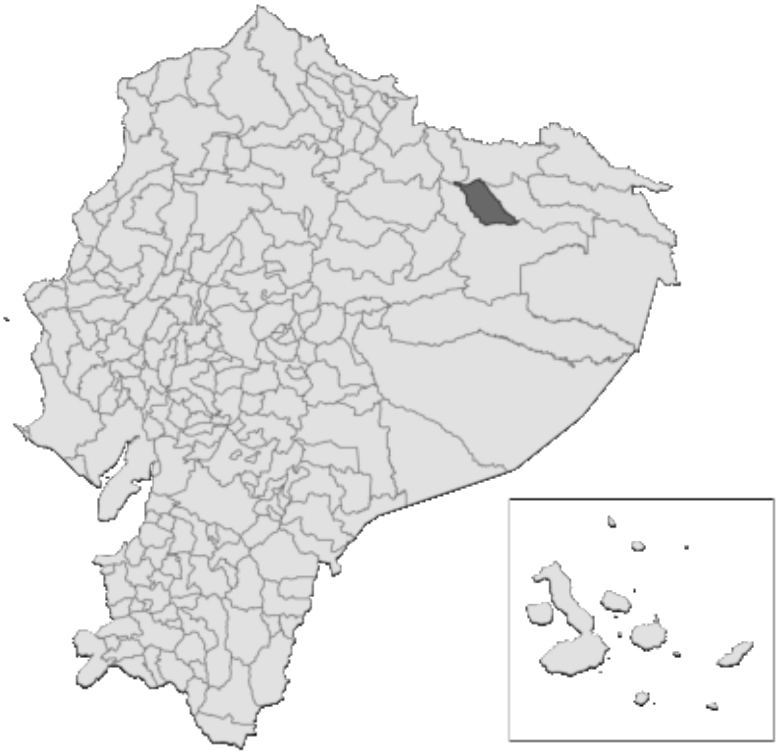
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LA JOYA DE LOS SACHAS

PROVINCE: ORELLANA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.546 • RANK: 56/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.566 • RANK: 41/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.489 • RANK: 104/221 CANTONS ASSESSED

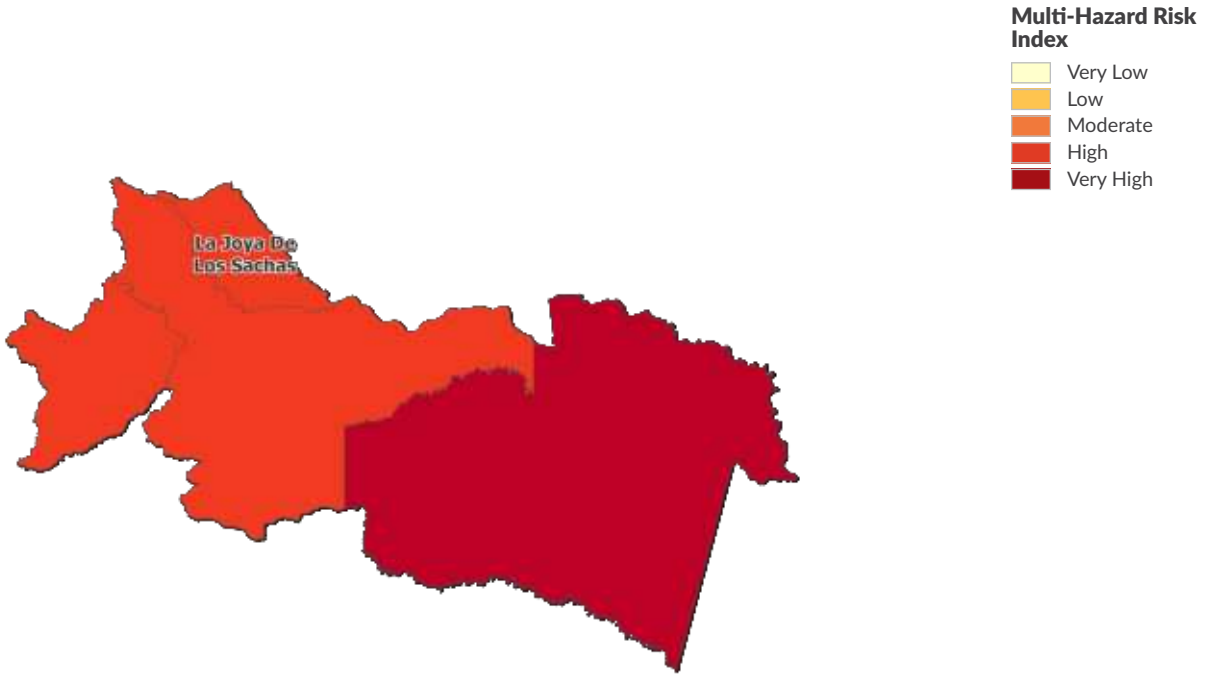
Coping Capacity (CC) - High
SCORE: 0.575 • RANK: 54/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.653 • RANK: 30/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.458 • RANK: 110/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ORELLANA PROVINCE

LA JOYA DE LOS SACHAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 30 / 221 CANTONS ASSESSED
SCORE: 0.653



MHE
0.653

Raw MHE
0.686

Relative MHE
0.620

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
62,250 people exposed
37,586 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
86%
53,359 people exposed
32,338 structures exposed (86%)
Critical Infrastructure Exposed: 88%

Inland Flood
57%
35,450 people exposed
23,535 structures exposed (63%)
Critical Infrastructure Exposed: 47%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
62,250 people exposed
37,586 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
94%
58,622 people exposed
35,455 structures exposed (94%)
Critical Infrastructure Exposed: 83%

VULNERABILITY (V)

RANK: 41 / 221 CANTONS ASSESSED **SCORE: 0.566**

Vulnerability in La Joya De Los Sachas is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.417

- **10.3** Average Years of Schooling
- **42.7%** Population (age 24 and over) with General Basic Education Schooling
- **4.2%** Population (age 24 and over) with No Schooling
- **2.9%** Adult Illiteracy Rate
- **50.9%** Households with No Internet Access
- **71.8%** Households with No Access to Television
- **76.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.675

- **40.7%** Homes with Access to Public Water Source
- **31.9%** Homes Connected to the Public Sewage System
- **51.8%** Homes without Piped Water
- **5.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.605

- **57.6** Age Dependency Ratio
- **13.8%** Unemployment Rate
- **78.1%** Poverty Rate (based on UBN)
- **1.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 1.000

- **40.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.665

- **0.5** Female to Male Labor Ratio (distance from parity)
- **45.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **93.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **80.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.427

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **2.4** Perinatal Mortality Rate (per 1,000 births)
- **6.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.568

- **24** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **25.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.362

38	8	50	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.480

15.9%	0.4%	20.1%	85.3%	9.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.680

43.6	3%	34.4	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.509

0.1	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 54 / 221 CANTONS ASSESSED **SCORE: 0.575**

La Joya De Los Sachas exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.748

59.9%
Labor Force Participation

1,491,518
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.503

0%
Protected Area (% of land area)

43,219.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.509

87.7%
Voter Participation

69.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.493

Communications Capacity

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.473

6%
Household Access to Fixed Phones

84.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.500

94.8%
Homes Served by the Public Electricity Network

70.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.354

9.9
Nurses and Midwives per 10,000 persons

11.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.646

10.3
Average Distance to Airport (km)

23.5
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 110 / 221 CANTONS ASSESSED **SCORE: 0.458**

La Joya De Los Sachas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.426

3.8	5.5%	0.1	21.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.490

9	9.4	3.3	6.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 104 / 221 CANTONS ASSESSED
SCORE: 0.489

La Joya De Los Sachas's score and ranking are due to Very High Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Population Pressures



Clean Water Access Vulnerability



Marginalization



Healthcare Capacity

KEY FACTORS INFLUENCING RESILIENCE



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Marginalization

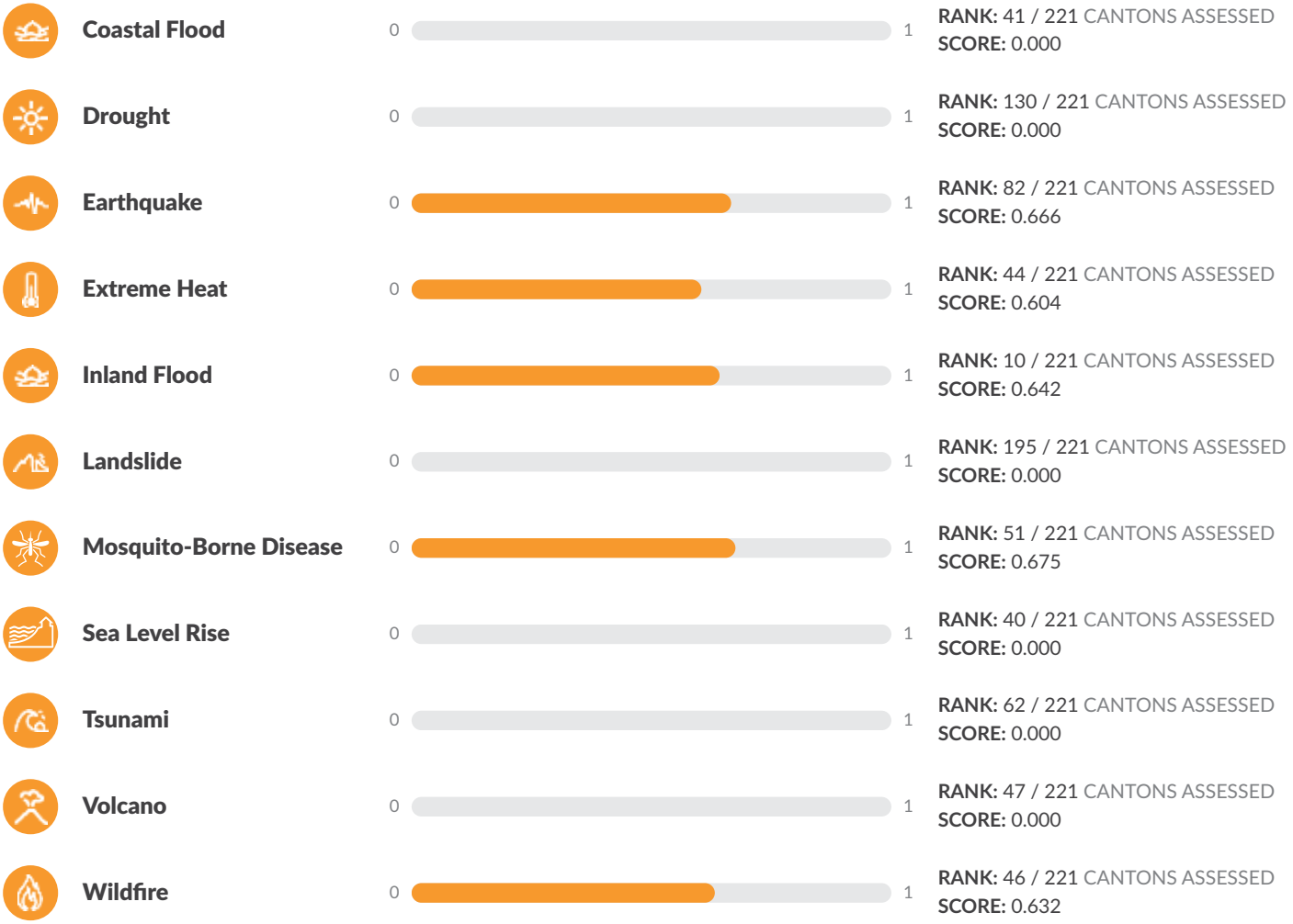
Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)

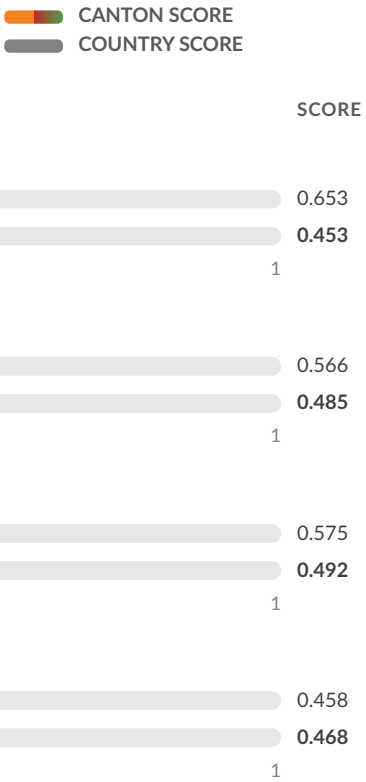


MULTI-HAZARD RISK (MHR)

RANKED
56 / 221
CANTONS ASSESSED
SCORE: 0.546

La Joya De Los Sachas's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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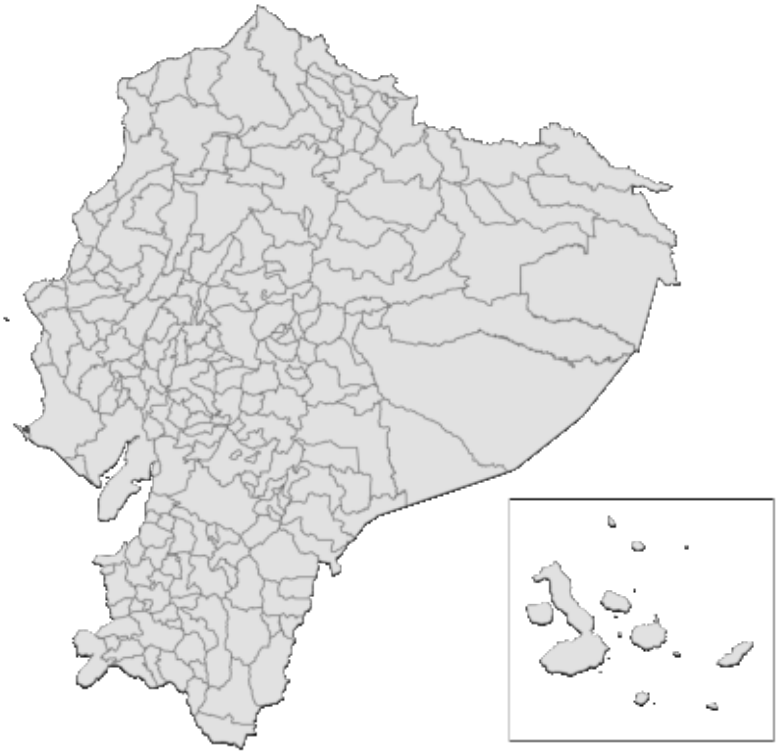
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LA LIBERTAD

PROVINCE: SANTA ELENA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.383 • RANK: 207/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.438 • RANK: 156/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.651 • RANK: 13/221 CANTONS ASSESSED

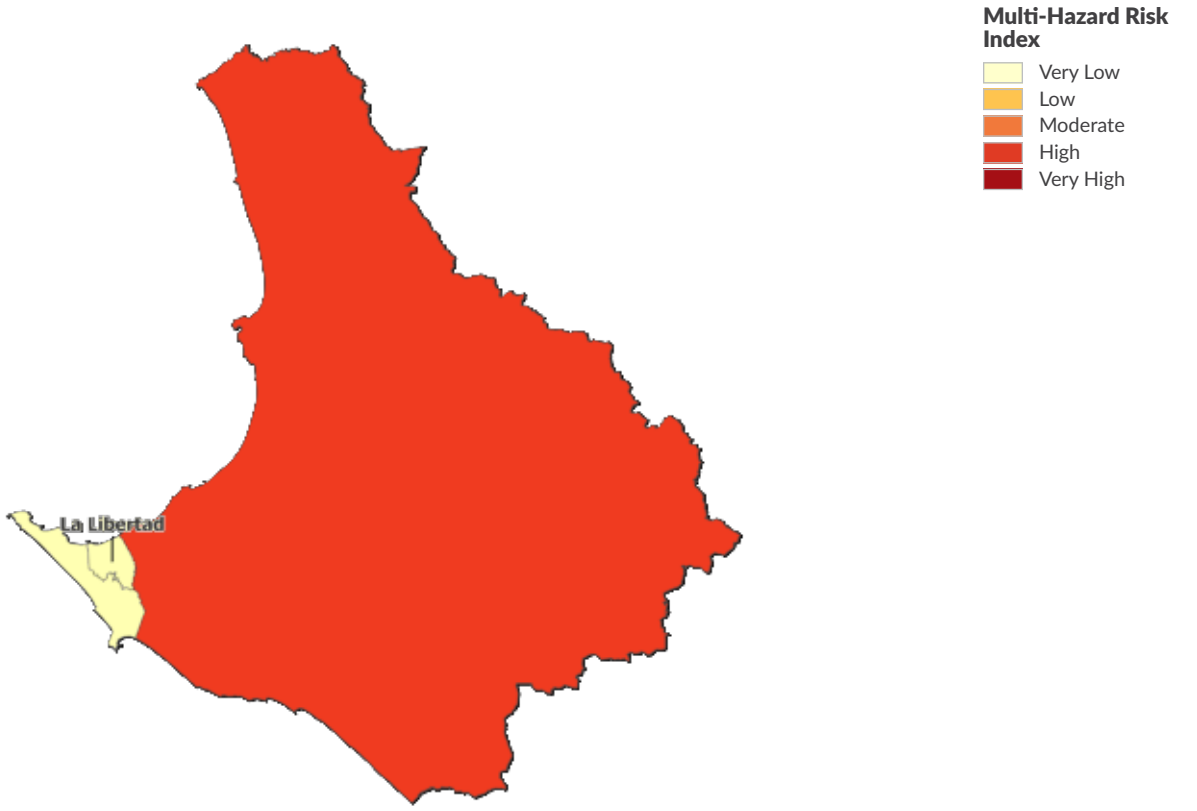
Coping Capacity (CC) - Very High
SCORE: 0.652 • RANK: 19/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.485 • RANK: 83/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.738 • RANK: 4/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SANTA ELENA PROVINCE

LA LIBERTAD • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Santa Elena	0.548
Salinas	0.427
La Libertad	**0.383**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 83 / 221 CANTONS ASSESSED
SCORE: 0.485



MHE
0.485

Raw MHE
0.690

Relative MHE
0.279

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **132** people exposed
- **81** structures exposed (<1%)

Critical Infrastructure Exposed: 9%

Drought
100%
- **128,647** people exposed
- **36,976** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **128,647** people exposed
- **36,976** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
1%
- **1,452** people exposed
- **471** structures exposed (1%)

Critical Infrastructure Exposed: 3%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
72%
- **92,087** people exposed
- **27,635** structures exposed (75%)

Critical Infrastructure Exposed: 77%

Sea Level Rise
<1%
- **73** people exposed
- **56** structures exposed (<1%)

Critical Infrastructure Exposed: 9%

Tsunami
34%
- **43,646** people exposed
- **12,335** structures exposed (33%)

Critical Infrastructure Exposed: 41%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
8%
- **9,786** people exposed
- **3,135** structures exposed (8%)

Critical Infrastructure Exposed: 4%

VULNERABILITY (V)

RANK: 156 / 221 CANTONS ASSESSED **SCORE: 0.438**

Vulnerability in La Libertad is primarily driven by Population Pressures and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.400

- **10.9** Average Years of Schooling
- **39.8%** Population (age 24 and over) with General Basic Education Schooling
- **3.4%** Population (age 24 and over) with No Schooling
- **2.8%** Adult Illiteracy Rate
- **44.9%** Households with No Internet Access
- **83.7%** Households with No Access to Television
- **73.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.327

- **95.8%** Homes with Access to Public Water Source
- **72.8%** Homes Connected to the Public Sewage System
- **16.3%** Homes without Piped Water
- **7.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.461

- **55.2** Age Dependency Ratio
- **21.1%** Unemployment Rate
- **44.6%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.000

- **0%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.444

- **0.5** Female to Male Labor Ratio (distance from parity)
- **41.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **33.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **53.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.475

- **7.2%** Prevalence of Disability (among persons age 5 and over)
- **4.6** Perinatal Mortality Rate (per 1,000 births)
- **8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.461

- **50.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **27.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.489

16
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

20
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

33
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

61
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.579

13.6%
Homes with Exterior Walls in Poor Condition

18.2%
Homes with Inadequate Materials Used in Outer Walls

16.6%
Homes with Roofs in Poor Condition

86%
Households with No Access to Vehicle for Private Use

13.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.645

4,440.2
Population Density (persons per sq km)

1.4%
Average Annual Population Change (2010-2022)

19.3
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.248

0.1
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 19 / 221 CANTONS ASSESSED **SCORE: 0.652**

La Libertad exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.624

56.7%
Labor Force Participation

548,749
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.355

0%
Protected Area (% of land area)

-0.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.816

89%
Voter Participation

98.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.614

Communications Capacity

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.616

11%
Household Access to Fixed Phones

88.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.561

97.5%
Homes Served by the Public Electricity Network

67.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.344

7
Nurses and Midwives per 10,000 persons

13.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.938

9.7
Average Distance to Airport (km)

3.2
Average Distance to Sea or River Port (km)

16.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 4 / 221 CANTONS ASSESSED **SCORE: 0.738**

La Libertad exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.508

0.5	3.1%	1.2	108.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.969

1.1	2	0.9	1.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 13 / 221 CANTONS ASSESSED
SCORE: 0.651

La Libertad's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Population Pressures



Housing and Transportation Vulnerability



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Housing and Transportation Vulnerability

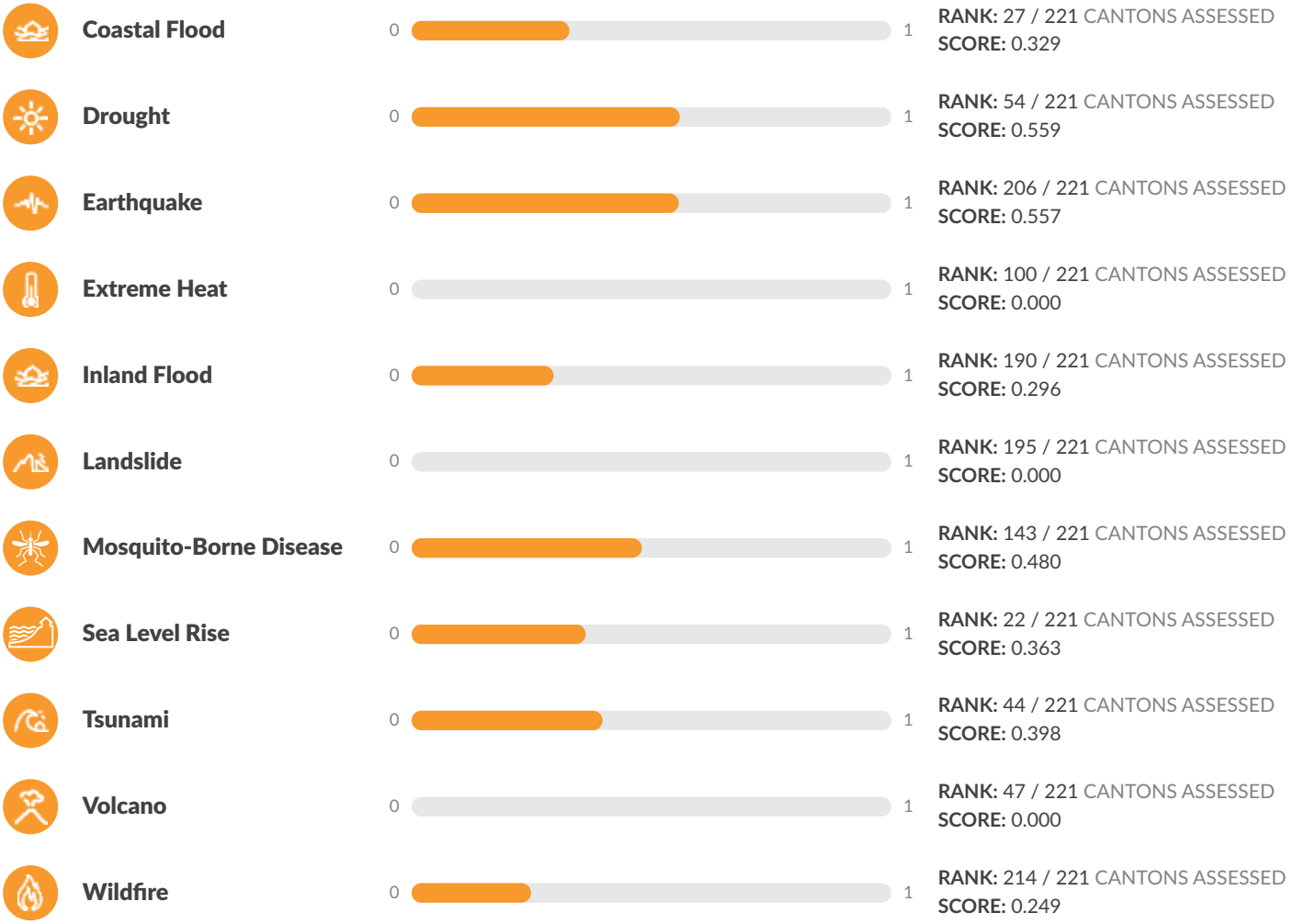
Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

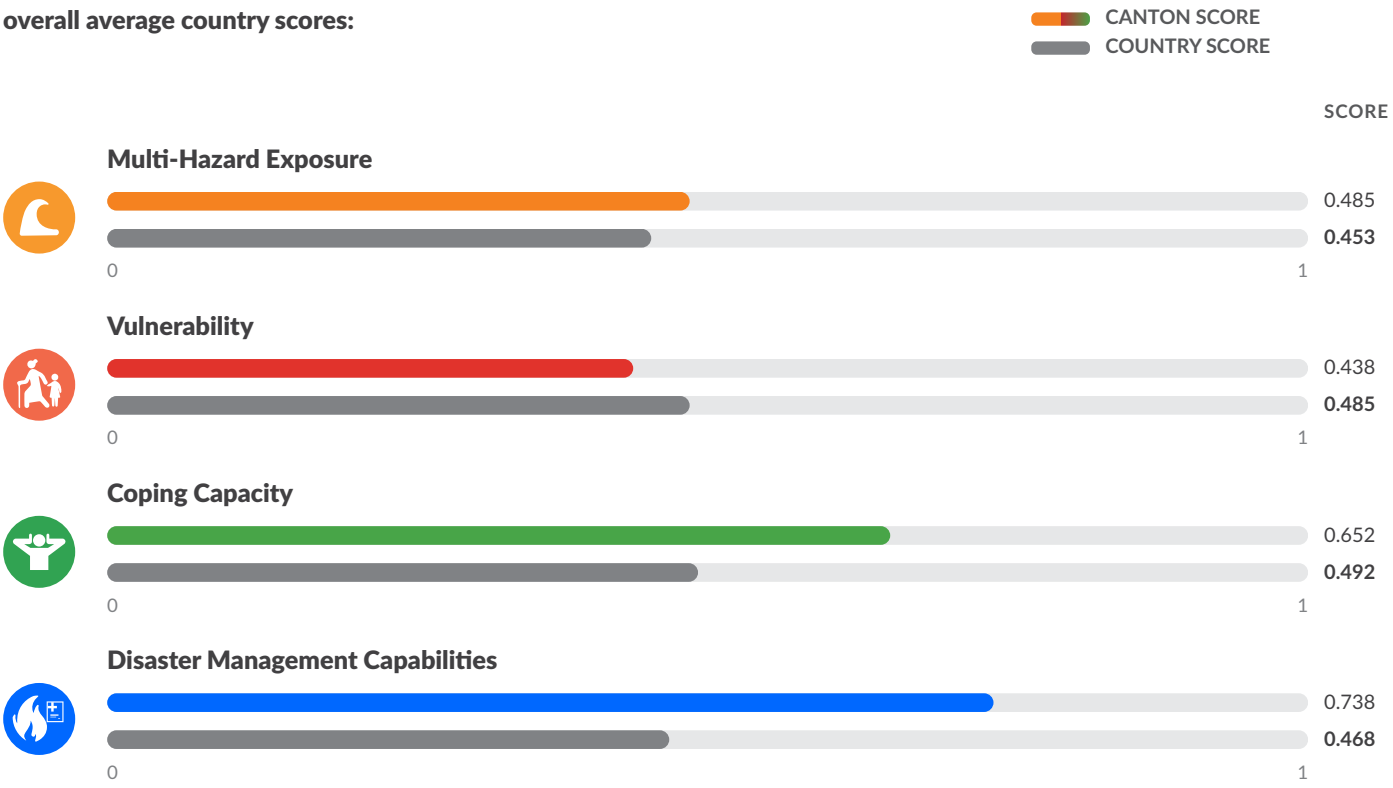


MULTI-HAZARD RISK (MHR)

RANKED
207 / 221
CANTONS ASSESSED
SCORE: 0.383

La Libertad's score and ranking are due to High Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

LA MANÁ

NDPBA SUBNATIONAL PROFILE

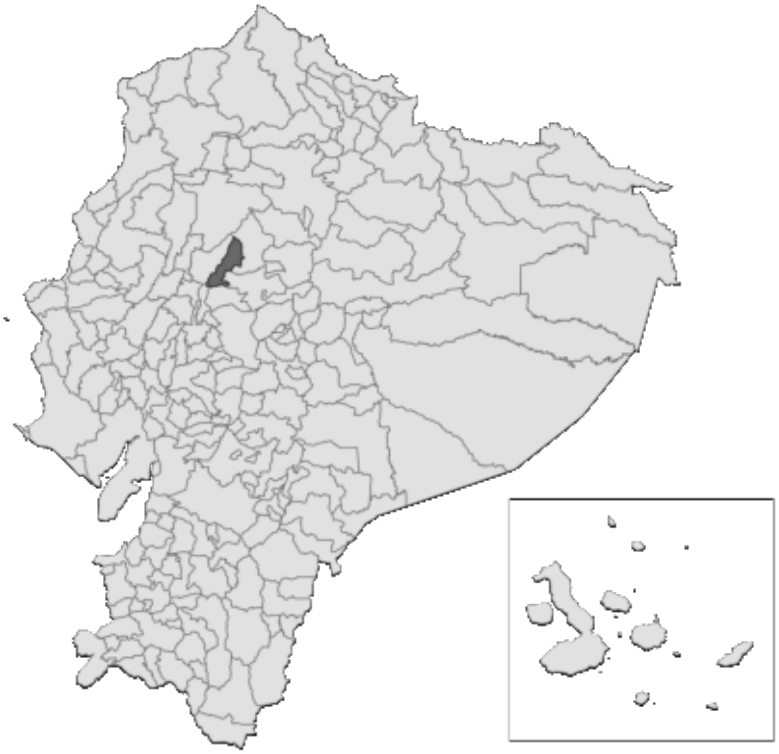
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LA MANÁ

PROVINCE: COTOPAXI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.475 • RANK: 127/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.497 • RANK: 99/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.490 • RANK: 103/221 CANTONS ASSESSED

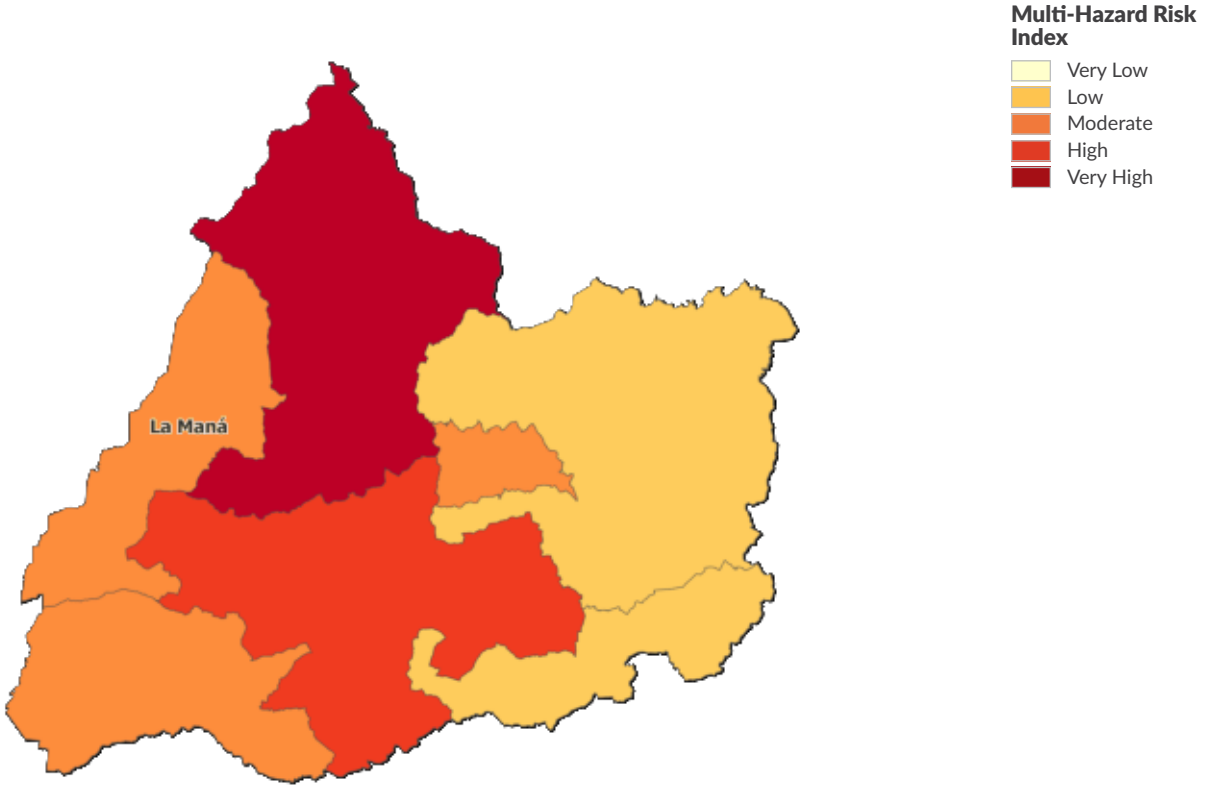
Coping Capacity (CC) - High
SCORE: 0.563 • RANK: 61/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.370 • RANK: 140/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.403 • RANK: 157/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN COTOPAXI PROVINCE

LA MANÁ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sigchos	0.585
Pujilí	0.541
Saquisilí	0.490
Pangua	0.486
La Maná	**0.475**
Salcedo	0.460
Latacunga	0.440

MULTI-HAZARD EXPOSURE (MHE)

RANK: 140 / 221 CANTONS ASSESSED
SCORE: 0.370



MHE
0.370

Raw MHE
0.526

Relative MHE
0.213

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
50,343 people exposed
18,604 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
<1%
245 people exposed
146 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Inland Flood
27%
13,600 people exposed
6,244 structures exposed (34%)
Critical Infrastructure Exposed: 33%

Landslide
16%
7,903 people exposed
2,670 structures exposed (14%)
Critical Infrastructure Exposed: 35%

Mosquito-Borne Disease
99%
49,992 people exposed
18,340 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
<1%
402 people exposed
342 structures exposed (2%)
Critical Infrastructure Exposed: 1%

Wildfire
41%
20,545 people exposed
10,001 structures exposed (54%)
Critical Infrastructure Exposed: 29%

VULNERABILITY (V)

RANK: 99 / 221 CANTONS ASSESSED **SCORE: 0.497**

Vulnerability in La Maná is primarily driven by Clean Water Access Vulnerability and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.500

- **10** Average Years of Schooling
- **44.8%** Population (age 24 and over) with General Basic Education Schooling
- **6.5%** Population (age 24 and over) with No Schooling
- **5.6%** Adult Illiteracy Rate
- **48.5%** Households with No Internet Access
- **81.2%** Households with No Access to Television
- **80.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.600

- **83.5%** Homes with Access to Public Water Source
- **33.7%** Homes Connected to the Public Sewage System
- **26.8%** Homes without Piped Water
- **12.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.436

- **54.9** Age Dependency Ratio
- **12.4%** Unemployment Rate
- **46.2%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.431

- **3.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.507

- **0.4** Female to Male Labor Ratio (distance from parity)
- **51.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **57.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **54.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.525

- **8.2%** Prevalence of Disability (among persons age 5 and over)
- **6.1** Perinatal Mortality Rate (per 1,000 births)
- **7.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.587

- **13** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **6.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.476

35
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

19
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

35
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.467

12%
Homes with Exterior Walls in Poor Condition

2.4%
Homes with Inadequate Materials Used in Outer Walls

15.8%
Homes with Roofs in Poor Condition

86.2%
Households with No Access to Vehicle for Private Use

9.6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.563

81.4
Population Density (persons per sq km)

2%
Average Annual Population Change (2010-2022)

14.5
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.384

0.1
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 61 / 221 CANTONS ASSESSED **SCORE: 0.563**

La Maná exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.602

60.7%
Labor Force Participation

163,455
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.594

20.4%
Protected Area (% of land area)

-6,218.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.596

86.3%
Voter Participation

87.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.480

Communications Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.571

10.1%
Household Access to Fixed Phones

86.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.510

97.1%
Homes Served by the Public Electricity Network

62.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.252

5.9
Nurses and Midwives per 10,000 persons

8.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.586

11.4
Average Distance to Airport (km)

46.3
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 157 / 221 CANTONS ASSESSED **SCORE: 0.403**

La Maná exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.300

3	1.4%	0.2	82.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.505

8	7.6	3.3	7.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 103 / 221 CANTONS ASSESSED
SCORE: 0.490

La Maná's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Mass Care Support



Clean Water Access Vulnerability



Population Pressures

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Clean Water Access Vulnerability

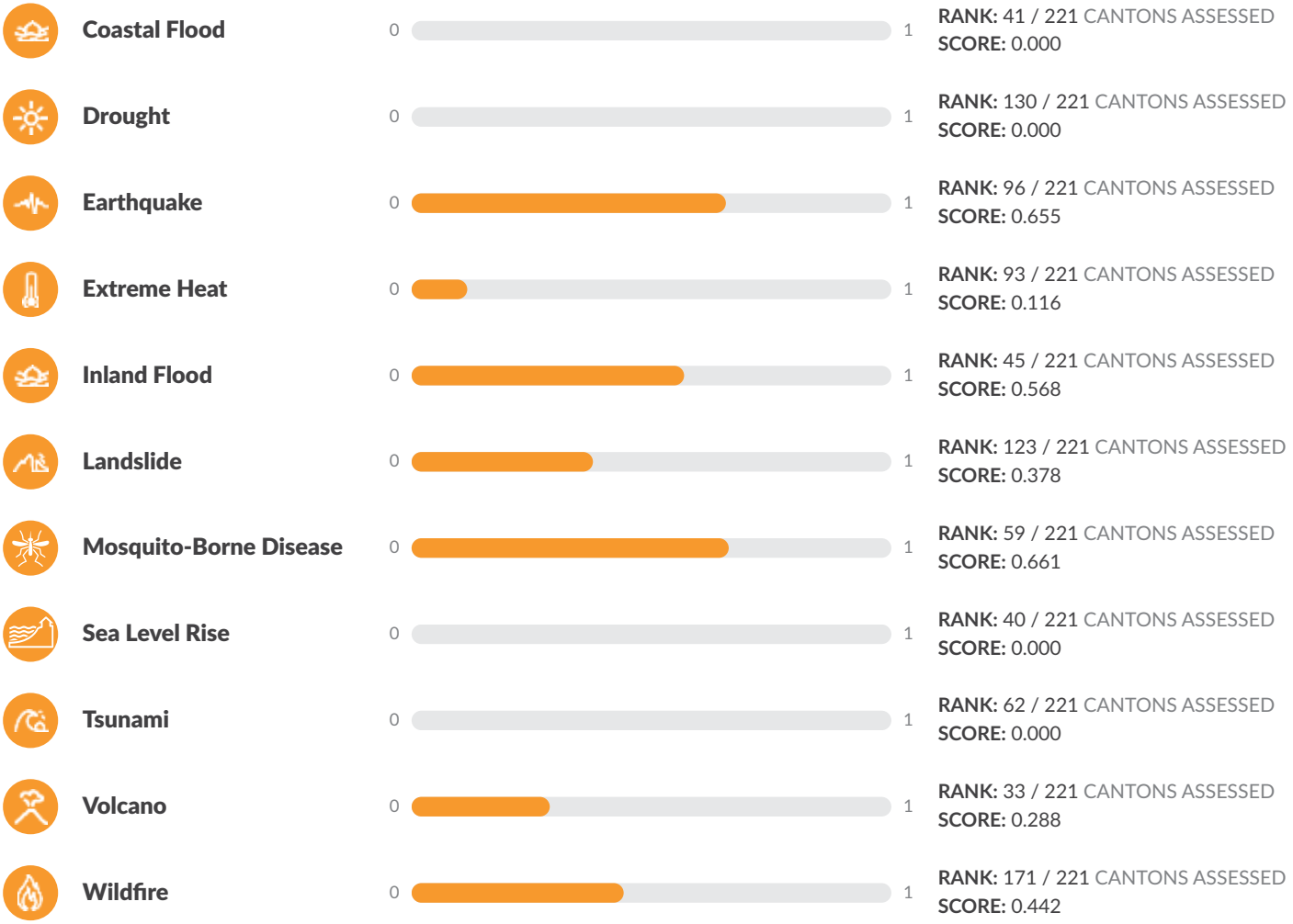
Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

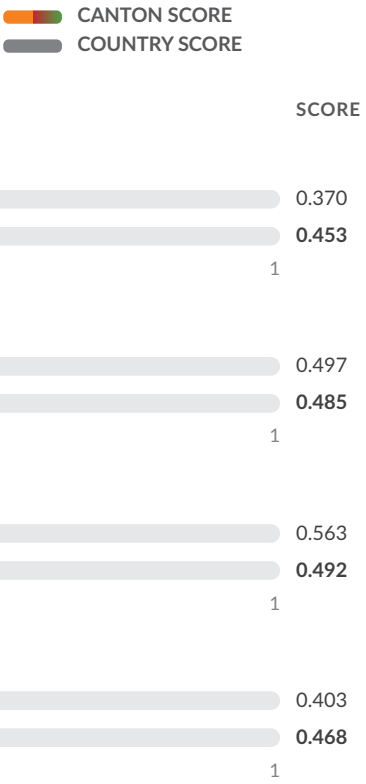


MULTI-HAZARD RISK (MHR)

RANKED
127 / 221
CANTONS ASSESSED
SCORE: 0.475

La Maná's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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LAS LAJAS

NDPBA SUBNATIONAL PROFILE

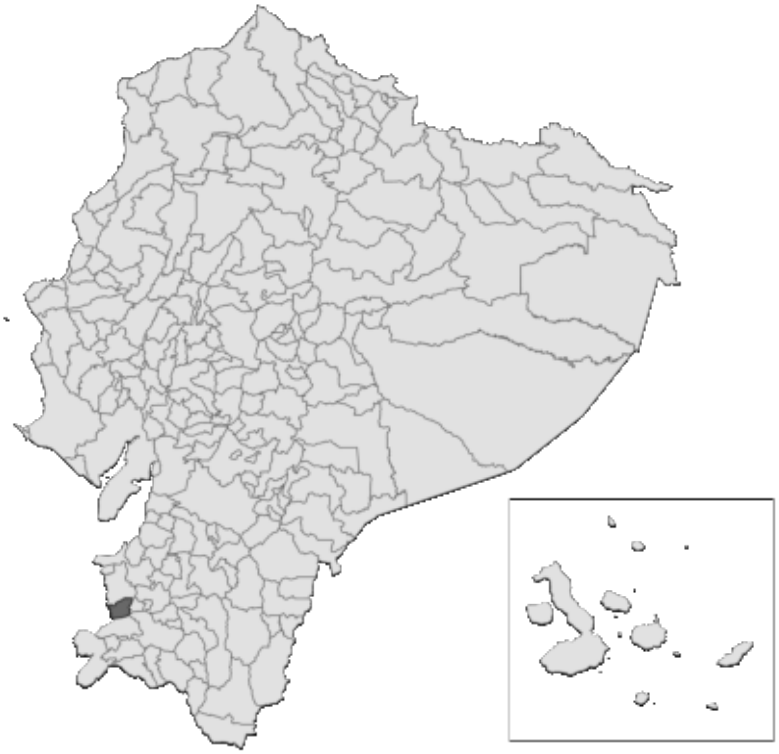
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ECUADOR

LAS LAJAS

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.485 • RANK: 118/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.476 • RANK: 119/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.370 • RANK: 140/221 CANTONS ASSESSED

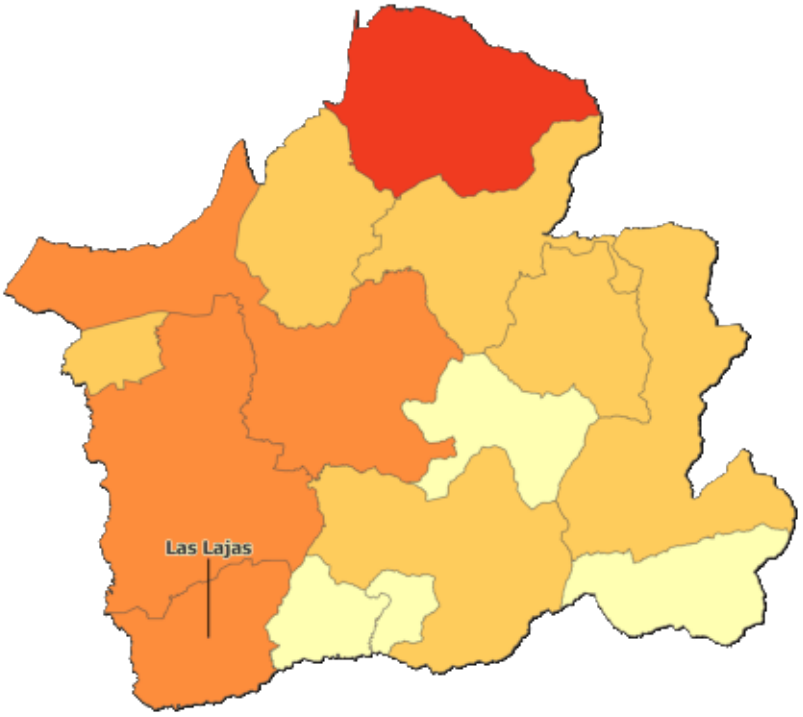
Vulnerability (V) - Low
SCORE: 0.415 • RANK: 175/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.401 • RANK: 173/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.442 • RANK: 134/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

LAS LAJAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	**0.485**
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	0.435
Portovelo	0.424
Balsas	0.420
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 140 / 221 CANTONS ASSESSED
SCORE: 0.370



MHE
0.370

Raw MHE
0.267

Relative MHE
0.472

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
100%
- **5,553** people exposed
- **4,483** structures exposed (100%)

Critical Infrastructure Exposed: 99%

Earthquake
100%
- **5,581** people exposed
- **4,505** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
<1%
- **29** people exposed
- **26** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Inland Flood
6%
- **332** people exposed
- **323** structures exposed (7%)

Critical Infrastructure Exposed: 5%

Landslide
34%
- **1,871** people exposed
- **1,675** structures exposed (37%)

Critical Infrastructure Exposed: 35%

Mosquito-Borne Disease
100%
- **5,562** people exposed
- **4,479** structures exposed (99%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
100%
- **5,581** people exposed
- **4,505** structures exposed (100%)

Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 175 / 221 CANTONS ASSESSED **SCORE: 0.415**

Vulnerability in Las Lajas is primarily driven by Information Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.556

- **9.7** Average Years of Schooling
- **51%** Population (age 24 and over) with General Basic Education Schooling
- **4.3%** Population (age 24 and over) with No Schooling
- **3.3%** Adult Illiteracy Rate
- **62.3%** Households with No Internet Access
- **88.4%** Households with No Access to Television
- **86.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.380

- **86.2%** Homes with Access to Public Water Source
- **58%** Homes Connected to the Public Sewage System
- **15.2%** Homes without Piped Water
- **5.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.478

- **56.4** Age Dependency Ratio
- **30.2%** Unemployment Rate
- **37.1%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.499

- **4.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.346

- **0.5** Female to Male Labor Ratio (distance from parity)
- **18.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **66.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **12.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.420

- **15.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.479

- **24.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **12.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **12.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.318

50 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**56** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.496

14.7% Homes with Exterior Walls in Poor Condition	**1.9%** Homes with Inadequate Materials Used in Outer Walls	**21.8%** Homes with Roofs in Poor Condition	**89.7%** Households with No Access to Vehicle for Private Use	**6.3%** Household Overcrowding

Population Pressures

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.356

19.2 Population Density (persons per sq km)	**1.6%** Average Annual Population Change (2010-2022)	**4.7** Net Migration Rate (per 1,000 persons)	**0.25** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.275

0.1 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 173 / 221 CANTONS ASSESSED **SCORE: 0.401**

Las Lajas exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.243

49.1%
Labor Force Participation

12,609
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.317

0%
Protected Area (% of land area)

-2,437.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.493

84.1%
Voter Participation

79.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.497

Communications Capacity

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.448

11.6%
Household Access to Fixed Phones

70.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.553

96.3%
Homes Served by the Public Electricity Network

72.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.543

15.7
Nurses and Midwives per 10,000 persons

22.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.445

38.8
Average Distance to Airport (km)

42.2
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 134 / 221 CANTONS ASSESSED **SCORE: 0.442**

Las Lajas exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.475

1.4	16.3%	0	59.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.410

24	4.2	2.4	23.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 119 / 221 CANTONS ASSESSED
SCORE: 0.476

Las Lajas's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Emergency Services

Information Access Vulnerability

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

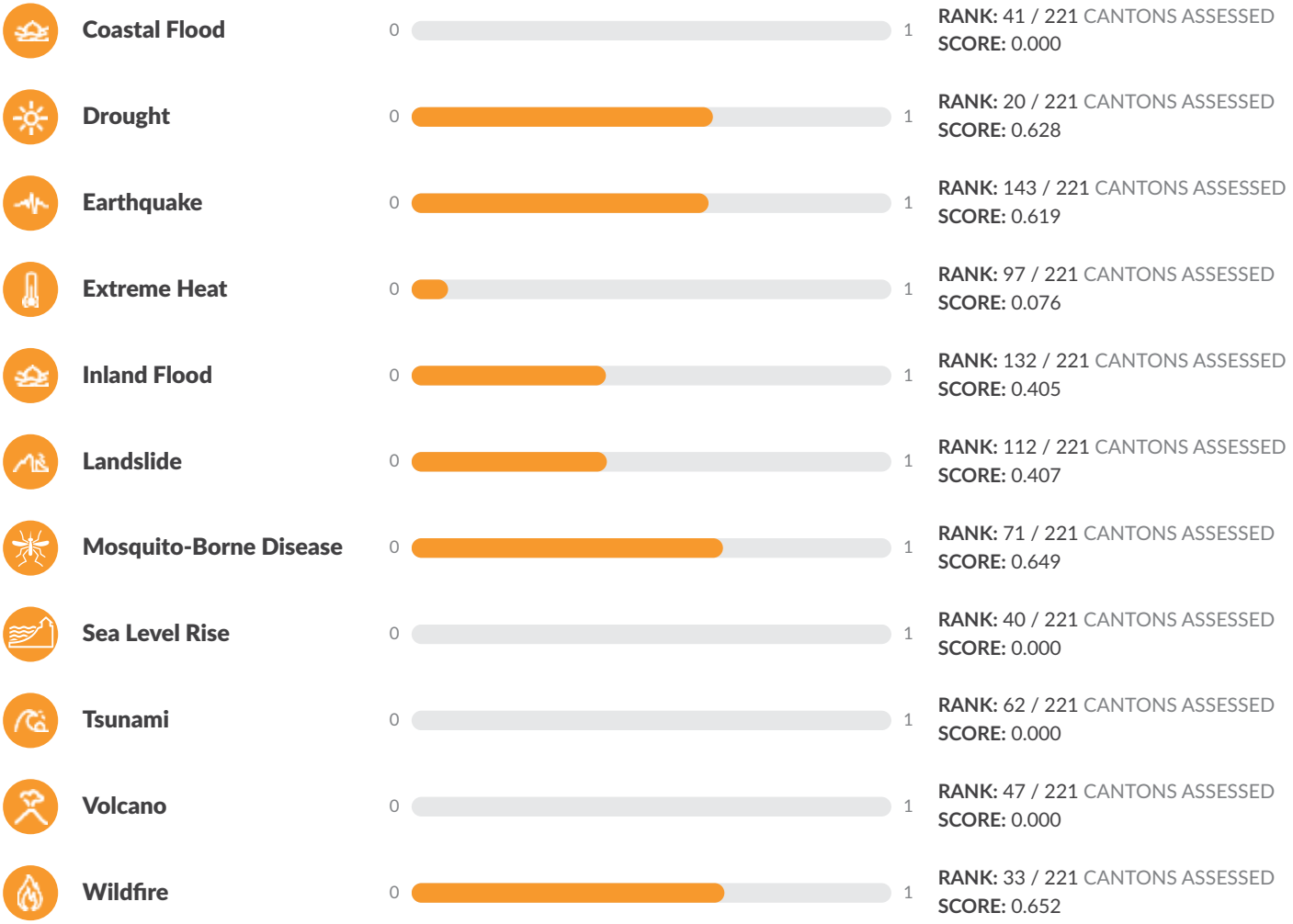
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

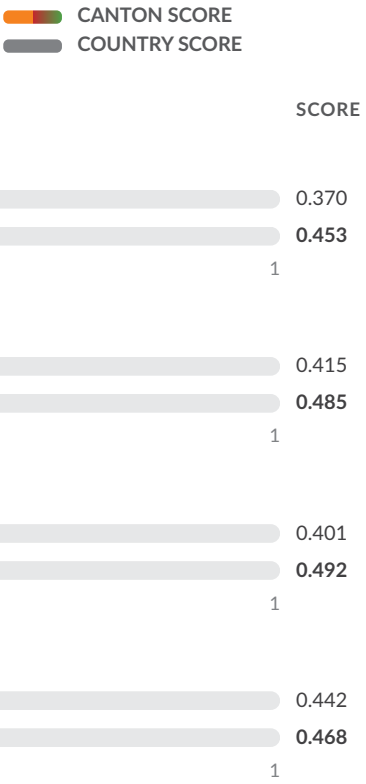


MULTI-HAZARD RISK (MHR)

RANKED
118 / 221
CANTONS ASSESSED
SCORE: 0.485

Las Lajas's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

LAS NAVES

NDPBA SUBNATIONAL PROFILE

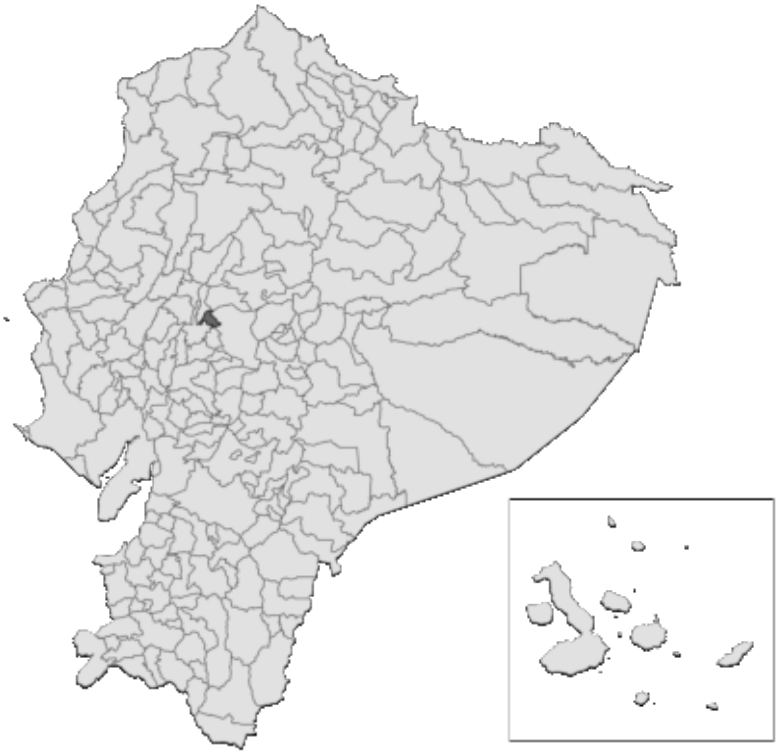
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ECUADOR

LAS NAVES

PROVINCE: BOLÍVAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.421 • RANK: 187/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.486 • RANK: 109/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.142 • RANK: 217/221 CANTONS ASSESSED

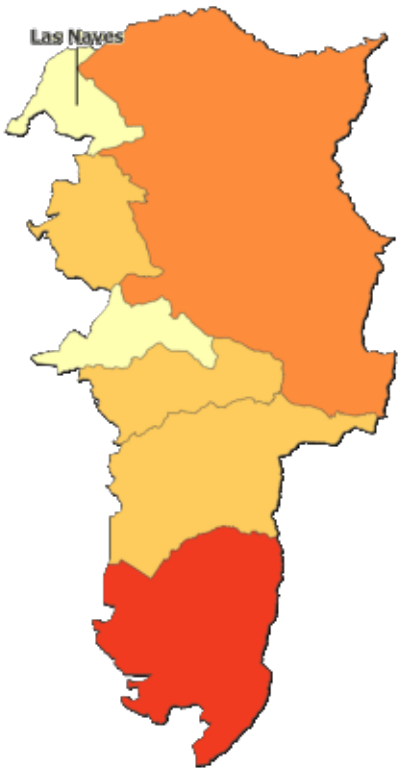
Vulnerability (V) - Moderate
SCORE: 0.474 • RANK: 126/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.477 • RANK: 119/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.454 • RANK: 116/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN BOLÍVAR PROVINCE

LAS NAVES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Chillanes	0.522
Guaranda	0.505
San Miguel	0.462
Echeandía	0.445
Chimbo	0.443
Caluma	0.427
Las Naves	**0.421**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 217 / 221 CANTONS ASSESSED
SCORE: 0.142



MHE
0.142

Raw MHE
0.163

Relative MHE
0.121

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
6,701 people exposed
3,084 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
36%
2,381 people exposed
1,001 structures exposed (32%)
Critical Infrastructure Exposed: 19%

Landslide
8%
562 people exposed
299 structures exposed (10%)
Critical Infrastructure Exposed: 11%

Mosquito-Borne Disease
100%
6,687 people exposed
3,075 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
34%
2,257 people exposed
1,115 structures exposed (36%)
Critical Infrastructure Exposed: 42%

VULNERABILITY (V)

RANK: 126 / 221 CANTONS ASSESSED **SCORE: 0.474**

Vulnerability in Las Naves is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.506

- **9.7** Average Years of Schooling
- **48.1%** Population (age 24 and over) with General Basic Education Schooling
- **5.6%** Population (age 24 and over) with No Schooling
- **5.1%** Adult Illiteracy Rate
- **51.1%** Households with No Internet Access
- **73.4%** Households with No Access to Television
- **85.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.622

- **59.8%** Homes with Access to Public Water Source
- **17.3%** Homes Connected to the Public Sewage System
- **26.2%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.474

- **52.3** Age Dependency Ratio
- **13.4%** Unemployment Rate
- **54.9%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.606

- **6.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.555

- **0.5** Female to Male Labor Ratio (distance from parity)
- **26.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **83.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **52.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.311

- **9.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.537

- **20.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.174

28	7	10	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.474

14.4%	4%	19%	85.9%	6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.486

46.7	1.3%	14.5	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.345

0.3	0.1	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 119 / 221 CANTONS ASSESSED **SCORE: 0.477**

Las Naves exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.473

57.7%
Labor Force Participation

53,969
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.329

0%
Protected Area (% of land area)

-1,650.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.545

87.2%
Voter Participation

78.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.464

Communications Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.501

7.1%
Household Access to Fixed Phones

85%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.485

95.7%
Homes Served by the Public Electricity Network

65.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.312

10
Nurses and Midwives per 10,000 persons

8.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.557

22.7
Average Distance to Airport (km)

36.8
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 116 / 221 CANTONS ASSESSED **SCORE: 0.454**

Las Naves exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.327

3.2	2.4%	0	50.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.581

24.7	3.1	2.8	3.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 109 / 221 CANTONS ASSESSED
SCORE: 0.486

Las Naves's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Clean Water Access Vulnerability

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

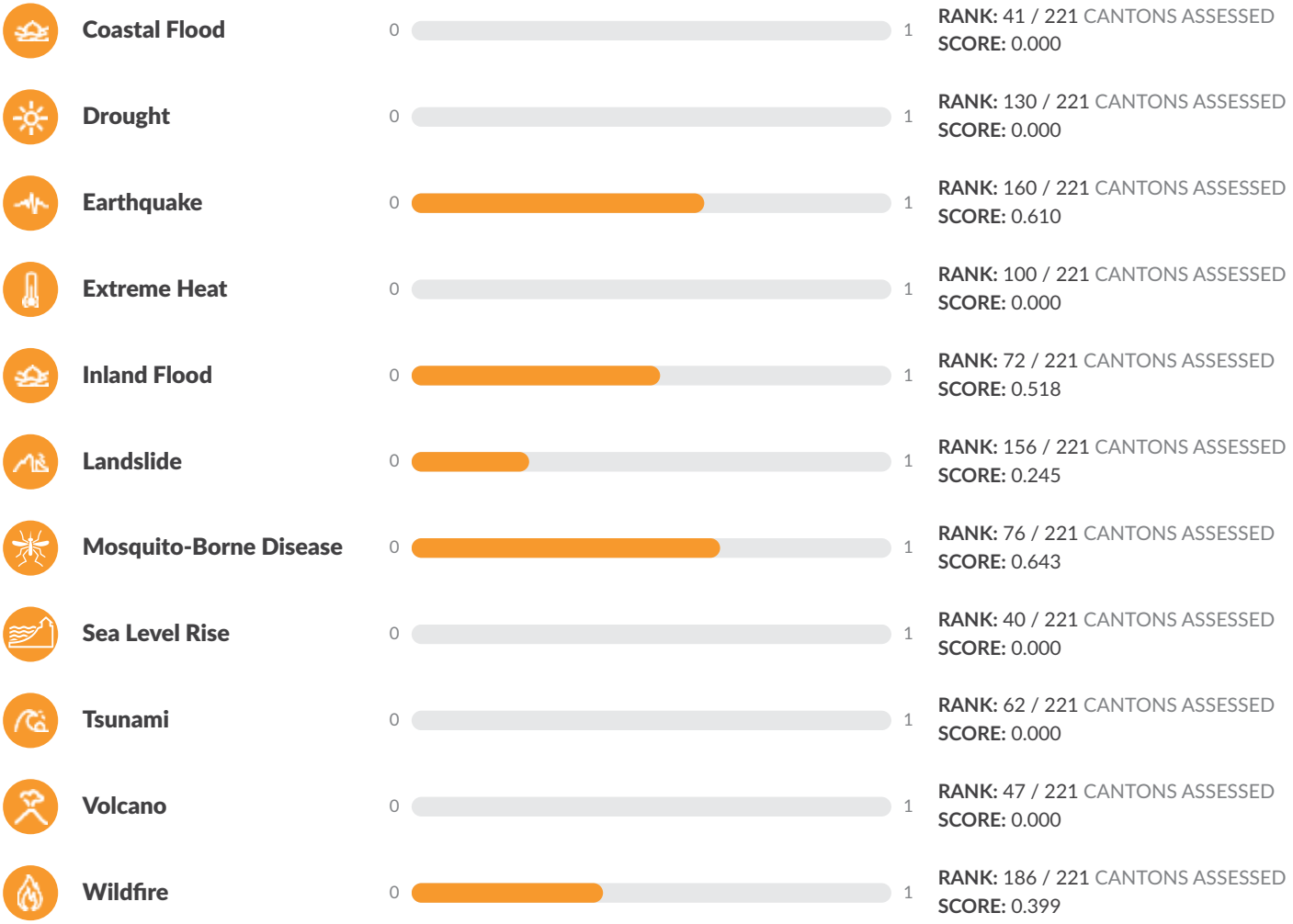
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
187 / 221
CANTONS ASSESSED
SCORE: 0.421

Las Naves's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: COTOPAXI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.440 • RANK: 165/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.403 • RANK: 185/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.618 • RANK: 21/221 CANTONS ASSESSED

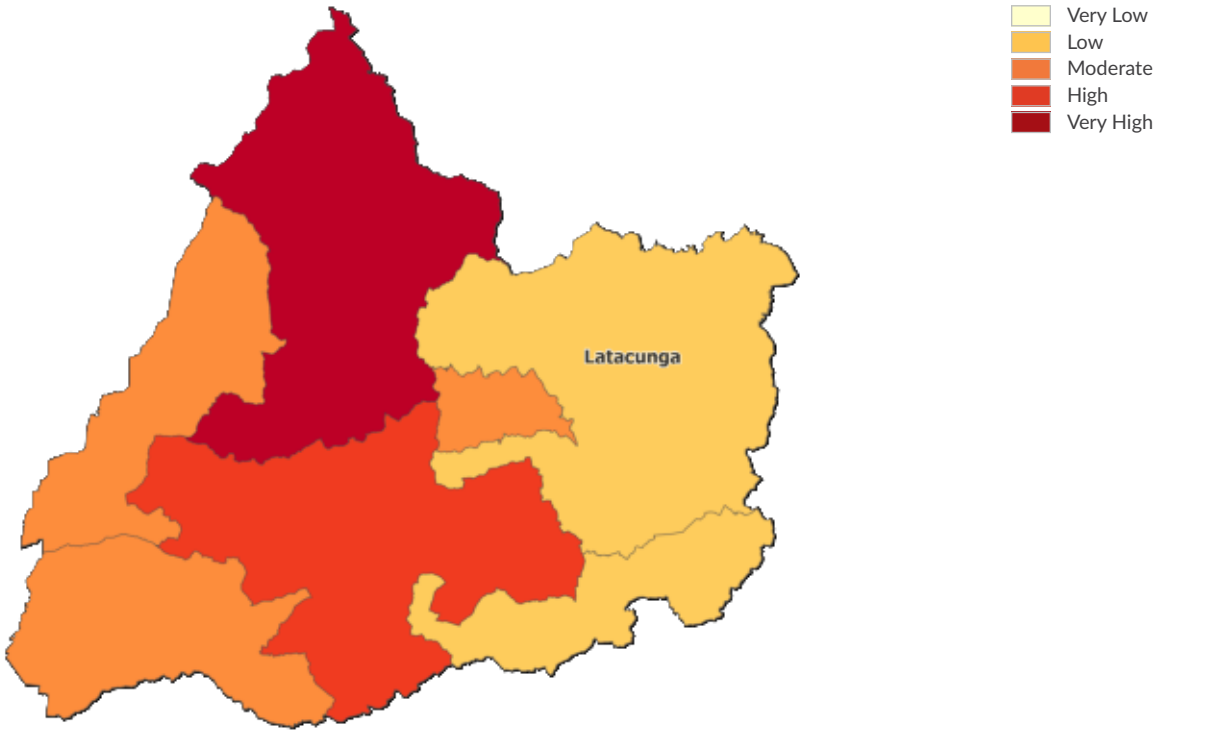
Coping Capacity (CC) - Very High
SCORE: 0.642 • RANK: 22/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.613 • RANK: 43/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.614 • RANK: 25/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN COTOPAXI PROVINCE

LATACUNGA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sigchos	0.585
Pujilí	0.541
Saquisilí	0.490
Pangua	0.486
La Maná	0.475
Salcedo	0.460
Latacunga	**0.440**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 43 / 221 CANTONS ASSESSED
SCORE: 0.613



MHE
0.613

Raw MHE
0.875

Relative MHE
0.351

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
83%
171,324 people exposed
124,035 structures exposed (80%)
Critical Infrastructure Exposed: 73%

Earthquake
100%
205,460 people exposed
154,147 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
2,033 people exposed
1,060 structures exposed (<1%)
Critical Infrastructure Exposed: 8%

Landslide
34%
69,083 people exposed
25,528 structures exposed (17%)
Critical Infrastructure Exposed: 17%

Mosquito-Borne Disease
4%
7,968 people exposed
7,551 structures exposed (5%)
Critical Infrastructure Exposed: 2%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
23%
46,658 people exposed
31,962 structures exposed (21%)
Critical Infrastructure Exposed: 48%

Wildfire
99%
203,815 people exposed
152,723 structures exposed (99%)
Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 185 / 221 CANTONS ASSESSED **SCORE: 0.403**

Vulnerability in Latacunga is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.379

- **11** Average Years of Schooling
- **37.6%** Population (age 24 and over) with General Basic Education Schooling
- **6%** Population (age 24 and over) with No Schooling
- **5.4%** Adult Illiteracy Rate
- **36.4%** Households with No Internet Access
- **77.5%** Households with No Access to Television
- **57%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.363

- **95.9%** Homes with Access to Public Water Source
- **64.3%** Homes Connected to the Public Sewage System
- **27.8%** Homes without Piped Water
- **6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.422

- **51.3** Age Dependency Ratio
- **11.5%** Unemployment Rate
- **38.1%** Poverty Rate (based on UBN)
- **1.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.954

- **21.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.324

- **0.3** Female to Male Labor Ratio (distance from parity)
- **32.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **68.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **25.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.481

- **7.7%** Prevalence of Disability (among persons age 5 and over)
- **4.7** Perinatal Mortality Rate (per 1,000 births)
- **12%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.297

- **0.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.407

36
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

11
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

30
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.242

6%
Homes with Exterior Walls in Poor Condition

0.2%
Homes with Inadequate Materials Used in Outer Walls

9.2%
Homes with Roofs in Poor Condition

65.5%
Households with No Access to Vehicle for Private Use

6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.541

145.3
Population Density (persons per sq km)

2%
Average Annual Population Change (2010-2022)

13.2
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.382

0.5
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 22 / 221 CANTONS ASSESSED **SCORE: 0.642**

Latacunga exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.756

61.5%
Labor Force Participation

1,141,191
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.510

18%
Protected Area (% of land area)

-11,255.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.552

85.9%
Voter Participation

83.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.661

Communications Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.710

20.7%
Household Access to Fixed Phones

88.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.742

98.3%
Homes Served by the Public Electricity Network

83.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.628

21.4
Nurses and Midwives per 10,000 persons

27.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.563

9.6
Average Distance to Airport (km)

106.3
Average Distance to Sea or River Port (km)

2.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 25 / 221 CANTONS ASSESSED **SCORE: 0.614**

Latacunga exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.598

1.2	12.3%	1.9	90.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.630

8.8	4.6	2.2	3.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 21 / 221 CANTONS ASSESSED
SCORE: 0.618

Latacunga's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Population Pressures



Vulnerable Health Status



Governance



Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).



Governance

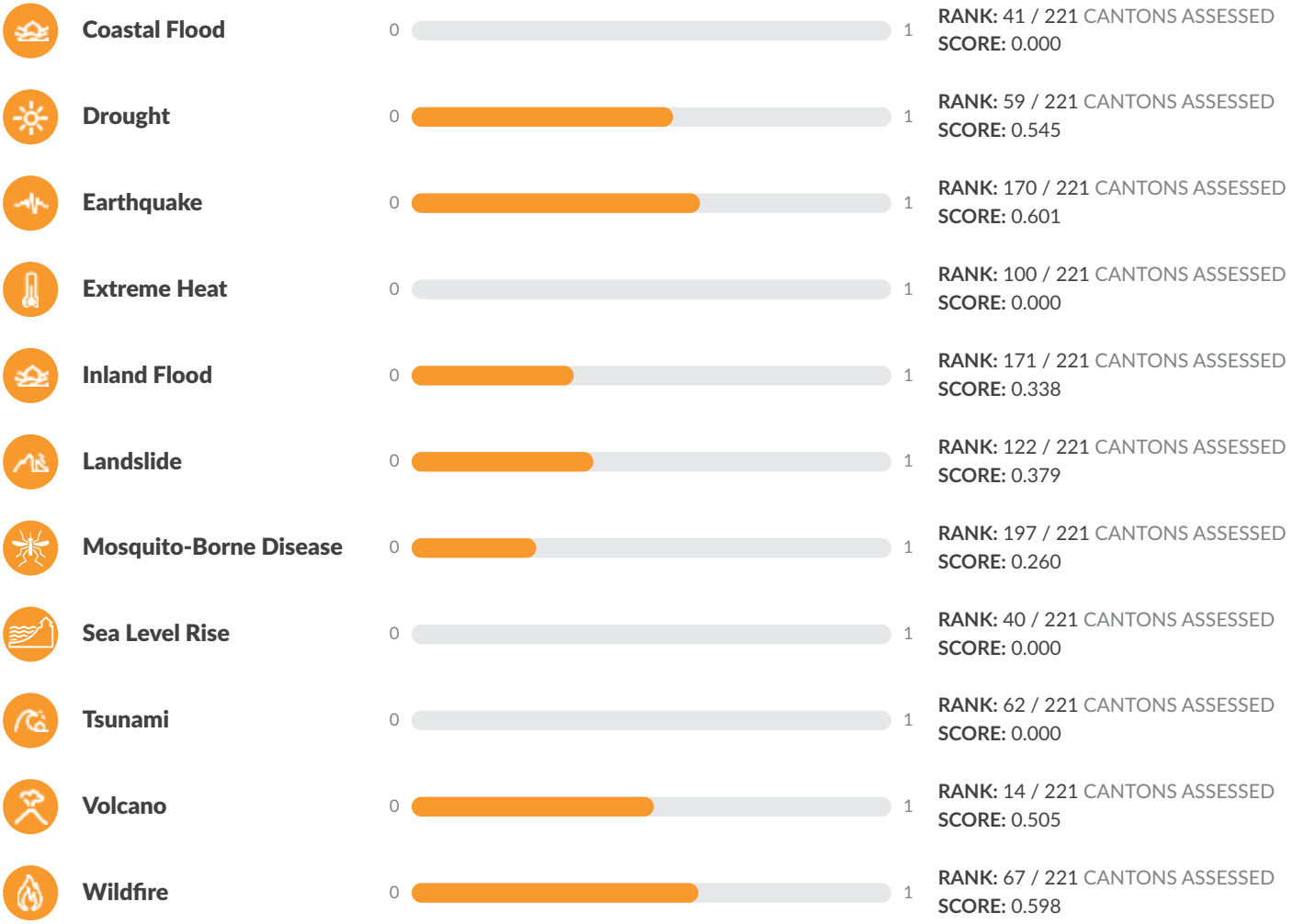
The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

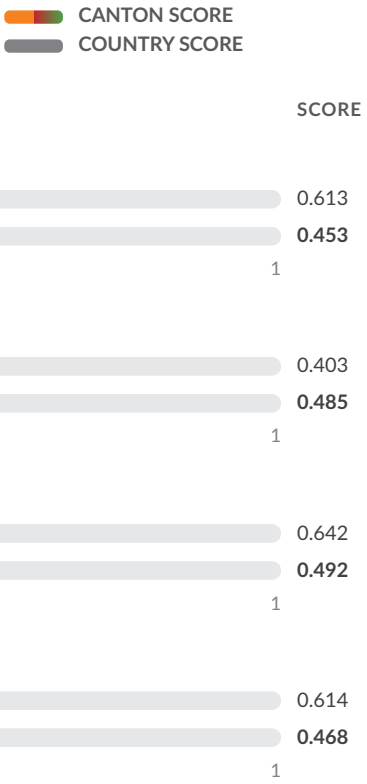


MULTI-HAZARD RISK (MHR)

RANKED
165 / 221
CANTONS ASSESSED
SCORE: 0.440

Latacunga's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

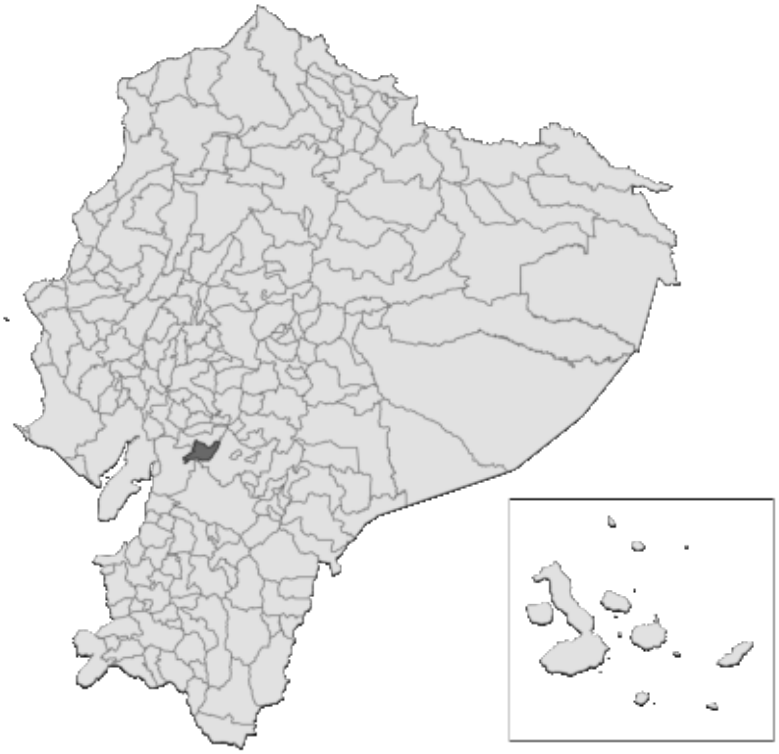
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PROVINCE: CAÑAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.426 • RANK: 181/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.485 • RANK: 113/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.541 • RANK: 67/221 CANTONS ASSESSED

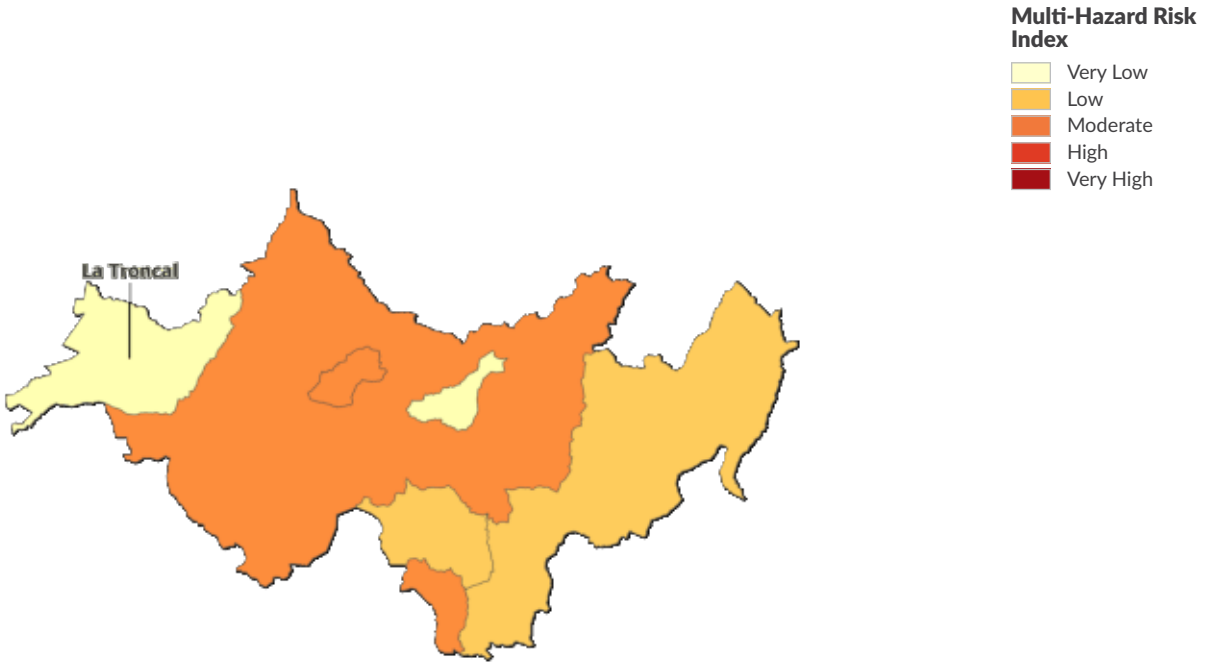
Coping Capacity (CC) - High
SCORE: 0.556 • RANK: 66/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.329 • RANK: 166/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.554 • RANK: 59/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CAÑAR PROVINCE

LA TRONCAL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Suscal	0.506
Cañar	0.504
Déleg	0.479
Biblián	0.457
Azogues	0.445
La Troncal	**0.426**
El Tambo	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 166 / 221 CANTONS ASSESSED
SCORE: 0.329



MHE
0.329

Raw MHE
0.512

Relative MHE
0.147

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
59,275 people exposed
18,534 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
7%
4,360 people exposed
2,027 structures exposed (11%)
Critical Infrastructure Exposed: 10%

Inland Flood
28%
16,391 people exposed
4,438 structures exposed (24%)
Critical Infrastructure Exposed: 37%

Landslide
5%
2,668 people exposed
423 structures exposed (2%)
Critical Infrastructure Exposed: 6%

Mosquito-Borne Disease
100%
58,992 people exposed
18,445 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
13%
7,410 people exposed
2,510 structures exposed (14%)
Critical Infrastructure Exposed: 16%

VULNERABILITY (V)

RANK: 113 / 221 CANTONS ASSESSED **SCORE: 0.485**

Vulnerability in La Troncal is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.437

- **9.8** Average Years of Schooling
- **46.8%** Population (age 24 and over) with General Basic Education Schooling
- **6.2%** Population (age 24 and over) with No Schooling
- **4.4%** Adult Illiteracy Rate
- **39.8%** Households with No Internet Access
- **65.5%** Households with No Access to Television
- **77.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.451

- **77.8%** Homes with Access to Public Water Source
- **62.9%** Homes Connected to the Public Sewage System
- **20%** Homes without Piped Water
- **7.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.435

- **60.5** Age Dependency Ratio
- **10.8%** Unemployment Rate
- **45.4%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.592

- **5.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.483

- **0.4** Female to Male Labor Ratio (distance from parity)
- **53.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **43.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **58.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.480

- **9.6%** Prevalence of Disability (among persons age 5 and over)
- **4.2** Perinatal Mortality Rate (per 1,000 births)
- **4.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.590

- **56** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **5.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **17.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.466

43
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.412

8.3%
Homes with Exterior Walls in Poor Condition

3.5%
Homes with Inadequate Materials Used in Outer Walls

11.5%
Homes with Roofs in Poor Condition

83.4%
Households with No Access to Vehicle for Private Use

9.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.573

169
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

19.9
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.595

0.2
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 66 / 221 CANTONS ASSESSED **SCORE: 0.556**

La Troncal exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.599

57.4%
Labor Force Participation

330,198
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.320

0%
Protected Area (% of land area)

-2,257.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.562

77.1%
Voter Participation

97%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.586

Communications Capacity

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.594

10.8%
Household Access to Fixed Phones

87.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.632

97.5%
Homes Served by the Public Electricity Network

76.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.454

14
Nurses and Midwives per 10,000 persons

14.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.662

4.6
Average Distance to Airport (km)

59.1
Average Distance to Sea or River Port (km)

1.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 59 / 221 CANTONS ASSESSED **SCORE: 0.554**

La Troncal exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.423

1.3	1.3%	0.5	60.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.685

4.8	3.8	1.9	4.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 67 / 221 CANTONS ASSESSED
SCORE: 0.541

La Troncal's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Disaster Impacts


Mass Care Support


Population Pressures


Healthcare Capacity

KEY FACTORS INFLUENCING RESILIENCE



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Population Pressures

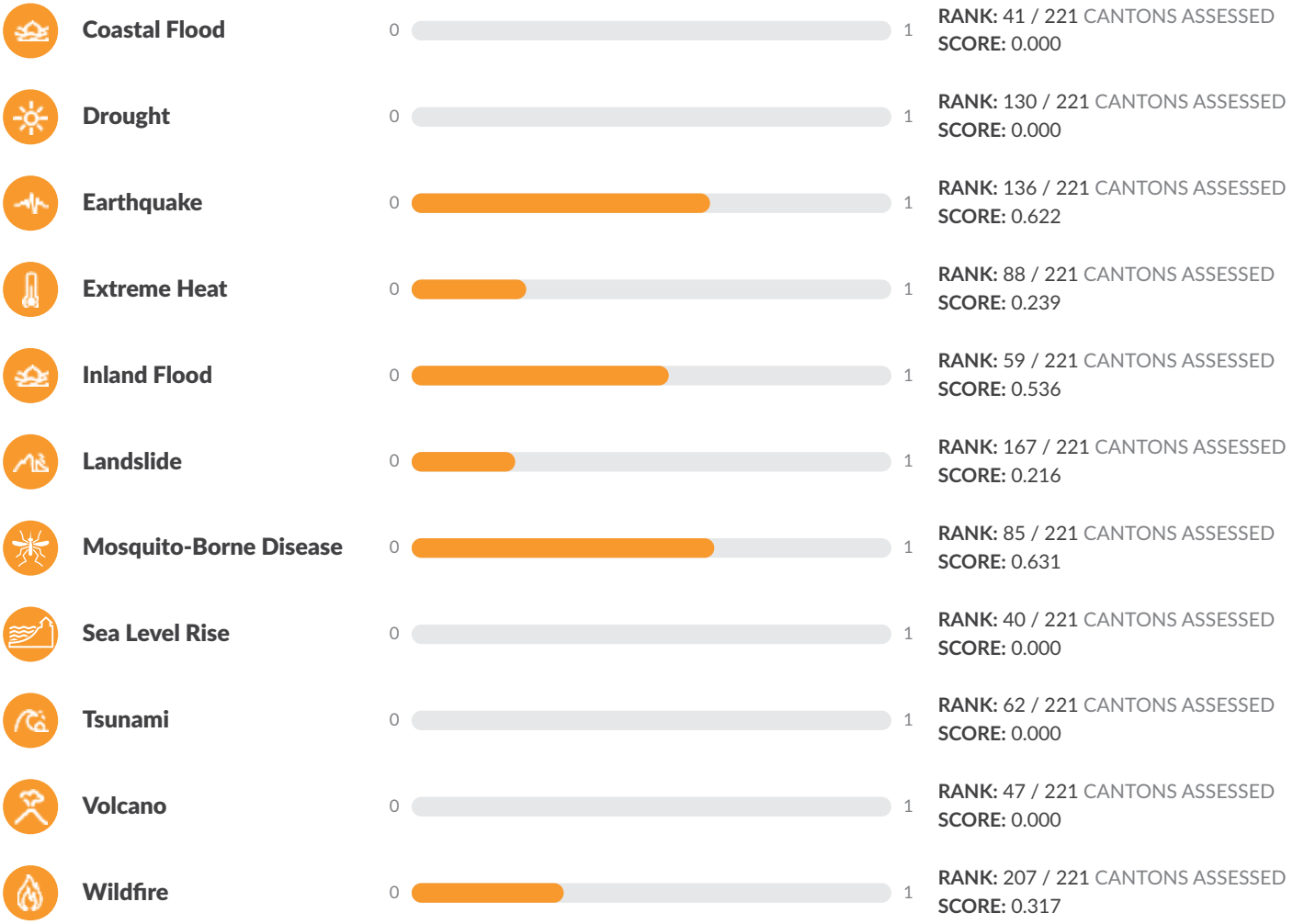
Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
181 / 221
CANTONS ASSESSED
SCORE: 0.426

La Troncal's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

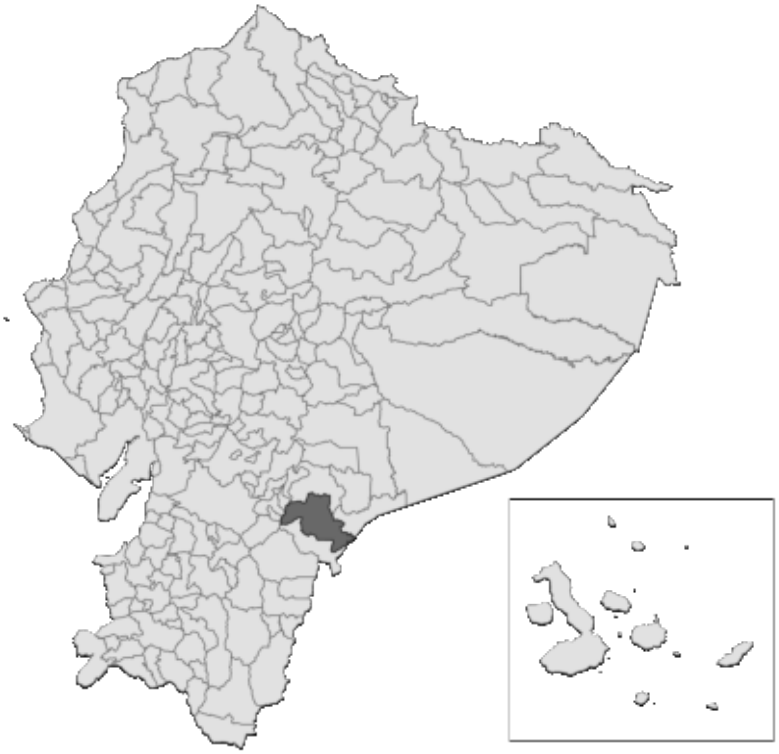
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LIMÓN INDANZA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.491 • RANK: 114/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.475 • RANK: 124/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.388 • RANK: 134/221 CANTONS ASSESSED

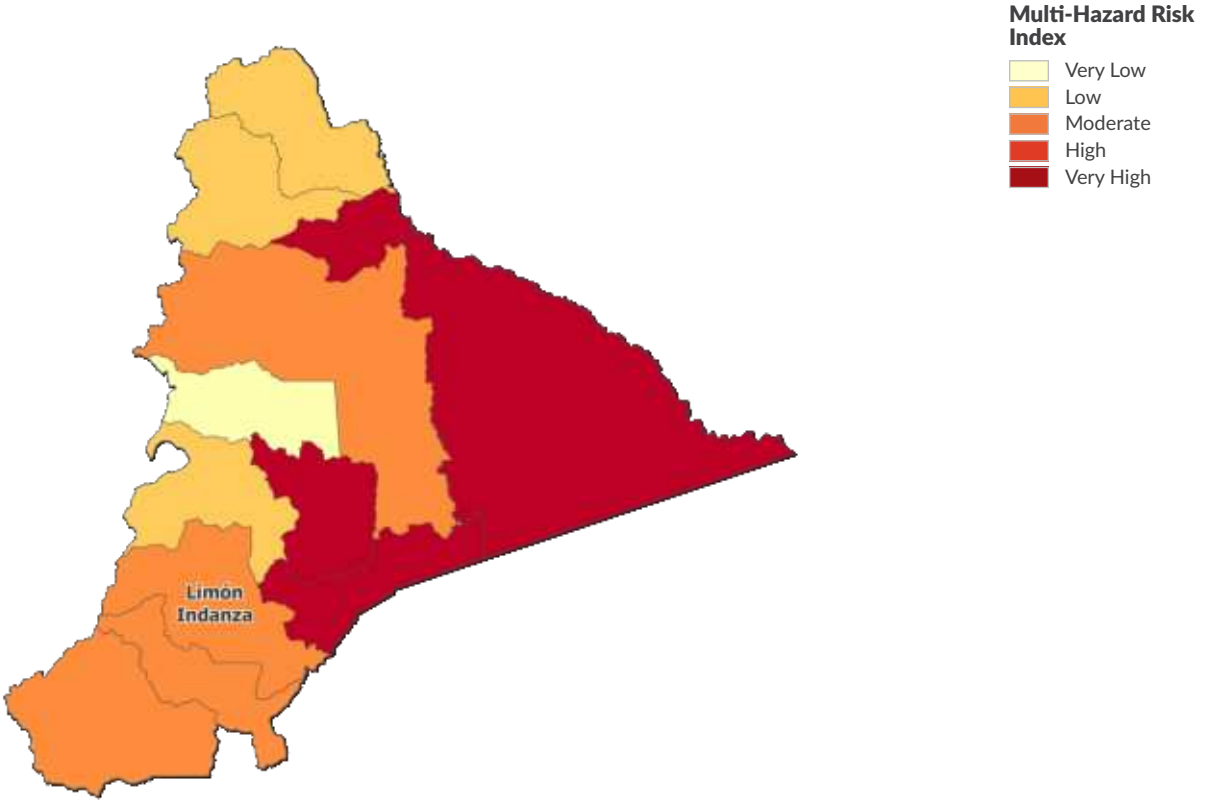
Vulnerability (V) - Moderate
SCORE: 0.497 • RANK: 99/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.452 • RANK: 142/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.469 • RANK: 99/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

LIMÓN INDANZA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	**0.491**
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 134 / 221 CANTONS ASSESSED
SCORE: 0.388



MHE
0.388

Raw MHE
0.366

Relative MHE
0.410

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
12,755 people exposed
7,563 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
1%
167 people exposed
110 structures exposed (1%)
Critical Infrastructure Exposed: 1%

Landslide
95%
12,110 people exposed
7,107 structures exposed (94%)
Critical Infrastructure Exposed: 98%

Mosquito-Borne Disease
89%
11,323 people exposed
6,665 structures exposed (88%)
Critical Infrastructure Exposed: 93%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
12,746 people exposed
7,547 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 99 / 221 CANTONS ASSESSED **SCORE: 0.497**

Vulnerability in Limón Indanza is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.469

- **10** Average Years of Schooling
- **43%** Population (age 24 and over) with General Basic Education Schooling
- **7.9%** Population (age 24 and over) with No Schooling
- **4.1%** Adult Illiteracy Rate
- **44.8%** Households with No Internet Access
- **81.4%** Households with No Access to Television
- **73.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.506

- **73.2%** Homes with Access to Public Water Source
- **54.2%** Homes Connected to the Public Sewage System
- **33.2%** Homes without Piped Water
- **5.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.655

- **73.2** Age Dependency Ratio
- **13%** Unemployment Rate
- **59%** Poverty Rate (based on UBN)
- **2.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.484

- **3.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.507

- **0.3** Female to Male Labor Ratio (distance from parity)
- **64.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **88.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **31.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.352

- **6.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.513

- **6.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **56.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.457

23
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

32
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.453

13.7%
Homes with Exterior Walls in Poor Condition

1.2%
Homes with Inadequate Materials Used in Outer Walls

15%
Homes with Roofs in Poor Condition

83.7%
Households with No Access to Vehicle for Private Use

10.3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.349

5.3
Population Density (persons per sq km)

-0.1
Average Annual Population Change (2010-2022)

0.9
Net Migration Rate (per 1,000 persons)

0.32
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.688

0.4
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 142 / 221 CANTONS ASSESSED **SCORE: 0.452**

Limón Indanza exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.386

54.8%
Labor Force Participation

29,882
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.713

56.2%
Protected Area (% of land area)

-5,362.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.303

73.4%
Voter Participation

74.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.579

Communications Capacity

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.622

24.9%
Household Access to Fixed Phones

79.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.510

90.7%
Homes Served by the Public Electricity Network

80.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.819

34.4
Nurses and Midwives per 10,000 persons

48.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.365

29.8
Average Distance to Airport (km)

75.6
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 99 / 221 CANTONS ASSESSED **SCORE: 0.469**

Limón Indanza exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.573

5.8	19.4%	2.6	64.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.365

10.5	9.8	8.6	9.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 124 / 221 CANTONS ASSESSED
SCORE: 0.475

Limón Indanza's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Disaster Impacts

Economic Constraints

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

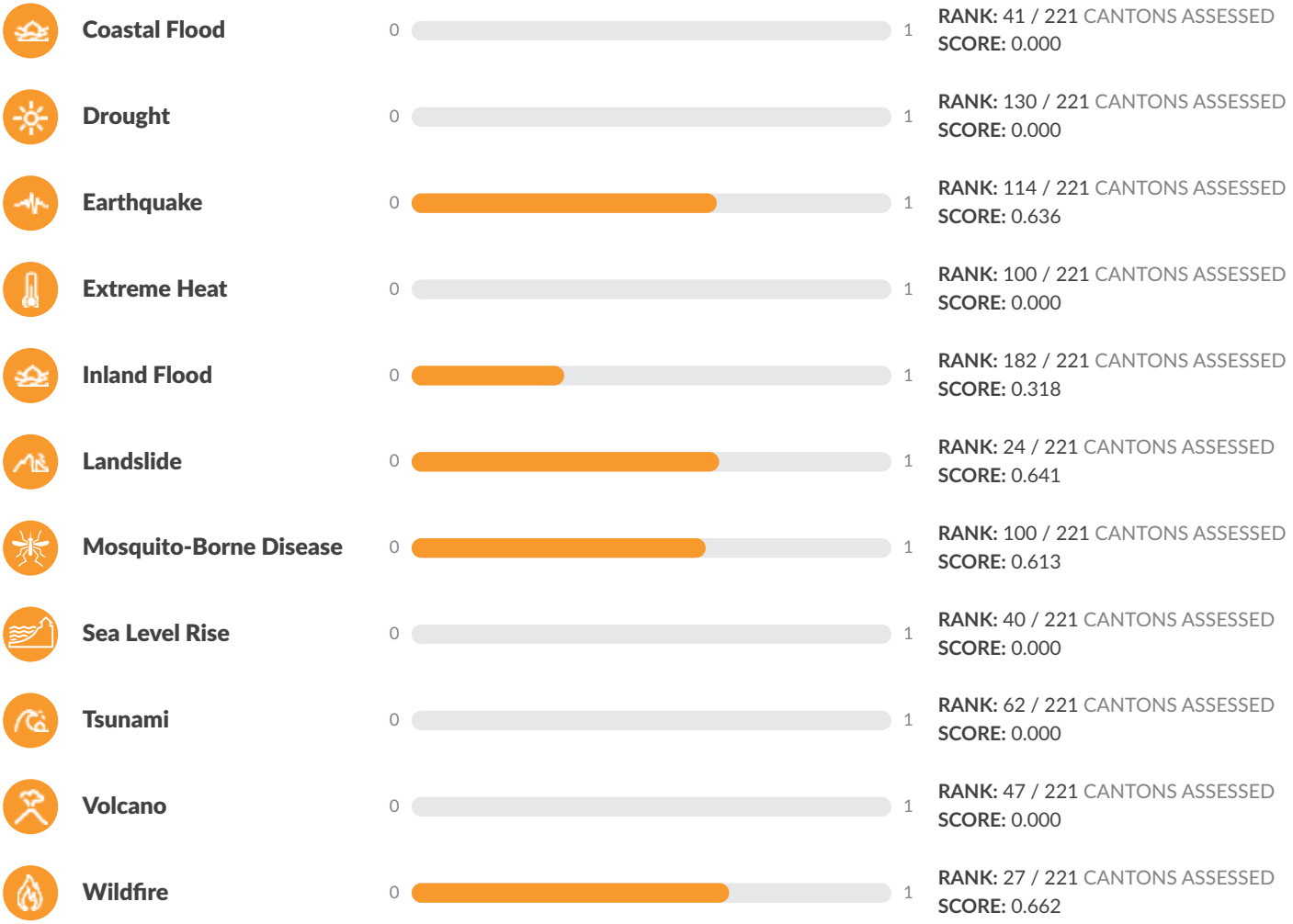
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

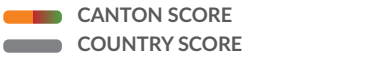


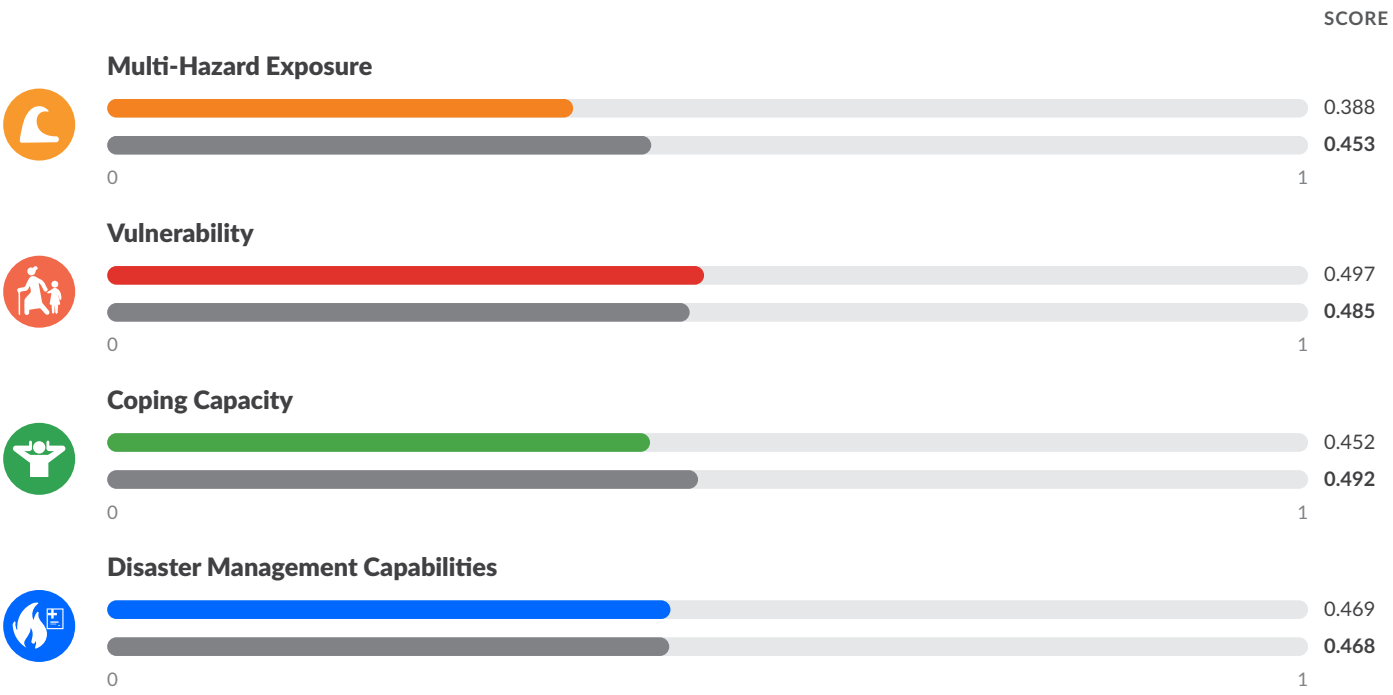
MULTI-HAZARD RISK (MHR)

RANKED
114 / 221
CANTONS ASSESSED
SCORE: 0.491

Limón Indanza's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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LOGROÑO

NDPBA SUBNATIONAL PROFILE

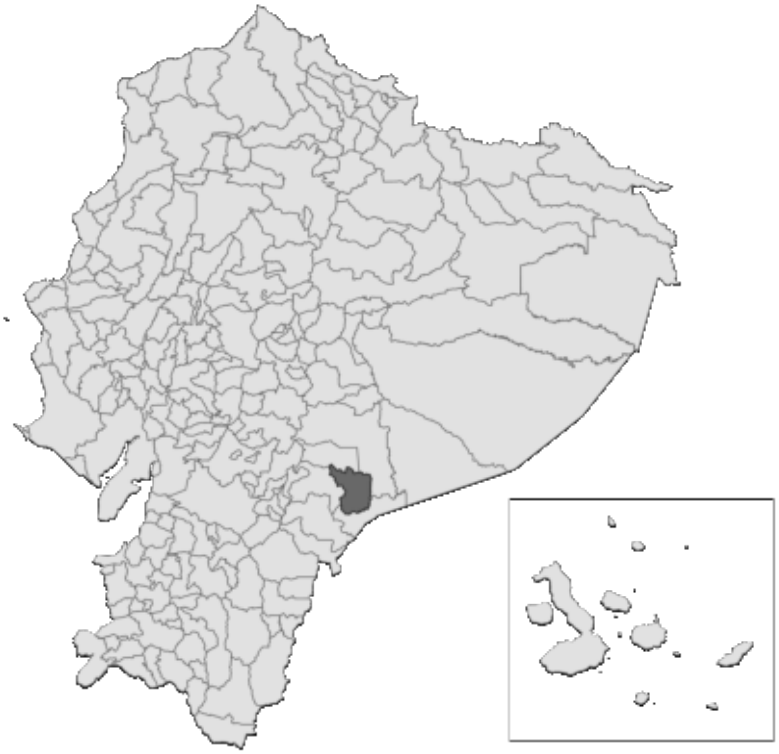
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LOGROÑO

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.602 • RANK: 19/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.637 • RANK: 6/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.296 • RANK: 218/221 CANTONS ASSESSED

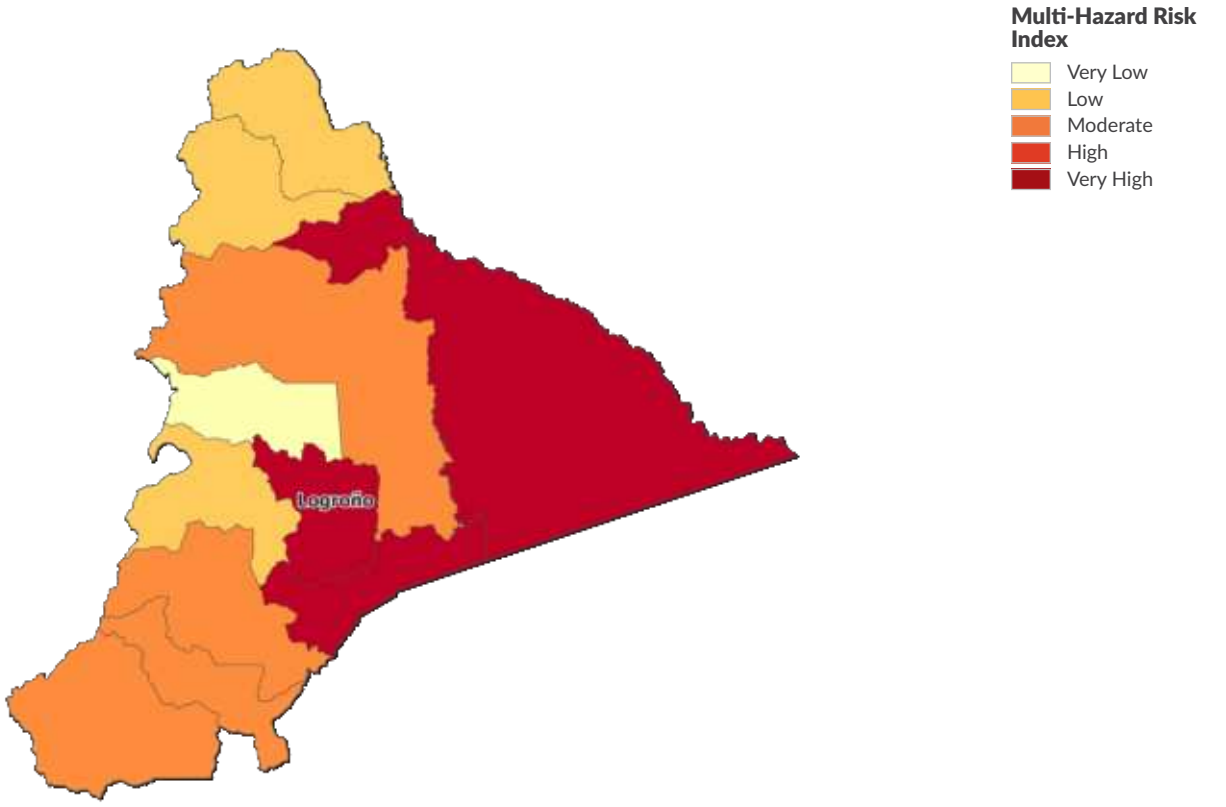
Coping Capacity (CC) - Very Low
SCORE: 0.258 • RANK: 219/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.296 • RANK: 176/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.269 • RANK: 215/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

LOGROÑO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	**0.602**
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 176 / 221 CANTONS ASSESSED
SCORE: 0.296



MHE
0.296

Raw MHE
0.285

Relative MHE
0.308

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
7,496 people exposed
5,642 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
12%
884 people exposed
697 structures exposed (12%)
Critical Infrastructure Exposed: 11%

Landslide
64%
4,787 people exposed
3,689 structures exposed (65%)
Critical Infrastructure Exposed: 51%

Mosquito-Borne Disease
100%
7,463 people exposed
5,541 structures exposed (98%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
98%
7,376 people exposed
5,553 structures exposed (98%)
Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 6 / 221 CANTONS ASSESSED **SCORE: 0.637**

Vulnerability in Logroño is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.607

- **9.4** Average Years of Schooling
- **50.7%** Population (age 24 and over) with General Basic Education Schooling
- **4.6%** Population (age 24 and over) with No Schooling
- **3.6%** Adult Illiteracy Rate
- **79.7%** Households with No Internet Access
- **88%** Households with No Access to Television
- **90%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.621

- **74.9%** Homes with Access to Public Water Source
- **28.4%** Homes Connected to the Public Sewage System
- **73.8%** Homes without Piped Water
- **3.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.948

- **82** Age Dependency Ratio
- **43.9%** Unemployment Rate
- **83%** Poverty Rate (based on UBN)
- **10.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.366

- **2.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.811

- **0.6** Female to Male Labor Ratio (distance from parity)
- **100.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **95.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **64.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.384

- **4.5%** Prevalence of Disability (among persons age 5 and over)
- **4.4** Perinatal Mortality Rate (per 1,000 births)
- **6.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.369

- **25.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **71** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.486

31
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

27
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

18
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.644

20.2%
Homes with Exterior Walls in Poor Condition

2.1%
Homes with Inadequate Materials Used in Outer Walls

19.9%
Homes with Roofs in Poor Condition

93.9%
Households with No Access to Vehicle for Private Use

19.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.506

6.4
Population Density (persons per sq km)

2%
Average Annual Population Change (2010-2022)

-0.7
Net Migration Rate (per 1,000 persons)

0.37
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.620

0.4
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 219 / 221 CANTONS ASSESSED **SCORE: 0.258**

Logroño exhibits weaker Coping Capacity in the areas of Energy Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.147

40%
Labor Force Participation

16,390
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.441

2.8%
Protected Area (% of land area)

-3,889.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.234

72.2%
Voter Participation

63.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.331

Communications Capacity

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.292

6%
Household Access to Fixed Phones

58.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.125

74%
Homes Served by the Public Electricity Network

43%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.469

12
Nurses and Midwives per 10,000 persons

18.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.439

17.5
Average Distance to Airport (km)

53.6
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 215 / 221 CANTONS ASSESSED **SCORE: 0.269**

Logroño exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.341

7.2	9.2%	0	43.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.197

22.8	23.2	7.9	18.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 218 / 221 CANTONS ASSESSED
SCORE: 0.296

Logroño's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Constraints | **Energy Capacity** | **Economic Capacity** | **Marginalization**

KEY FACTORS INFLUENCING RESILIENCE

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

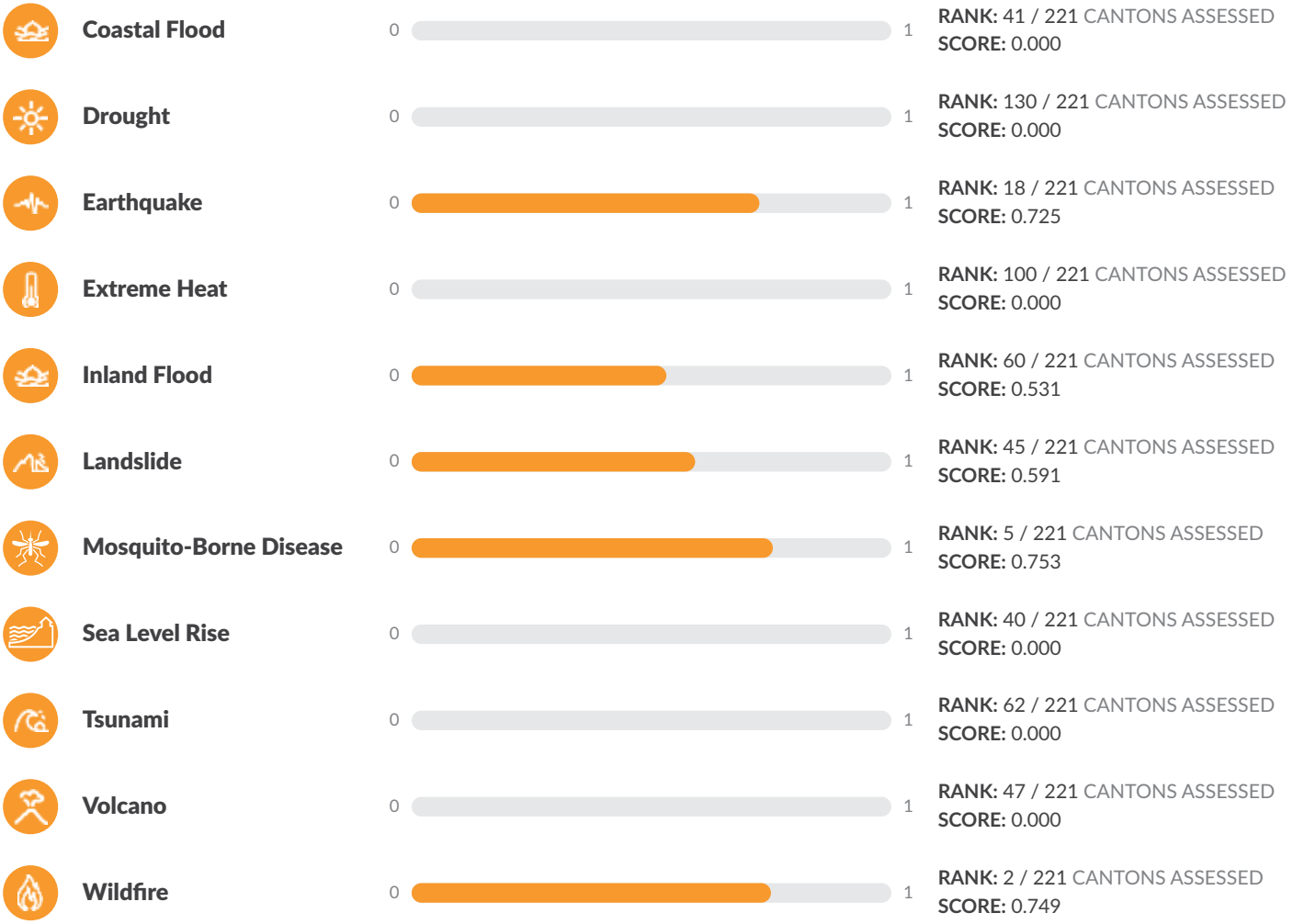
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

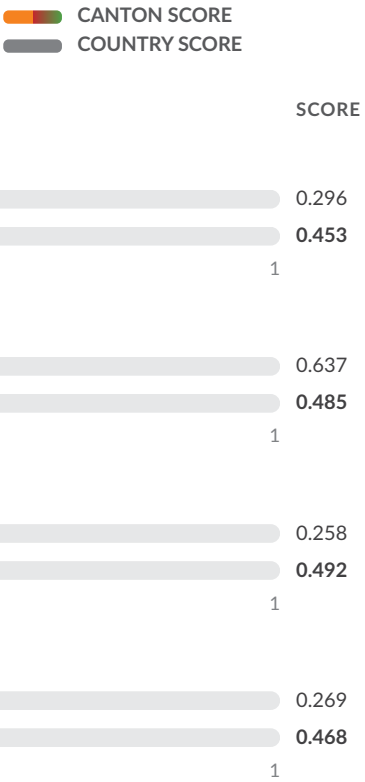


MULTI-HAZARD RISK (MHR)

RANKED
19 / 221
CANTONS ASSESSED
SCORE: 0.602

Logroño's score and ranking are due to Low Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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LOJA

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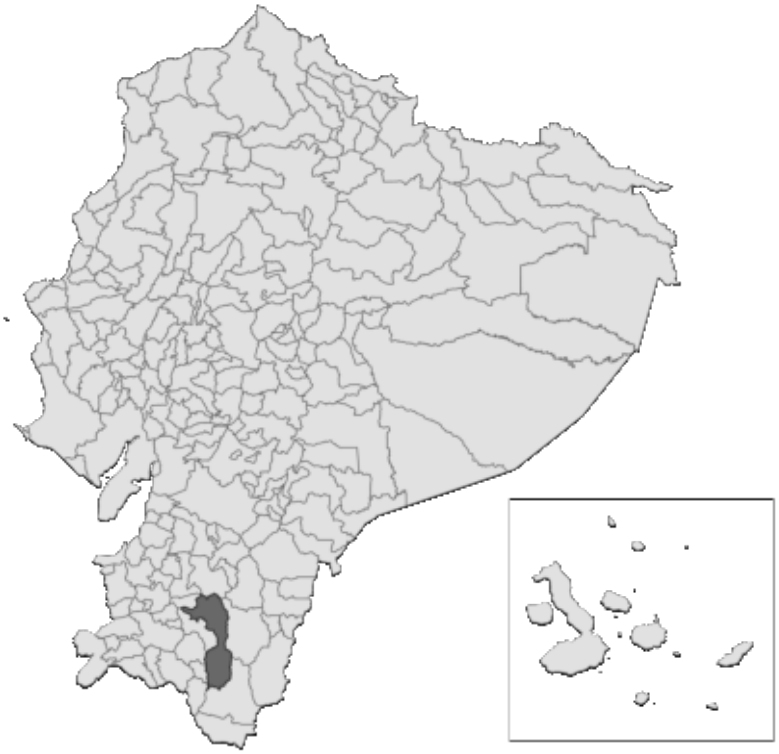
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ECUADOR

LOJA

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.383 • RANK: 207/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.376 • RANK: 200/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.639 • RANK: 15/221 CANTONS ASSESSED

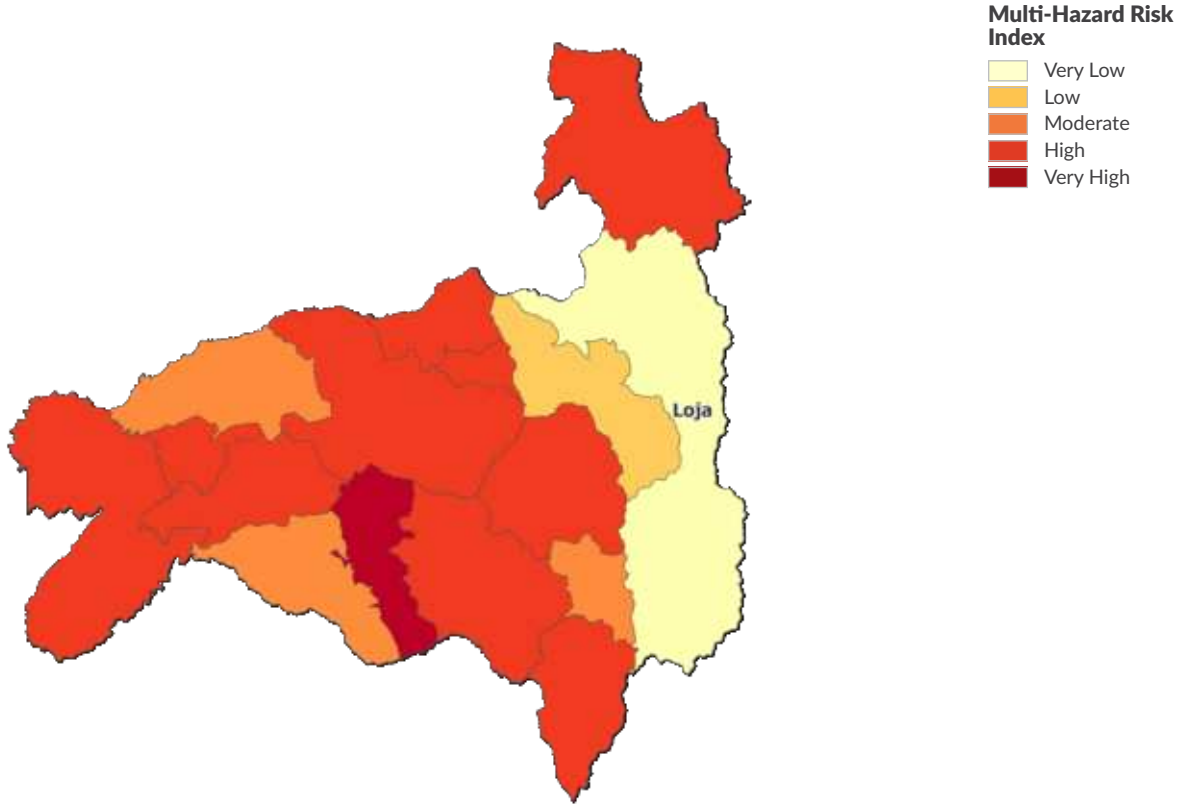
Coping Capacity (CC) - Very High
SCORE: 0.651 • RANK: 20/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.448 • RANK: 108/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.641 • RANK: 18/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

LOJA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	**0.383**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 108 / 221 CANTONS ASSESSED
SCORE: 0.448



MHE
0.448

Raw MHE
0.786

Relative MHE
0.110

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
11%
- **26,256** people exposed
- **23,970** structures exposed (24%)

Critical Infrastructure Exposed: 30%

Earthquake
100%
- **240,507** people exposed
- **100,656** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
2%
- **5,379** people exposed
- **3,721** structures exposed (4%)

Critical Infrastructure Exposed: 6%

Landslide
45%
- **107,660** people exposed
- **55,518** structures exposed (55%)

Critical Infrastructure Exposed: 45%

Mosquito-Borne Disease
20%
- **48,552** people exposed
- **21,420** structures exposed (21%)

Critical Infrastructure Exposed: 17%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
39%
- **94,762** people exposed
- **50,055** structures exposed (50%)

Critical Infrastructure Exposed: 44%

VULNERABILITY (V)

RANK: 200 / 221 CANTONS ASSESSED **SCORE: 0.376**

Vulnerability in Loja is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.162

- **13.1** Average Years of Schooling
- **29.4%** Population (age 24 and over) with General Basic Education Schooling
- **2%** Population (age 24 and over) with No Schooling
- **1.5%** Adult Illiteracy Rate
- **24.3%** Households with No Internet Access
- **70.3%** Households with No Access to Television
- **42%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.295

- **94.7%** Homes with Access to Public Water Source
- **81.2%** Homes Connected to the Public Sewage System
- **13.6%** Homes without Piped Water
- **7.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.353

- **50.5** Age Dependency Ratio
- **12.6%** Unemployment Rate
- **24.4%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.375

- **2.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.295

- **0.2** Female to Male Labor Ratio (distance from parity)
- **26.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **75.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **26.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.441

- **6.3%** Prevalence of Disability (among persons age 5 and over)
- **4.8** Perinatal Mortality Rate (per 1,000 births)
- **7.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.321

- **3.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.548

72
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

40
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.256

6.4%
Homes with Exterior Walls in Poor Condition

0.5%
Homes with Inadequate Materials Used in Outer Walls

8.9%
Homes with Roofs in Poor Condition

66.8%
Households with No Access to Vehicle for Private Use

5.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.497

132.2
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

15.4
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.707

0.5
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 20 / 221 CANTONS ASSESSED **SCORE: 0.651**

Loja exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.779

62%
Labor Force Participation

1,390,563
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.341

7.7%
Protected Area (% of land area)

-17,664
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.545

81.6%
Voter Participation

91.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.732

Communications Capacity

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.868

27.1%
Household Access to Fixed Phones

93.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.846

99.2%
Homes Served by the Public Electricity Network

87.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.713

25
Nurses and Midwives per 10,000 persons

38.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.501

21.9
Average Distance to Airport (km)

68.5
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 18 / 221 CANTONS ASSESSED **SCORE: 0.641**

Loja exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.666

1.7	2%	2.7	12.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.617

5	8.8	1.8	4.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 15 / 221 CANTONS ASSESSED
SCORE: 0.639

Loja's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Transportation Capacity

Population Pressures

Governance

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

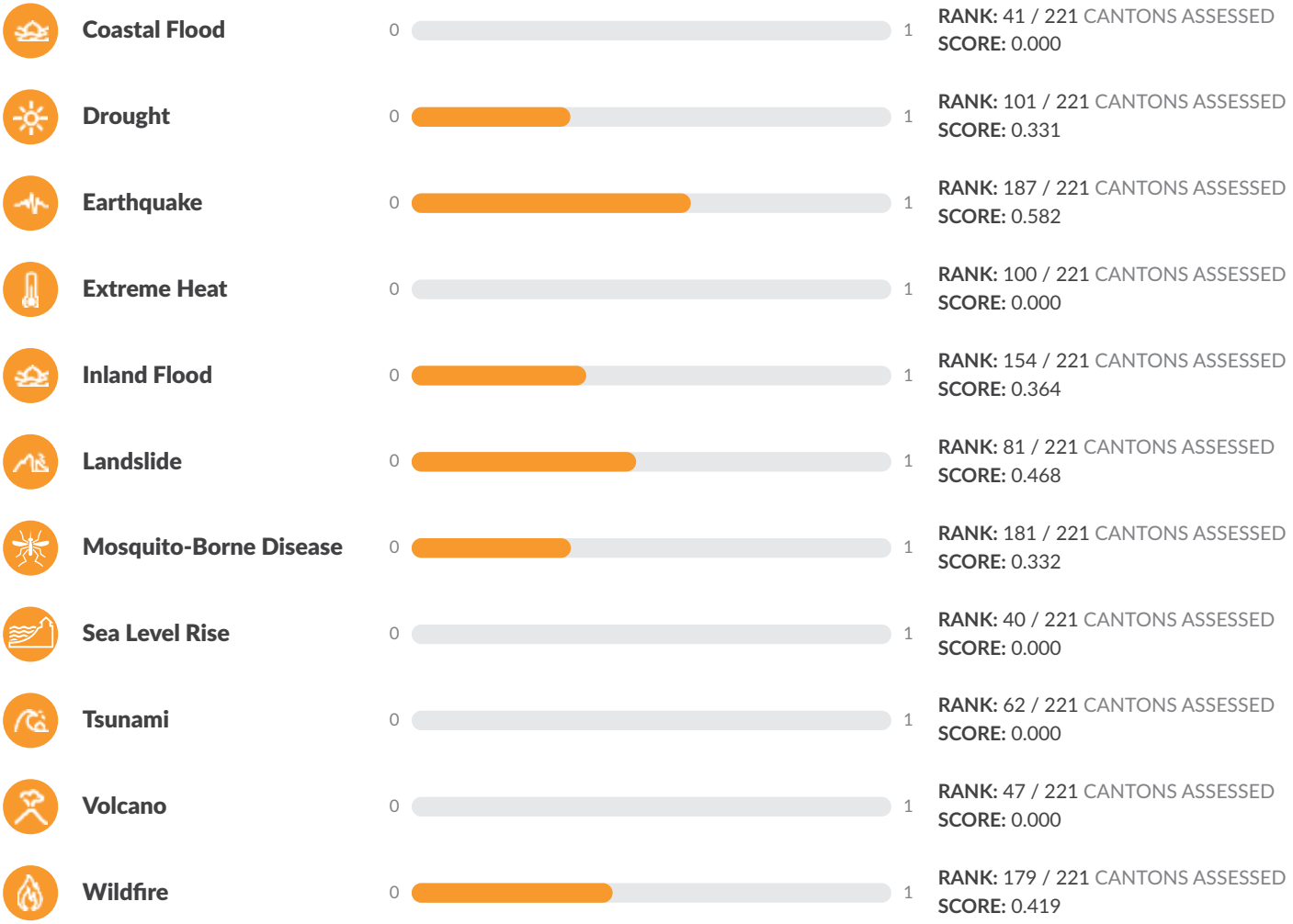
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

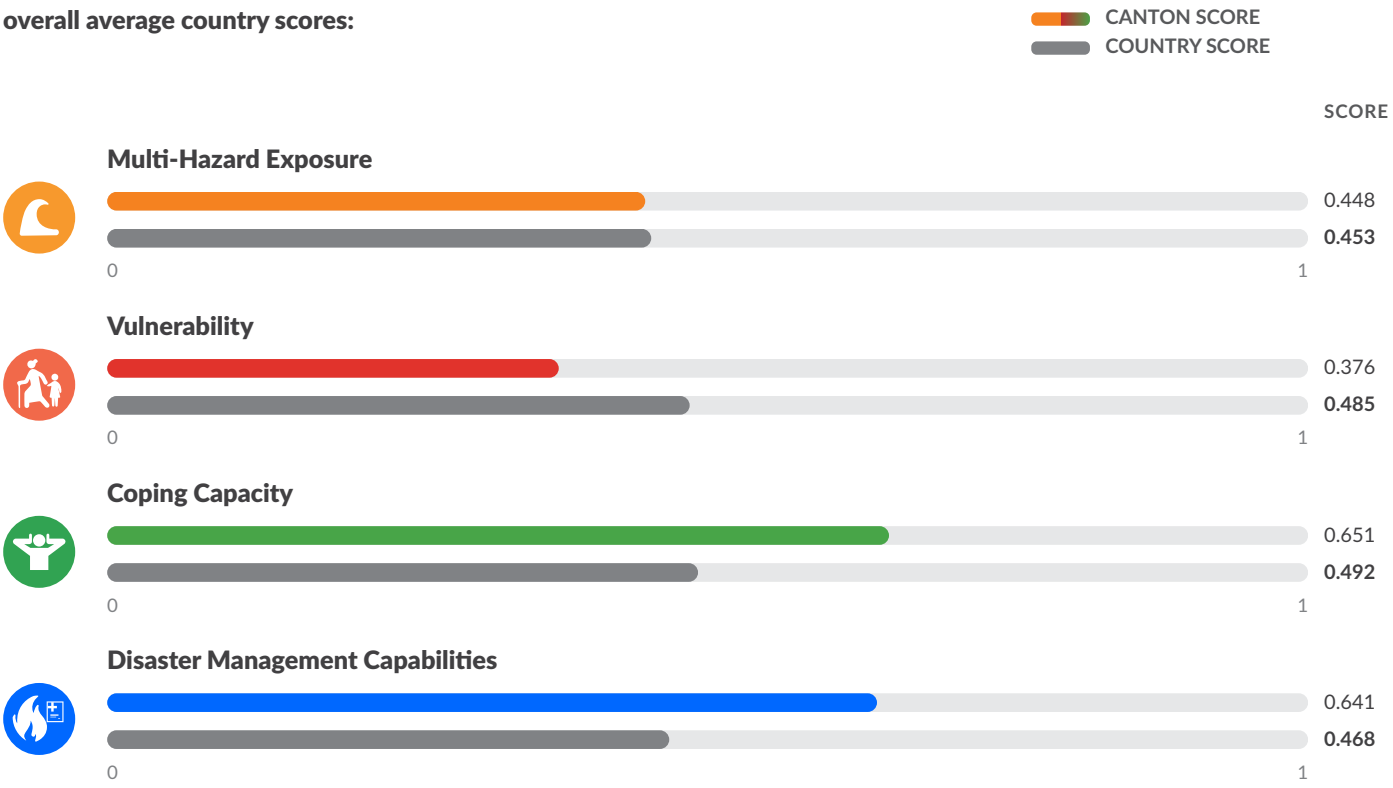


MULTI-HAZARD RISK (MHR)

RANKED
207 / 221
CANTONS ASSESSED
SCORE: 0.383

Loja's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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LOMAS DE SARGENTILLO

NDPBA SUBNATIONAL PROFILE

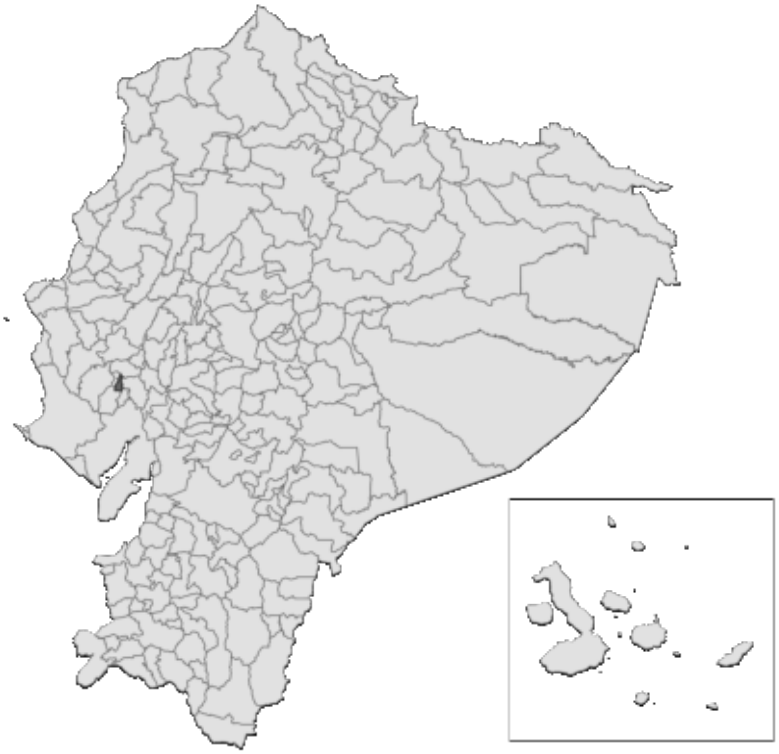
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LOMAS DE SARGENTILLO

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.519 • RANK: 88/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.502 • RANK: 93/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.582 • RANK: 49/221 CANTONS ASSESSED

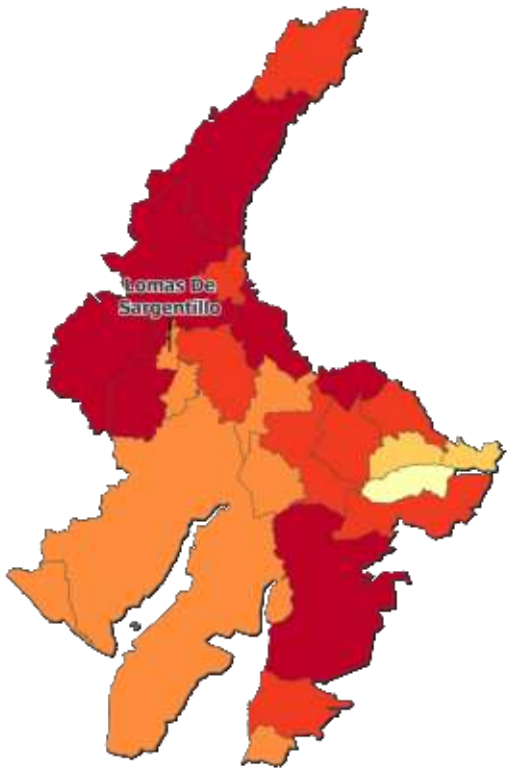
Vulnerability (V) - High
SCORE: 0.535 • RANK: 68/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.485 • RANK: 114/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.557 • RANK: 57/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

LOMAS DE SARGENTILLO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	**0.519**
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 49 / 221 CANTONS ASSESSED
SCORE: 0.582



MHE
0.582

Raw MHE
0.478

Relative MHE
0.686

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
100%
- **22,180** people exposed
- **8,597** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **22,180** people exposed
- **8,597** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
100%
- **22,180** people exposed
- **8,597** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Inland Flood
9%
- **2,040** people exposed
- **633** structures exposed (7%)
- **Critical Infrastructure Exposed:** 14%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Mosquito-Borne Disease
98%
- **21,819** people exposed
- **8,482** structures exposed (99%)
- **Critical Infrastructure Exposed:** 98%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
39%
- **8,633** people exposed
- **3,384** structures exposed (39%)
- **Critical Infrastructure Exposed:** 31%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
53%
- **11,701** people exposed
- **4,978** structures exposed (58%)
- **Critical Infrastructure Exposed:** 65%

VULNERABILITY (V)

RANK: 68 / 221 CANTONS ASSESSED **SCORE: 0.535**

Vulnerability in Lomas De Sargentillo is primarily driven by Housing and Transportation Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.659

- **8.4** Average Years of Schooling
- **52.8%** Population (age 24 and over) with General Basic Education Schooling
- **10.5%** Population (age 24 and over) with No Schooling
- **9%** Adult Illiteracy Rate
- **67.8%** Households with No Internet Access
- **83.4%** Households with No Access to Television
- **87.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.568

- **73.5%** Homes with Access to Public Water Source
- **49.8%** Homes Connected to the Public Sewage System
- **41.2%** Homes without Piped Water
- **7.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.506

- **55.9** Age Dependency Ratio
- **21.1%** Unemployment Rate
- **58.2%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.753

- **10.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.636

- **0.7** Female to Male Labor Ratio (distance from parity)
- **48.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **60.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **58.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.441

- **11.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **12.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.489

- **7.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **5.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.279

61
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

12
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

0
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.697

23.3%
Homes with Exterior Walls in Poor Condition

13.4%
Homes with Inadequate Materials Used in Outer Walls

24%
Homes with Roofs in Poor Condition

93.5%
Households with No Access to Vehicle for Private Use

12.9%
Household Overcrowding

Population Pressures

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.567

309.8
Population Density (persons per sq km)

1.6%
Average Annual Population Change (2010-2022)

9.4
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.169

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 114 / 221 CANTONS ASSESSED **SCORE: 0.485**

Lomas De Sargentillo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.313

48.6%
Labor Force Participation

36,651
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.352

0%
Protected Area (% of land area)

-163.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.821

94%
Voter Participation

89.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.364

Communications Capacity

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.347

5.7%
Household Access to Fixed Phones

70.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.290

89.7%
Homes Served by the Public Electricity Network

50.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.192

3.1
Nurses and Midwives per 10,000 persons

9.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.628

34.4
Average Distance to Airport (km)

12.1
Average Distance to Sea or River Port (km)

2.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 57 / 221 CANTONS ASSESSED **SCORE: 0.557**

Lomas De Sargentillo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.410

1.7	0.3%	0.4	34.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.704

11.9	2.7	1.2	3.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 93 / 221 CANTONS ASSESSED
SCORE: 0.502

Lomas De Sargentillo's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Healthcare Capacity
- Energy Capacity
- Housing and Transportation Vulnerability
- Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

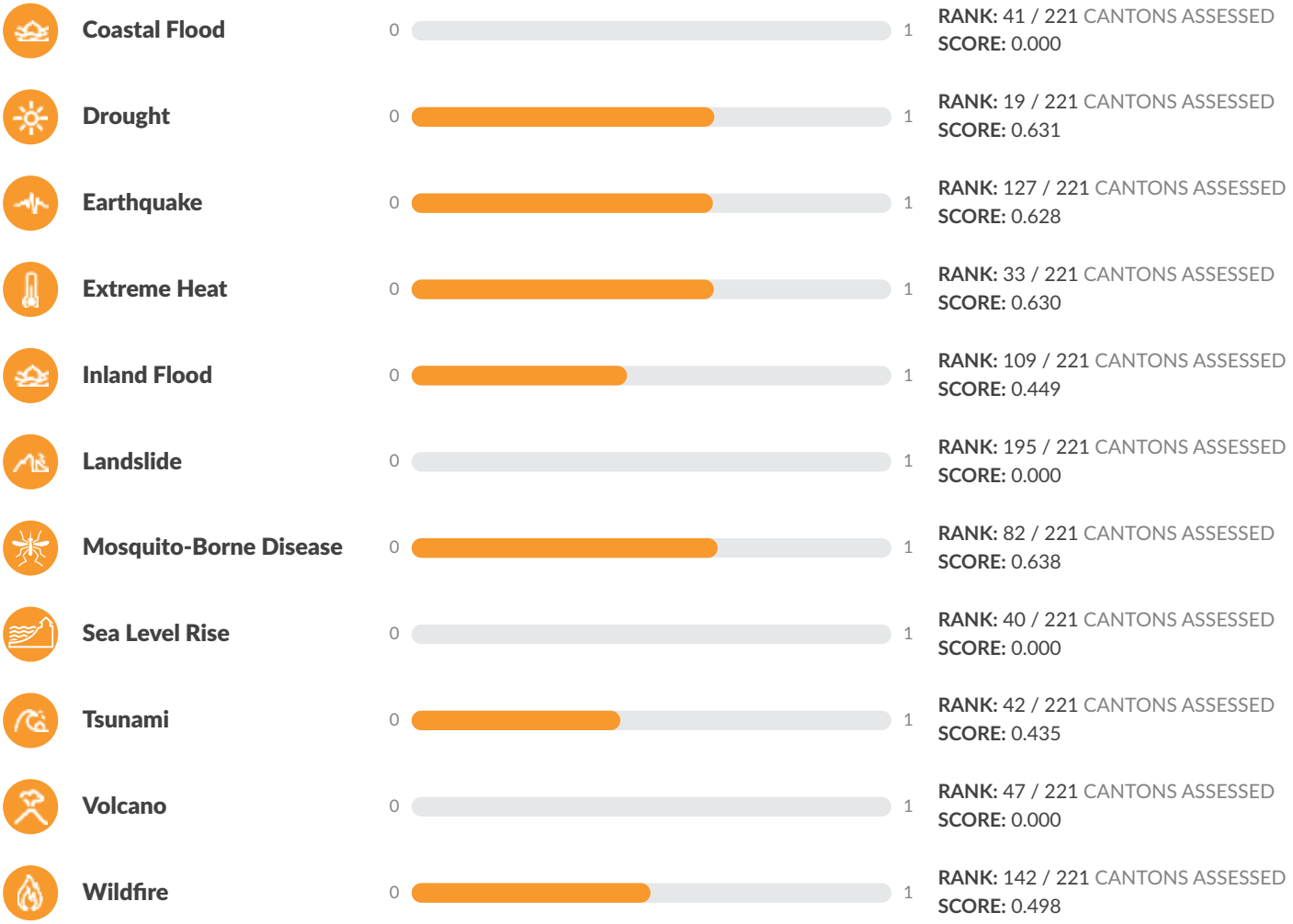
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)

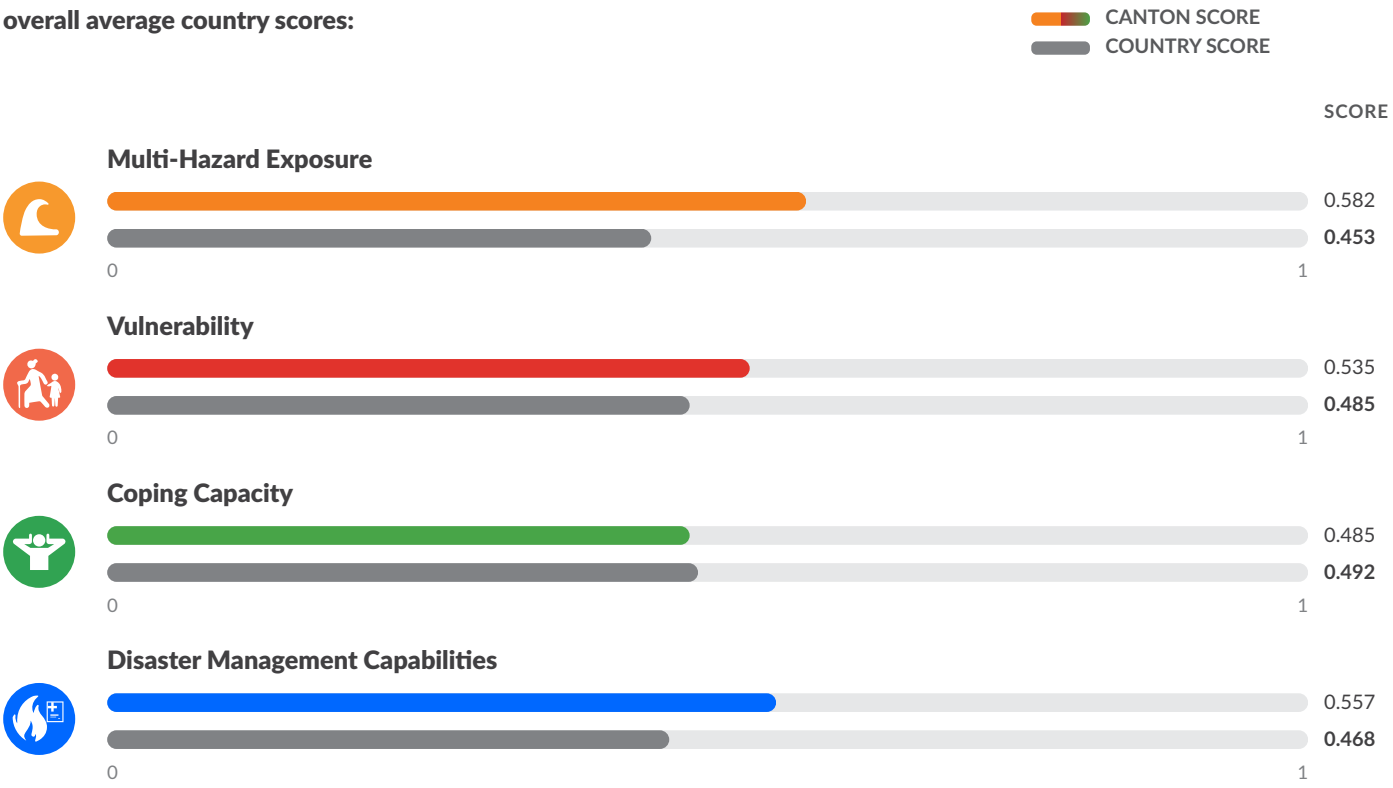


MULTI-HAZARD RISK (MHR)

RANKED
88 / 221
CANTONS ASSESSED
SCORE: 0.519

Lomas De Sargentillo's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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LORETO

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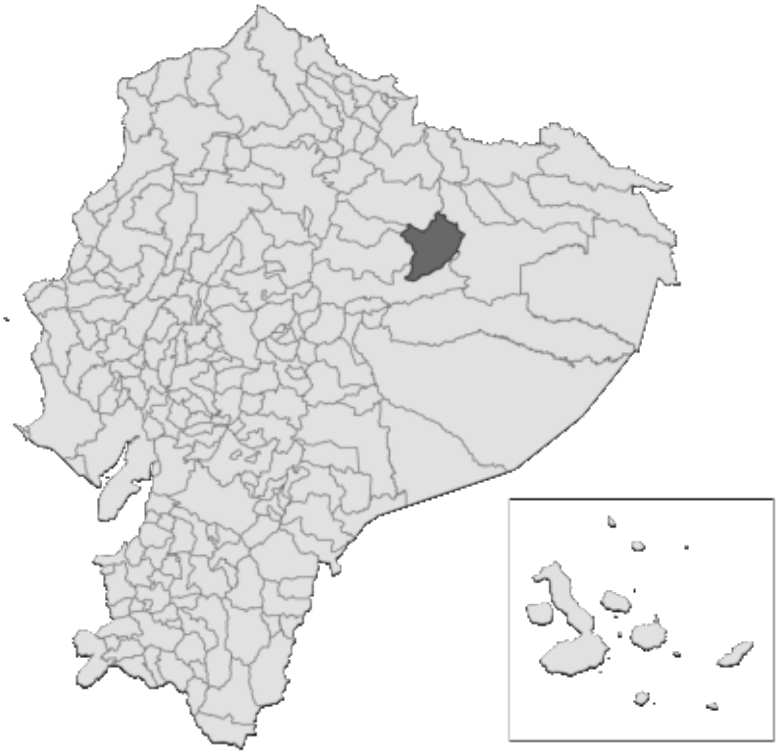
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ECUADOR

LORETO

PROVINCE: ORELLANA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.566 • RANK: 43/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.614 • RANK: 12/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.363 • RANK: 206/221 CANTONS ASSESSED

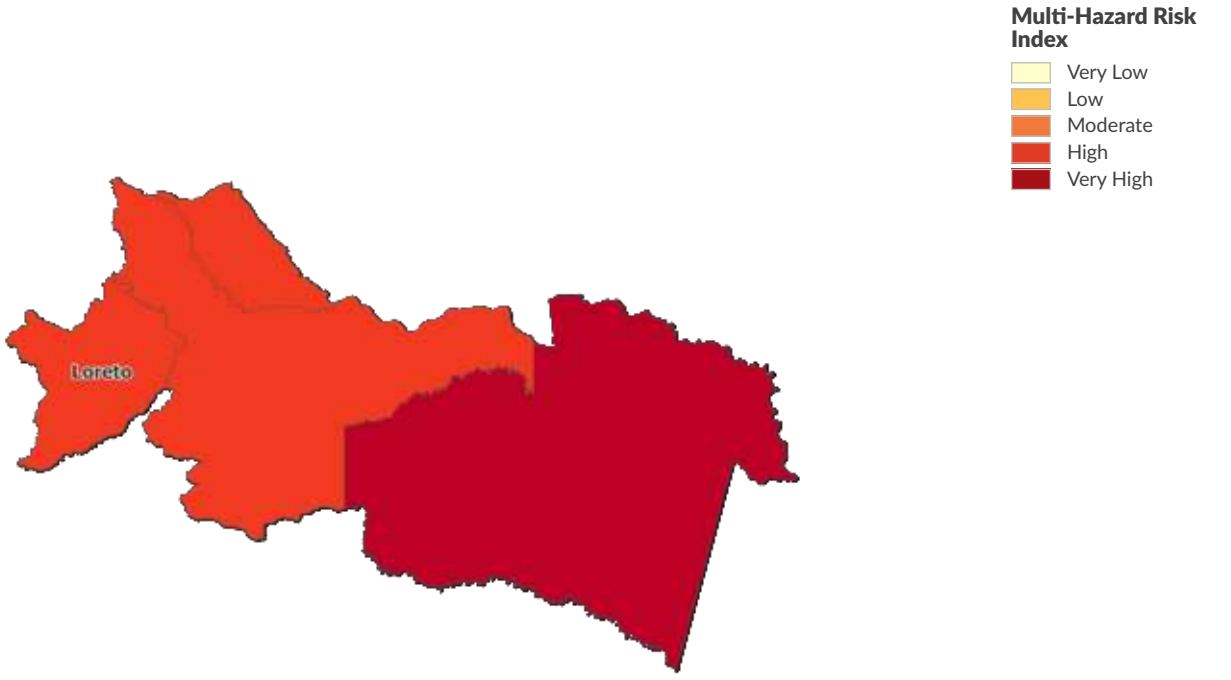
Coping Capacity (CC) - Low
SCORE: 0.414 • RANK: 165/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.353 • RANK: 151/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.288 • RANK: 210/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ORELLANA PROVINCE

LORETO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 151 / 221 CANTONS ASSESSED
SCORE: 0.353



MHE
0.353

Raw MHE
0.502

Relative MHE
0.203

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
35,065 people exposed
19,222 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
16%
5,772 people exposed
2,741 structures exposed (14%)
Critical Infrastructure Exposed: 13%

Inland Flood
9%
3,330 people exposed
1,985 structures exposed (10%)
Critical Infrastructure Exposed: 13%

Landslide
4%
1,517 people exposed
773 structures exposed (4%)
Critical Infrastructure Exposed: 4%

Mosquito-Borne Disease
100%
35,051 people exposed
19,195 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: <1%

Wildfire
75%
26,220 people exposed
14,208 structures exposed (74%)
Critical Infrastructure Exposed: 76%

VULNERABILITY (V)

RANK: 12 / 221 CANTONS ASSESSED **SCORE: 0.614**

Vulnerability in Loreto is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.580

- **9.5** Average Years of Schooling
- **49.5%** Population (age 24 and over) with General Basic Education Schooling
- **5.4%** Population (age 24 and over) with No Schooling
- **4.1%** Adult Illiteracy Rate
- **74%** Households with No Internet Access
- **86%** Households with No Access to Television
- **85.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.742

- **41.9%** Homes with Access to Public Water Source
- **27.4%** Homes Connected to the Public Sewage System
- **70.9%** Homes without Piped Water
- **6.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.857

- **74.2** Age Dependency Ratio
- **26.4%** Unemployment Rate
- **83.9%** Poverty Rate (based on UBN)
- **4.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.888

- **16.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.751

- **0.5** Female to Male Labor Ratio (distance from parity)
- **89.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **92.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **74.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.384

- **8.5%** Prevalence of Disability (among persons age 5 and over)
- **1.7** Perinatal Mortality Rate (per 1,000 births)
- **4.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.401

- **14.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **12.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **2.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.433

34	5	24	98
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.678

23.5%	0.9%	26.3%	93.3%	19%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.528

12.9	2.3%	7.9	0.33
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.345

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 165 / 221 CANTONS ASSESSED **SCORE: 0.414**

Loreto exhibits weaker Coping Capacity in the areas of Energy Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.308

46.5%
Labor Force Participation

50,769
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.801

14.9%
Protected Area (% of land area)

27,234
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.464

88.1%
Voter Participation

57.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.342

Communications Capacity

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.254

2.8%
Household Access to Fixed Phones

72.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.202

75.1%
Homes Served by the Public Electricity Network

56.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.501

17.3
Nurses and Midwives per 10,000 persons

15.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.413

37.9
Average Distance to Airport (km)

39.2
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 210 / 221 CANTONS ASSESSED **SCORE: 0.288**

Loreto exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.336

5.9	6.8%	0	46.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.239

41.8	12.9	9.2	10.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 206 / 221 CANTONS ASSESSED
SCORE: 0.363

Loreto's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Constraints | **Energy Capacity** | **Emergency Services** | **Marginalization**

KEY FACTORS INFLUENCING RESILIENCE

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

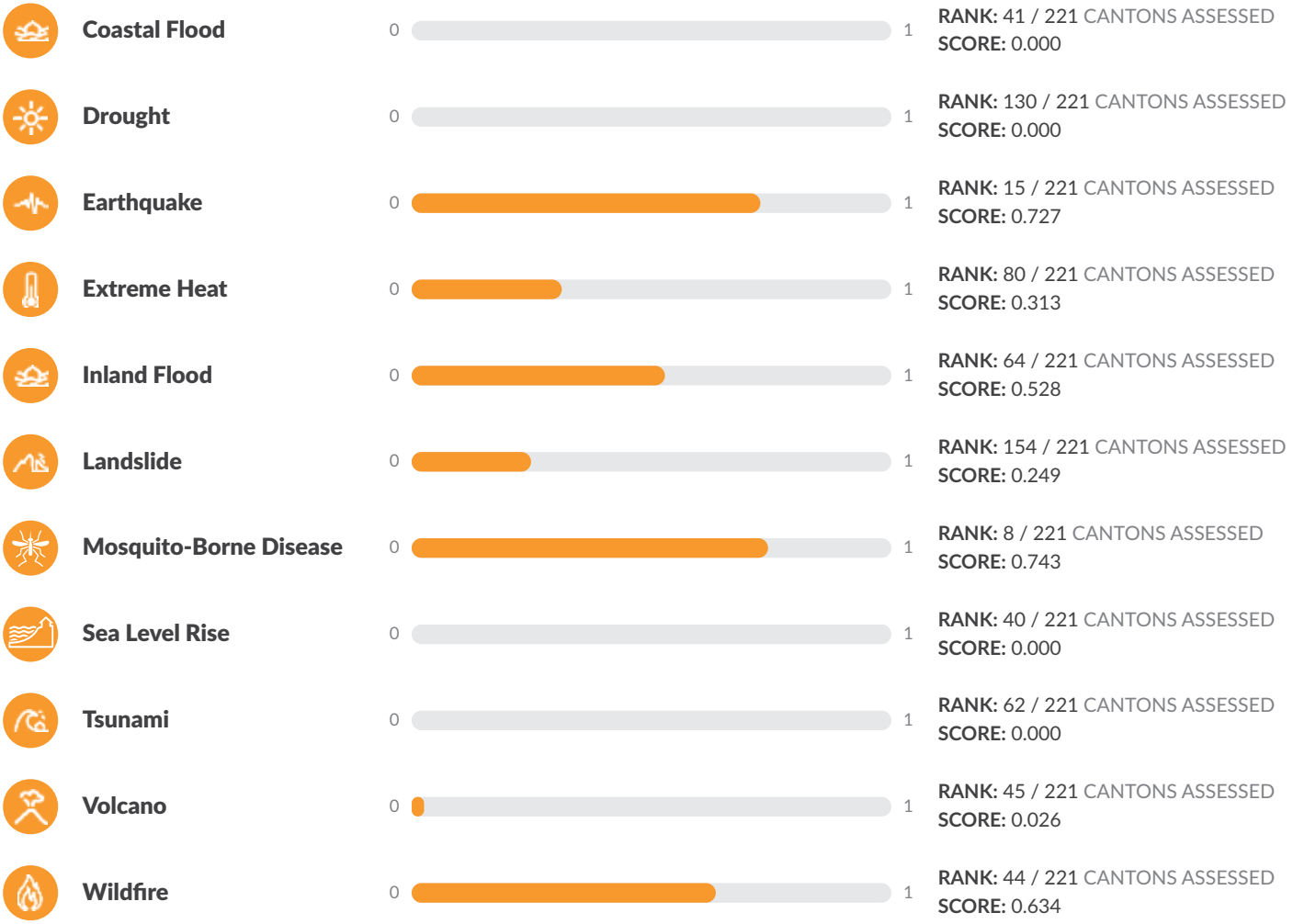
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

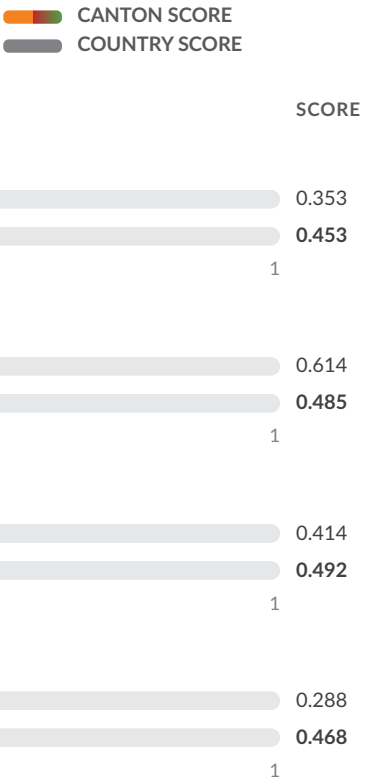


MULTI-HAZARD RISK (MHR)

RANKED
43 / 221
CANTONS ASSESSED
SCORE: 0.566

Loreto's score and ranking are due to Low Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

MACARÁ

NDPBA SUBNATIONAL PROFILE

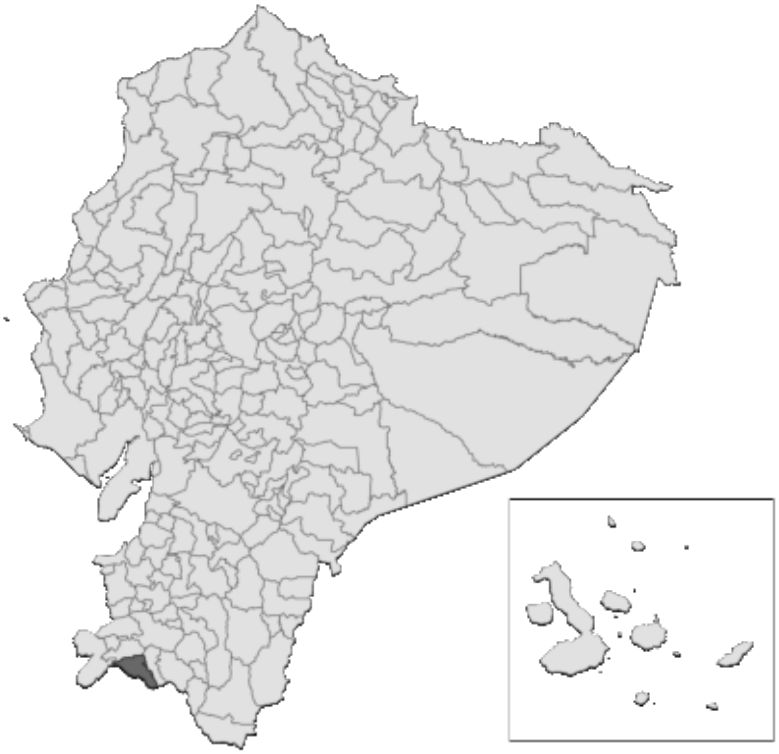
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ECUADOR

MACARÁ

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.492 • RANK: 113/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.492 • RANK: 100/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.445 • RANK: 111/221 CANTONS ASSESSED

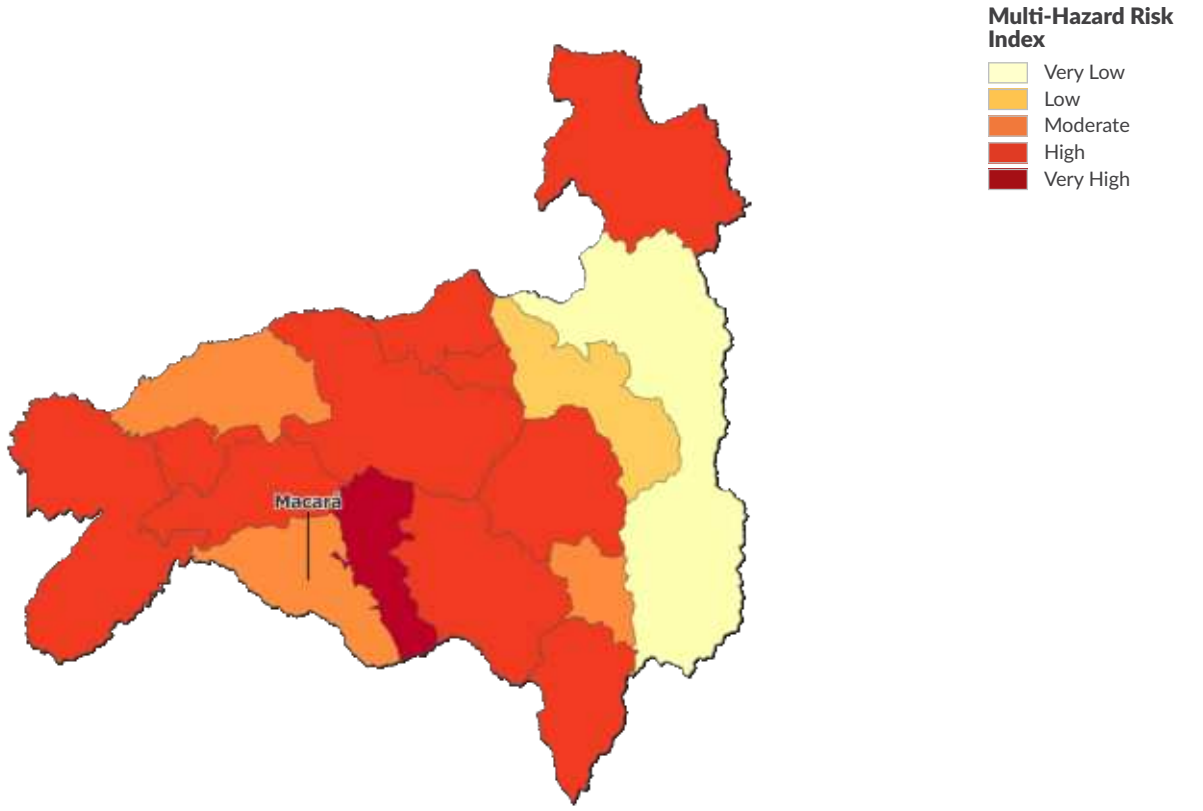
Vulnerability (V) - Low
SCORE: 0.425 • RANK: 170/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.438 • RANK: 155/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.463 • RANK: 105/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

MACARÁ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590	Chaguarpamba	0.524
Espíndola	0.548	Olmedo	0.521
Saraguro	0.548	Celica	0.520
Zapotillo	0.546	Quilanga	0.494
Gonzanamá	0.544	Puyango	0.493
Calvas	0.536	**Macará**	**0.492**
Paltas	0.532	Catamayo	0.467
Pindal	0.528	Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 111 / 221 CANTONS ASSESSED
SCORE: 0.445



MHE
0.445

Raw MHE
0.436

Relative MHE
0.453

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
100%
21,288 people exposed
9,791 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Earthquake
100%
21,288 people exposed
9,791 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
149 people exposed
105 structures exposed (1%)
Critical Infrastructure Exposed: 6%

Landslide
49%
10,527 people exposed
4,897 structures exposed (50%)
Critical Infrastructure Exposed: 57%

Mosquito-Borne Disease
95%
20,186 people exposed
9,212 structures exposed (94%)
Critical Infrastructure Exposed: 97%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
33%
6,952 people exposed
4,143 structures exposed (42%)
Critical Infrastructure Exposed: 38%

VULNERABILITY (V)

RANK: 170 / 221 CANTONS ASSESSED **SCORE: 0.425**

Vulnerability in Macará is primarily driven by Housing and Transportation Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.384

- **10.1** Average Years of Schooling
- **49.2%** Population (age 24 and over) with General Basic Education Schooling
- **3.3%** Population (age 24 and over) with No Schooling
- **3.2%** Adult Illiteracy Rate
- **41.3%** Households with No Internet Access
- **59.3%** Households with No Access to Television
- **74.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.462

- **84.9%** Homes with Access to Public Water Source
- **65.6%** Homes Connected to the Public Sewage System
- **23.5%** Homes without Piped Water
- **9.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.480

- **63.4** Age Dependency Ratio
- **12.3%** Unemployment Rate
- **45.2%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.535

- **4.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.429

- **0.4** Female to Male Labor Ratio (distance from parity)
- **58.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **22.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **49.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.369

- **9.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.374

- **30.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.611

61
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

44
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

42
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.481

15%
Homes with Exterior Walls in Poor Condition

1.6%
Homes with Inadequate Materials Used in Outer Walls

18.4%
Homes with Roofs in Poor Condition

82.4%
Households with No Access to Vehicle for Private Use

10.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.411

31.8
Population Density (persons per sq km)

-0.4
Average Annual Population Change (2010-2022)

22
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.370

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 155 / 221 CANTONS ASSESSED **SCORE: 0.438**

Macará exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.395

54%
Labor Force Participation

40,838
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.267

0%
Protected Area (% of land area)

-5,789.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.376

76.1%
Voter Participation

80.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.601

Communications Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.710

27.7%
Household Access to Fixed Phones

86%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.676

98.4%
Homes Served by the Public Electricity Network

76.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.507

12.6
Nurses and Midwives per 10,000 persons

22.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.509

7
Average Distance to Airport (km)

106.7
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 105 / 221 CANTONS ASSESSED **SCORE: 0.463**

Macará exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.396

2.7	1.9%	1.1	89.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.531

7	5.8	4.4	5.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 100 / 221 CANTONS ASSESSED
SCORE: 0.492

Macará's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance **Economic Capacity** **Mass Care Support** **Healthcare Capacity**

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

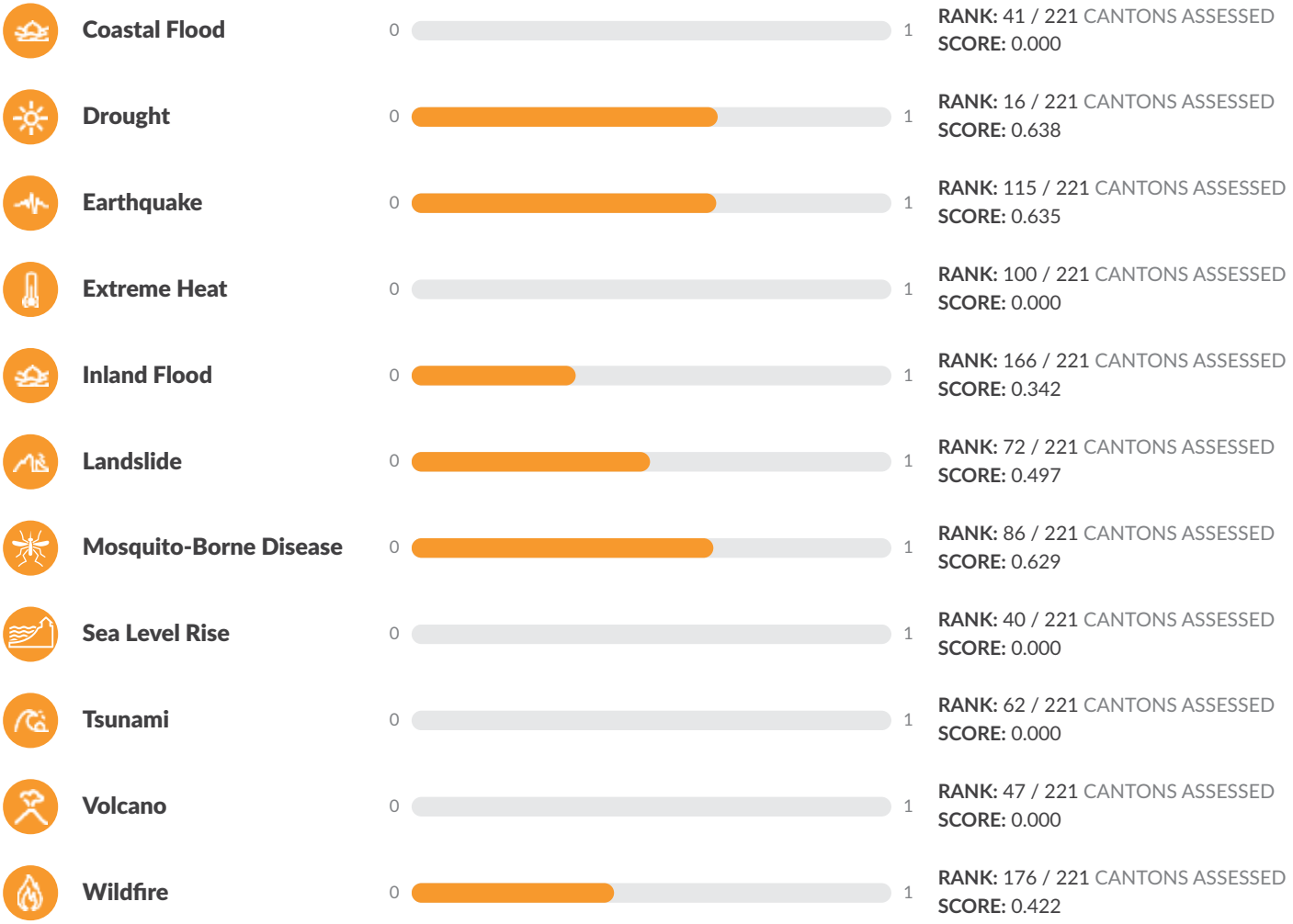
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
113 / 221
CANTONS ASSESSED
SCORE: 0.492

Macará's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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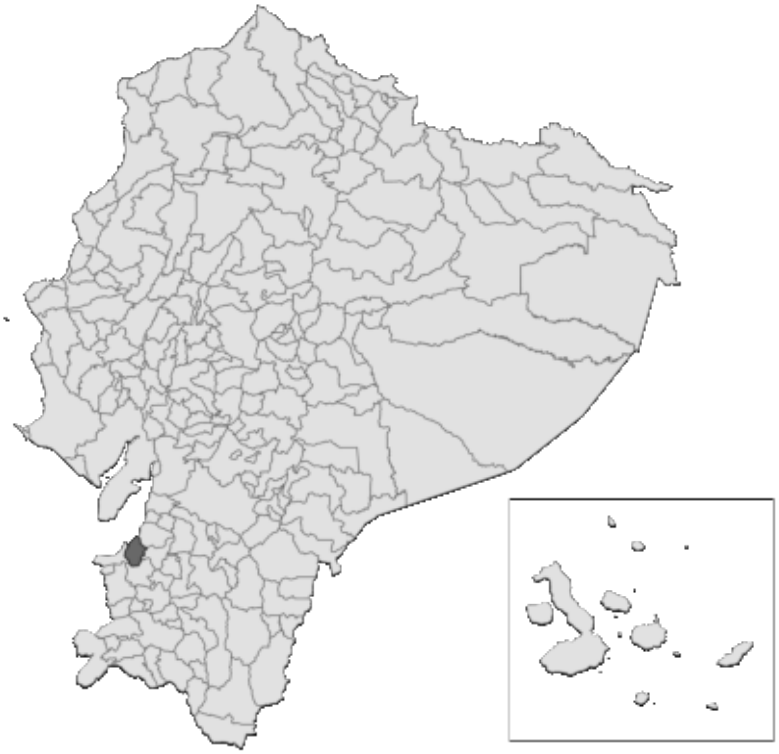
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MACHALA

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.469 • RANK: 133/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.427 • RANK: 164/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.682 • RANK: 4/221 CANTONS ASSESSED

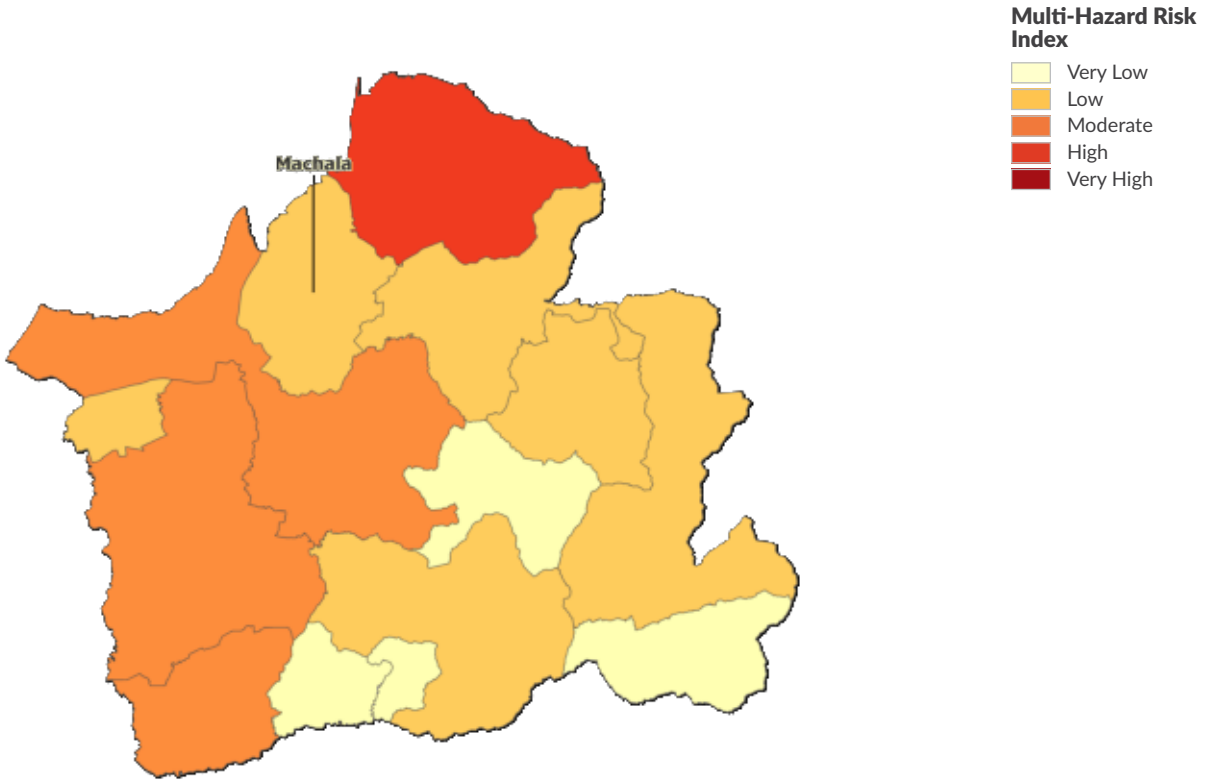
Coping Capacity (CC) - Very High
SCORE: 0.691 • RANK: 9/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.921 • RANK: 2/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.782 • RANK: 1/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

MACHALA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521	Piñas	0.440
Santa Rosa	0.502	Zaruma	0.440
Arenillas	0.496	Huaquillas	0.435
Las Lajas	0.485	Portovelo	0.424
Machala	**0.469**	Balsas	0.420
Pasaje	0.454	Marcabelí	0.394
Chilla	0.453	Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 2 / 221 CANTONS ASSESSED
SCORE: 0.921



MHE
0.921

Raw MHE
0.936

Relative MHE
0.906

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
12%
- **34,719** people exposed
- **10,064** structures exposed (12%)

Critical Infrastructure Exposed: 14%

Drought
100%
- **286,140** people exposed
- **81,444** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **286,140** people exposed
- **81,444** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **286,140** people exposed
- **81,444** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
17%
- **48,893** people exposed
- **18,866** structures exposed (23%)

Critical Infrastructure Exposed: 31%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
89%
- **254,375** people exposed
- **73,839** structures exposed (91%)

Critical Infrastructure Exposed: 83%

Sea Level Rise
3%
- **8,152** people exposed
- **3,176** structures exposed (4%)

Critical Infrastructure Exposed: 8%

Tsunami
100%
- **285,325** people exposed
- **81,325** structures exposed (100%)

Critical Infrastructure Exposed: 93%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
14%
- **38,985** people exposed
- **13,010** structures exposed (16%)

Critical Infrastructure Exposed: 8%

VULNERABILITY (V)

RANK: 164 / 221 CANTONS ASSESSED **SCORE: 0.427**

Vulnerability in Machala is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.209

- **12.1** Average Years of Schooling
- **32.1%** Population (age 24 and over) with General Basic Education Schooling
- **2%** Population (age 24 and over) with No Schooling
- **1.6%** Adult Illiteracy Rate
- **29.3%** Households with No Internet Access
- **64.7%** Households with No Access to Television
- **59.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.268

- **91.6%** Homes with Access to Public Water Source
- **87.2%** Homes Connected to the Public Sewage System
- **15.1%** Homes without Piped Water
- **4.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.359

- **49.8** Age Dependency Ratio
- **13.8%** Unemployment Rate
- **33.5%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.399

- **2.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.398

- **0.3** Female to Male Labor Ratio (distance from parity)
- **35.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **41.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **57.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.533

- **6.4%** Prevalence of Disability (among persons age 5 and over)
- **9.3** Perinatal Mortality Rate (per 1,000 births)
- **8.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.550

- **21.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **18.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.517

68	19	30	33
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.367

7.8%	4.7%	9.6%	78.6%	7.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.637

822.7	1.9%	30.6	0.26
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.652

0.4	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 9 / 221 CANTONS ASSESSED **SCORE: 0.691**

Machala exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.815

62%
Labor Force Participation

2,260,529
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.309

0%
Protected Area (% of land area)

-2,938.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.657

81.7%
Voter Participation

98.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.730

Communications Capacity

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.742

16%
Household Access to Fixed Phones

92%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.748

99%
Homes Served by the Public Electricity Network

79.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.617

22.7
Nurses and Midwives per 10,000 persons

24
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.810

11.4
Average Distance to Airport (km)

6.2
Average Distance to Sea or River Port (km)

3.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 1 / 221 CANTONS ASSESSED **SCORE: 0.782**

Machala exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.694

1	0.9%	2.2	3.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.870

2.4	2	1.4	1.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 4 / 221 CANTONS ASSESSED
SCORE: 0.682

Machala's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Population Pressures

Vulnerable Health Status

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

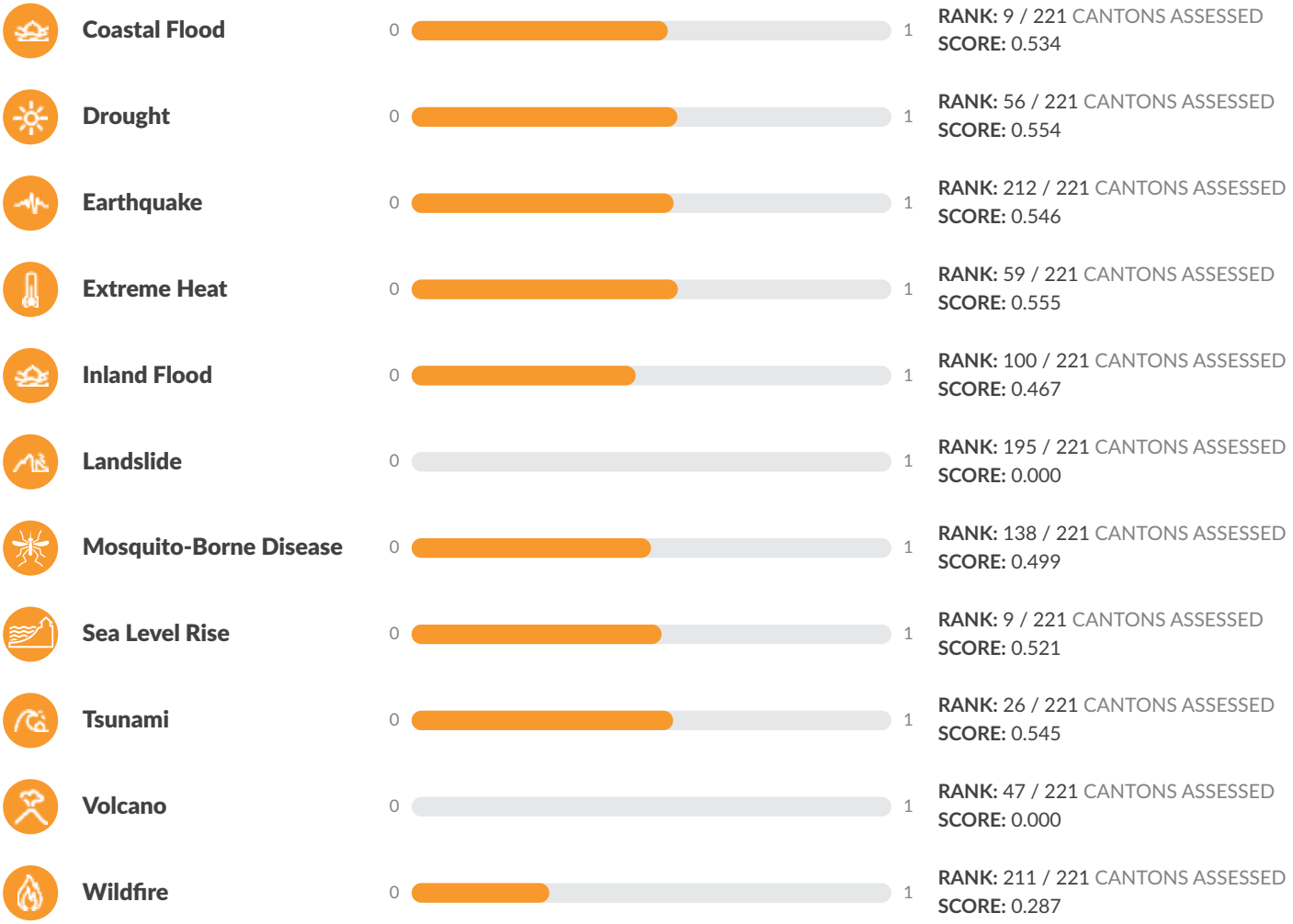
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

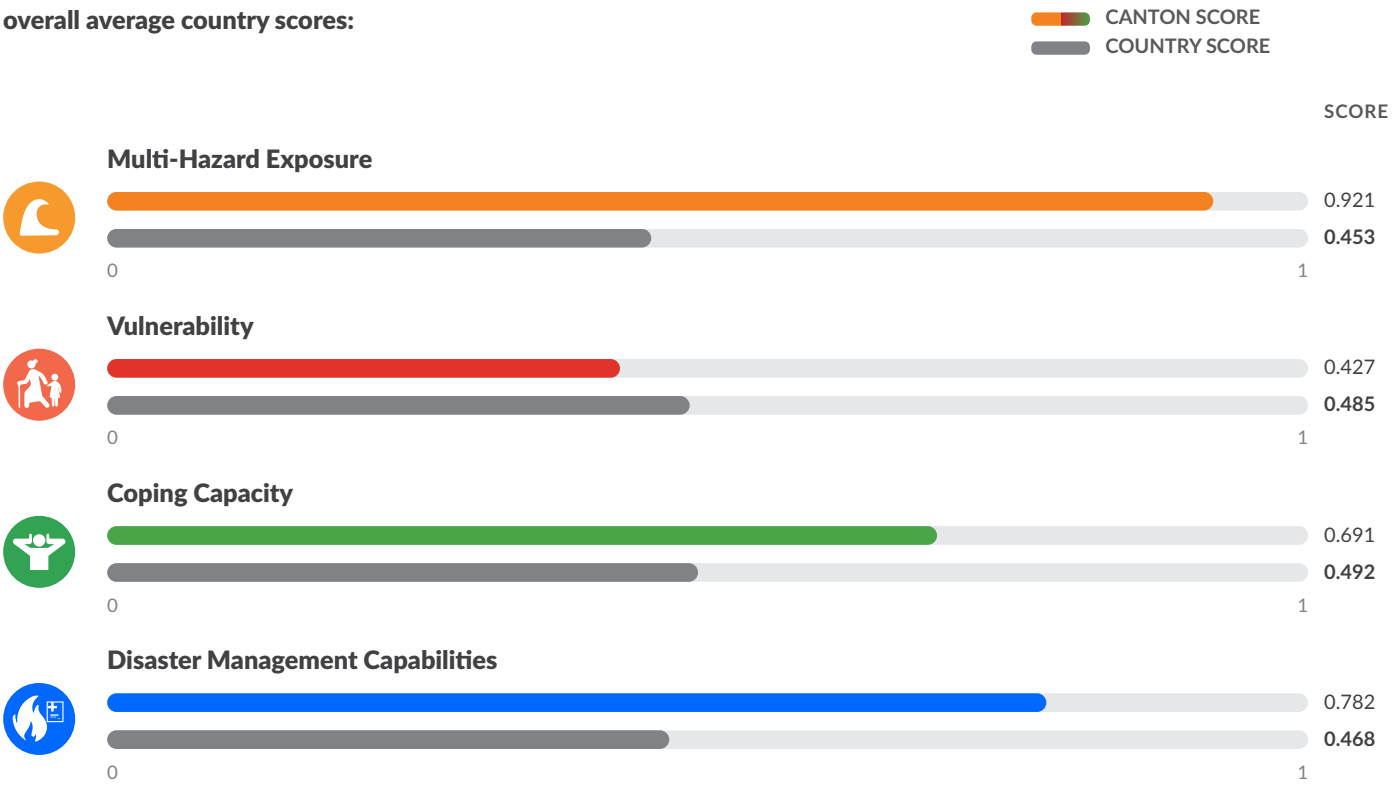


MULTI-HAZARD RISK (MHR)

RANKED
133 / 221
CANTONS ASSESSED
SCORE: 0.469

Machala's score and ranking are due to Very High Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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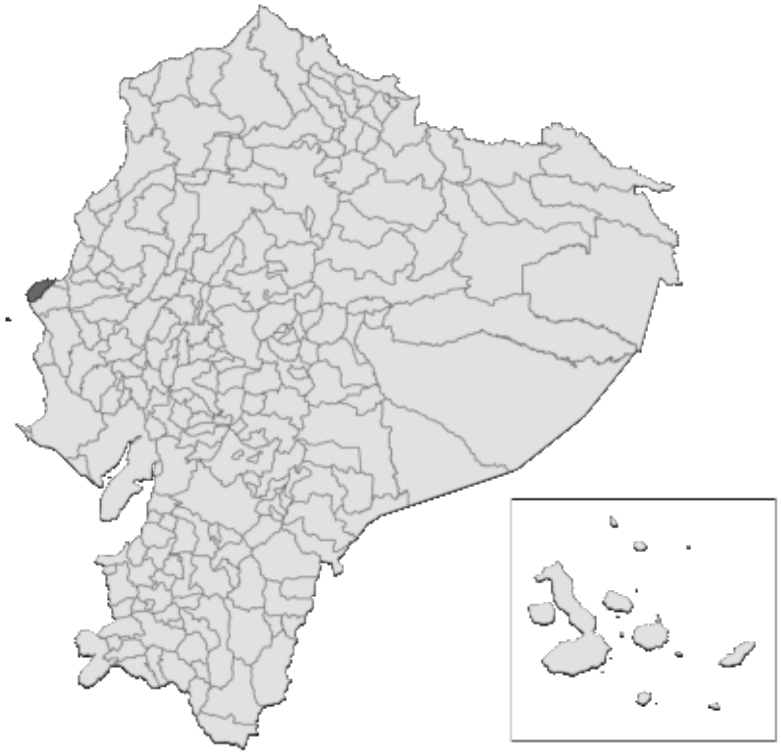
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MANTA

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.415 • RANK: 193/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.440 • RANK: 153/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.691 • RANK: 3/221 CANTONS ASSESSED

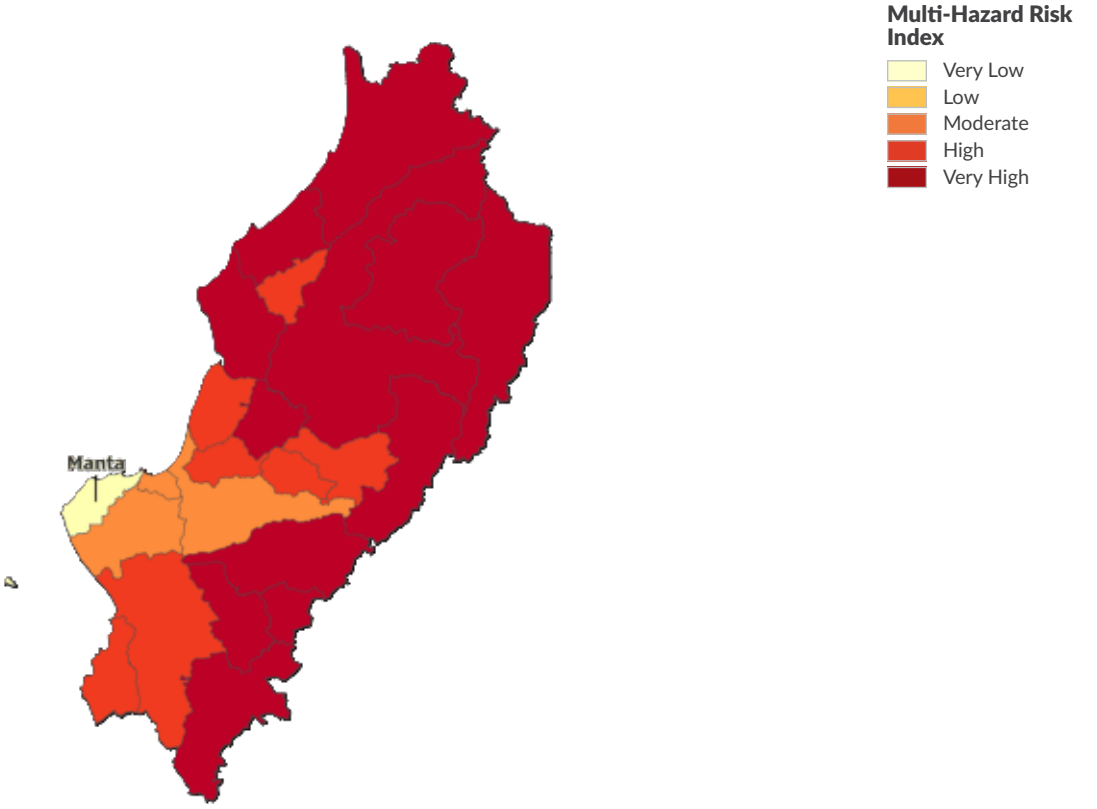
Coping Capacity (CC) - Very High
SCORE: 0.747 • RANK: 3/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.734 • RANK: 17/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.765 • RANK: 2/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

MANTA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	**Manta**	**0.415**
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 17 / 221 CANTONS ASSESSED
SCORE: 0.734



MHE
0.734

Raw MHE
0.888

Relative MHE
0.580

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **344** people exposed
- **407** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 8%

Drought
100%
- **262,823** people exposed
- **92,397** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **262,823** people exposed
- **92,397** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
85%
- **224,035** people exposed
- **80,170** structures exposed (87%)
- **Critical Infrastructure Exposed:** 86%

Inland Flood
2%
- **4,735** people exposed
- **1,453** structures exposed (2%)
- **Critical Infrastructure Exposed:** 9%

Landslide
1%
- **3,254** people exposed
- **2,033** structures exposed (2%)
- **Critical Infrastructure Exposed:** 6%

Mosquito-Borne Disease
78%
- **204,211** people exposed
- **71,743** structures exposed (78%)
- **Critical Infrastructure Exposed:** 76%

Sea Level Rise
<1%
- **173** people exposed
- **218** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 7%

Tsunami
17%
- **43,432** people exposed
- **14,309** structures exposed (15%)
- **Critical Infrastructure Exposed:** 34%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
24%
- **61,959** people exposed
- **21,507** structures exposed (23%)
- **Critical Infrastructure Exposed:** 21%

VULNERABILITY (V)

RANK: 153 / 221 CANTONS ASSESSED **SCORE: 0.440**

Vulnerability in Manta is primarily driven by Population Pressures and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.301

- **11.8** Average Years of Schooling
- **34%** Population (age 24 and over) with General Basic Education Schooling
- **3.4%** Population (age 24 and over) with No Schooling
- **3%** Adult Illiteracy Rate
- **35.1%** Households with No Internet Access
- **73%** Households with No Access to Television
- **61.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.263

- **91.2%** Homes with Access to Public Water Source
- **83.7%** Homes Connected to the Public Sewage System
- **18.4%** Homes without Piped Water
- **3.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.350

- **47.9** Age Dependency Ratio
- **16.6%** Unemployment Rate
- **32.4%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.525

- **4.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.357

- **0.3** Female to Male Labor Ratio (distance from parity)
- **39.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **32.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **38.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.500

- **7.5%** Prevalence of Disability (among persons age 5 and over)
- **4.6** Perinatal Mortality Rate (per 1,000 births)
- **10%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.443

- **23.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **16.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.493

79	14	33	23
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.394

11%	6.6%	11.7%	73.4%	6.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.725

934.7	1.5%	50.9	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.615

0.7	0.3	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 3 / 221 CANTONS ASSESSED **SCORE: 0.747**

Manta exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.793

61.5%
Labor Force Participation

1,908,584
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.645

16.4%
Protected Area (% of land area)

-1,337.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.756

85.6%
Voter Participation

99.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.726

Communications Capacity

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.650

13%
Household Access to Fixed Phones

89.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.706

98.8%
Homes Served by the Public Electricity Network

77.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.666

23.3
Nurses and Midwives per 10,000 persons

31.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.883

7.3
Average Distance to Airport (km)

6.4
Average Distance to Sea or River Port (km)

5.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 2 / 221 CANTONS ASSESSED **SCORE: 0.765**

Manta exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.668

1	3%	1.9	18
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.862

2.6	3	1.3	1.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 3 / 221 CANTONS ASSESSED
SCORE: 0.691

Manta's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Disaster Impacts

Vulnerable Health Status

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

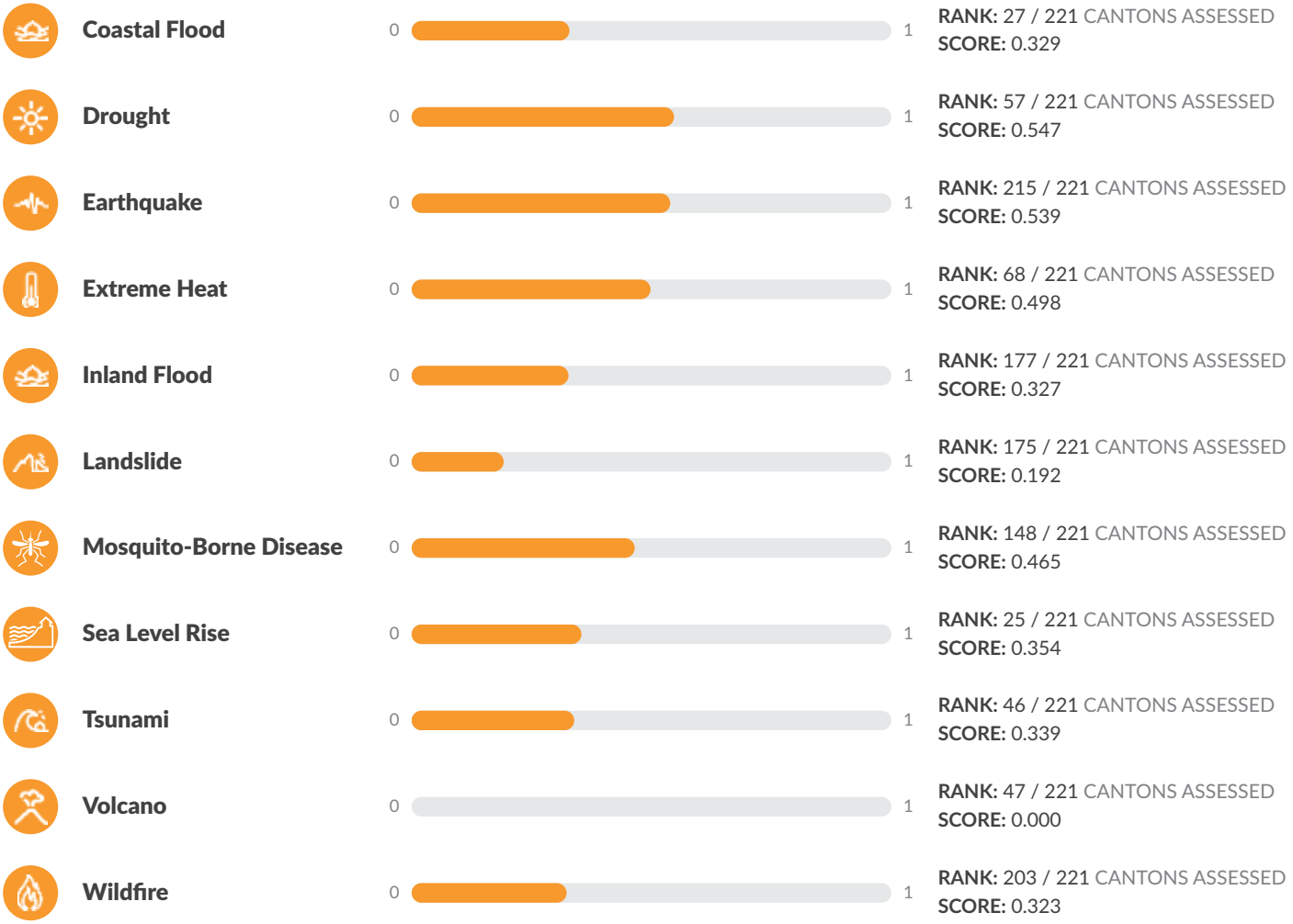
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

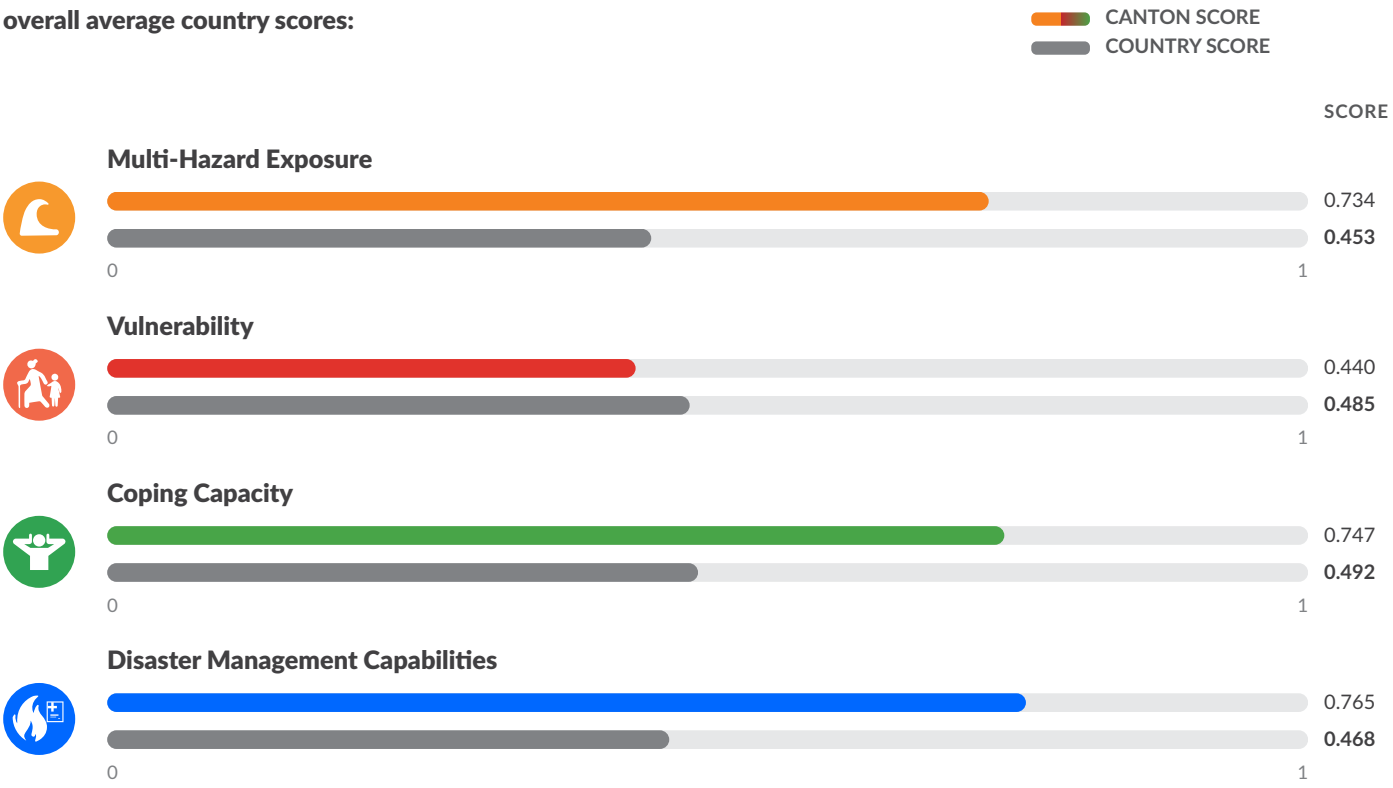


MULTI-HAZARD RISK (MHR)

RANKED
193 / 221
CANTONS ASSESSED
SCORE: 0.415

Manta's score and ranking are due to Very High Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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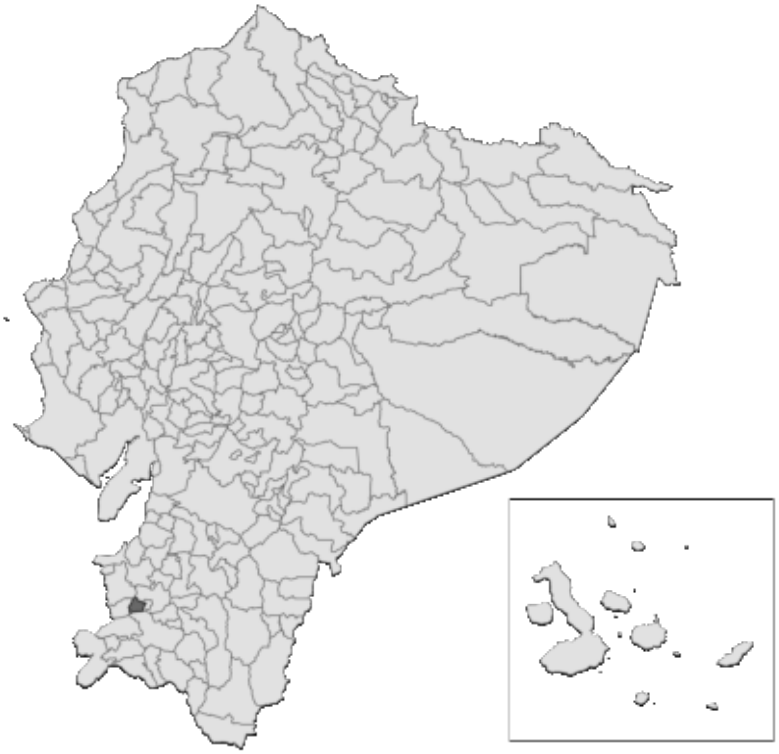
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MARCABELÍ

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.394 • RANK: 202/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.359 • RANK: 206/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.534 • RANK: 72/221 CANTONS ASSESSED

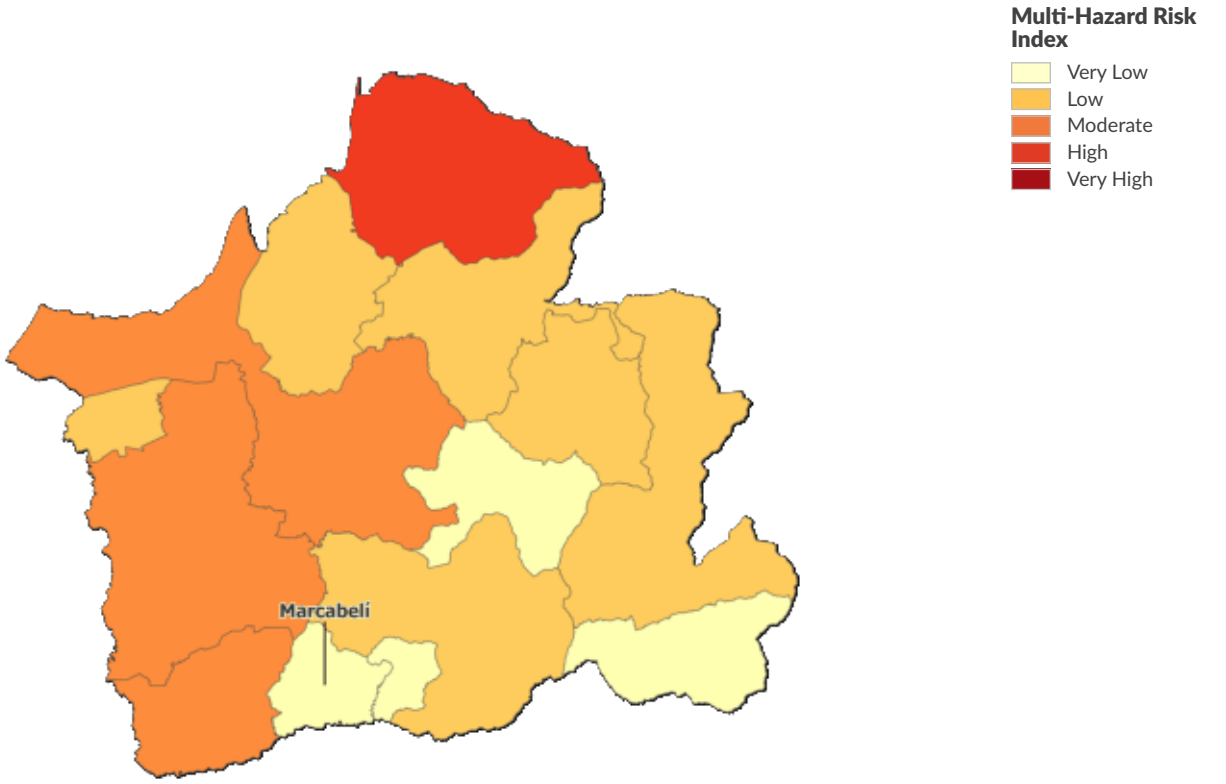
Coping Capacity (CC) - Moderate
SCORE: 0.506 • RANK: 97/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.179 • RANK: 212/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.454 • RANK: 116/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

MARCABELÍ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	0.435
Portovelo	0.424
Balsas	0.420
Marcabelí	**0.394**
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 212 / 221 CANTONS ASSESSED
SCORE: 0.179



MHE
0.179

Raw MHE
0.223

Relative MHE
0.134

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
6%
- **390** people exposed
- **296** structures exposed (5%)

Critical Infrastructure Exposed: 2%

Earthquake
100%
- **6,321** people exposed
- **5,513** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
6%
- **393** people exposed
- **360** structures exposed (7%)

Critical Infrastructure Exposed: 6%

Landslide
31%
- **1,968** people exposed
- **2,100** structures exposed (38%)

Critical Infrastructure Exposed: 28%

Mosquito-Borne Disease
100%
- **6,321** people exposed
- **5,511** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
46%
- **2,906** people exposed
- **2,875** structures exposed (52%)

Critical Infrastructure Exposed: 35%

VULNERABILITY (V)

RANK: 206 / 221 CANTONS ASSESSED **SCORE: 0.359**

Vulnerability in Marcabelí is primarily driven by Population Pressures and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.378

- **10.2** Average Years of Schooling
- **47.4%** Population (age 24 and over) with General Basic Education Schooling
- **3.6%** Population (age 24 and over) with No Schooling
- **3%** Adult Illiteracy Rate
- **34%** Households with No Internet Access
- **72.5%** Households with No Access to Television
- **69%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.239

- **93.2%** Homes with Access to Public Water Source
- **78.9%** Homes Connected to the Public Sewage System
- **11.3%** Homes without Piped Water
- **3.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.369

- **55.6** Age Dependency Ratio
- **10.6%** Unemployment Rate
- **29%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.424

- **3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.405

- **0.4** Female to Male Labor Ratio (distance from parity)
- **35.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **50%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **34.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.344

- **8.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.310

- **65** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.530

90
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

4
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

32
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

108
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.276

6%
Homes with Exterior Walls in Poor Condition

0.4%
Homes with Inadequate Materials Used in Outer Walls

8.8%
Homes with Roofs in Poor Condition

78.8%
Households with No Access to Vehicle for Private Use

5.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.457

46.3
Population Density (persons per sq km)

1.9%
Average Annual Population Change (2010-2022)

10.9
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.389

0.3
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 97 / 221 CANTONS ASSESSED **SCORE: 0.506**

Marcabelí exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.395

59.5%
Labor Force Participation

12,181
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.334

0%
Protected Area (% of land area)

-1,300
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.581

81.8%
Voter Participation

93.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.600

Communications Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.818

21.2%
Household Access to Fixed Phones

93.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.841

99.1%
Homes Served by the Public Electricity Network

86.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.273

7.3
Nurses and Midwives per 10,000 persons

8.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.469

38.6
Average Distance to Airport (km)

41.9
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 116 / 221 CANTONS ASSESSED **SCORE: 0.454**

Marcabelí exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.409

1.5	5.3%	0	57.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.499

26.5	2.9	2.4	10.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 72 / 221 CANTONS ASSESSED
SCORE: 0.534

Marcabelí's score and ranking are due to Very Low Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Economic Capacity

Mass Care Support

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

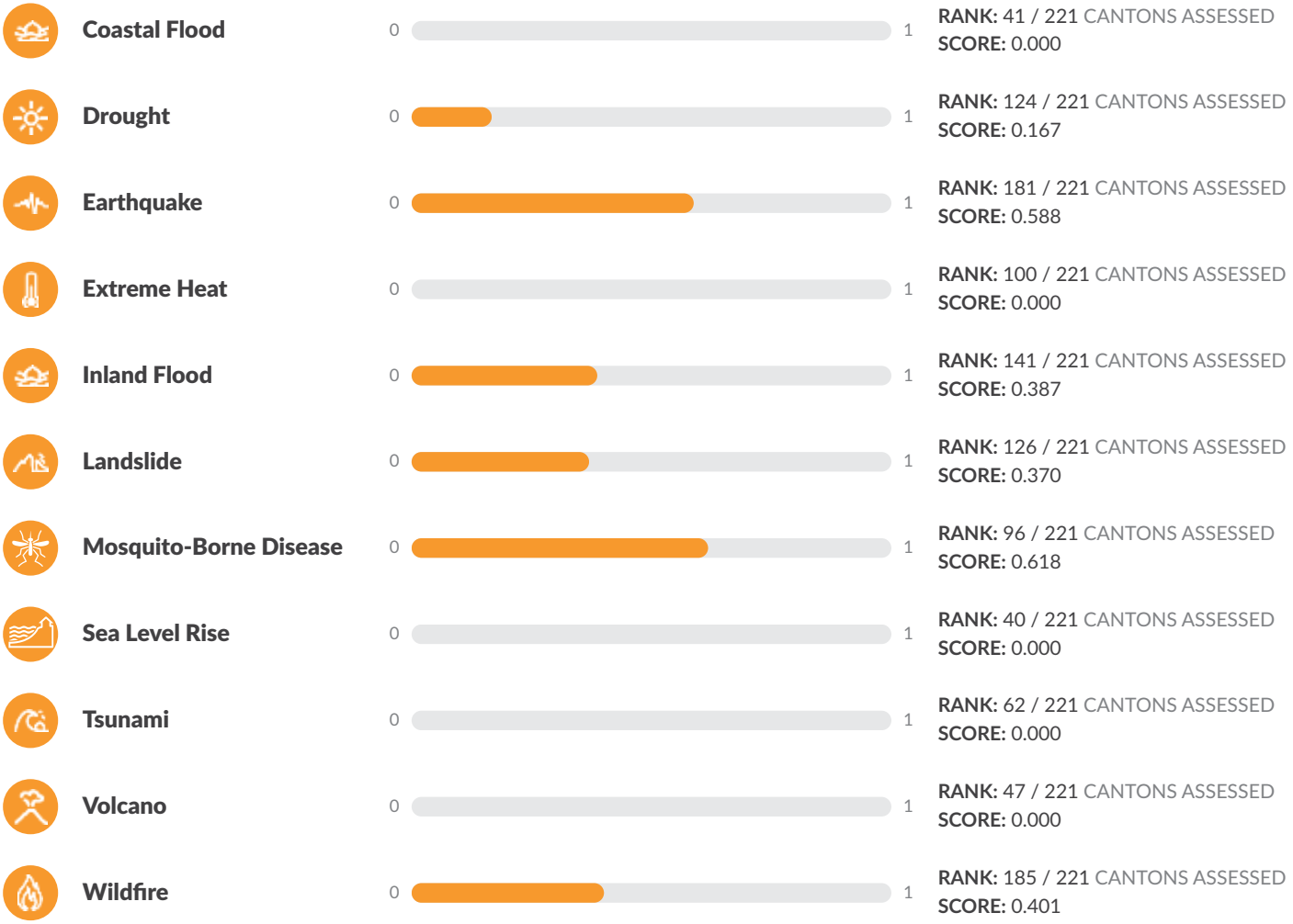
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)



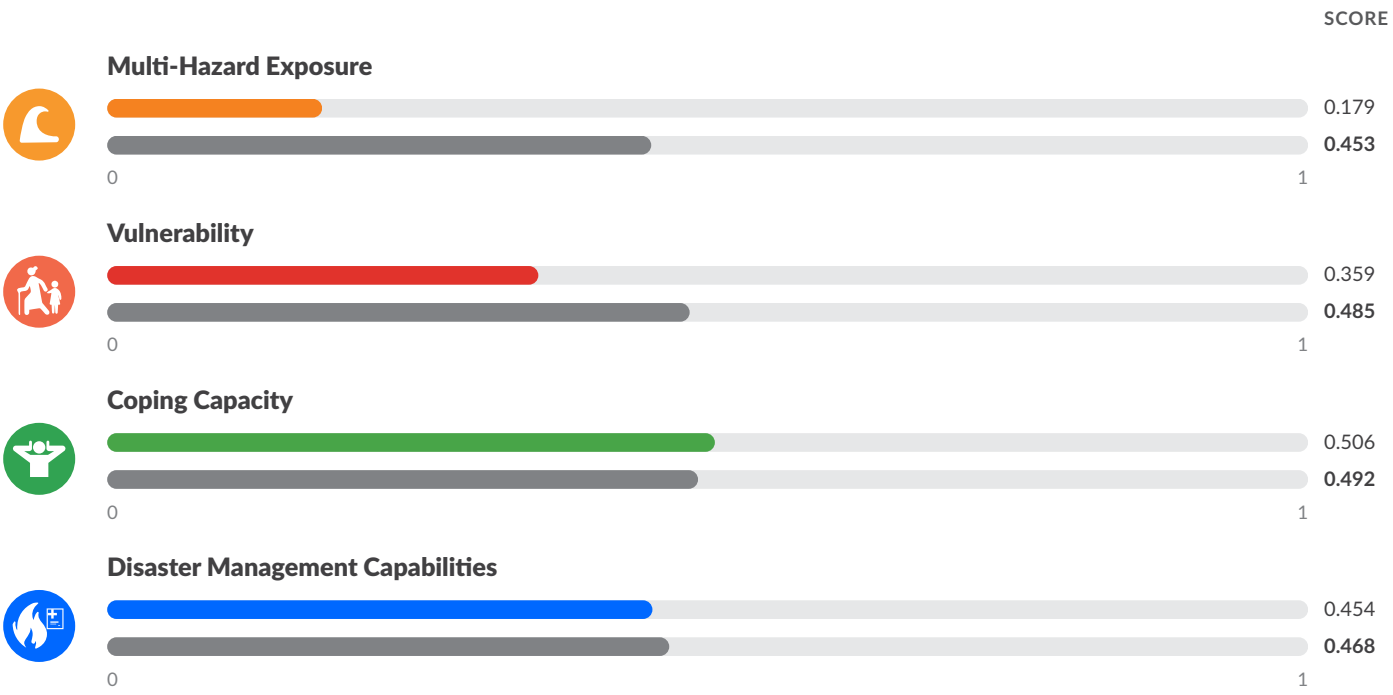
MULTI-HAZARD RISK (MHR)

RANKED
202 / 221
CANTONS ASSESSED
SCORE: 0.394

Marcabelí's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE



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MEJÍA

NDPBA SUBNATIONAL PROFILE

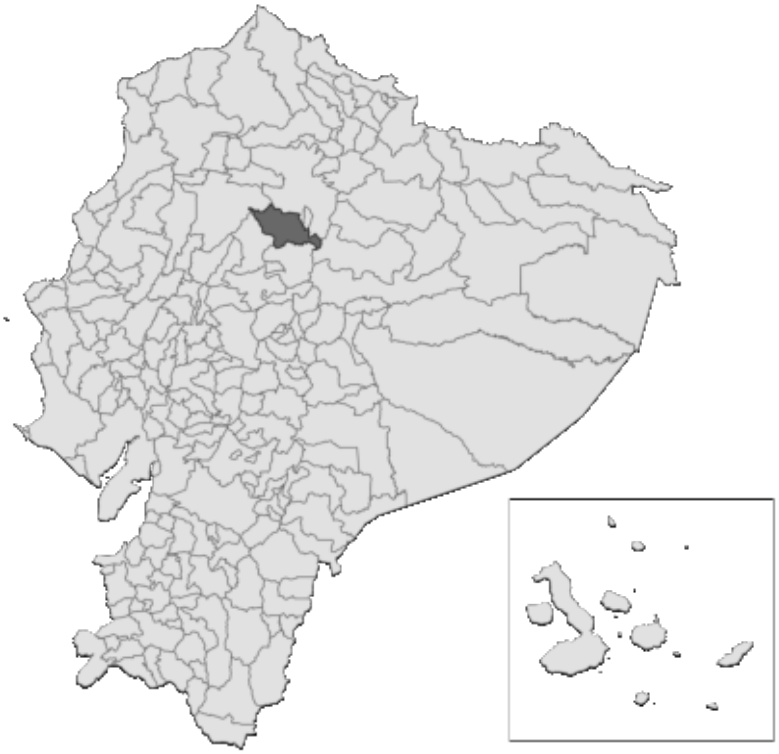
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MEJÍA

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.442 • RANK: 161/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.364 • RANK: 203/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.585 • RANK: 37/221 CANTONS ASSESSED

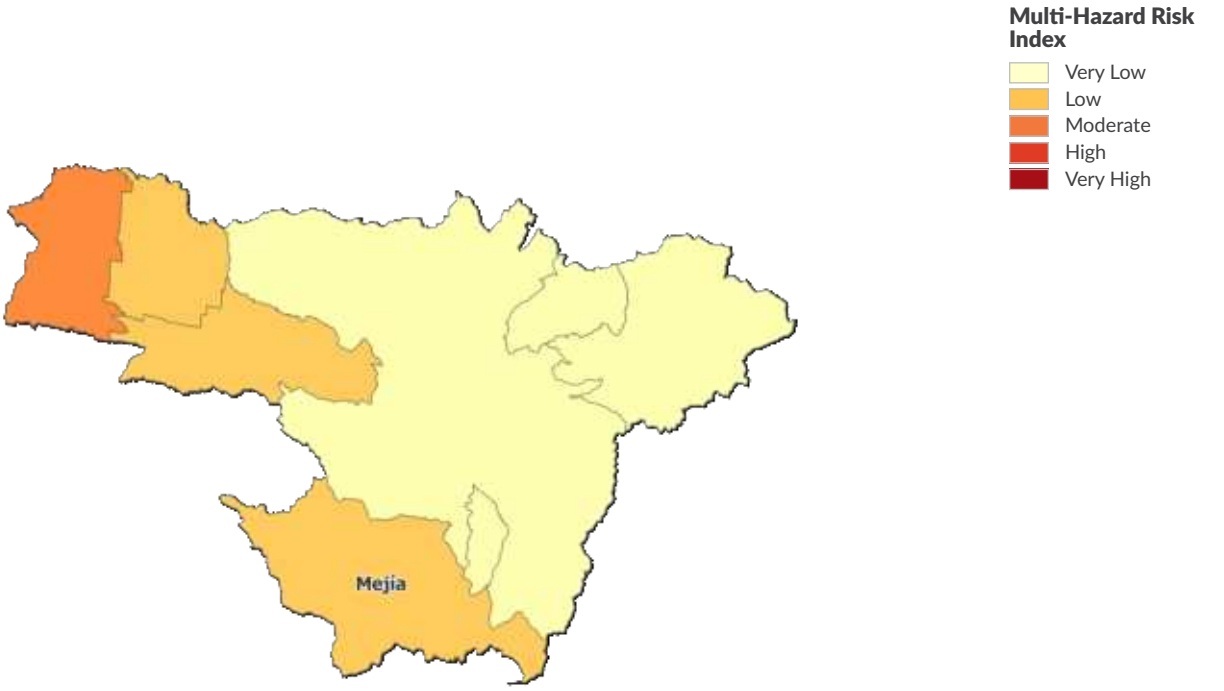
Coping Capacity (CC) - Very High
SCORE: 0.663 • RANK: 16/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.521 • RANK: 72/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.455 • RANK: 114/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

MEJÍA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	0.504
San Miguel De Los Bancos	0.463
Pedro Vicente Maldonado	0.449
Mejía	**0.442**
Cayambe	0.412
Distrito Metropolitano De Quito	0.393
Pedro Moncayo	0.381
Rumiñahui	0.313

MULTI-HAZARD EXPOSURE (MHE)

RANK: 72 / 221 CANTONS ASSESSED
SCORE: 0.521



MHE
0.521

Raw MHE
0.720

Relative MHE
0.321

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
101,634 people exposed
61,297 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
26%
25,967 people exposed
14,996 structures exposed (24%)
Critical Infrastructure Exposed: 27%

Landslide
24%
24,743 people exposed
19,292 structures exposed (31%)
Critical Infrastructure Exposed: 35%

Mosquito-Borne Disease
27%
27,442 people exposed
14,421 structures exposed (24%)
Critical Infrastructure Exposed: 38%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
46%
46,295 people exposed
29,457 structures exposed (48%)
Critical Infrastructure Exposed: 37%

Wildfire
100%
101,618 people exposed
61,289 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 203 / 221 CANTONS ASSESSED **SCORE: 0.364**

Vulnerability in Mejía is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.336

- **10.9** Average Years of Schooling
- **37.7%** Population (age 24 and over) with General Basic Education Schooling
- **5%** Population (age 24 and over) with No Schooling
- **3.9%** Adult Illiteracy Rate
- **35.1%** Households with No Internet Access
- **70.1%** Households with No Access to Television
- **53.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.239

- **94.3%** Homes with Access to Public Water Source
- **86.4%** Homes Connected to the Public Sewage System
- **15.5%** Homes without Piped Water
- **3.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.341

- **49.3** Age Dependency Ratio
- **12.7%** Unemployment Rate
- **26.1%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.442

- **3.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.254

- **0.2** Female to Male Labor Ratio (distance from parity)
- **26.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **45.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **24.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.453

- **6.7%** Prevalence of Disability (among persons age 5 and over)
- **10.2** Perinatal Mortality Rate (per 1,000 births)
- **8.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.274

- **0.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **6.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.370

49
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

18
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.215

5.4%
Homes with Exterior Walls in Poor Condition

0.2%
Homes with Inadequate Materials Used in Outer Walls

7.8%
Homes with Roofs in Poor Condition

70.5%
Households with No Access to Vehicle for Private Use

4.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.501

72.2
Population Density (persons per sq km)

1.9%
Average Annual Population Change (2010-2022)

11.5
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.558

0.5
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 16 / 221 CANTONS ASSESSED **SCORE: 0.663**

Mejía exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.757

64%
Labor Force Participation

616,562
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.562

25.4%
Protected Area (% of land area)

-10,095.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.674

86.4%
Voter Participation

94.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.591

Communications Capacity

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.764

27.7%
Household Access to Fixed Phones

89.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.857

99.2%
Homes Served by the Public Electricity Network

87.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.254

6.7
Nurses and Midwives per 10,000 persons

8.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.488

11.5
Average Distance to Airport (km)

116
Average Distance to Sea or River Port (km)

1.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 114 / 221 CANTONS ASSESSED **SCORE: 0.455**

Mejía exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.322

3.7	6.2%	0.2	104.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.588

7.5	6.3	2.5	4.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 37 / 221 CANTONS ASSESSED
SCORE: 0.585

Mejía's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Disaster Impacts

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

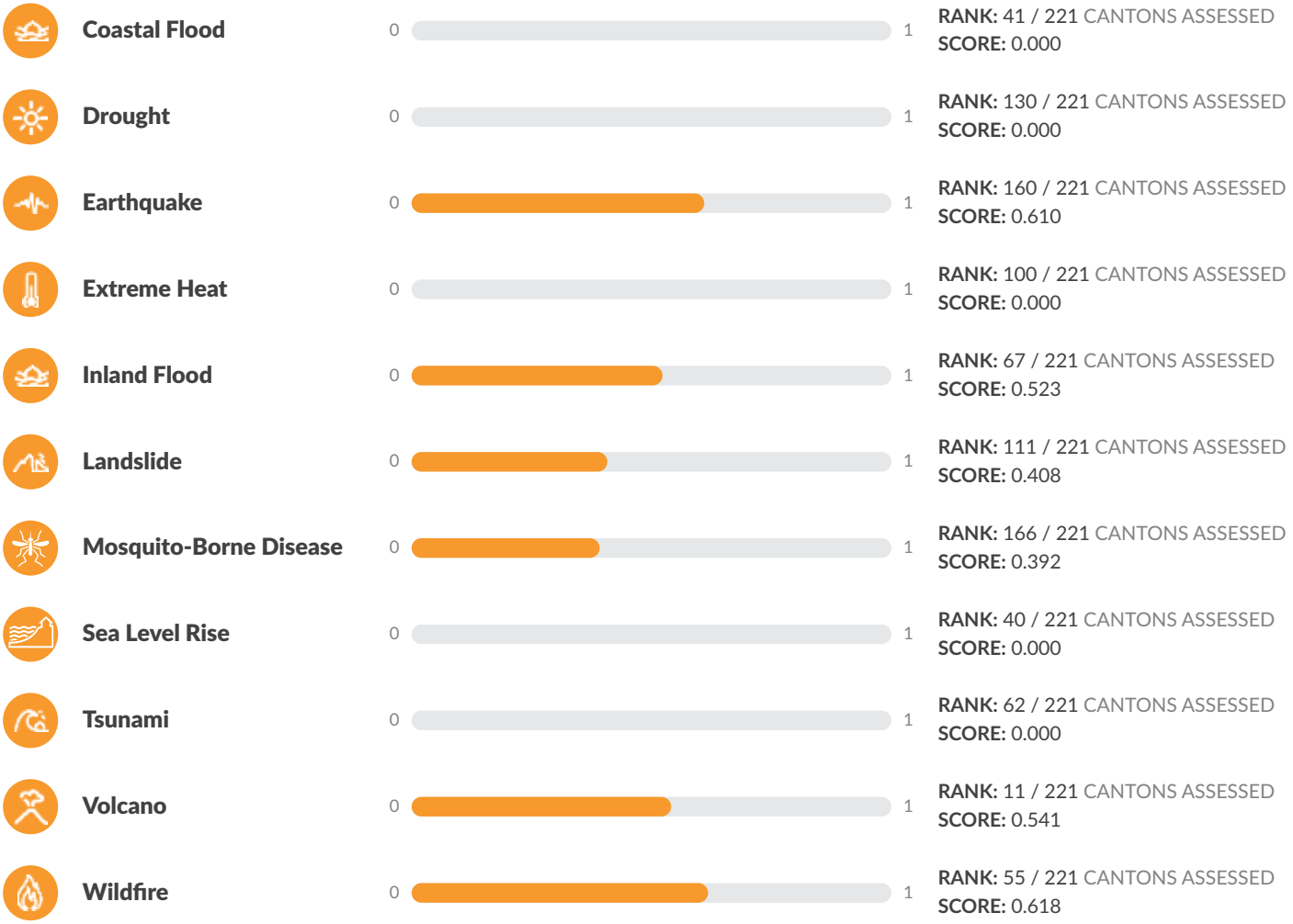
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

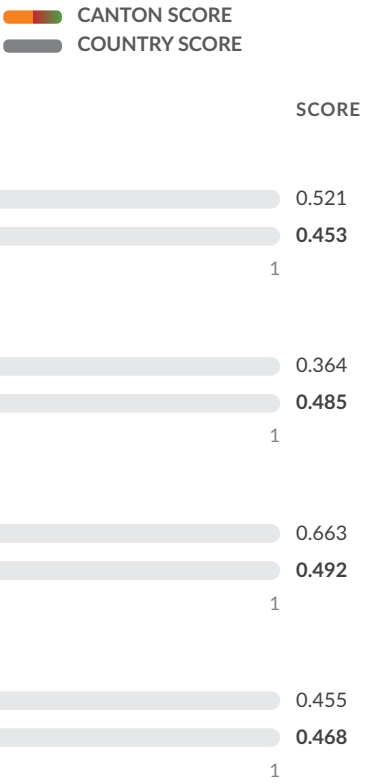


MULTI-HAZARD RISK (MHR)

RANKED
161 / 221
CANTONS ASSESSED
SCORE: 0.442

Mejía's score and ranking are due to High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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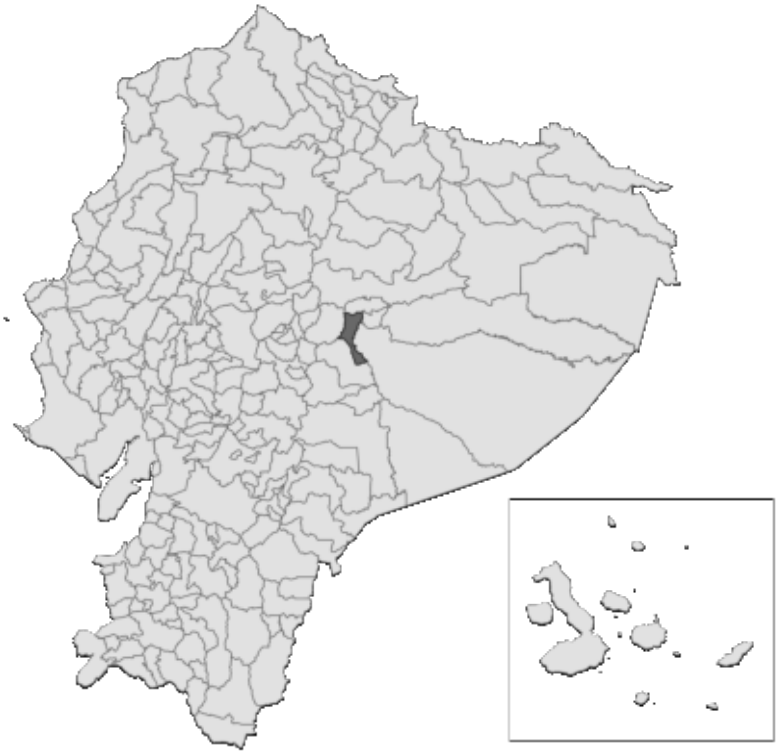
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MERA

PROVINCE: PASTAZA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.413 • RANK: 194/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.433 • RANK: 157/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.514 • RANK: 85/221 CANTONS ASSESSED

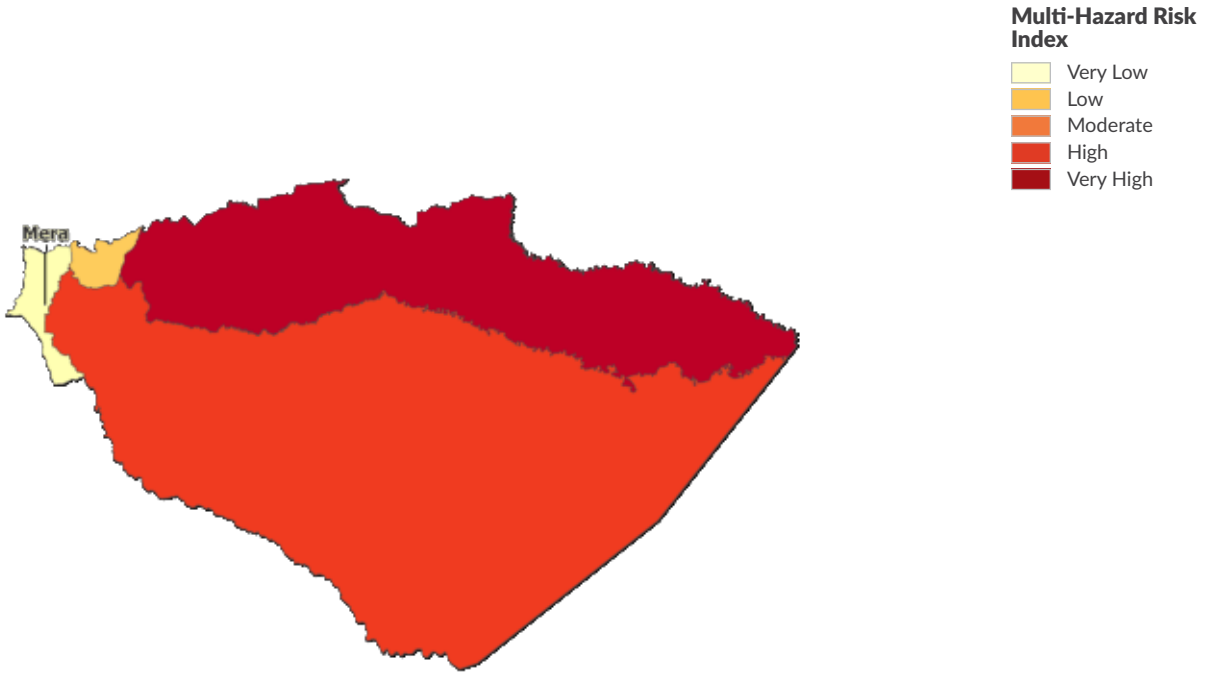
Coping Capacity (CC) - High
SCORE: 0.525 • RANK: 82/221 CANTONS ASSESSED

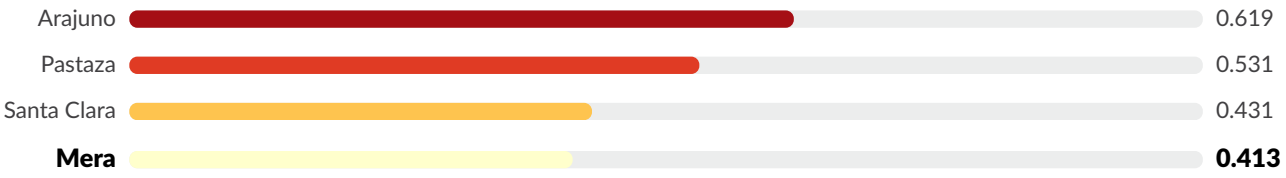
Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.194 • RANK: 210/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.449 • RANK: 122/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PASTAZA PROVINCE

MERA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 210 / 221 CANTONS ASSESSED
SCORE: 0.194



MHE
0.194

Raw MHE
0.308

Relative MHE
0.079

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
15,317 people exposed
9,058 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
7%
1,137 people exposed
889 structures exposed (10%)
Critical Infrastructure Exposed: 28%

Landslide
3%
433 people exposed
551 structures exposed (6%)
Critical Infrastructure Exposed: 14%

Mosquito-Borne Disease
99%
15,200 people exposed
8,897 structures exposed (98%)
Critical Infrastructure Exposed: 95%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
21%
3,214 people exposed
2,284 structures exposed (25%)
Critical Infrastructure Exposed: 43%

VULNERABILITY (V)

RANK: 157 / 221 CANTONS ASSESSED **SCORE: 0.433**

Vulnerability in Mera is primarily driven by Economic Constraints and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.305

- **11.9** Average Years of Schooling
- **28.1%** Population (age 24 and over) with General Basic Education Schooling
- **3.8%** Population (age 24 and over) with No Schooling
- **3.1%** Adult Illiteracy Rate
- **46.4%** Households with No Internet Access
- **68.6%** Households with No Access to Television
- **62.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.526

- **73.5%** Homes with Access to Public Water Source
- **53.5%** Homes Connected to the Public Sewage System
- **37.3%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.591

- **61.2** Age Dependency Ratio
- **20.5%** Unemployment Rate
- **51.2%** Poverty Rate (based on UBN)
- **1.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.490

- **3.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.415

- **0.3** Female to Male Labor Ratio (distance from parity)
- **24.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **68.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **53.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.200

- **4.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.178

- **4.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.382

33
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

12
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

41
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.364

10.3%
Homes with Exterior Walls in Poor Condition

1.3%
Homes with Inadequate Materials Used in Outer Walls

12%
Homes with Roofs in Poor Condition

74.1%
Households with No Access to Vehicle for Private Use

8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.541

28.4
Population Density (persons per sq km)

2.2%
Average Annual Population Change (2010-2022)

15.6
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.509

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 82 / 221 CANTONS ASSESSED **SCORE: 0.525**

Mera exhibits weaker Coping Capacity in the areas of Governance and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.504

61.7%
Labor Force Participation

32,360
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.674

27.2%
Protected Area (% of land area)

-2,856
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.450

80.4%
Voter Participation

82.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.571

Communications Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.701

19.7%
Household Access to Fixed Phones

88.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.452

90.7%
Homes Served by the Public Electricity Network

74.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.569

14.6
Nurses and Midwives per 10,000 persons

28.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.562

4.8
Average Distance to Airport (km)

68.7
Average Distance to Sea or River Port (km)

0.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 122 / 221 CANTONS ASSESSED **SCORE: 0.449**

Mera exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.245

4.9	1.3%	0	67
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.653

7.9	3.8	2.1	3.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 85 / 221 CANTONS ASSESSED
SCORE: 0.514

Mera's score and ranking are due to Low Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Economic Constraints

Governance

Energy Capacity

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

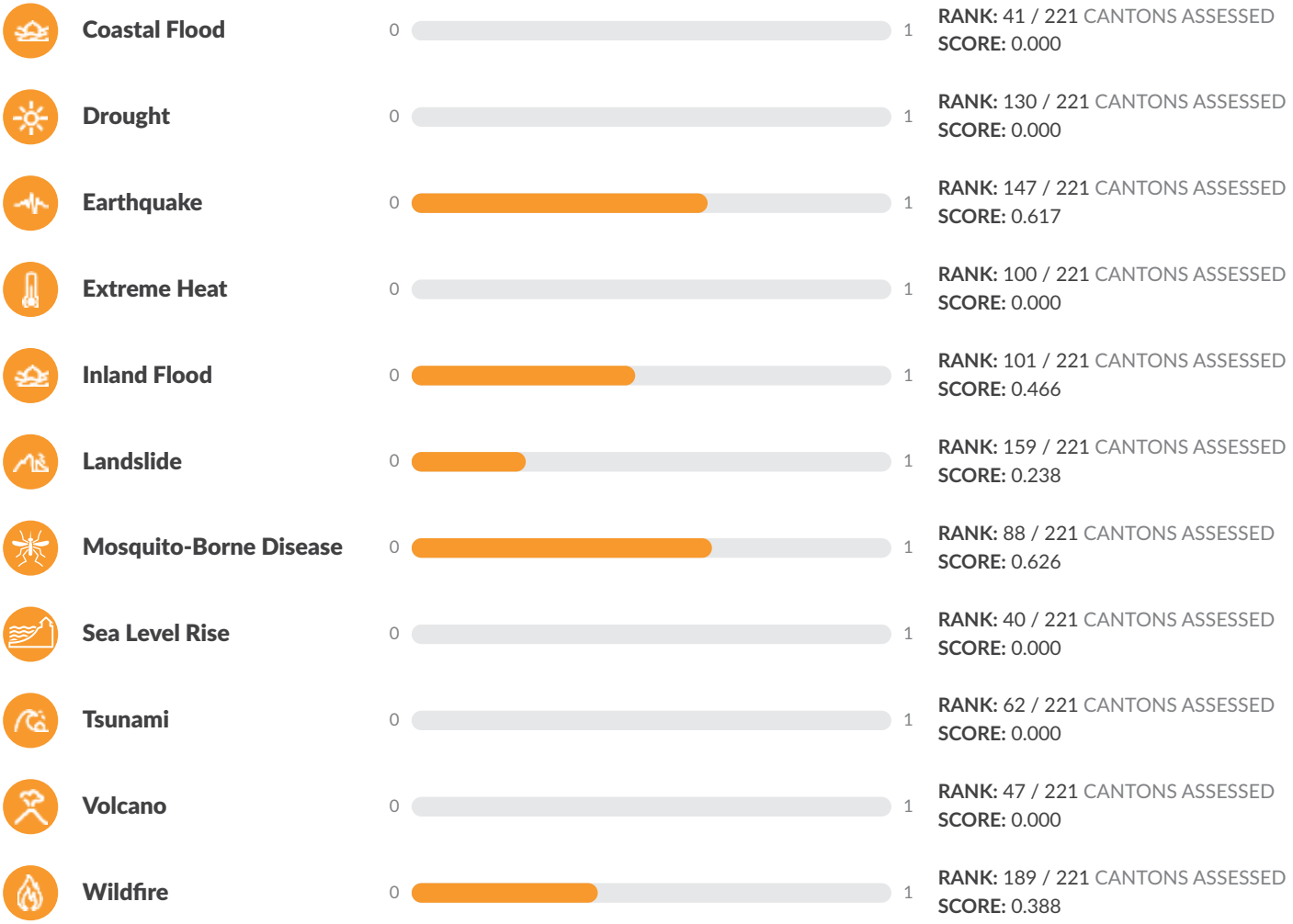
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

HAZARD-SPECIFIC RISK (HSR)

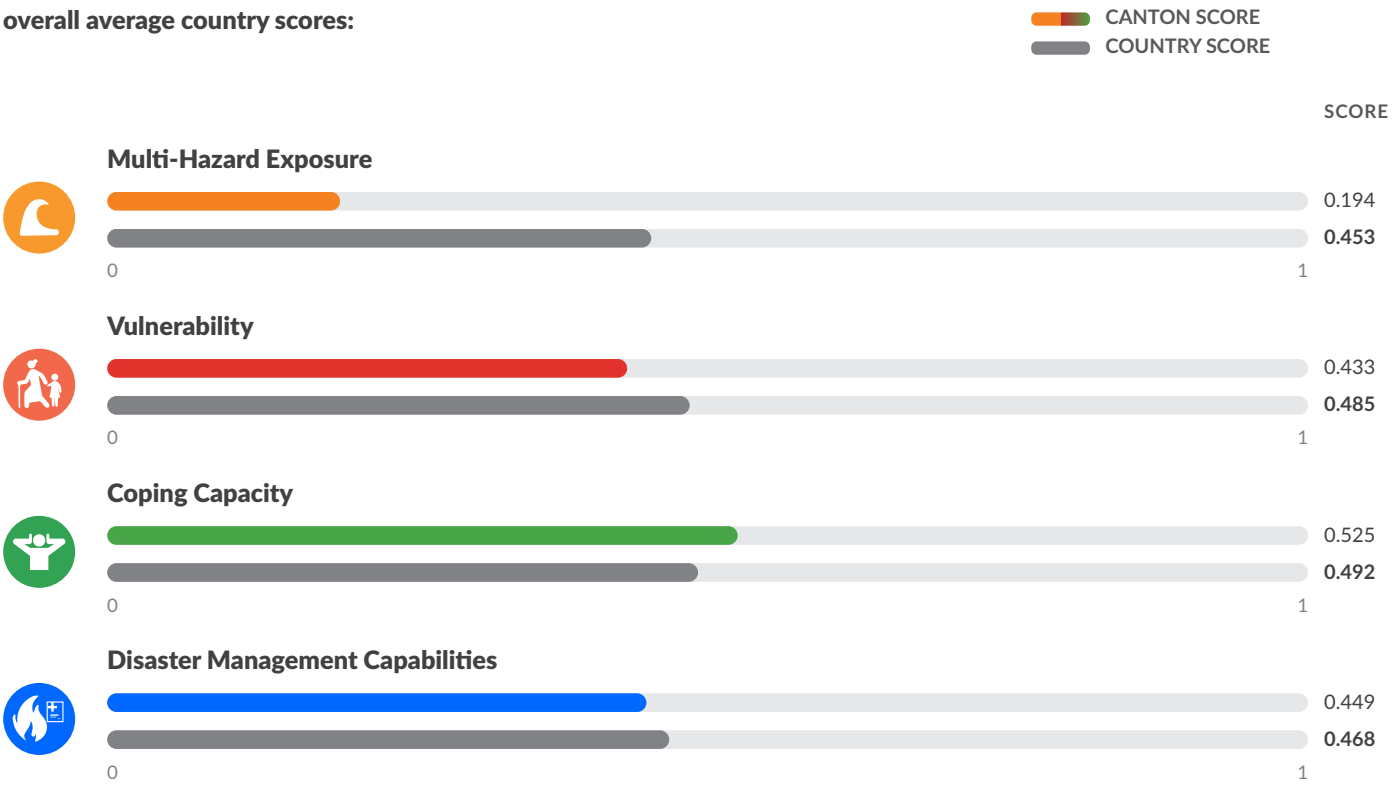


MULTI-HAZARD RISK (MHR)

RANKED
194 / 221
CANTONS ASSESSED
SCORE: 0.413

Mera's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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MILAGRO

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.524 • RANK: 80/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.470 • RANK: 131/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.593 • RANK: 33/221 CANTONS ASSESSED

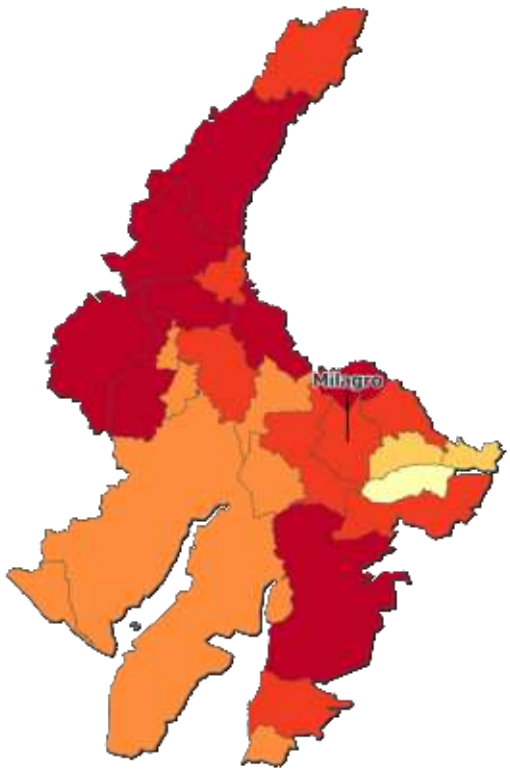
Coping Capacity (CC) - Very High
SCORE: 0.595 • RANK: 41/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.876 • RANK: 5/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.652 • RANK: 15/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

MILAGRO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	**0.524**
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 5 / 221 CANTONS ASSESSED
SCORE: 0.876



MHE
0.876

Raw MHE
0.878

Relative MHE
0.873

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
98%
- **196,701** people exposed
- **57,154** structures exposed (98%)
- **Critical Infrastructure Exposed:** 95%

Earthquake
100%
- **200,896** people exposed
- **58,596** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
100%
- **200,896** people exposed
- **58,596** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Inland Flood
39%
- **77,452** people exposed
- **23,300** structures exposed (40%)
- **Critical Infrastructure Exposed:** 41%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Mosquito-Borne Disease
95%
- **190,571** people exposed
- **56,074** structures exposed (96%)
- **Critical Infrastructure Exposed:** 97%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
89%
- **179,319** people exposed
- **49,972** structures exposed (85%)
- **Critical Infrastructure Exposed:** 84%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
36%
- **72,016** people exposed
- **18,912** structures exposed (32%)
- **Critical Infrastructure Exposed:** 28%

VULNERABILITY (V)

RANK: 131 / 221 CANTONS ASSESSED **SCORE: 0.470**

Vulnerability in Milagro is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.358

- **11.5** Average Years of Schooling
- **36.8%** Population (age 24 and over) with General Basic Education Schooling
- **3.1%** Population (age 24 and over) with No Schooling
- **2.3%** Adult Illiteracy Rate
- **42.4%** Households with No Internet Access
- **83.4%** Households with No Access to Television
- **70.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.512

- **80.8%** Homes with Access to Public Water Source
- **26.6%** Homes Connected to the Public Sewage System
- **22.9%** Homes without Piped Water
- **5.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.438

- **55.7** Age Dependency Ratio
- **14.6%** Unemployment Rate
- **45.5%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.612

- **6.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.454

- **0.4** Female to Male Labor Ratio (distance from parity)
- **54.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **46.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **48.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.495

- **8%** Prevalence of Disability (among persons age 5 and over)
- **3.6** Perinatal Mortality Rate (per 1,000 births)
- **8.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.533

- **12.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **25.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.488

30
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

37
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

39
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.448

9.6%
Homes with Exterior Walls in Poor Condition

7.9%
Homes with Inadequate Materials Used in Outer Walls

12.3%
Homes with Roofs in Poor Condition

83.8%
Households with No Access to Vehicle for Private Use

8.9%
Household Overcrowding

Population Pressures

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.573

491
Population Density (persons per sq km)

1.3%
Average Annual Population Change (2010-2022)

19.3
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.455

0.4
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 41 / 221 CANTONS ASSESSED **SCORE: 0.595**

Milagro exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.664

58.1%
Labor Force Participation

710,153
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.302

0%
Protected Area (% of land area)

-3,410.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.601

85.2%
Voter Participation

90.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.618

Communications Capacity

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.574

11.8%
Household Access to Fixed Phones

85%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.638

98.3%
Homes Served by the Public Electricity Network

72.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.499

12.1
Nurses and Midwives per 10,000 persons

22.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.762

5.5
Average Distance to Airport (km)

28.9
Average Distance to Sea or River Port (km)

3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 15 / 221 CANTONS ASSESSED **SCORE: 0.652**

Milagro exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.557

2.2	1.6%	2	30.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.748

3.6	3.4	1.6	3.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 33 / 221 CANTONS ASSESSED
SCORE: 0.593

Milagro's score and ranking are due to Moderate Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Clean Water Access Vulnerability

Healthcare Capacity

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

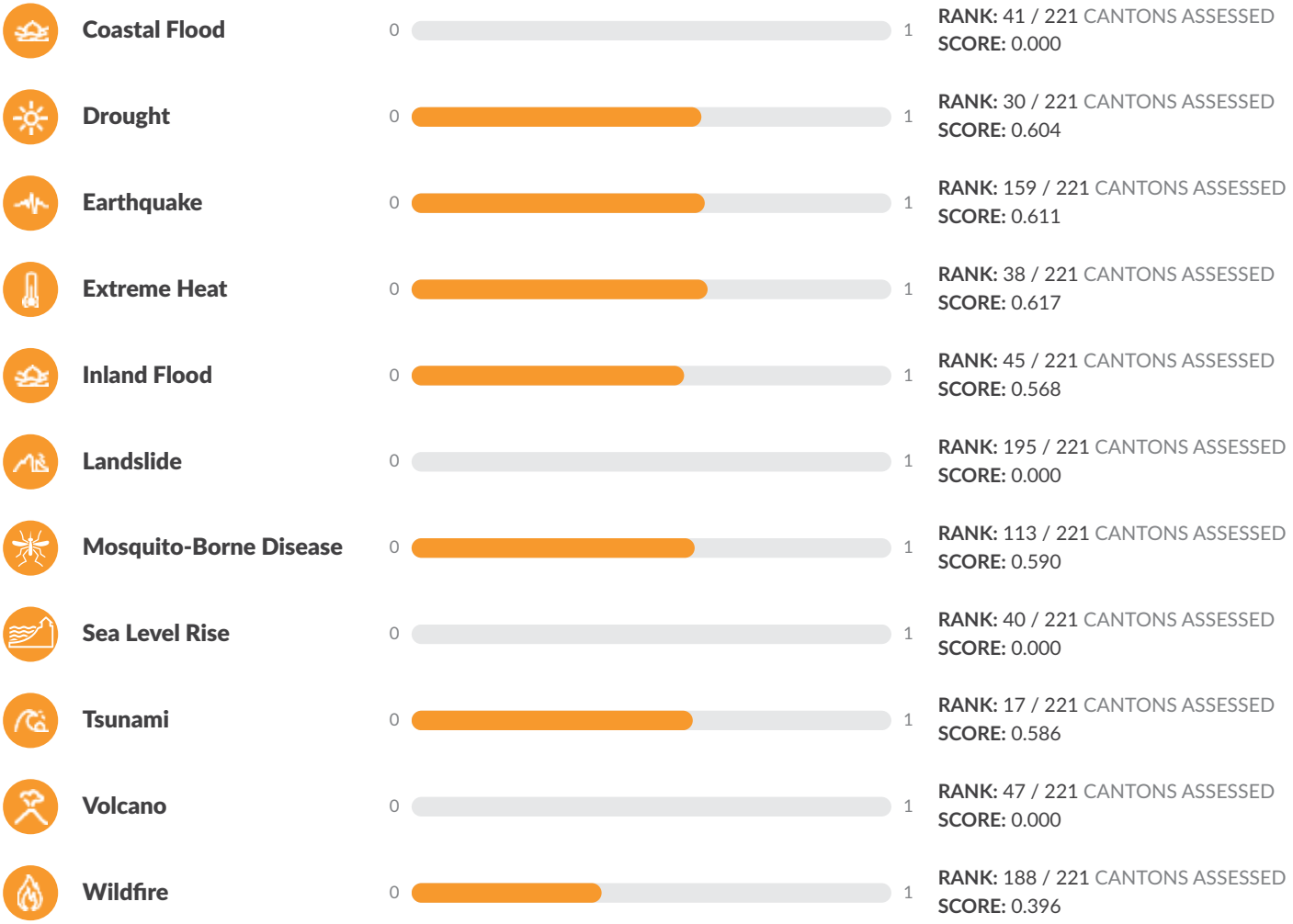
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

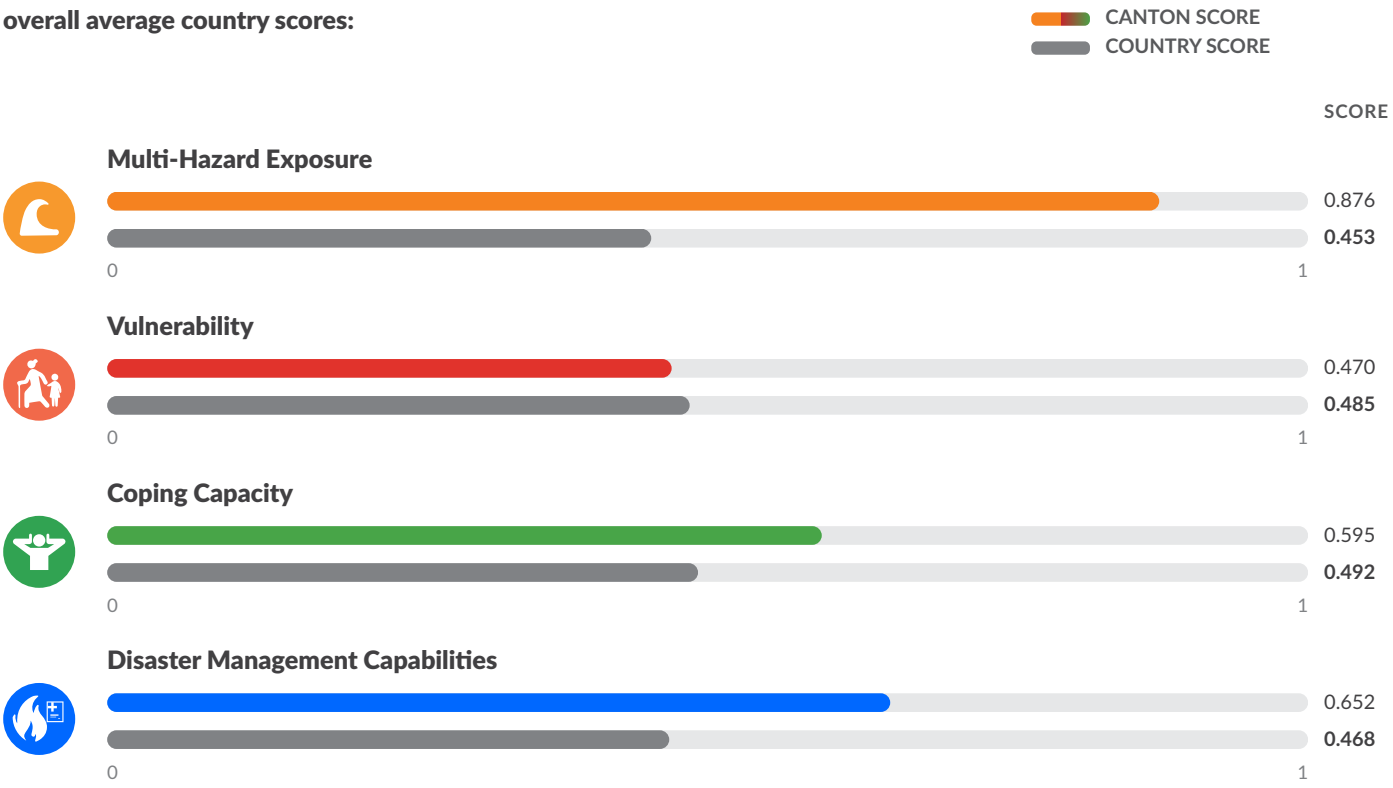


MULTI-HAZARD RISK (MHR)

RANKED
80 / 221
CANTONS ASSESSED
SCORE: 0.524

Milagro's score and ranking are due to Very High Multi-Hazard Exposure combined with Moderate Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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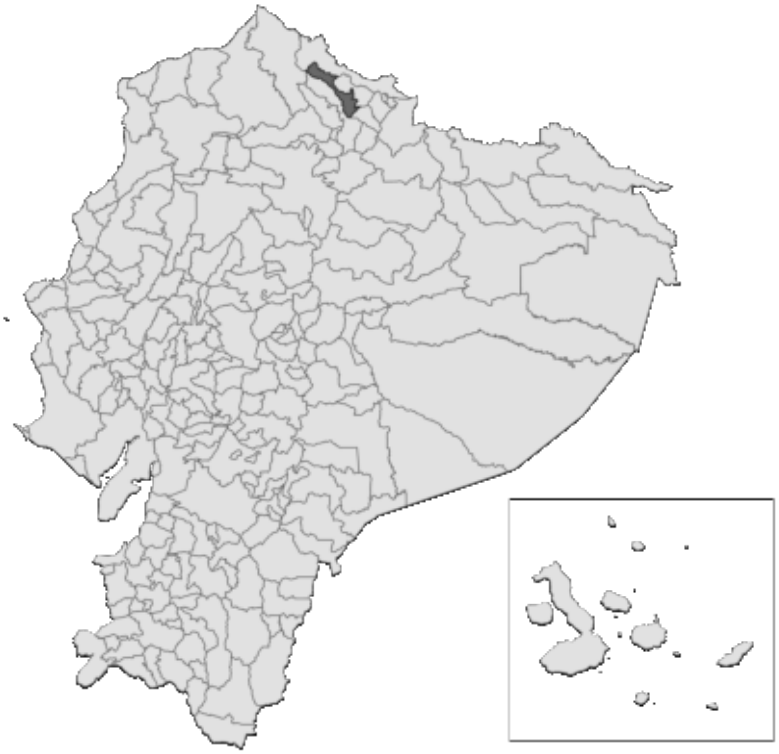
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PROVINCE: CARCHI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.470 • RANK: 132/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.491 • RANK: 101/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.355 • RANK: 148/221 CANTONS ASSESSED

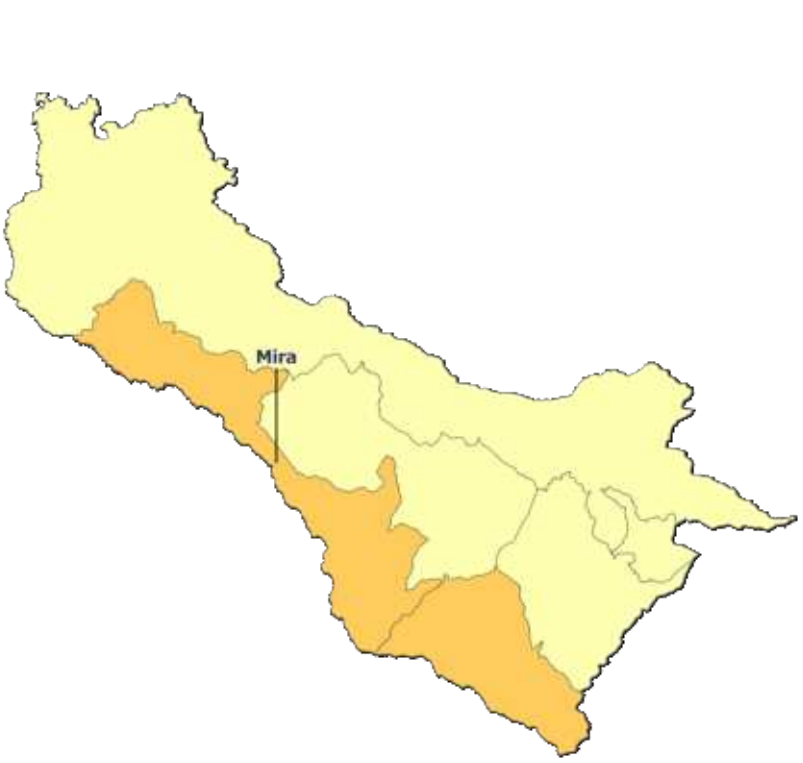
Vulnerability (V) - Low
SCORE: 0.446 • RANK: 149/221 CANTONS ASSESSED

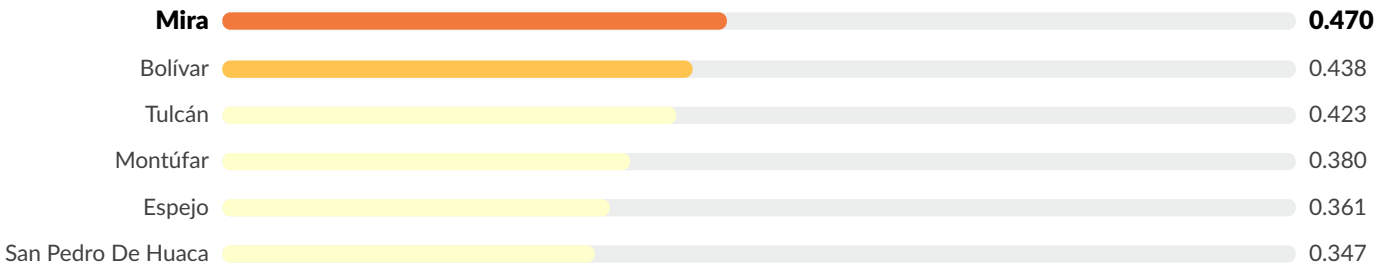
Coping Capacity (CC) - Moderate
SCORE: 0.502 • RANK: 101/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.417 • RANK: 148/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CARCHI PROVINCE

MIRA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 148 / 221 CANTONS ASSESSED
SCORE: 0.355



MHE
0.355

Raw MHE
0.347

Relative MHE
0.363

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
73%
9,713 people exposed
4,020 structures exposed (68%)
Critical Infrastructure Exposed: 52%

Earthquake
100%
13,354 people exposed
5,927 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
114 people exposed
124 structures exposed (2%)
Critical Infrastructure Exposed: 8%

Landslide
92%
12,238 people exposed
5,655 structures exposed (95%)
Critical Infrastructure Exposed: 97%

Mosquito-Borne Disease
43%
5,699 people exposed
2,493 structures exposed (42%)
Critical Infrastructure Exposed: 48%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
76%
10,102 people exposed
4,477 structures exposed (76%)
Critical Infrastructure Exposed: 81%

VULNERABILITY (V)

RANK: 149 / 221 CANTONS ASSESSED **SCORE: 0.446**

Vulnerability in Mira is primarily driven by Information Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.536

- **9.2** Average Years of Schooling
- **54.3%** Population (age 24 and over) with General Basic Education Schooling
- **6.4%** Population (age 24 and over) with No Schooling
- **5.8%** Adult Illiteracy Rate
- **51.9%** Households with No Internet Access
- **78.1%** Households with No Access to Television
- **74.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.390

- **81.2%** Homes with Access to Public Water Source
- **75.1%** Homes Connected to the Public Sewage System
- **26.5%** Homes without Piped Water
- **4.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.420

- **56.1** Age Dependency Ratio
- **8.9%** Unemployment Rate
- **44.9%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.545

- **4.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.439

- **0.4** Female to Male Labor Ratio (distance from parity)
- **26.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **75.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **59%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.492

- **12.3%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **16.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.097

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.688

42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

52
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

60
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

50
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.380

14.1%
Homes with Exterior Walls in Poor Condition

0.1%
Homes with Inadequate Materials Used in Outer Walls

18%
Homes with Roofs in Poor Condition

83%
Households with No Access to Vehicle for Private Use

4.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.411

21.8
Population Density (persons per sq km)

0.4%
Average Annual Population Change (2010-2022)

19.6
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.484

0.3
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 101 / 221 CANTONS ASSESSED **SCORE: 0.502**

Mira exhibits weaker Coping Capacity in the areas of Transportation Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.424

56.9%
Labor Force Participation

32,902
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.347

0.4%
Protected Area (% of land area)

-3,065.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.554

85.9%
Voter Participation

83.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.580

Communications Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.663

25%
Household Access to Fixed Phones

83.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.696

97.6%
Homes Served by the Public Electricity Network

82.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.729

34.6
Nurses and Midwives per 10,000 persons

28.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.231

52.8
Average Distance to Airport (km)

165.9
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 148 / 221 CANTONS ASSESSED **SCORE: 0.417**

Mira exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.455

2.6	12.2%	0	32.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.379

23.1	13.2	4	7.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 101 / 221 CANTONS ASSESSED
SCORE: 0.491

Mira's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Emergency Services

Economic Capacity

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

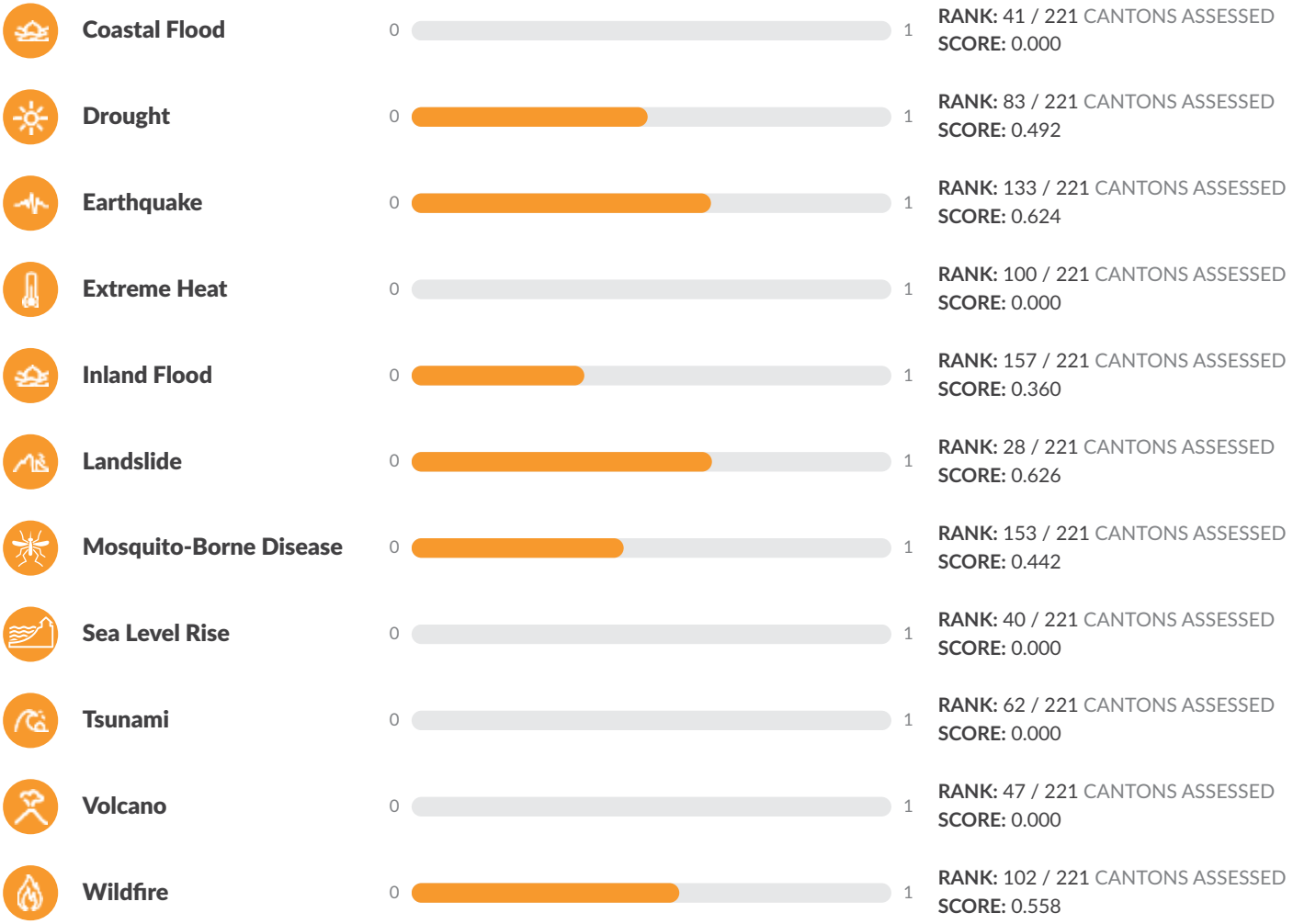
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
132 / 221
CANTONS ASSESSED
SCORE: 0.470

Mira's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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MOCACHE

NDPBA SUBNATIONAL PROFILE

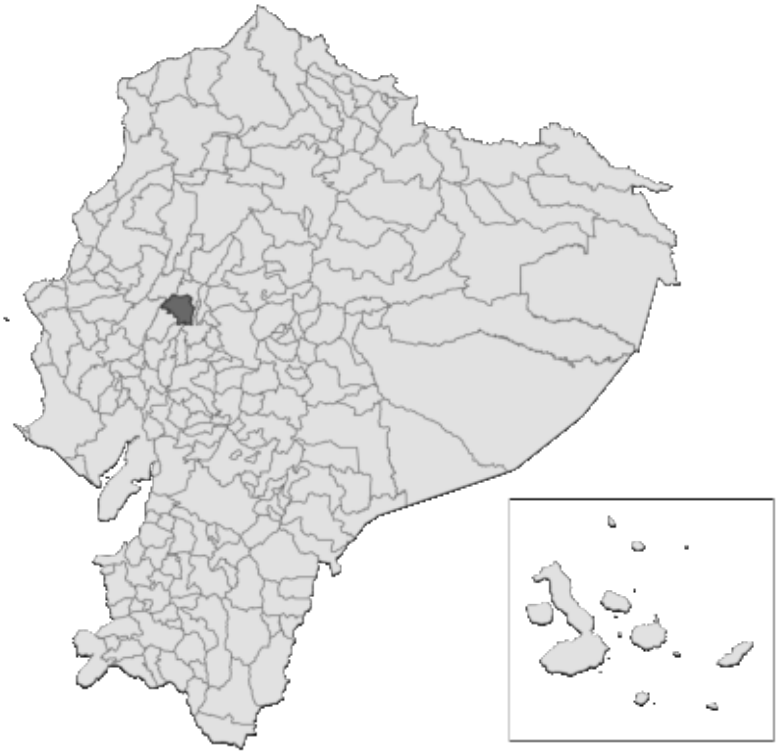
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ECUADOR

MOCACHE

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.577 • RANK: 30/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.566 • RANK: 41/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.403 • RANK: 182/221 CANTONS ASSESSED

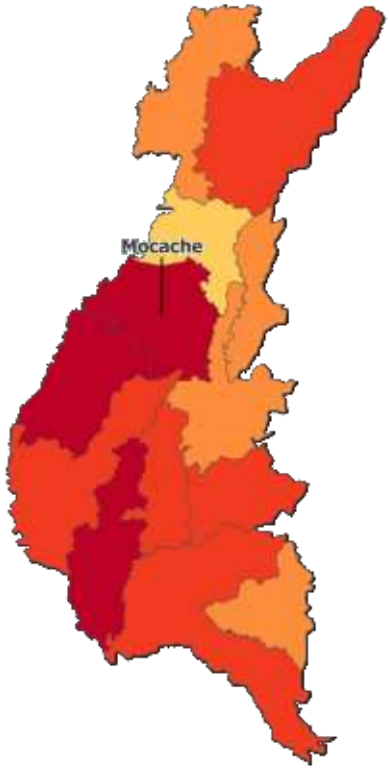
Coping Capacity (CC) - Low
SCORE: 0.452 • RANK: 142/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.516 • RANK: 74/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.323 • RANK: 195/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

MOCACHE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	**0.577**
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 74 / 221 CANTONS ASSESSED
SCORE: 0.516



MHE
0.516

Raw MHE
0.603

Relative MHE
0.429

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
46,628 people exposed
25,230 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
46,618 people exposed
25,215 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
11%
5,359 people exposed
2,093 structures exposed (8%)
Critical Infrastructure Exposed: 15%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
46,628 people exposed
25,230 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
85%
39,835 people exposed
21,657 structures exposed (86%)
Critical Infrastructure Exposed: 87%

VULNERABILITY (V)

RANK: 41 / 221 CANTONS ASSESSED **SCORE: 0.566**

Vulnerability in Mocache is primarily driven by Marginalization and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.691

- **8.3** Average Years of Schooling
- **57%** Population (age 24 and over) with General Basic Education Schooling
- **9.6%** Population (age 24 and over) with No Schooling
- **8.1%** Adult Illiteracy Rate
- **63%** Households with No Internet Access
- **85.9%** Households with No Access to Television
- **91.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.669

- **54.5%** Homes with Access to Public Water Source
- **14.2%** Homes Connected to the Public Sewage System
- **56.8%** Homes without Piped Water
- **3.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.546

- **58.7** Age Dependency Ratio
- **13.7%** Unemployment Rate
- **74%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.931

- **19.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.813

- **0.7** Female to Male Labor Ratio (distance from parity)
- **59.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **10%** Prevalence of Child Marriage (among adolescents age 12-17)
- **96.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **79%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.335

- **9.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.294

- **14.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.406

34
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

8
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

40
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

17
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.654

23%
Homes with Exterior Walls in Poor Condition

13%
Homes with Inadequate Materials Used in Outer Walls

24.5%
Homes with Roofs in Poor Condition

90.7%
Households with No Access to Vehicle for Private Use

9.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.453

74.3
Population Density (persons per sq km)

0.8%
Average Annual Population Change (2010-2022)

4.4
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.307

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 142 / 221 CANTONS ASSESSED **SCORE: 0.452**

Mocache exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.468

50.1%
Labor Force Participation

240,751
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.397

0.8%
Protected Area (% of land area)

-1,266.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.526

89%
Voter Participation

66.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.382

Communications Capacity

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.287

1.7%
Household Access to Fixed Phones

84.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.514

96%
Homes Served by the Public Electricity Network

68.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.060

3.8
Nurses and Midwives per 10,000 persons

3.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.665

6.4
Average Distance to Airport (km)

32.3
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 195 / 221 CANTONS ASSESSED **SCORE: 0.323**

Mocache exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.200

6.4	0.9%	0	74.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.446

14.1	7.1	4.9	6.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 182 / 221 CANTONS ASSESSED
SCORE: 0.403

Mocache's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Marginalization



Mass Care Support



Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Mass Care Support

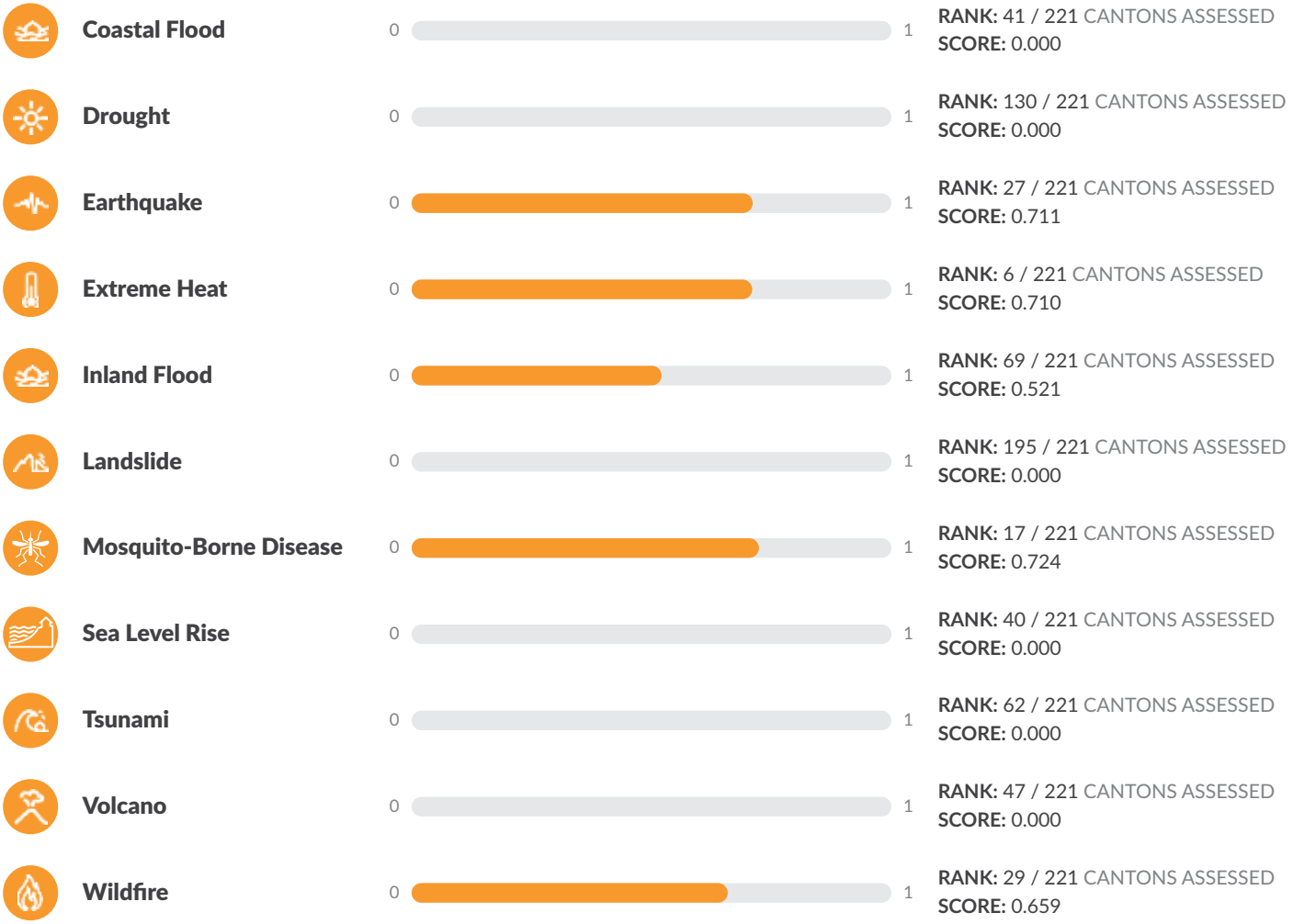
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

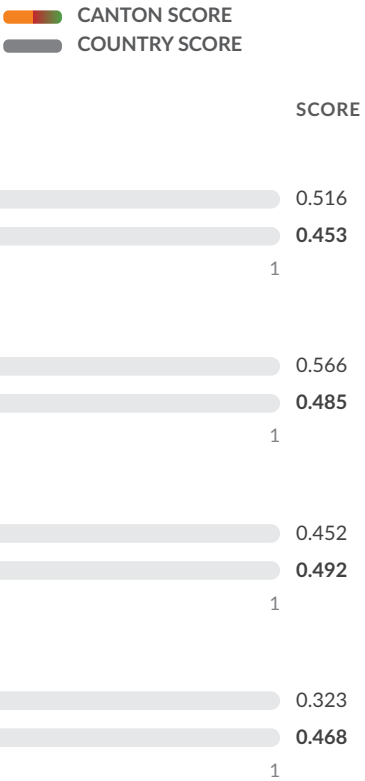


MULTI-HAZARD RISK (MHR)

RANKED
30 / 221
CANTONS ASSESSED
SCORE: 0.577

Mocache's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.379 • RANK: 211/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.395 • RANK: 190/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.564 • RANK: 50/221 CANTONS ASSESSED

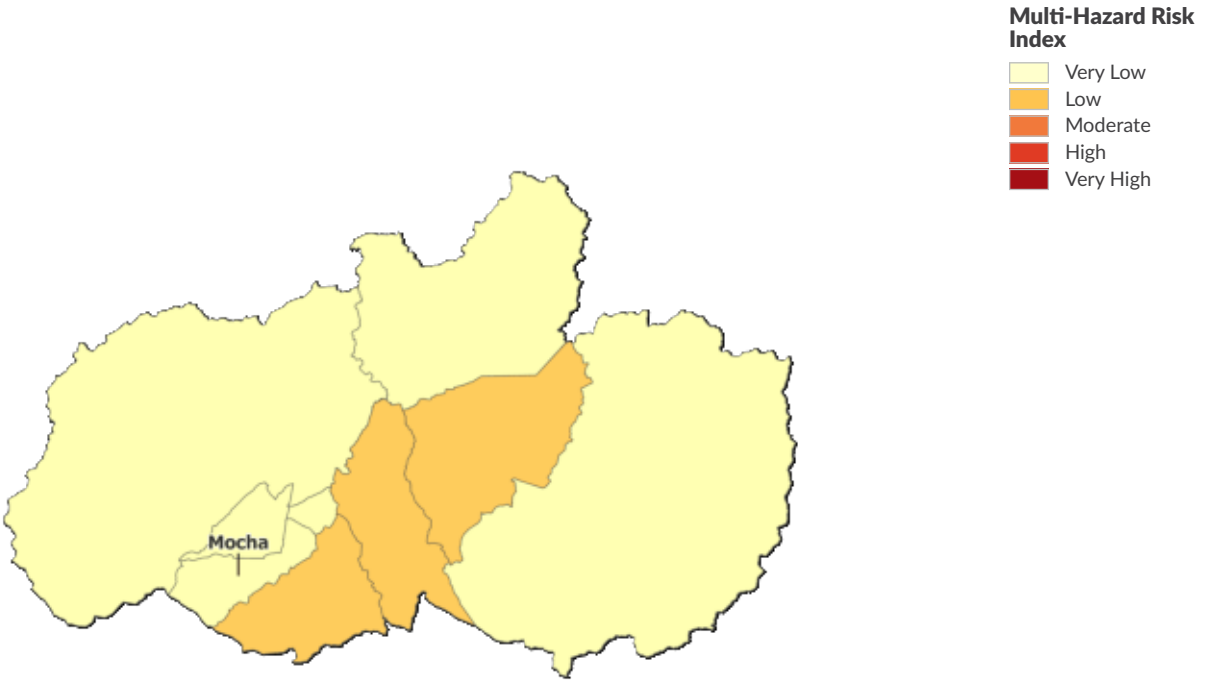
Coping Capacity (CC) - High
SCORE: 0.557 • RANK: 65/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.207 • RANK: 207/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.530 • RANK: 69/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

MOCHA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454
San Pedro De Pelileo	0.436
Patate	0.431
Santiago De Píllaro	0.410
Ambato	0.409
Mocha	**0.379**
Baños De Agua Santa	0.364
Tisaleo	0.361
Cevallos	0.340

MULTI-HAZARD EXPOSURE (MHE)

RANK: 207 / 221 CANTONS ASSESSED
SCORE: 0.207



MHE
0.207

Raw MHE
0.264

Relative MHE
0.150

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
7,874 people exposed
8,479 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
3%
212 people exposed
197 structures exposed (2%)
Critical Infrastructure Exposed: 6%

Landslide
37%
2,903 people exposed
3,374 structures exposed (40%)
Critical Infrastructure Exposed: 48%

Mosquito-Borne Disease
21%
1,669 people exposed
1,896 structures exposed (22%)
Critical Infrastructure Exposed: 67%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
7%
530 people exposed
537 structures exposed (6%)
Critical Infrastructure Exposed: 34%

Wildfire
97%
7,606 people exposed
8,215 structures exposed (97%)
Critical Infrastructure Exposed: 96%

VULNERABILITY (V)

RANK: 190 / 221 CANTONS ASSESSED **SCORE: 0.395**

Vulnerability in Mocha is primarily driven by Vulnerable Health Status and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.530

- **9.6** Average Years of Schooling
- **56.4%** Population (age 24 and over) with General Basic Education Schooling
- **3.6%** Population (age 24 and over) with No Schooling
- **3.7%** Adult Illiteracy Rate
- **51.5%** Households with No Internet Access
- **90.6%** Households with No Access to Television
- **71.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.308

- **98.1%** Homes with Access to Public Water Source
- **59.8%** Homes Connected to the Public Sewage System
- **25.3%** Homes without Piped Water
- **4.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.345

- **54.8** Age Dependency Ratio
- **10.3%** Unemployment Rate
- **31.2%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.224

- **1.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.313

- **0.3** Female to Male Labor Ratio (distance from parity)
- **54.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **33.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **18.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.553

- **6.4%** Prevalence of Disability (among persons age 5 and over)
- **16.1** Perinatal Mortality Rate (per 1,000 births)
- **15.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.135

- **2.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.458

77
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

17
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

48
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

0
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.362

10.9%
Homes with Exterior Walls in Poor Condition

2.7%
Homes with Inadequate Materials Used in Outer Walls

21.1%
Homes with Roofs in Poor Condition

67.6%
Households with No Access to Vehicle for Private Use

3.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.348

85.2
Population Density (persons per sq km)

0.7%
Average Annual Population Change (2010-2022)

4
Net Migration Rate (per 1,000 persons)

0.24
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.429

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 65 / 221 CANTONS ASSESSED **SCORE: 0.557**

Mocha exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.481

63.7%
Labor Force Participation

14,451
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.749

40.7%
Protected Area (% of land area)

-772.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.561

85.1%
Voter Participation

86.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.564

Communications Capacity

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.612

15.9%
Household Access to Fixed Phones

84.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.756

98.6%
Homes Served by the Public Electricity Network

83.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.386

9.6
Nurses and Midwives per 10,000 persons

13.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.503

21.9
Average Distance to Airport (km)

93.9
Average Distance to Sea or River Port (km)

2.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 69 / 221 CANTONS ASSESSED **SCORE: 0.530**

Mocha exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.390

2.1	2.3%	0	32.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.669

13.3	3.2	2.2	2.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 50 / 221 CANTONS ASSESSED
SCORE: 0.564

Mocha's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Vulnerable Health Status

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

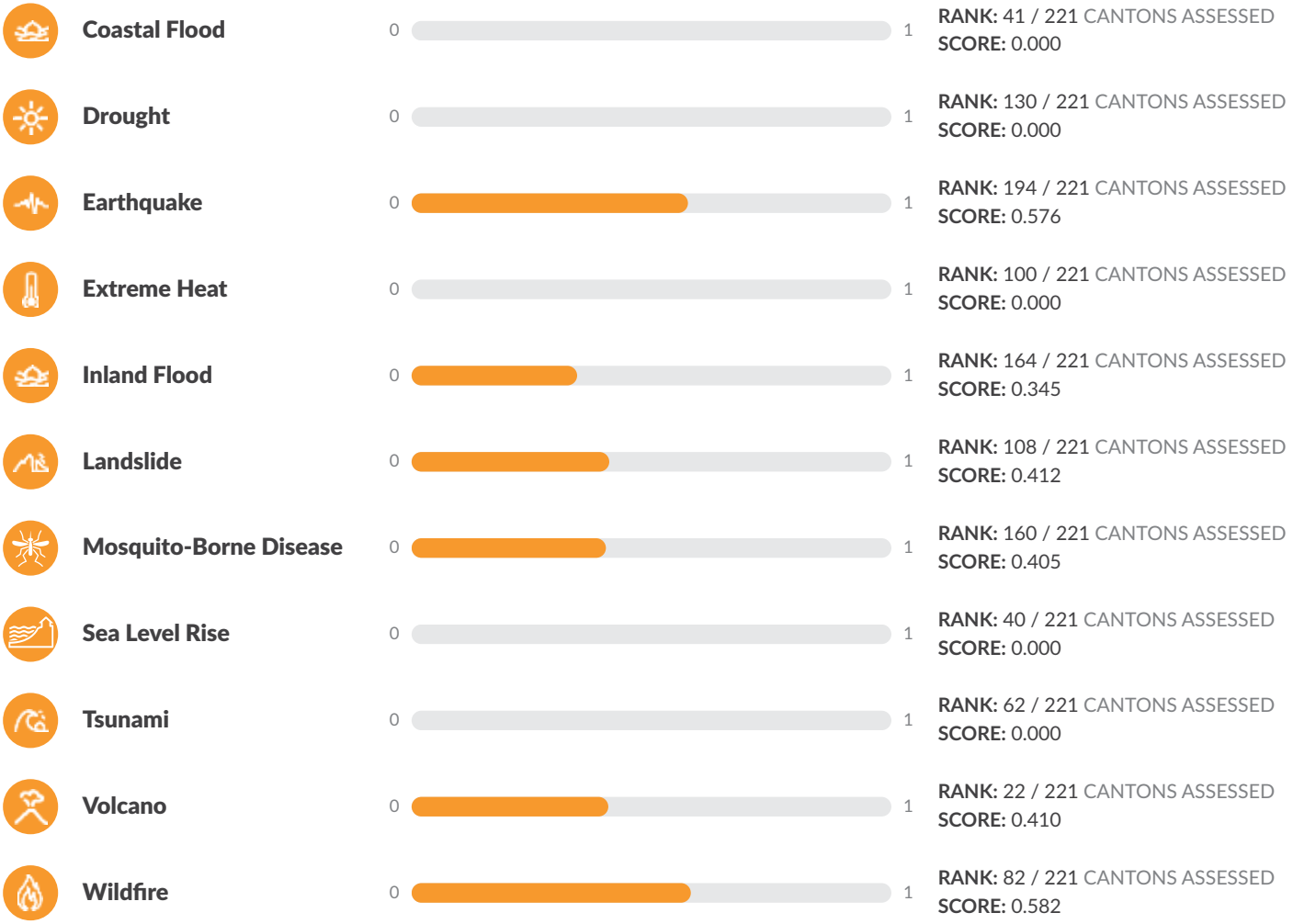
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
211 / 221
CANTONS ASSESSED
SCORE: 0.379

Mocha's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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MONTALVO

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.501 • RANK: 102/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.463 • RANK: 136/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.449 • RANK: 145/221 CANTONS ASSESSED

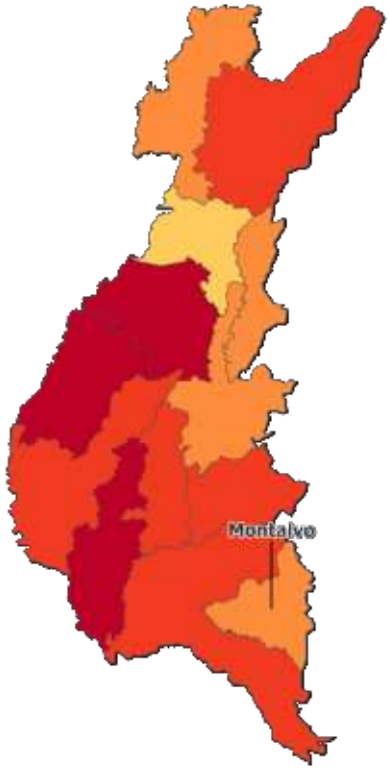
Coping Capacity (CC) - Low
SCORE: 0.459 • RANK: 134/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.350 • RANK: 154/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.352 • RANK: 188/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

MONTALVO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	**0.501**
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 154 / 221 CANTONS ASSESSED
SCORE: 0.350



MHE
0.350

Raw MHE
0.429

Relative MHE
0.272

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
28,982 people exposed
8,234 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
58%
16,740 people exposed
2,916 structures exposed (35%)
Critical Infrastructure Exposed: 42%

Inland Flood
68%
19,769 people exposed
3,789 structures exposed (46%)
Critical Infrastructure Exposed: 54%

Landslide
2%
639 people exposed
119 structures exposed (1%)
Critical Infrastructure Exposed: 5%

Mosquito-Borne Disease
100%
28,982 people exposed
8,234 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
52%
14,995 people exposed
2,012 structures exposed (24%)
Critical Infrastructure Exposed: 23%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
2%
573 people exposed
85 structures exposed (1%)
Critical Infrastructure Exposed: 4%

VULNERABILITY (V)

RANK: 136 / 221 CANTONS ASSESSED **SCORE: 0.463**

Vulnerability in Montalvo is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.448

- **10.7** Average Years of Schooling
- **40.3%** Population (age 24 and over) with General Basic Education Schooling
- **4.5%** Population (age 24 and over) with No Schooling
- **3.5%** Adult Illiteracy Rate
- **51.5%** Households with No Internet Access
- **81.8%** Households with No Access to Television
- **80.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.589

- **70%** Homes with Access to Public Water Source
- **30.6%** Homes Connected to the Public Sewage System
- **36.8%** Homes without Piped Water
- **5.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.461

- **52.9** Age Dependency Ratio
- **17.1%** Unemployment Rate
- **51.5%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.739

- **10.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.450

- **0.5** Female to Male Labor Ratio (distance from parity)
- **35.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **42%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **51.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.343

- **8.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.381

- **59.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **26.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.445

48 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**13** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**24** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**37** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.508

16.8% Homes with Exterior Walls in Poor Condition	**4.8%** Homes with Inadequate Materials Used in Outer Walls	**21.4%** Homes with Roofs in Poor Condition	**85.9%** Households with No Access to Vehicle for Private Use	**6.2%** Household Overcrowding

Population Pressures

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.456

79.8 Population Density (persons per sq km)	**1.4%** Average Annual Population Change (2010-2022)	**4.6** Net Migration Rate (per 1,000 persons)	**0.28** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.406

0.3 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 134 / 221 CANTONS ASSESSED **SCORE: 0.459**

Montalvo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.484

55.8%
Labor Force Participation

95,538
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.266

0%
Protected Area (% of land area)

-5,790.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.492

86.4%
Voter Participation

71.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.464

Communications Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.436

4.6%
Household Access to Fixed Phones

84.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.507

97%
Homes Served by the Public Electricity Network

62.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.280

8.5
Nurses and Midwives per 10,000 persons

8.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.633

13.3
Average Distance to Airport (km)

22.4
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 188 / 221 CANTONS ASSESSED **SCORE: 0.352**

Montalvo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.257

5.3	0.7%	0	43.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.447

21.7	7	3.9	6.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 145 / 221 CANTONS ASSESSED
SCORE: 0.449

Montalvo's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Mass Care Support



Healthcare Capacity



Clean Water Access Vulnerability



Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Clean Water Access Vulnerability

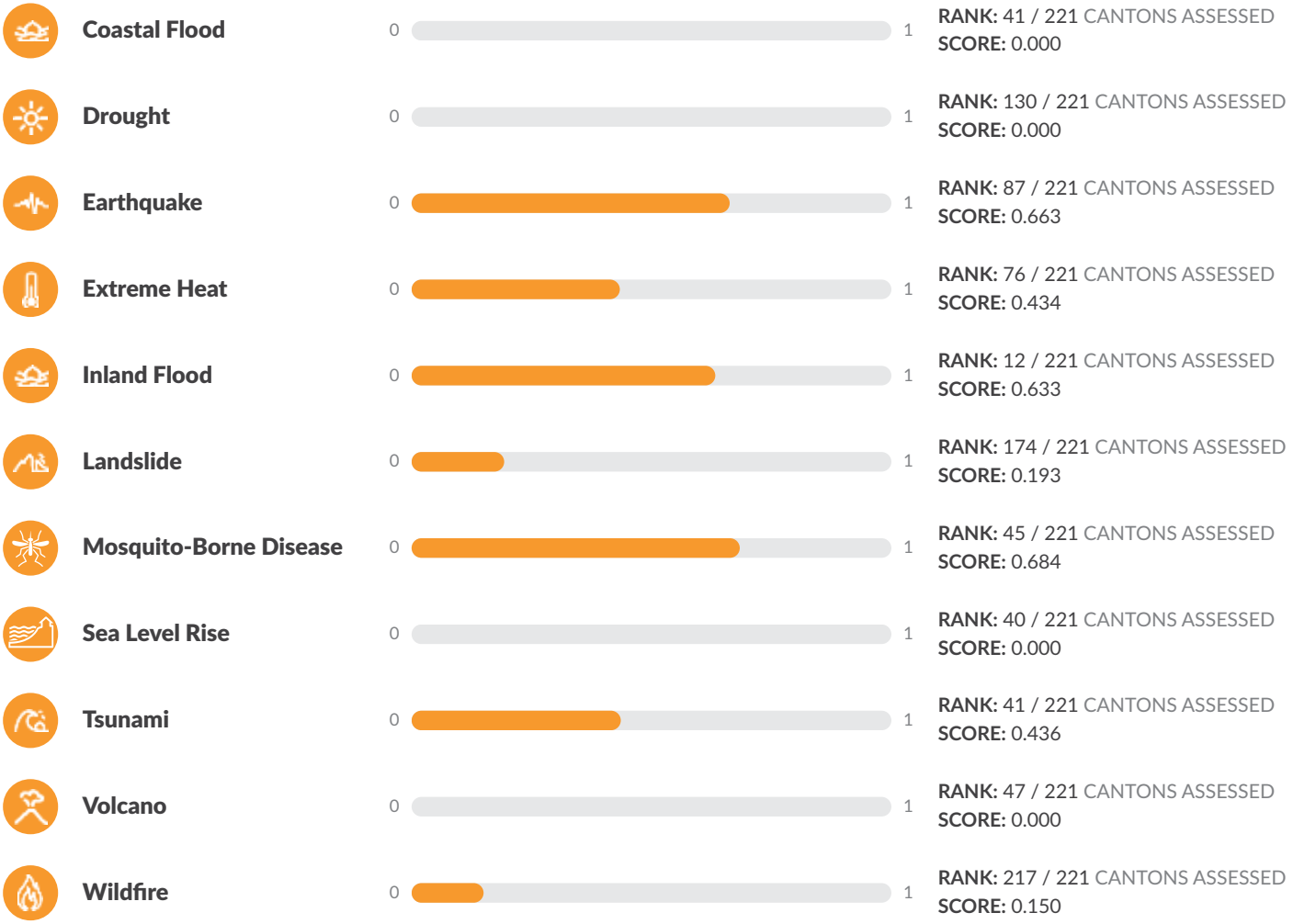
Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
102 / 221
CANTONS ASSESSED
SCORE: 0.501

Montalvo's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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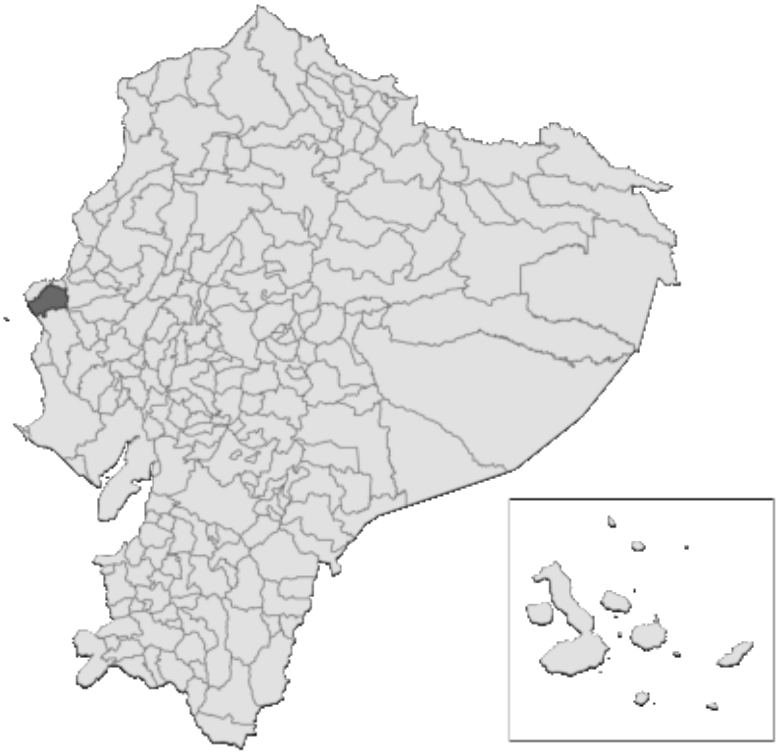
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MONTECRISTI

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.484 • RANK: 120/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.523 • RANK: 76/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.560 • RANK: 51/221 CANTONS ASSESSED

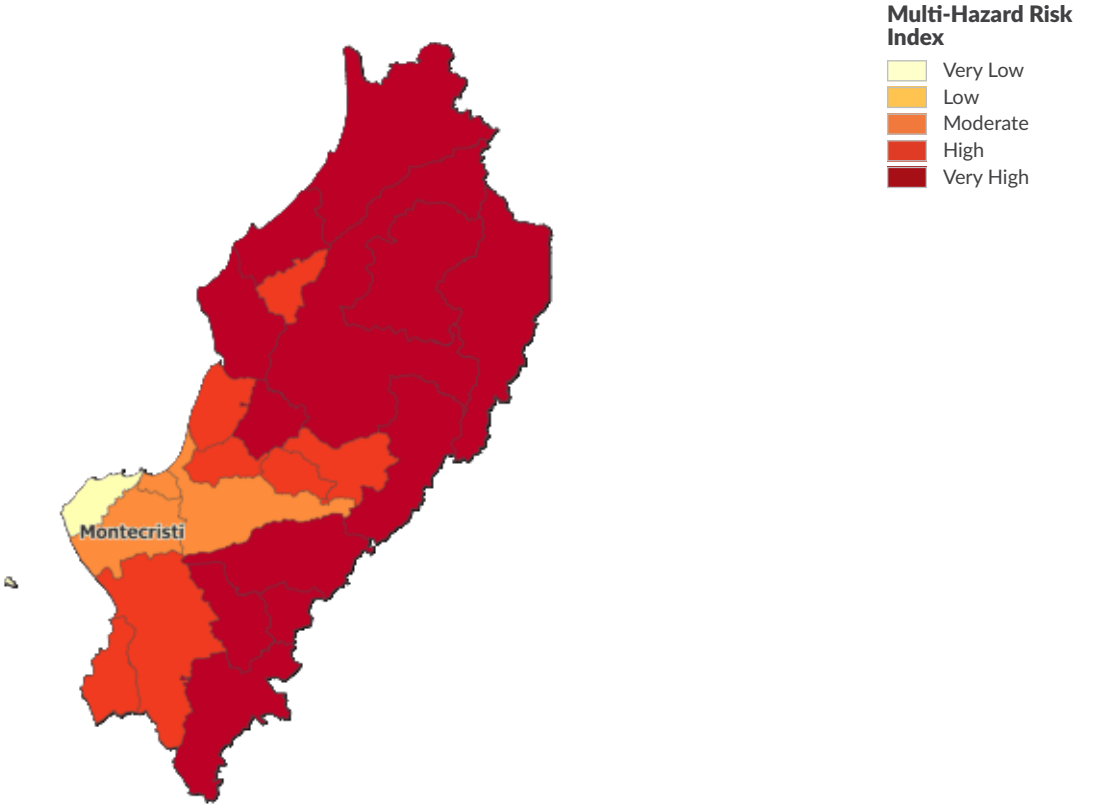
Coping Capacity (CC) - Very High
SCORE: 0.624 • RANK: 30/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.619 • RANK: 42/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.581 • RANK: 39/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

MONTECRISTI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	**Montecristi**	**0.484**
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 42 / 221 CANTONS ASSESSED
SCORE: 0.619



MHE
0.619

Raw MHE
0.723

Relative MHE
0.516

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: <1%

Drought
100%
- **81,369** people exposed
- **50,815** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **81,369** people exposed
- **50,815** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
64%
- **52,068** people exposed
- **30,954** structures exposed (61%)

Critical Infrastructure Exposed: 65%

Inland Flood
14%
- **11,383** people exposed
- **6,259** structures exposed (12%)

Critical Infrastructure Exposed: 25%

Landslide
6%
- **5,249** people exposed
- **3,169** structures exposed (6%)

Critical Infrastructure Exposed: 9%

Mosquito-Borne Disease
57%
- **46,527** people exposed
- **30,745** structures exposed (61%)

Critical Infrastructure Exposed: 52%

Sea Level Rise
0%
- **0** people exposed
- **1** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
<1%
- **318** people exposed
- **149** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
63%
- **51,650** people exposed
- **31,439** structures exposed (62%)

Critical Infrastructure Exposed: 56%

VULNERABILITY (V)

RANK: 76 / 221 CANTONS ASSESSED **SCORE: 0.523**

Vulnerability in Montecristi is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.460

- **10.4** Average Years of Schooling
- **43.6%** Population (age 24 and over) with General Basic Education Schooling
- **4.6%** Population (age 24 and over) with No Schooling
- **4.3%** Adult Illiteracy Rate
- **47.8%** Households with No Internet Access
- **84.7%** Households with No Access to Television
- **73.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.680

- **34.9%** Homes with Access to Public Water Source
- **43.5%** Homes Connected to the Public Sewage System
- **66.4%** Homes without Piped Water
- **5.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.472

- **50** Age Dependency Ratio
- **17.3%** Unemployment Rate
- **78.8%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.418

- **2.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.543

- **0.4** Female to Male Labor Ratio (distance from parity)
- **38** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **62.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **81.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.444

- **7%** Prevalence of Disability (among persons age 5 and over)
- **1.6** Perinatal Mortality Rate (per 1,000 births)
- **9.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.433

- **17.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.512

71
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

34
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

31
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.540

18.6%
Homes with Exterior Walls in Poor Condition

11%
Homes with Inadequate Materials Used in Outer Walls

17.8%
Homes with Roofs in Poor Condition

81%
Households with No Access to Vehicle for Private Use

9.3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.696

141.8
Population Density (persons per sq km)

3.1%
Average Annual Population Change (2010-2022)

31.4
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.366

0.3
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 30 / 221 CANTONS ASSESSED **SCORE: 0.624**

Montecristi exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.668

58.6%
Labor Force Participation

666,621
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.355

1.4%
Protected Area (% of land area)

-6,098.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.794

90.6%
Voter Participation

96%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.498

Communications Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.546

9.1%
Household Access to Fixed Phones

85.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.592

97.8%
Homes Served by the Public Electricity Network

70.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.113

2.6
Nurses and Midwives per 10,000 persons

6.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.744

11.5
Average Distance to Airport (km)

14.5
Average Distance to Sea or River Port (km)

2.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 39 / 221 CANTONS ASSESSED **SCORE: 0.581**

Montecristi exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.524

1.6	5.4%	0.1	10.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.638

5.1	4.8	2.6	4.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 51 / 221 CANTONS ASSESSED
SCORE: 0.560

Montecristi's score and ranking are due to High Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Population Pressures

Clean Water Access Vulnerability

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

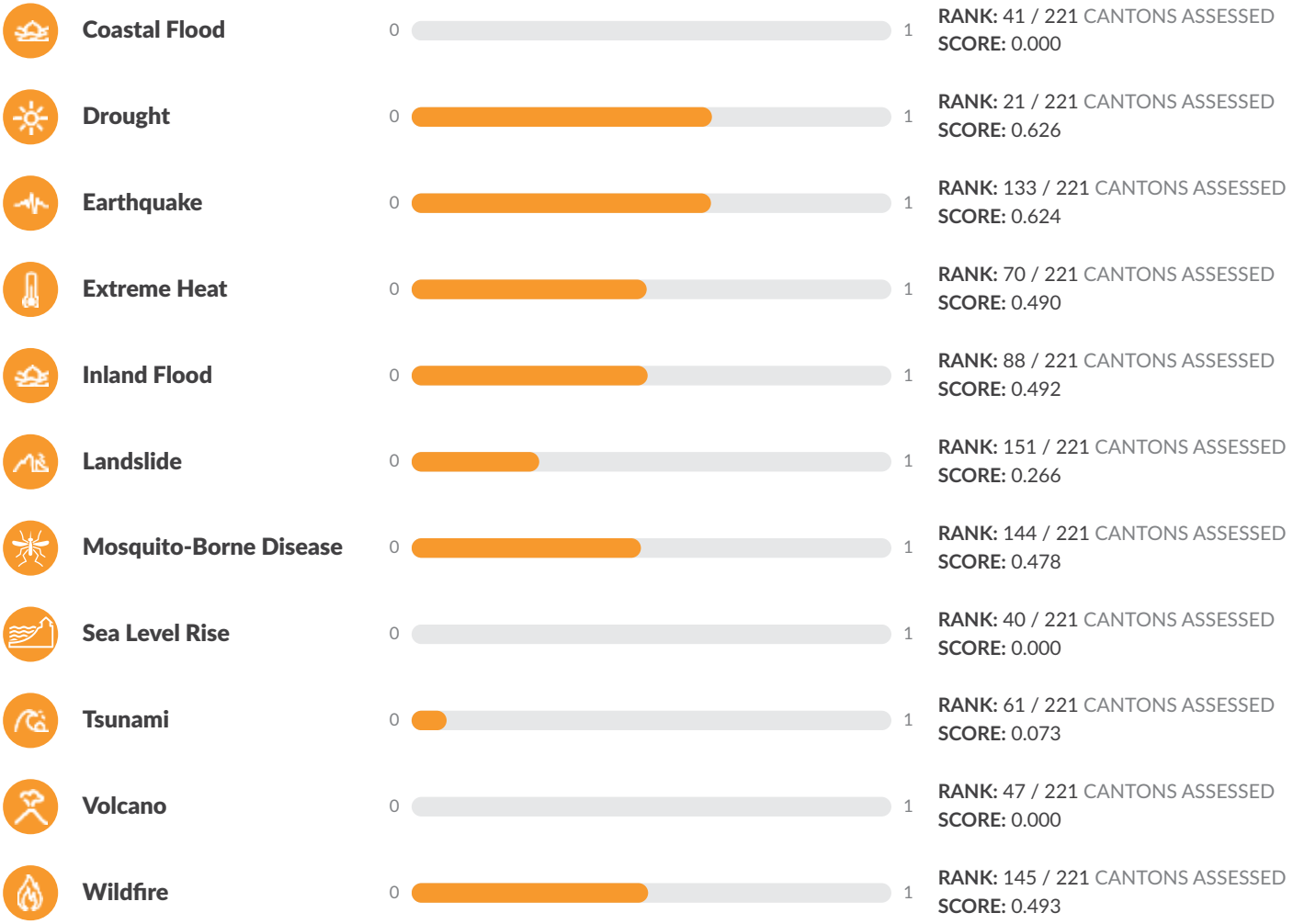
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

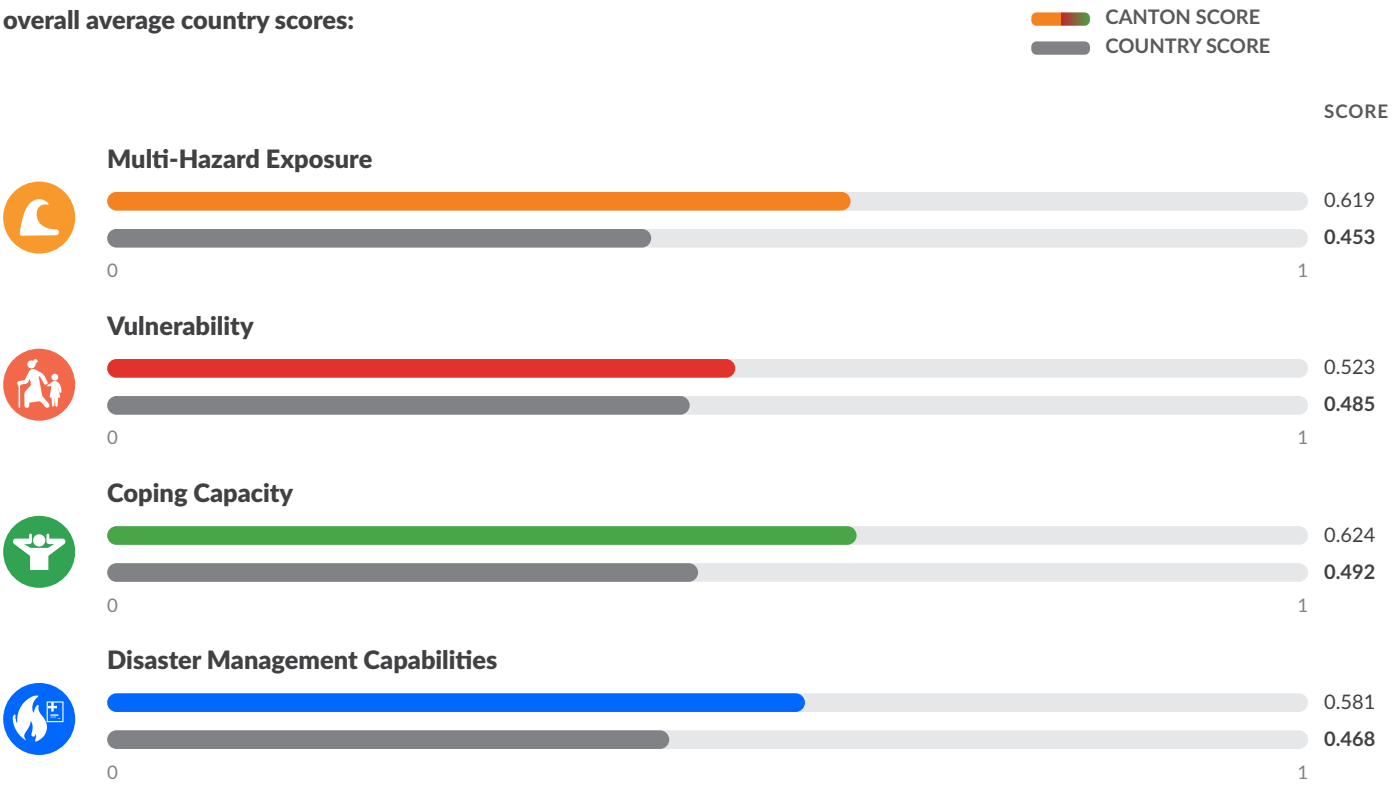


MULTI-HAZARD RISK (MHR)

RANKED
120 / 221
CANTONS ASSESSED
SCORE: 0.484

Montecristi's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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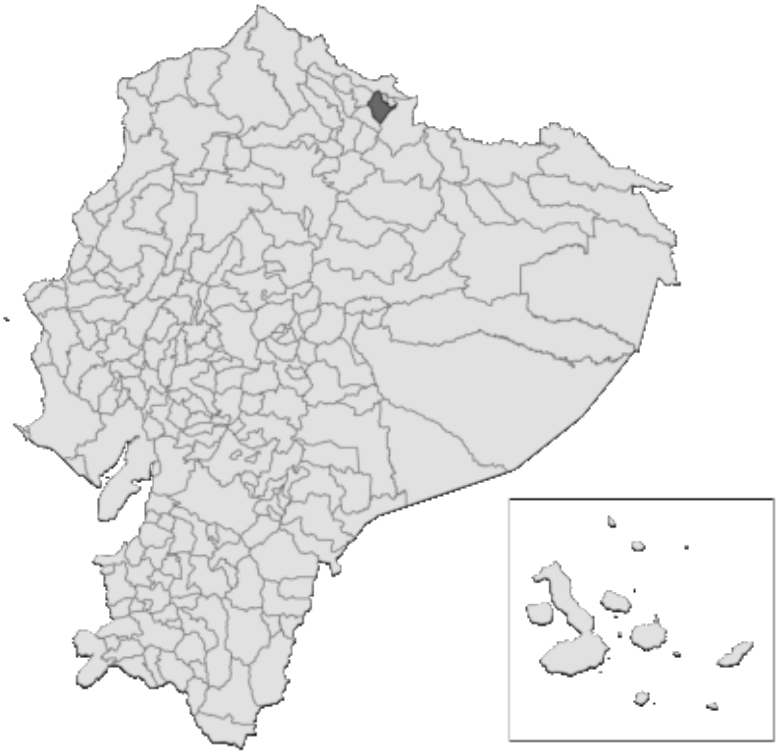
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MONTÚFAR

PROVINCE: CARCHI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.380 • RANK: 210/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.427 • RANK: 164/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.585 • RANK: 37/221 CANTONS ASSESSED

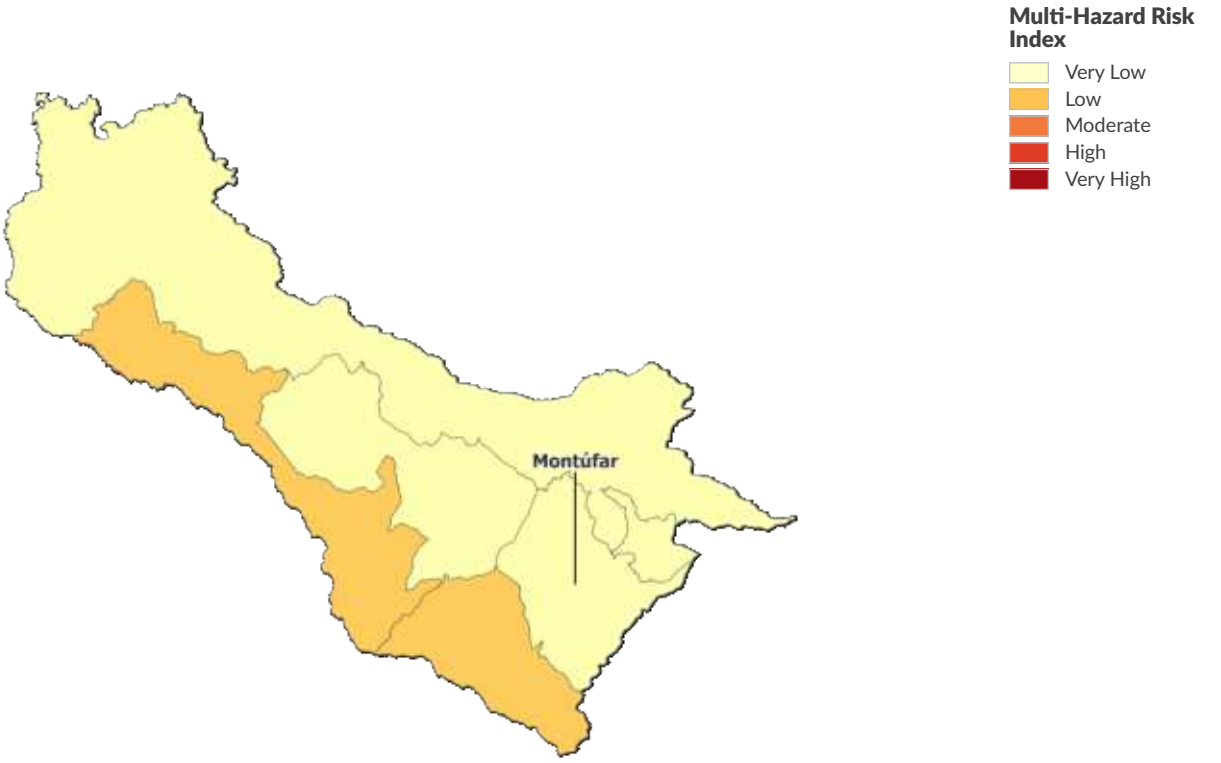
Coping Capacity (CC) - Very High
SCORE: 0.603 • RANK: 35/221 CANTONS ASSESSED

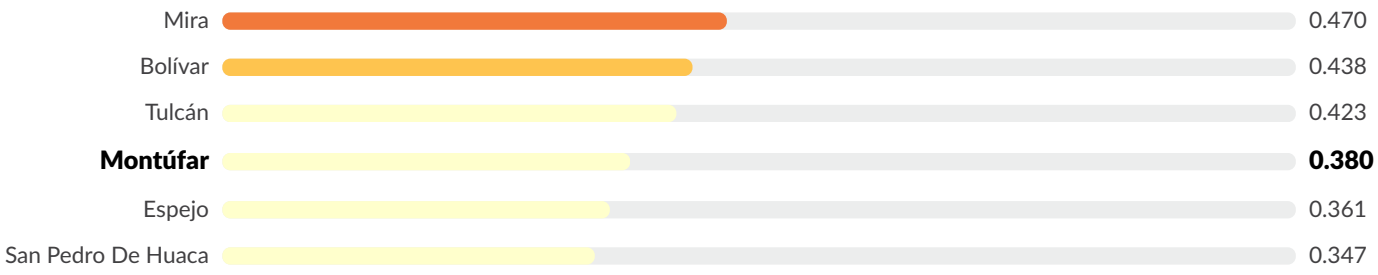
Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.274 • RANK: 187/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.580 • RANK: 41/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CARCHI PROVINCE

MONTÚFAR • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 187 / 221 CANTONS ASSESSED
SCORE: 0.274



MHE
0.274

Raw MHE
0.443

Relative MHE
0.104

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
33,023 people exposed
15,488 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
2%
623 people exposed
301 structures exposed (2%)
Critical Infrastructure Exposed: 6%

Landslide
59%
19,628 people exposed
9,339 structures exposed (60%)
Critical Infrastructure Exposed: 60%

Mosquito-Borne Disease
29%
9,654 people exposed
3,251 structures exposed (21%)
Critical Infrastructure Exposed: 8%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
69%
22,847 people exposed
10,047 structures exposed (65%)
Critical Infrastructure Exposed: 63%

VULNERABILITY (V)

RANK: 164 / 221 CANTONS ASSESSED **SCORE: 0.427**

Vulnerability in Montúfar is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.423

- **10** Average Years of Schooling
- **51.8%** Population (age 24 and over) with General Basic Education Schooling
- **3.1%** Population (age 24 and over) with No Schooling
- **3.2%** Adult Illiteracy Rate
- **44.4%** Households with No Internet Access
- **75%** Households with No Access to Television
- **68.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.331

- **97.9%** Homes with Access to Public Water Source
- **74.5%** Homes Connected to the Public Sewage System
- **23.7%** Homes without Piped Water
- **8.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.385

- **53.1** Age Dependency Ratio
- **11.8%** Unemployment Rate
- **34.7%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.534

- **4.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.299

- **0.3** Female to Male Labor Ratio (distance from parity)
- **26.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **51.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **29%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.553

- **9%** Prevalence of Disability (among persons age 5 and over)
- **7.2** Perinatal Mortality Rate (per 1,000 births)
- **12.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.141

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **24.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.683

42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

47
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

53
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

66
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.399

12.5%
Homes with Exterior Walls in Poor Condition

0.4%
Homes with Inadequate Materials Used in Outer Walls

17.2%
Homes with Roofs in Poor Condition

77.2%
Households with No Access to Vehicle for Private Use

8.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.571

77.8
Population Density (persons per sq km)

-0.2
Average Annual Population Change (2010-2022)

89.8
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.439

0.2
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 35 / 221 CANTONS ASSESSED **SCORE: 0.603**

Montúfar exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.603

62%
Labor Force Participation

120,731
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.675

23.3%
Protected Area (% of land area)

-1,739.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.589

86.8%
Voter Participation

85.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.591

Communications Capacity

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.672

14.5%
Household Access to Fixed Phones

89.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.873

99.1%
Homes Served by the Public Electricity Network

88.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.457

14.9
Nurses and Midwives per 10,000 persons

14.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.363

30.1
Average Distance to Airport (km)

146.8
Average Distance to Sea or River Port (km)

1.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 41 / 221 CANTONS ASSESSED **SCORE: 0.580**

Montúfar exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.492

2.8	5.3%	0.8	41.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.668

5.3	4.5	2	3.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 37 / 221 CANTONS ASSESSED
SCORE: 0.585

Montúfar's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Population Pressures

Vulnerable Health Status

Healthcare Capacity

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

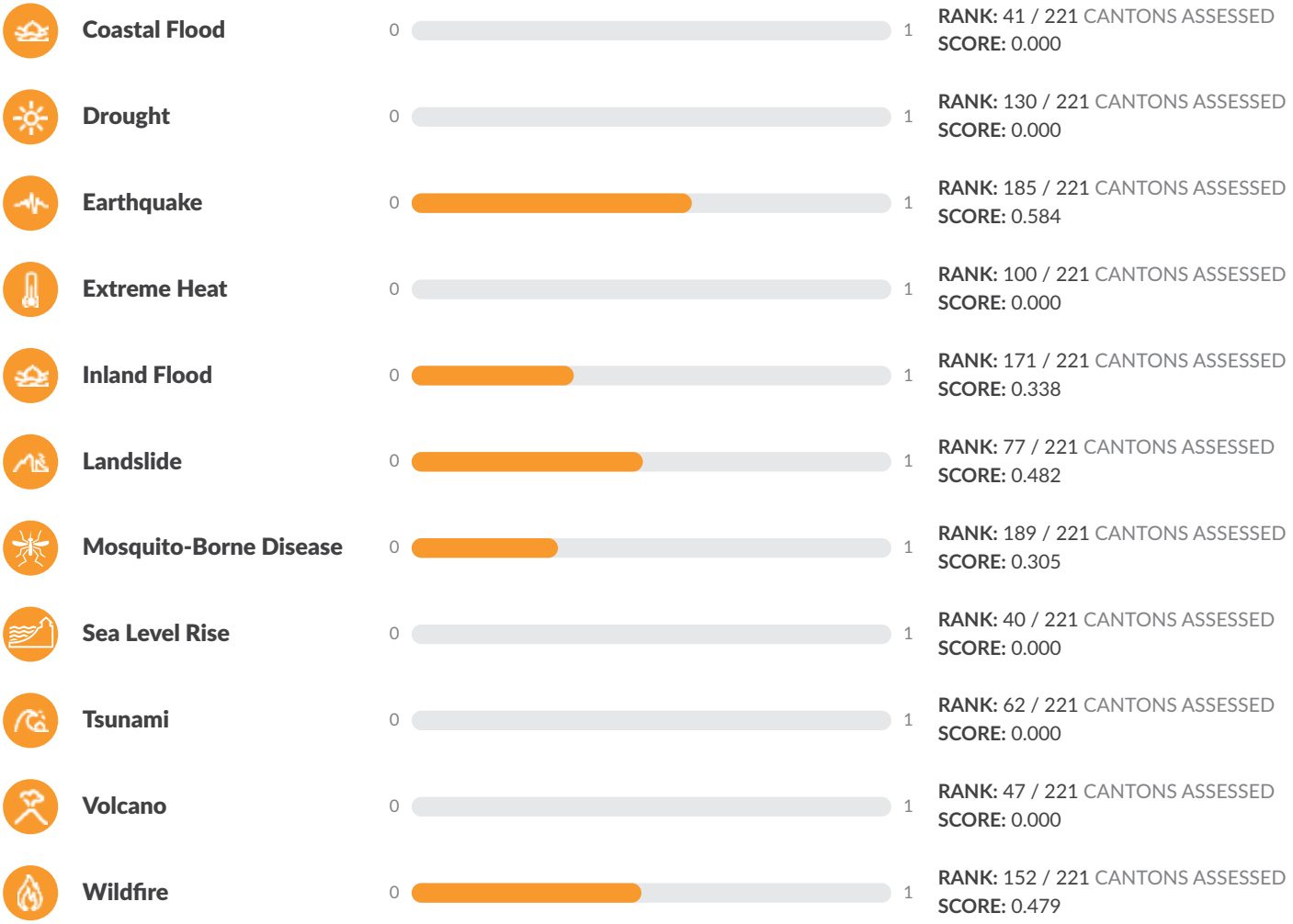
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
210 / 221
CANTONS ASSESSED
SCORE: 0.380

Montúfar's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE

SCORE

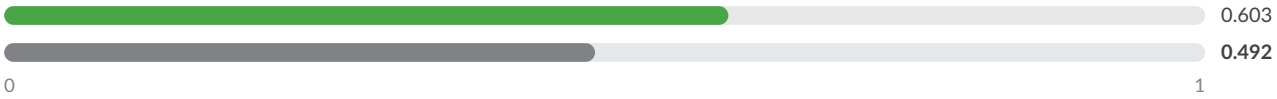
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Disaster Management Capabilities



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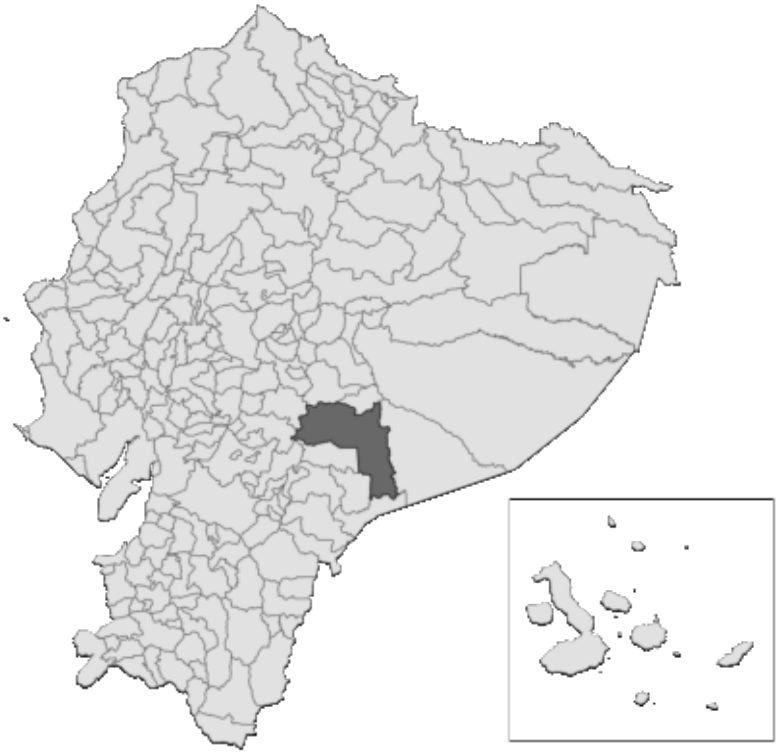
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MORONA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.499 • RANK: 107/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.489 • RANK: 104/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.465 • RANK: 99/221 CANTONS ASSESSED

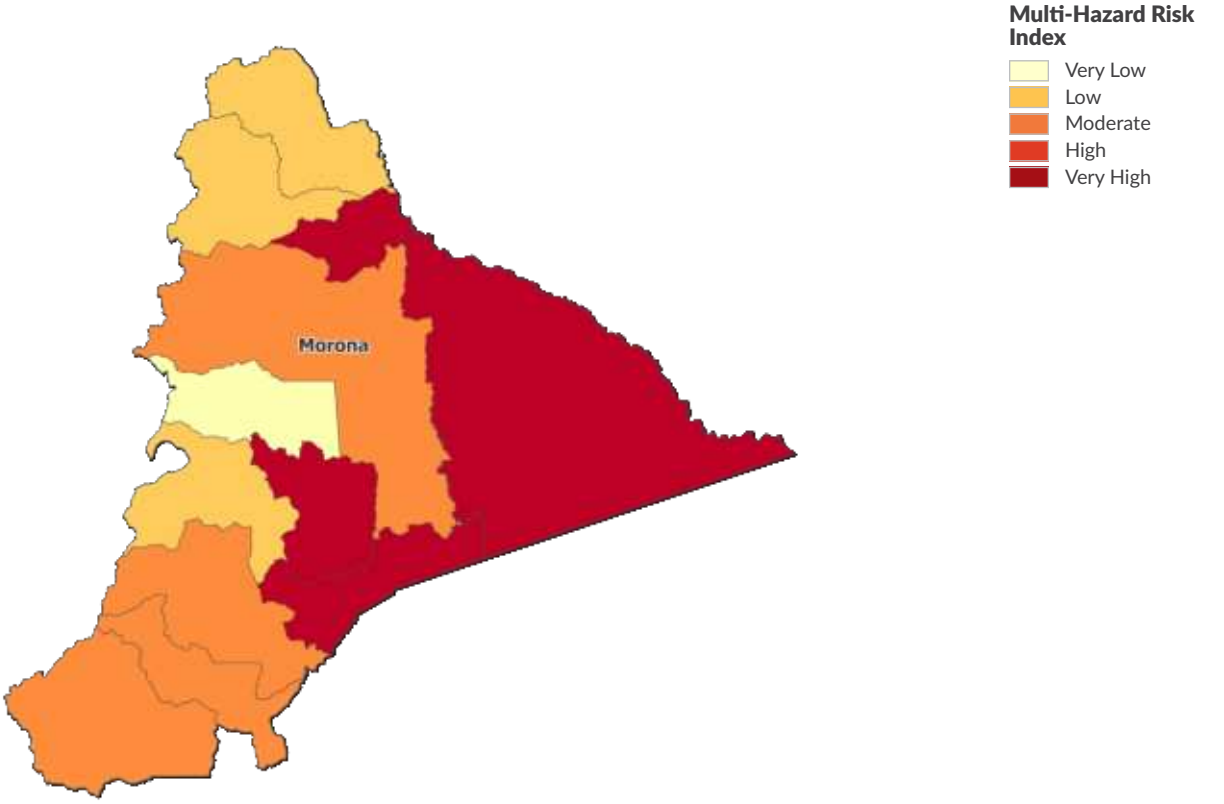
Vulnerability (V) - Moderate
SCORE: 0.504 • RANK: 92/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.470 • RANK: 124/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.501 • RANK: 80/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

MORONA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	**0.499**
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 99 / 221 CANTONS ASSESSED
SCORE: 0.465



MHE
0.465

Raw MHE
0.592

Relative MHE
0.338

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
54,260 people exposed
32,965 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
1%
545 people exposed
379 structures exposed (1%)
Critical Infrastructure Exposed: <1%

Inland Flood
4%
2,046 people exposed
1,455 structures exposed (4%)
Critical Infrastructure Exposed: 17%

Landslide
20%
11,101 people exposed
7,369 structures exposed (22%)
Critical Infrastructure Exposed: 38%

Mosquito-Borne Disease
98%
53,087 people exposed
31,696 structures exposed (96%)
Critical Infrastructure Exposed: 97%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
<1%
510 people exposed
550 structures exposed (2%)
Critical Infrastructure Exposed: 1%

Wildfire
74%
39,906 people exposed
27,821 structures exposed (84%)
Critical Infrastructure Exposed: 69%

VULNERABILITY (V)

RANK: 92 / 221 CANTONS ASSESSED **SCORE: 0.504**

Vulnerability in Morona is primarily driven by Economic Constraints and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.365

- **11.4** Average Years of Schooling
- **37%** Population (age 24 and over) with General Basic Education Schooling
- **3.6%** Population (age 24 and over) with No Schooling
- **2.5%** Adult Illiteracy Rate
- **49.6%** Households with No Internet Access
- **78.4%** Households with No Access to Television
- **67.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.522

- **81.5%** Homes with Access to Public Water Source
- **46.5%** Homes Connected to the Public Sewage System
- **37.8%** Homes without Piped Water
- **6.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.654

- **66.9** Age Dependency Ratio
- **19.9%** Unemployment Rate
- **53.2%** Poverty Rate (based on UBN)
- **2.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.494

- **4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.507

- **0.3** Female to Male Labor Ratio (distance from parity)
- **67.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **82.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **35%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.457

- **7.5%** Prevalence of Disability (among persons age 5 and over)
- **2.1** Perinatal Mortality Rate (per 1,000 births)
- **8.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.465

- **15.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **28.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.506

47	20	32	38
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.424

12.7%	1.9%	13.7%	78.7%	9.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.539

12.6	2.4%	11	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.561

0.3	0.1	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.470**

Morona exhibits weaker Coping Capacity in the areas of Governance and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.510

54.7%
Labor Force Participation

171,144
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.503

23.3%
Protected Area (% of land area)

-13,831.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.375

75.1%
Voter Participation

82.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.515

Communications Capacity

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.579

16.7%
Household Access to Fixed Phones

80.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.392

88.3%
Homes Served by the Public Electricity Network

70.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.634

21.3
Nurses and Midwives per 10,000 persons

28.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.455

9.5
Average Distance to Airport (km)

81.7
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 80 / 221 CANTONS ASSESSED **SCORE: 0.501**

Morona exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.590

4.8	4.5%	2	11.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.412

10.5	10.5	5.4	7.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 104 / 221 CANTONS ASSESSED
SCORE: 0.489

Morona's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Constraints **Governance** **Energy Capacity** **Emergency Services**

KEY FACTORS INFLUENCING RESILIENCE

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

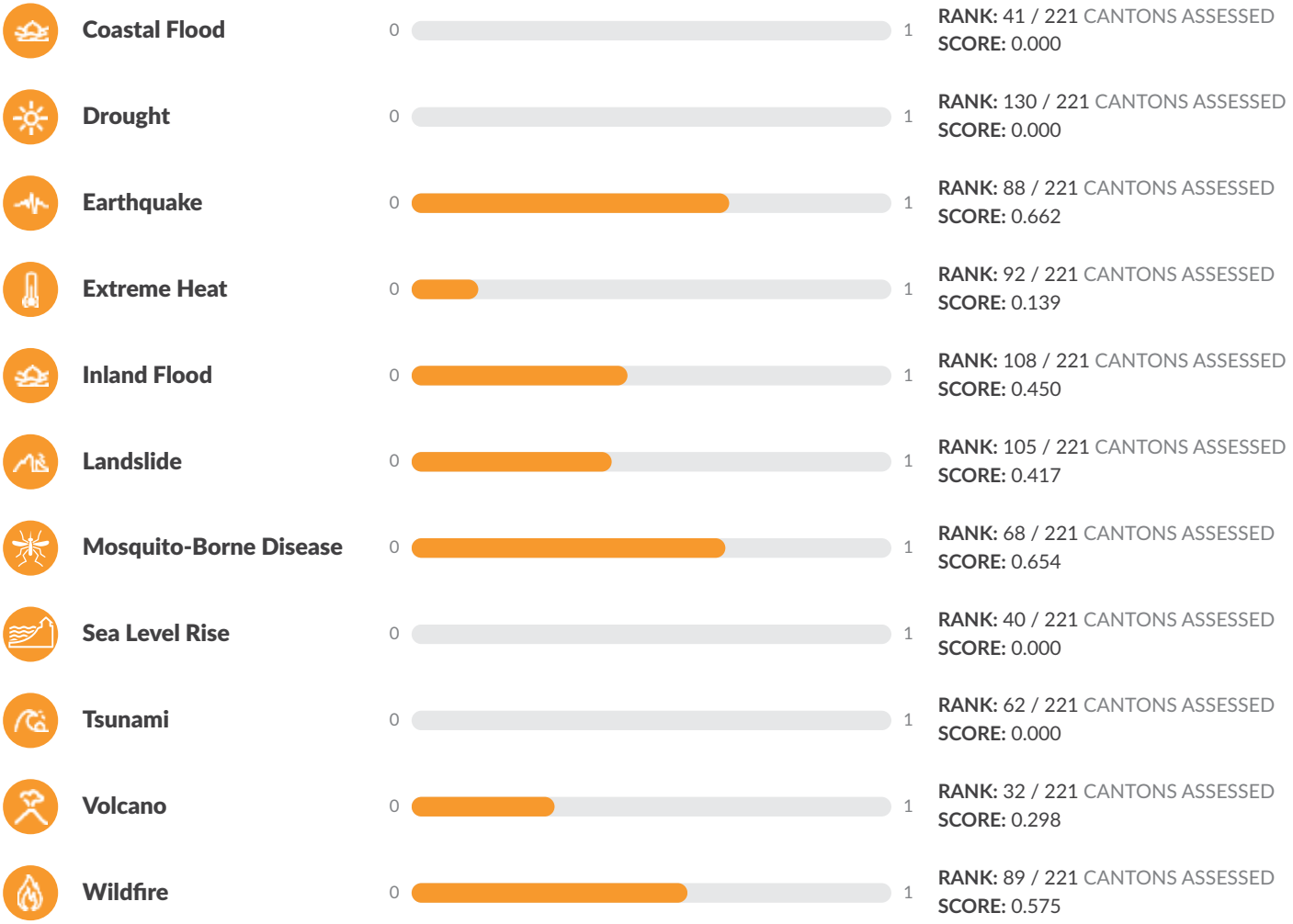
Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

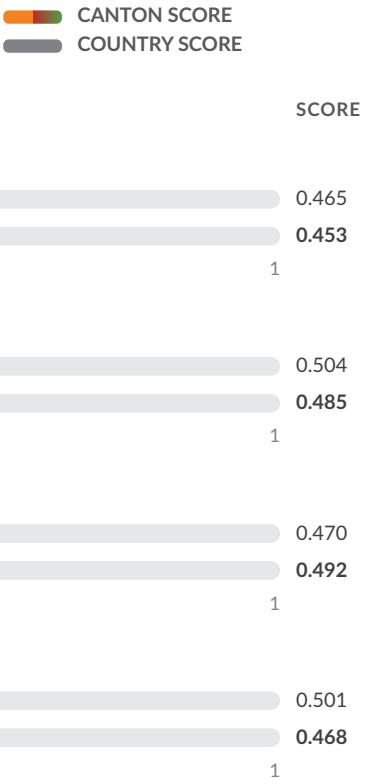


MULTI-HAZARD RISK (MHR)

RANKED
107 / 221
CANTONS ASSESSED
SCORE: 0.499

Morona's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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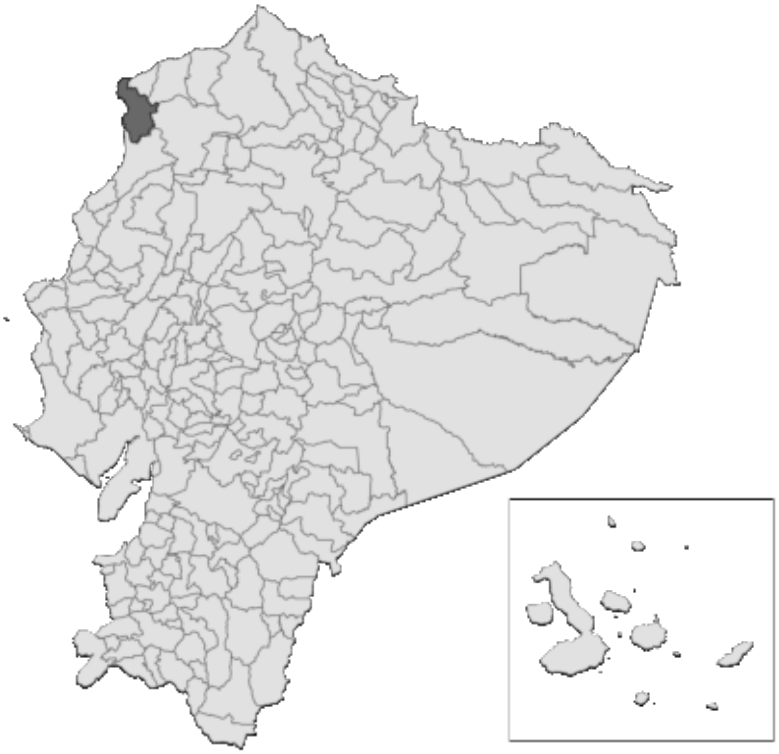
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PROVINCE: ESMERALDAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.614 • RANK: 14/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.692 • RANK: 1/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.352 • RANK: 211/221 CANTONS ASSESSED

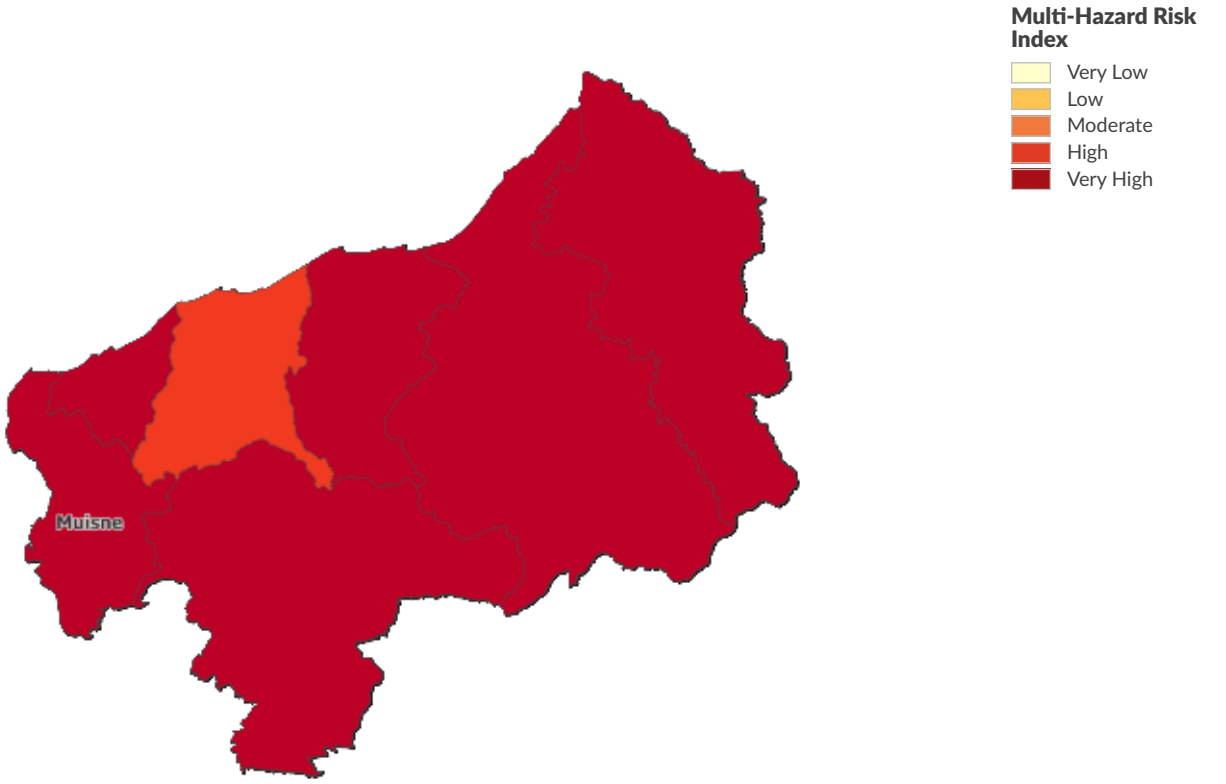
Coping Capacity (CC) - Low
SCORE: 0.398 • RANK: 174/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.514 • RANK: 76/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.351 • RANK: 190/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ESMERALDAS PROVINCE

MUISNE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Rioverde	0.636
Eloy Alfaro	0.631
Muisne	**0.614**
Atacames	0.585
San Lorenzo	0.572
Quinindé	0.568
Esmeraldas	0.523

MULTI-HAZARD EXPOSURE (MHE)

RANK: 76 / 221 CANTONS ASSESSED
SCORE: 0.514



MHE
0.514

Raw MHE
0.569

Relative MHE
0.458

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
14%
- **4,915** people exposed
- **3,650** structures exposed (17%)
- **Critical Infrastructure Exposed:** 9%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Earthquake
100%
- **35,854** people exposed
- **21,740** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
7%
- **2,334** people exposed
- **1,939** structures exposed (9%)
- **Critical Infrastructure Exposed:** 5%

Inland Flood
25%
- **9,014** people exposed
- **5,774** structures exposed (27%)
- **Critical Infrastructure Exposed:** 15%

Landslide
8%
- **2,895** people exposed
- **2,064** structures exposed (9%)
- **Critical Infrastructure Exposed:** 9%

Mosquito-Borne Disease
95%
- **33,997** people exposed
- **20,548** structures exposed (95%)
- **Critical Infrastructure Exposed:** 96%

Sea Level Rise
9%
- **3,070** people exposed
- **2,282** structures exposed (10%)
- **Critical Infrastructure Exposed:** 5%

Tsunami
60%
- **21,422** people exposed
- **12,692** structures exposed (58%)
- **Critical Infrastructure Exposed:** 57%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
83%
- **29,665** people exposed
- **18,920** structures exposed (87%)
- **Critical Infrastructure Exposed:** 96%

VULNERABILITY (V)

RANK: 1 / 221 CANTONS ASSESSED **SCORE: 0.692**

Vulnerability in Muisne is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.710

- **8.2** Average Years of Schooling
- **53.5%** Population (age 24 and over) with General Basic Education Schooling
- **9.9%** Population (age 24 and over) with No Schooling
- **8.7%** Adult Illiteracy Rate
- **81.3%** Households with No Internet Access
- **78%** Households with No Access to Television
- **94.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.887

- **33.8%** Homes with Access to Public Water Source
- **3.5%** Homes Connected to the Public Sewage System
- **84.8%** Homes without Piped Water
- **9.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.729

- **70.2** Age Dependency Ratio
- **29.8%** Unemployment Rate
- **92.3%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.654

- **7.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.831

- **0.6** Female to Male Labor Ratio (distance from parity)
- **62.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **9.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **99.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **92.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.464

- **9.5%** Prevalence of Disability (among persons age 5 and over)
- **1.7** Perinatal Mortality Rate (per 1,000 births)
- **8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.470

- **44.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.494

34
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

29
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

65
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.785

26.4%
Homes with Exterior Walls in Poor Condition

10.8%
Homes with Inadequate Materials Used in Outer Walls

30.6%
Homes with Roofs in Poor Condition

97.6%
Households with No Access to Vehicle for Private Use

13.3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.541

28.8
Population Density (persons per sq km)

2.1%
Average Annual Population Change (2010-2022)

8.3
Net Migration Rate (per 1,000 persons)

0.33
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.596

0.7
Hazard Susceptibility (recent events 2015-2025)

0.4
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 174 / 221 CANTONS ASSESSED **SCORE: 0.398**

Muisne exhibits weaker Coping Capacity in the areas of Energy Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.368

50.4%
Labor Force Participation

56,399
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.541

42%
Protected Area (% of land area)

-15,657.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.420

83.9%
Voter Participation

66.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.359

Communications Capacity

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.244

3.4%
Household Access to Fixed Phones

65.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.239

84.6%
Homes Served by the Public Electricity Network

51.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.613

24.7
Nurses and Midwives per 10,000 persons

21.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.339

60
Average Distance to Airport (km)

65.3
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 190 / 221 CANTONS ASSESSED **SCORE: 0.351**

Muisne exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.354

5	3.3%	0.5	65
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.347

15.3	10.4	4.6	15.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 211 / 221 CANTONS ASSESSED
SCORE: 0.352

Muisne's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Marginalization

Housing and Transportation Vulnerability

Energy Capacity

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

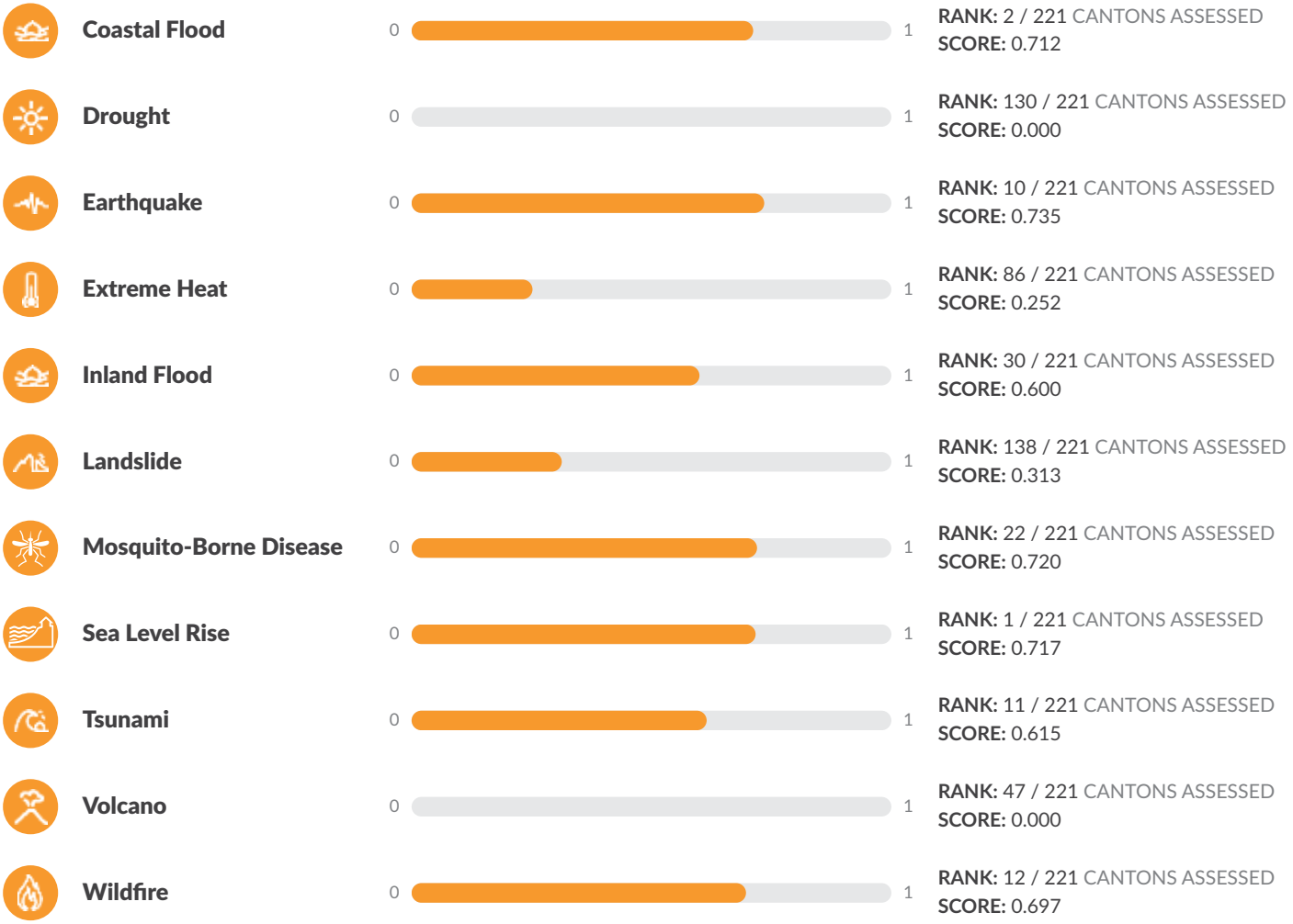
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
14 / 221
CANTONS ASSESSED
SCORE: 0.614

Muisne's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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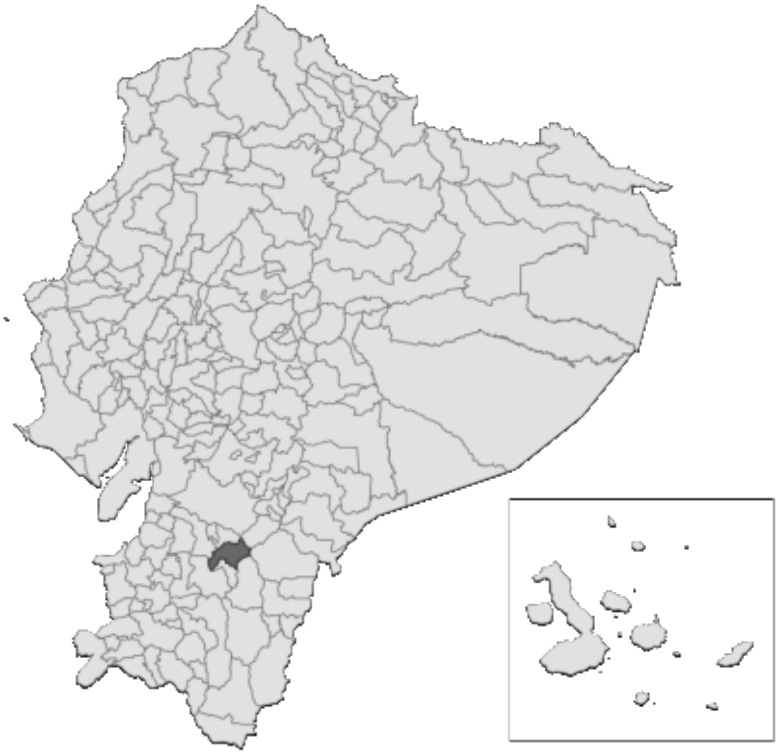
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ECUADOR

NABÓN

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.574 • RANK: 36/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.552 • RANK: 54/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.380 • RANK: 196/221 CANTONS ASSESSED

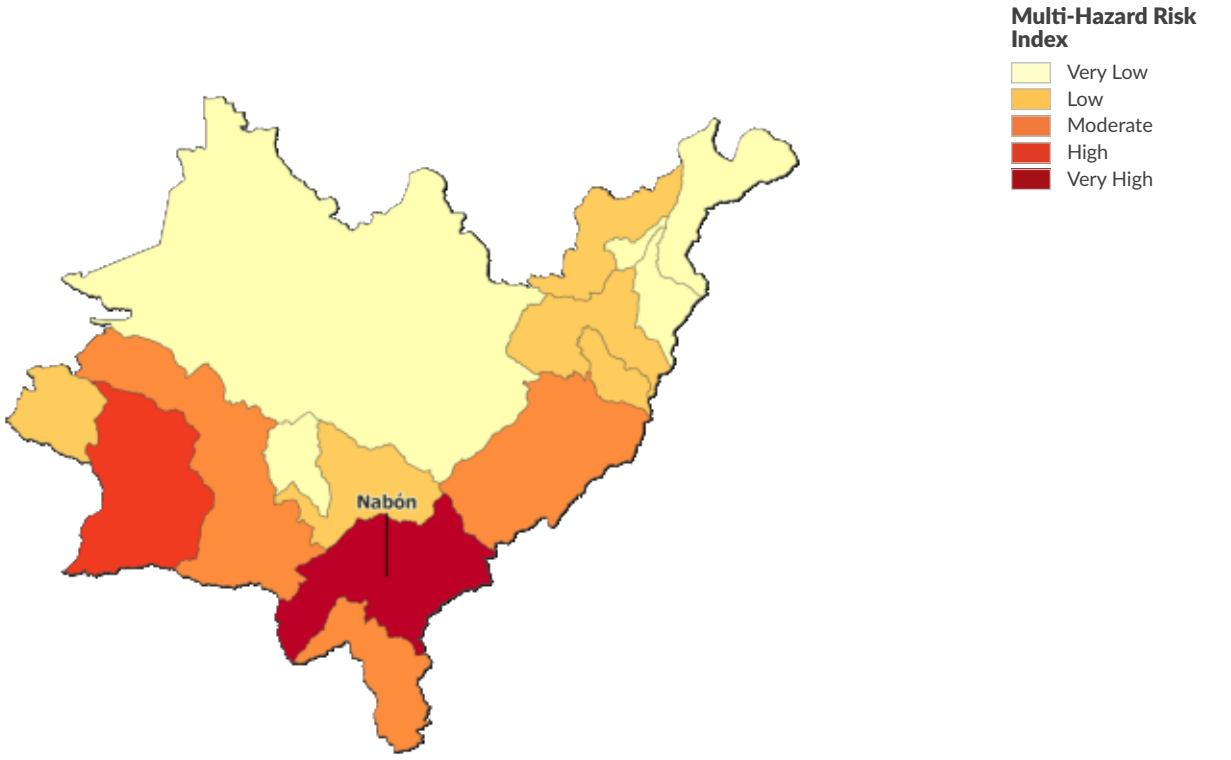
Coping Capacity (CC) - Very Low
SCORE: 0.328 • RANK: 211/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.437 • RANK: 114/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.363 • RANK: 184/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

NABÓN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	**0.574**
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 114 / 221 CANTONS ASSESSED
SCORE: 0.437



MHE
0.437

Raw MHE
0.488

Relative MHE
0.386

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
96%
- **18,418** people exposed
- **18,560** structures exposed (96%)

Critical Infrastructure Exposed: 91%

Earthquake
100%
- **19,107** people exposed
- **19,400** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **12** people exposed
- **5** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
88%
- **16,786** people exposed
- **17,145** structures exposed (88%)

Critical Infrastructure Exposed: 87%

Mosquito-Borne Disease
2%
- **454** people exposed
- **484** structures exposed (2%)

Critical Infrastructure Exposed: 1%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
93%
- **17,688** people exposed
- **17,949** structures exposed (93%)

Critical Infrastructure Exposed: 88%

VULNERABILITY (V)

RANK: 54 / 221 CANTONS ASSESSED **SCORE: 0.552**

Vulnerability in Nabón is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.720

- **6.6** Average Years of Schooling
- **60.4%** Population (age 24 and over) with General Basic Education Schooling
- **14.6%** Population (age 24 and over) with No Schooling
- **13.6%** Adult Illiteracy Rate
- **45.4%** Households with No Internet Access
- **84.6%** Households with No Access to Television
- **85.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.555

- **89.3%** Homes with Access to Public Water Source
- **29.1%** Homes Connected to the Public Sewage System
- **55.8%** Homes without Piped Water
- **4.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.642

- **67.7** Age Dependency Ratio
- **11%** Unemployment Rate
- **72.3%** Poverty Rate (based on UBN)
- **2.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.621

- **6.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.565

- **0.4** Female to Male Labor Ratio (distance from parity)
- **33.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **85.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **83.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.436

- **13.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.241

- **1.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.491

91	10	33	28
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.540

22.1%	0.2%	28.5%	85%	8.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.368

23.4	-0.4	-8.2	0.33
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.575

0.3	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 211 / 221 CANTONS ASSESSED **SCORE: 0.328**

Nabón exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.251

46.4%
Labor Force Participation

23,248
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.288

0%
Protected Area (% of land area)

-4,364.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.252

75.3%
Voter Participation

58.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.494

Communications Capacity

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.526

6.4%
Household Access to Fixed Phones

87.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.498

95.5%
Homes Served by the Public Electricity Network

68.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.590

18.3
Nurses and Midwives per 10,000 persons

25.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.363

49.5
Average Distance to Airport (km)

100.2
Average Distance to Sea or River Port (km)

1.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 184 / 221 CANTONS ASSESSED **SCORE: 0.363**

Nabón exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.327

4.1	3.7%	0	50.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.400

19.8	6.9	6.6	6.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 196 / 221 CANTONS ASSESSED
SCORE: 0.380

Nabón's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Information Access Vulnerability

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

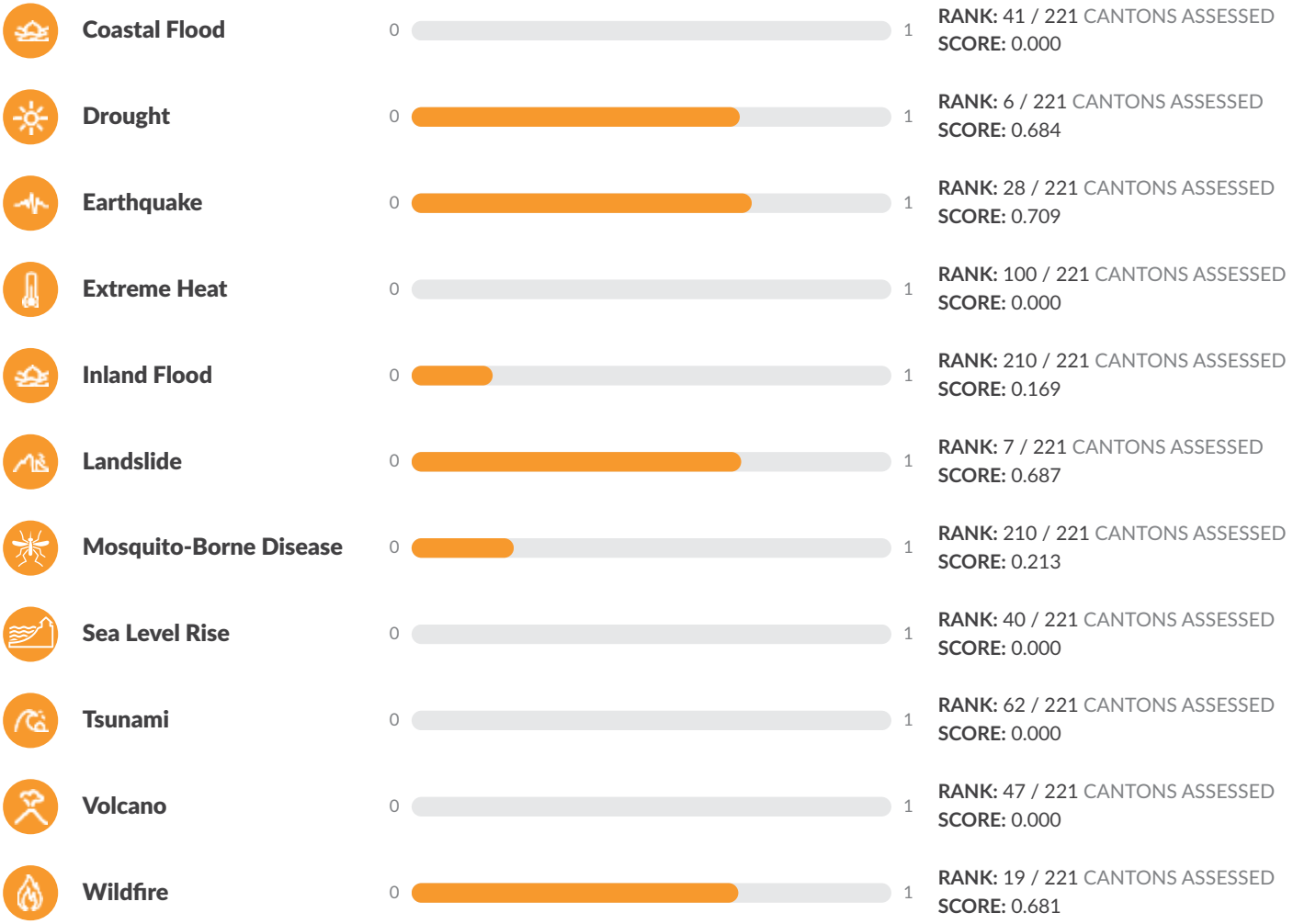
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
36 / 221
CANTONS ASSESSED
SCORE: 0.574

Nabón's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NANGARITZA

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.524 • RANK: 80/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.548 • RANK: 59/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.396 • RANK: 188/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.462 • RANK: 132/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.284 • RANK: 183/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.273 • RANK: 213/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

NANGARITZA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Palanda	0.535
Yacuambi	0.535
Nangaritza	**0.524**
Chinchipe	0.511
Paquisha	0.465
Centinela Del Cóndor	0.428
El Pangui	0.428
Zamora	0.419
Yantzaza	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 183 / 221 CANTONS ASSESSED
SCORE: 0.284



MHE
0.284

Raw MHE
0.275

Relative MHE
0.293

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
6,296 people exposed
6,954 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
19%
1,183 people exposed
1,338 structures exposed (19%)
Critical Infrastructure Exposed: 24%

Landslide
36%
2,243 people exposed
2,660 structures exposed (38%)
Critical Infrastructure Exposed: 38%

Mosquito-Borne Disease
96%
6,032 people exposed
6,521 structures exposed (94%)
Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
98%
6,161 people exposed
6,810 structures exposed (98%)
Critical Infrastructure Exposed: 86%

VULNERABILITY (V)

RANK: 59 / 221 CANTONS ASSESSED **SCORE: 0.548**

Vulnerability in Nangaritza is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.503

- **9.9** Average Years of Schooling
- **48%** Population (age 24 and over) with General Basic Education Schooling
- **5.3%** Population (age 24 and over) with No Schooling
- **3.5%** Adult Illiteracy Rate
- **51.8%** Households with No Internet Access
- **86.1%** Households with No Access to Television
- **78%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.578

- **72.1%** Homes with Access to Public Water Source
- **56.5%** Homes Connected to the Public Sewage System
- **38%** Homes without Piped Water
- **10.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.780

- **67.6** Age Dependency Ratio
- **31.4%** Unemployment Rate
- **56.5%** Poverty Rate (based on UBN)
- **6.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.439

- **3.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.665

- **0.4** Female to Male Labor Ratio (distance from parity)
- **92.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **87.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **56.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.253

- **4.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.209

- **6.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.476

33	22	16	81
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.481

14.7%	0.4%	16.2%	89.6%	11.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.492

3.2	1.9%	5.9	0.36
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.647

0.4	0.3	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 132 / 221 CANTONS ASSESSED **SCORE: 0.462**

Nangaritza exhibits weaker Coping Capacity in the areas of Economic Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.369

56.2%
Labor Force Participation

17,711
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.683

34.3%
Protected Area (% of land area)

-3,876.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.437

80.1%
Voter Participation

81.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.507

Communications Capacity

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.389

6.5%
Household Access to Fixed Phones

74.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.527

94%
Homes Served by the Public Electricity Network

76.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.639

23.3
Nurses and Midwives per 10,000 persons

26.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.472

33.5
Average Distance to Airport (km)

14.5
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 213 / 221 CANTONS ASSESSED **SCORE: 0.273**

Nangaritza exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.450

3.4	18.8%	0	37.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.096

35.7	32.6	15.6	15.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 188 / 221 CANTONS ASSESSED
SCORE: 0.396

Nangaritza's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Emergency Services | **Economic Constraints** | **Marginalization** | **Disaster Impacts**

KEY FACTORS INFLUENCING RESILIENCE

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

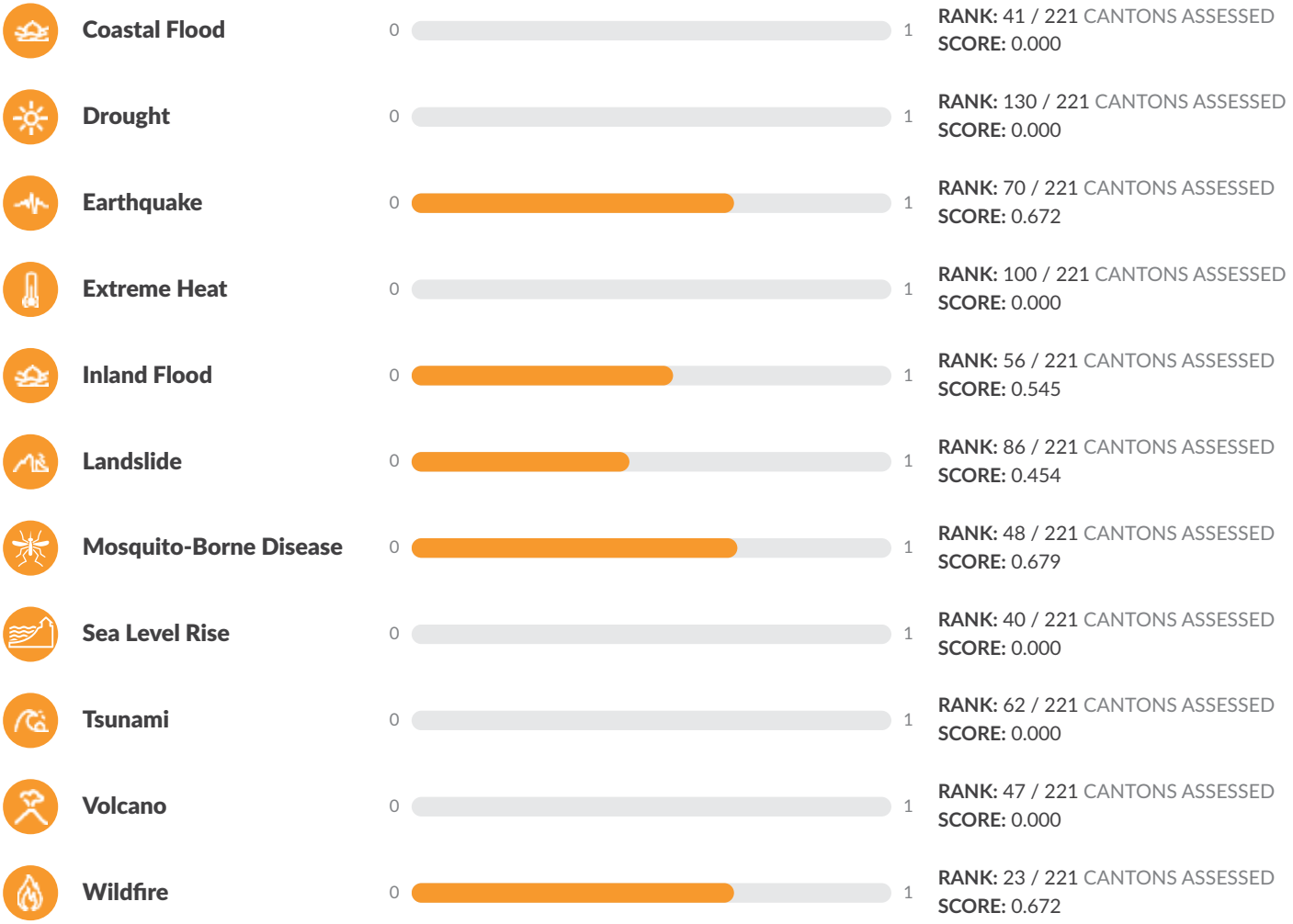
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

HAZARD-SPECIFIC RISK (HSR)

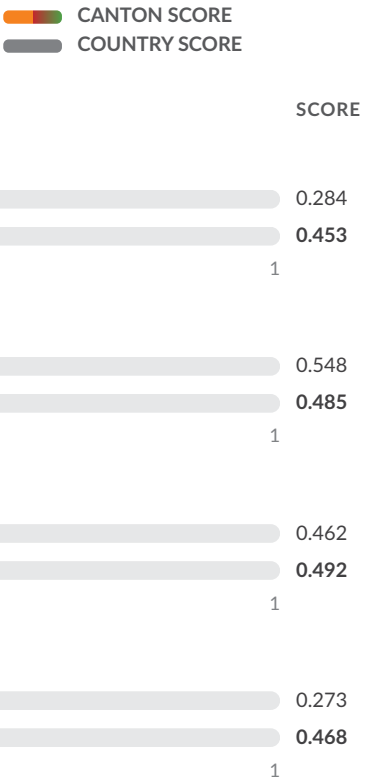


MULTI-HAZARD RISK (MHR)

RANKED
80 / 221
CANTONS ASSESSED
SCORE: 0.524

Nangaritza's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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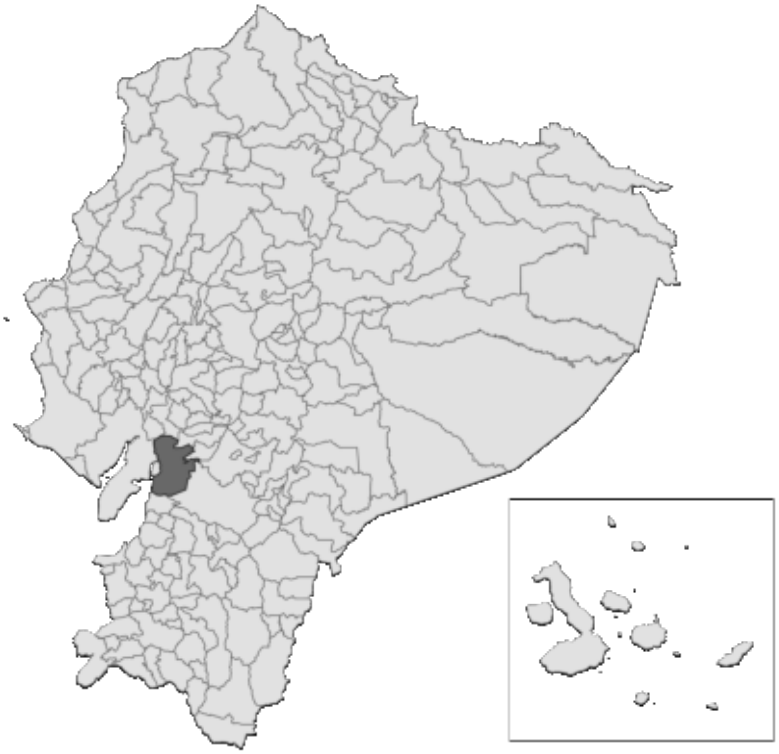
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NARANJAL

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.590 • RANK: 21/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.466 • RANK: 136/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.760 • RANK: 13/221 CANTONS ASSESSED

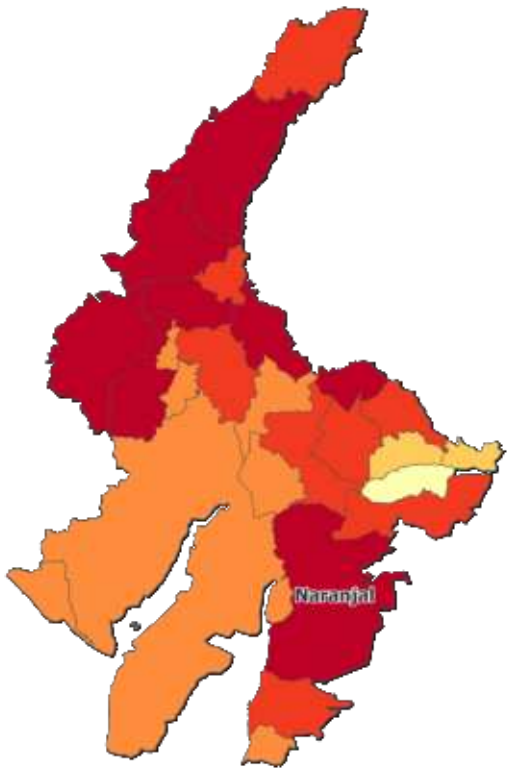
Vulnerability (V) - Moderate
SCORE: 0.490 • RANK: 106/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.506 • RANK: 97/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.384 • RANK: 166/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

NARANJAL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	**0.590**
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 13 / 221 CANTONS ASSESSED
SCORE: 0.760



MHE
0.760

Raw MHE
0.729

Relative MHE
0.791

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
3%
- **2,690** people exposed
- **1,469** structures exposed (5%)
- **Critical Infrastructure Exposed:** 2%

Drought
93%
- **75,753** people exposed
- **28,471** structures exposed (88%)
- **Critical Infrastructure Exposed:** 87%

Earthquake
100%
- **81,387** people exposed
- **32,431** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
94%
- **76,672** people exposed
- **29,119** structures exposed (90%)
- **Critical Infrastructure Exposed:** 87%

Inland Flood
45%
- **36,777** people exposed
- **15,891** structures exposed (49%)
- **Critical Infrastructure Exposed:** 54%

Landslide
3%
- **2,192** people exposed
- **1,617** structures exposed (5%)
- **Critical Infrastructure Exposed:** 5%

Mosquito-Borne Disease
99%
- **80,827** people exposed
- **32,275** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
2%
- **1,499** people exposed
- **655** structures exposed (2%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
47%
- **37,912** people exposed
- **15,538** structures exposed (48%)
- **Critical Infrastructure Exposed:** 41%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
37%
- **30,335** people exposed
- **12,374** structures exposed (38%)
- **Critical Infrastructure Exposed:** 38%

VULNERABILITY (V)

RANK: 106 / 221 CANTONS ASSESSED **SCORE: 0.490**

Vulnerability in Naranjal is primarily driven by Marginalization and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.511

- **9.5** Average Years of Schooling
- **51.6%** Population (age 24 and over) with General Basic Education Schooling
- **5.5%** Population (age 24 and over) with No Schooling
- **4.4%** Adult Illiteracy Rate
- **50.5%** Households with No Internet Access
- **73.5%** Households with No Access to Television
- **84.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.550

- **74.9%** Homes with Access to Public Water Source
- **37.3%** Homes Connected to the Public Sewage System
- **24.9%** Homes without Piped Water
- **7.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.450

- **59.7** Age Dependency Ratio
- **8.2%** Unemployment Rate
- **53.5%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.529

- **4.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.614

- **0.5** Female to Male Labor Ratio (distance from parity)
- **67.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **51%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **65.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.461

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **4.8** Perinatal Mortality Rate (per 1,000 births)
- **6.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.515

- **19.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.416

46	14	23	26
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.504

10.8%	5.7%	14.4%	89.2%	11.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.589

49.2	1.7%	29.2	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.240

0.3	0	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 97 / 221 CANTONS ASSESSED **SCORE: 0.506**

Naranjal exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.628

59.1%
Labor Force Participation

341,346
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.303

15.2%
Protected Area (% of land area)

-35,036.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.446

80.5%
Voter Participation

81.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.512

Communications Capacity

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.496

4.4%
Household Access to Fixed Phones

89.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.614

97.8%
Homes Served by the Public Electricity Network

72.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.277

6.9
Nurses and Midwives per 10,000 persons

9.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.660

5.4
Average Distance to Airport (km)

34.1
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 166 / 221 CANTONS ASSESSED **SCORE: 0.384**

Naranjal exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.292

5.1	1%	0.2	51.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.475

10.6	5.9	3.6	9.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 136 / 221 CANTONS ASSESSED
SCORE: 0.466

Naranjal's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Marginalization

Population Pressures

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

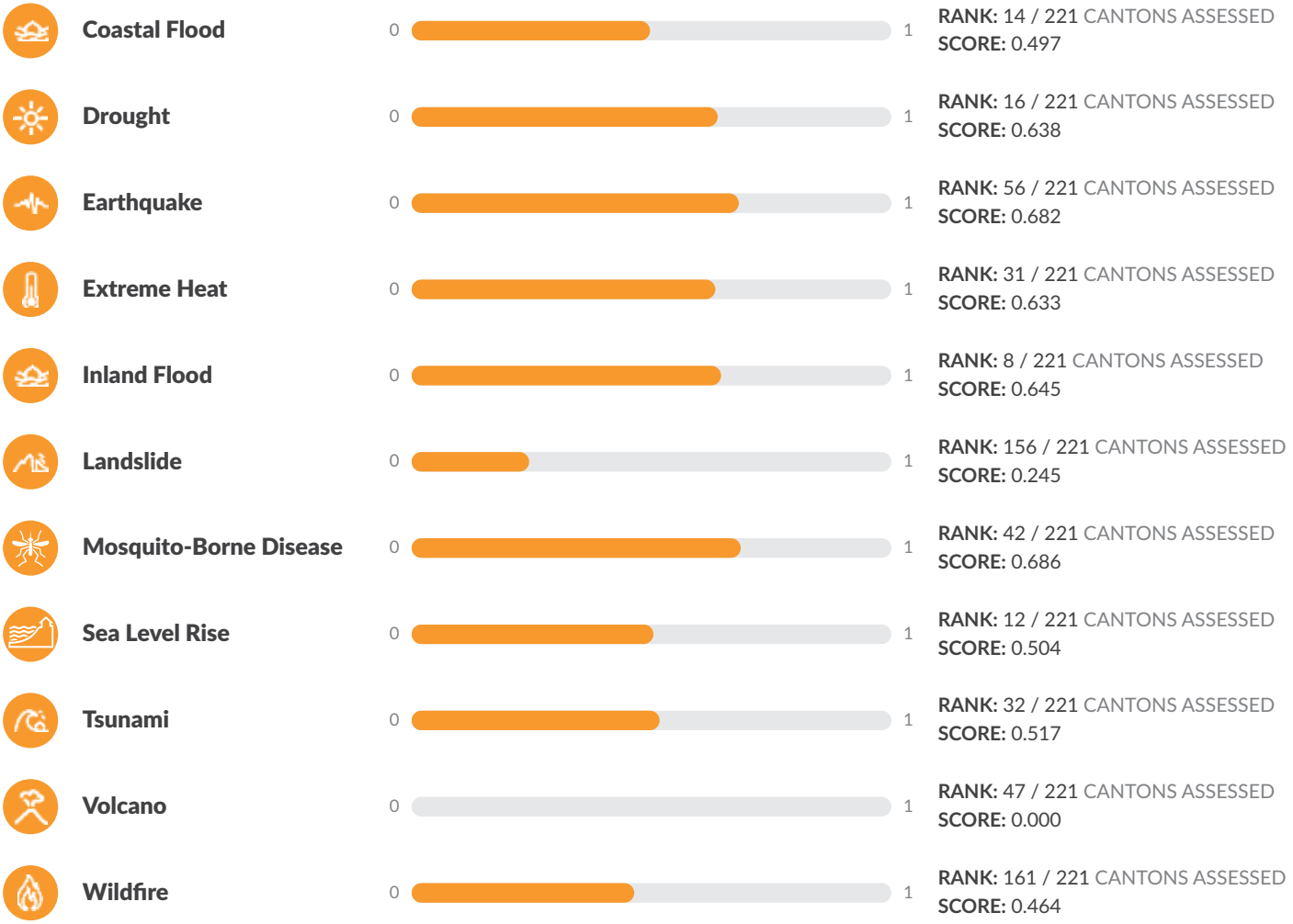
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

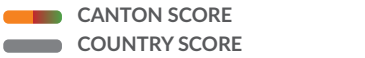


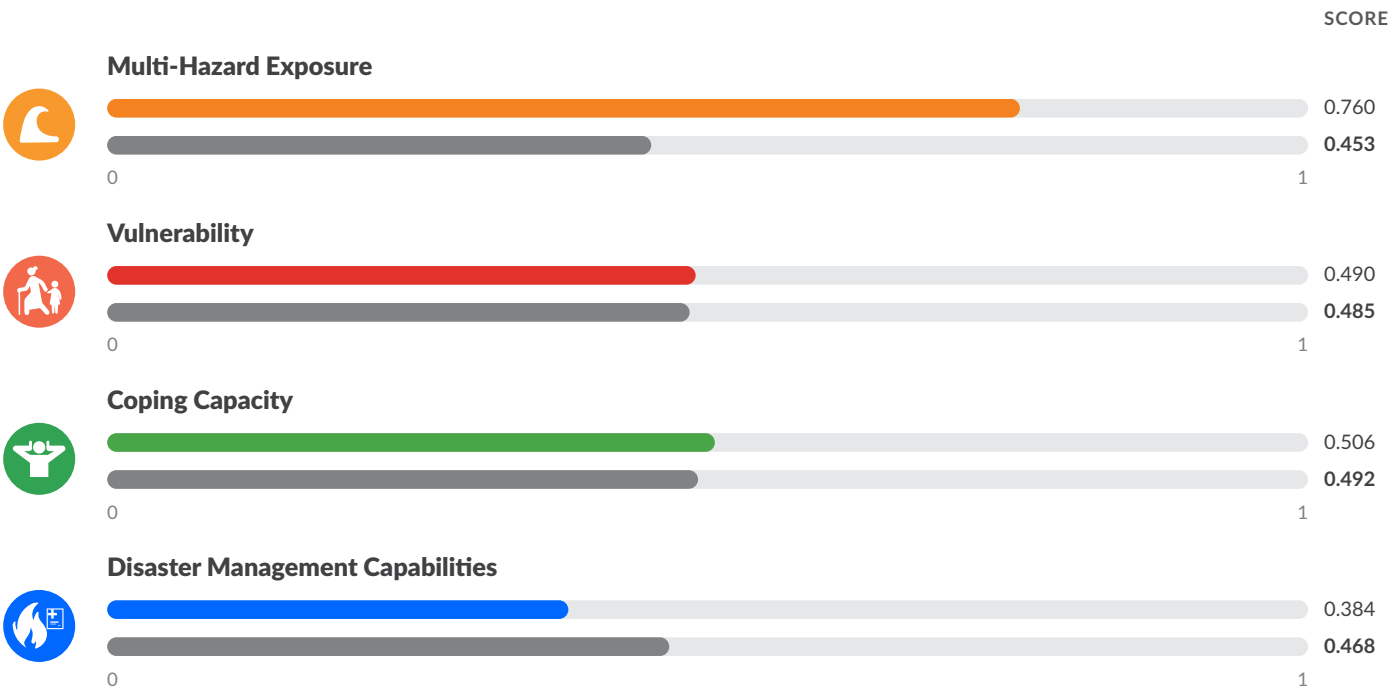
MULTI-HAZARD RISK (MHR)

RANKED
21 / 221
CANTONS ASSESSED
SCORE: 0.590

Naranjal's score and ranking are due to Very High Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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NARANJITO

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.449 • RANK: 152/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.460 • RANK: 139/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.540 • RANK: 68/221 CANTONS ASSESSED

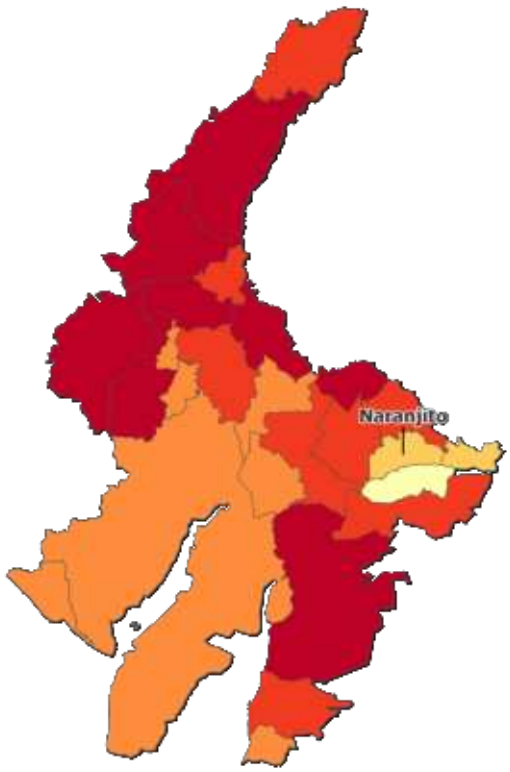
Coping Capacity (CC) - Moderate
SCORE: 0.506 • RANK: 97/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.417 • RANK: 125/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.574 • RANK: 44/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

NARANJITO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617	San Jacinto De Yaguachi	0.561	Durán	0.502
Colimes	0.611	Palestina	0.554	Playas	0.497
Pedro Carbo	0.611	El Triunfo	0.543	Samborondón	0.484
Alfredo Baquerizo Moreno (Juján)	0.590	Balao	0.539	Guayaquil	0.483
Naranjal	0.590	Daule	0.537	General Antonio Elizalde	0.453
Balzar	0.576	Simón Bolívar	0.536	**Naranjito**	**0.449**
Santa Lucía	0.575	Milagro	0.524	Coronel Marcelino Maridueña	0.428
Isidro Ayora	0.569	Lomas De Sargentillo	0.519		
El Empalme	0.562	Nobol	0.517		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 125 / 221 CANTONS ASSESSED
SCORE: 0.417



MHE
0.417

Raw MHE
0.517

Relative MHE
0.318

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
1 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Earthquake
100%
44,926 people exposed
13,883 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
89%
39,800 people exposed
12,385 structures exposed (89%)
Critical Infrastructure Exposed: 93%

Inland Flood
29%
12,989 people exposed
4,103 structures exposed (30%)
Critical Infrastructure Exposed: 44%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
99%
44,522 people exposed
13,721 structures exposed (99%)
Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
25%
11,389 people exposed
3,283 structures exposed (24%)
Critical Infrastructure Exposed: 15%

VULNERABILITY (V)

RANK: 139 / 221 CANTONS ASSESSED **SCORE: 0.460**

Vulnerability in Naranjito is primarily driven by Population Pressures and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.514

- **9.9** Average Years of Schooling
- **47.3%** Population (age 24 and over) with General Basic Education Schooling
- **5.7%** Population (age 24 and over) with No Schooling
- **4.7%** Adult Illiteracy Rate
- **52%** Households with No Internet Access
- **82.5%** Households with No Access to Television
- **82.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.468

- **82.5%** Homes with Access to Public Water Source
- **65.9%** Homes Connected to the Public Sewage System
- **20.5%** Homes without Piped Water
- **10.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.431

- **56.8** Age Dependency Ratio
- **14.3%** Unemployment Rate
- **45.1%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.628

- **6.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.440

- **0.5** Female to Male Labor Ratio (distance from parity)
- **46.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **48.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **43.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.485

- **9.6%** Prevalence of Disability (among persons age 5 and over)
- **1.7** Perinatal Mortality Rate (per 1,000 births)
- **7.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.595

- **48.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **78.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.519

39
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

22
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

140
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.520

13%
Homes with Exterior Walls in Poor Condition

5.1%
Homes with Inadequate Materials Used in Outer Walls

18.3%
Homes with Roofs in Poor Condition

89.4%
Households with No Access to Vehicle for Private Use

9.3%
Household Overcrowding

Population Pressures

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.549

191.4
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

13.2
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.245

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 97 / 221 CANTONS ASSESSED **SCORE: 0.506**

Naranjito exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.491

56.8%
Labor Force Participation

85,005
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.325

0%
Protected Area (% of land area)

-1,901
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.581

83.6%
Voter Participation

91.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.506

Communications Capacity

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.414

6.7%
Household Access to Fixed Phones

77%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.630

98.3%
Homes Served by the Public Electricity Network

71.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.278

6.6
Nurses and Midwives per 10,000 persons

9.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.702

7.1
Average Distance to Airport (km)

41.7
Average Distance to Sea or River Port (km)

2.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 44 / 221 CANTONS ASSESSED **SCORE: 0.574**

Naranjito exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.487

1.3	2%	0.7	46.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.661

5.2	4.8	2.2	3.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 68 / 221 CANTONS ASSESSED
SCORE: 0.540

Naranjito's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Communications Capacity

Population Pressures

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

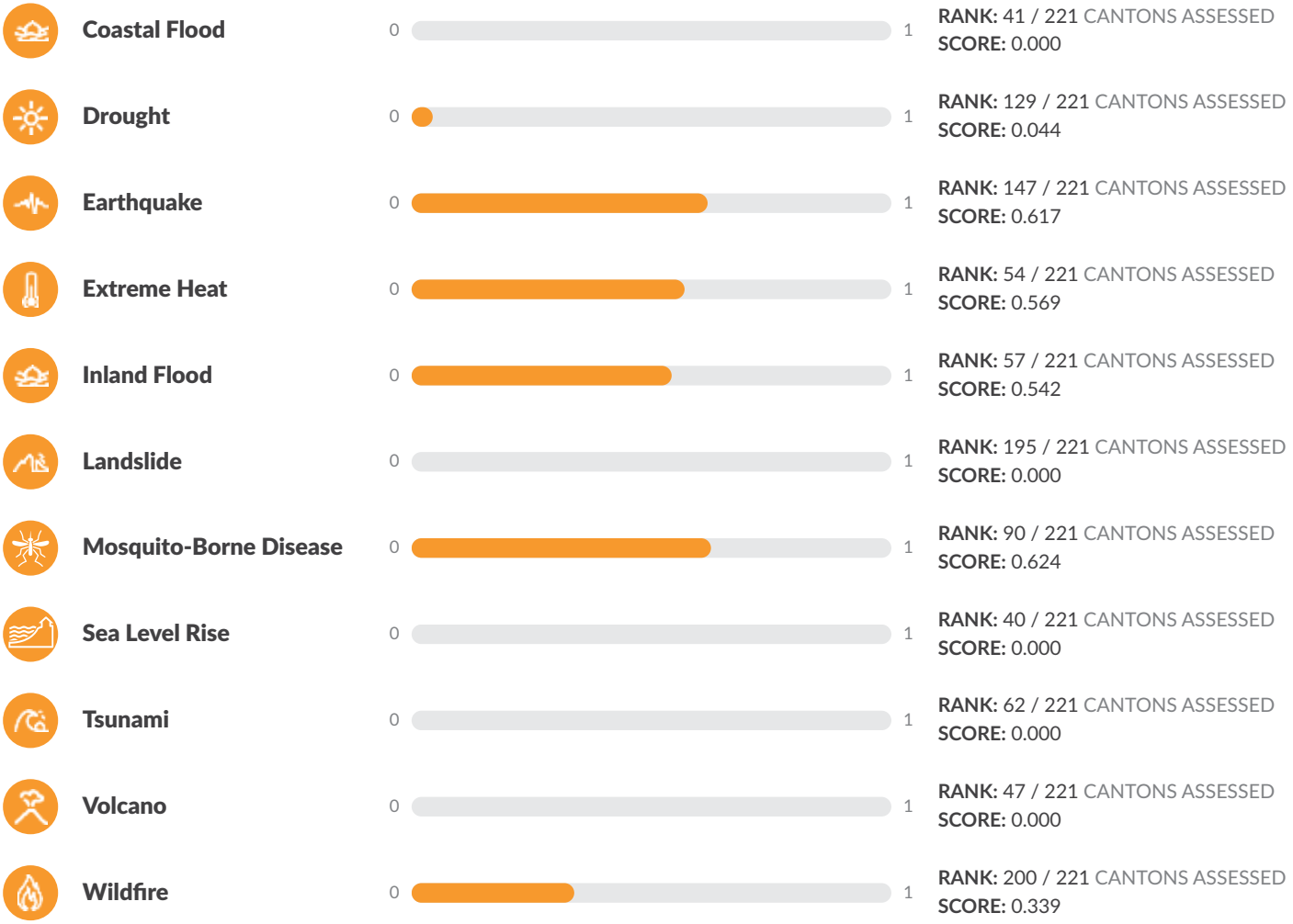
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
152 / 221
CANTONS ASSESSED
SCORE: 0.449

Naranjito's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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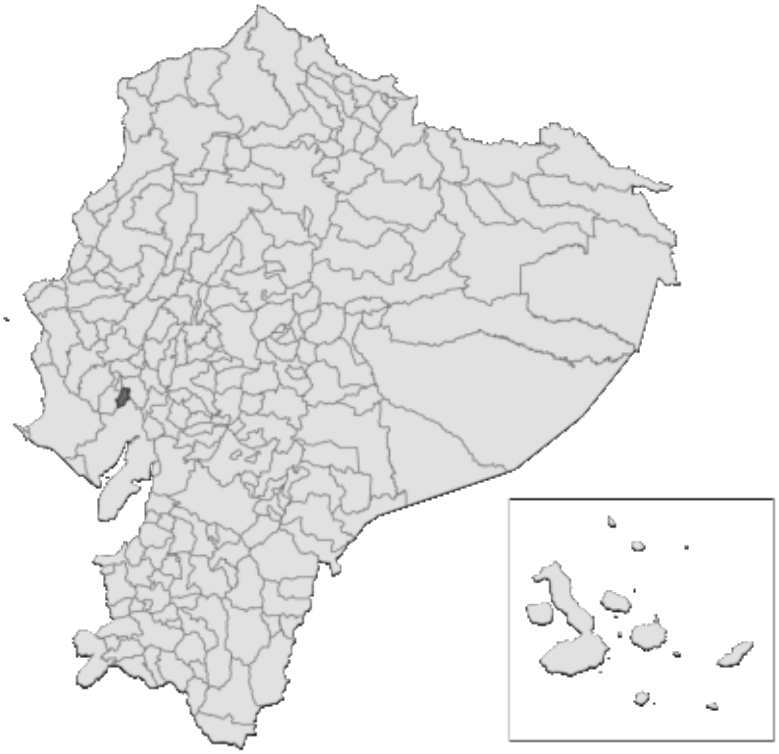
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PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.517 • RANK: 89/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.529 • RANK: 76/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.657 • RANK: 27/221 CANTONS ASSESSED

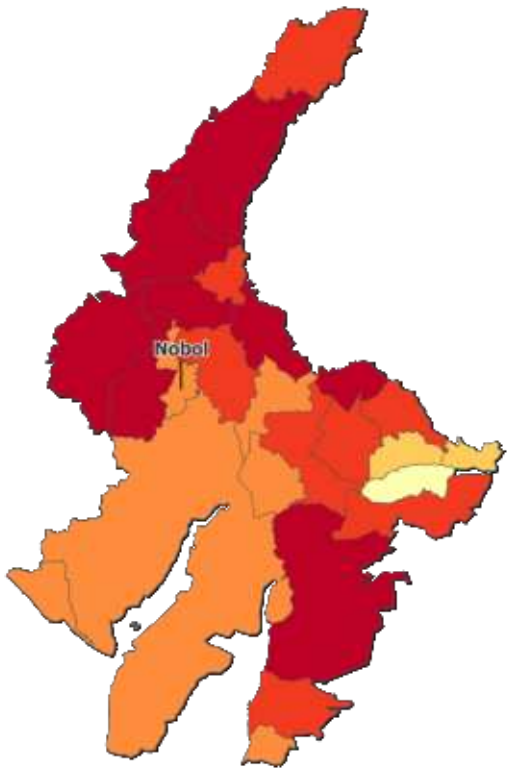
Vulnerability (V) - High
SCORE: 0.514 • RANK: 82/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.539 • RANK: 73/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.562 • RANK: 51/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

NOBOL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617	San Jacinto De Yaguachi	0.561	Durán	0.502
Colimes	0.611	Palestina	0.554	Playas	0.497
Pedro Carbo	0.611	El Triunfo	0.543	Samborondón	0.484
Alfredo Baquerizo Moreno (Juján)	0.590	Balao	0.539	Guayaquil	0.483
Naranjal	0.590	Daule	0.537	General Antonio Elizalde	0.453
Balzar	0.576	Simón Bolívar	0.536	Naranjito	0.449
Santa Lucía	0.575	Milagro	0.524	Coronel Marcelino Maridueña	0.428
Isidro Ayora	0.569	Lomas De Sargentillo	0.519		
El Empalme	0.562	**Nobol**	**0.517**		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 27 / 221 CANTONS ASSESSED
SCORE: 0.657



MHE
0.657

Raw MHE
0.519

Relative MHE
0.794

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **119** people exposed
- **76** structures exposed (<1%)

Critical Infrastructure Exposed: 2%

Drought
100%
- **23,679** people exposed
- **10,069** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **23,679** people exposed
- **10,069** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **23,679** people exposed
- **10,069** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
47%
- **11,130** people exposed
- **4,617** structures exposed (46%)

Critical Infrastructure Exposed: 54%

Landslide
<1%
- **110** people exposed
- **46** structures exposed (<1%)

Critical Infrastructure Exposed: 2%

Mosquito-Borne Disease
98%
- **23,204** people exposed
- **9,812** structures exposed (97%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
94%
- **22,313** people exposed
- **9,464** structures exposed (94%)

Critical Infrastructure Exposed: 89%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
17%
- **4,088** people exposed
- **2,020** structures exposed (20%)

Critical Infrastructure Exposed: 23%

VULNERABILITY (V)

RANK: 82 / 221 CANTONS ASSESSED **SCORE: 0.514**

Vulnerability in Nobol is primarily driven by Housing and Transportation Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.565

- **9.4** Average Years of Schooling
- **47.7%** Population (age 24 and over) with General Basic Education Schooling
- **6.8%** Population (age 24 and over) with No Schooling
- **5.5%** Adult Illiteracy Rate
- **62%** Households with No Internet Access
- **83.8%** Households with No Access to Television
- **84.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.528

- **91%** Homes with Access to Public Water Source
- **32.9%** Homes Connected to the Public Sewage System
- **27.3%** Homes without Piped Water
- **9.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.470

- **55.3** Age Dependency Ratio
- **20.2%** Unemployment Rate
- **48.6%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.621

- **6.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.531

- **0.5** Female to Male Labor Ratio (distance from parity)
- **62** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **48%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **47.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.527

- **9.7%** Prevalence of Disability (among persons age 5 and over)
- **5.5** Perinatal Mortality Rate (per 1,000 births)
- **10.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.351

- **2.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **24.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.487

78
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

8
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

39
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.623

17.1%
Homes with Exterior Walls in Poor Condition

12.1%
Homes with Inadequate Materials Used in Outer Walls

19.7%
Homes with Roofs in Poor Condition

91%
Households with No Access to Vehicle for Private Use

13%
Household Overcrowding

Population Pressures

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.556

177.1
Population Density (persons per sq km)

1.7%
Average Annual Population Change (2010-2022)

10.2
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.296

0.1
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 73 / 221 CANTONS ASSESSED **SCORE: 0.539**

Nobol exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.479

56%
Labor Force Participation

86,160
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.341

0%
Protected Area (% of land area)

-903.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.736

92.6%
Voter Participation

85.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.469

Communications Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.513

8.1%
Household Access to Fixed Phones

84.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.484

94.8%
Homes Served by the Public Electricity Network

68.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.214

3.8
Nurses and Midwives per 10,000 persons

9.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.666

23.3
Average Distance to Airport (km)

9.7
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 51 / 221 CANTONS ASSESSED **SCORE: 0.562**

Nobol exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.480

1.5	6%	0	24
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.645

8.8	3.7	2.1	3.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 76 / 221 CANTONS ASSESSED
SCORE: 0.529

Nobol's score and ranking are due to High Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Healthcare Capacity
- Housing and Transportation Vulnerability
- Information Access Vulnerability
- Population Pressures

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

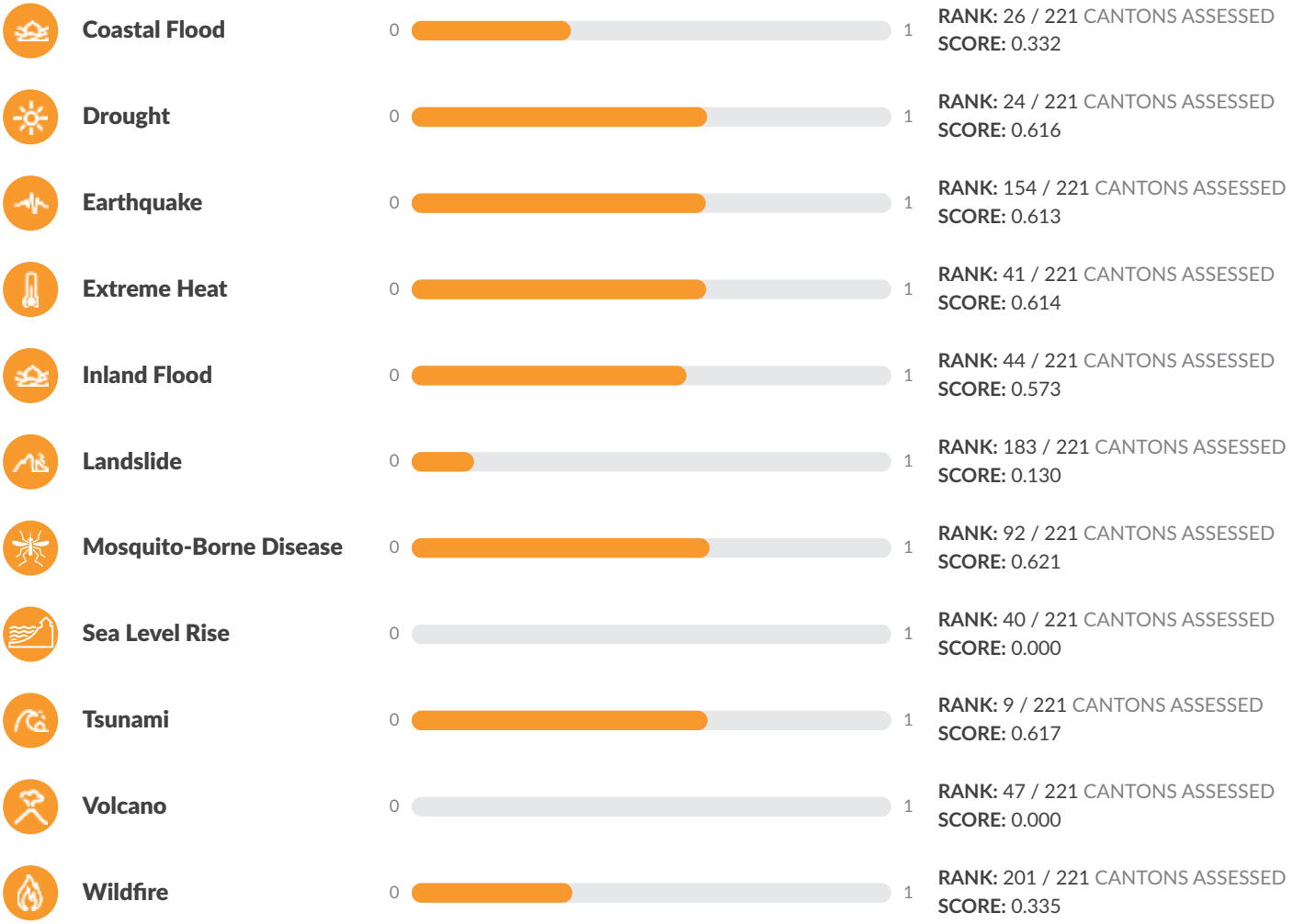
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

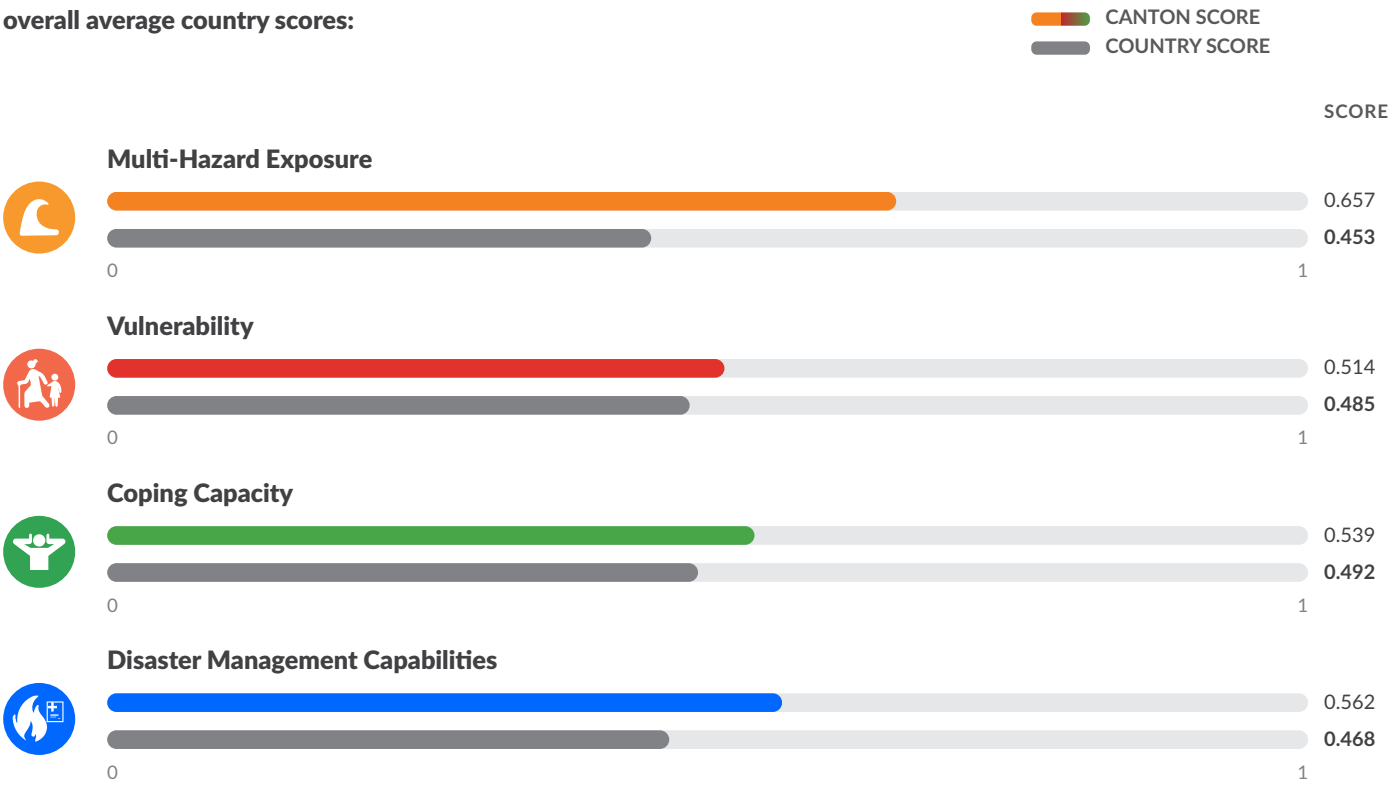


MULTI-HAZARD RISK (MHR)

RANKED
89 / 221
CANTONS ASSESSED
SCORE: 0.517

Nobol's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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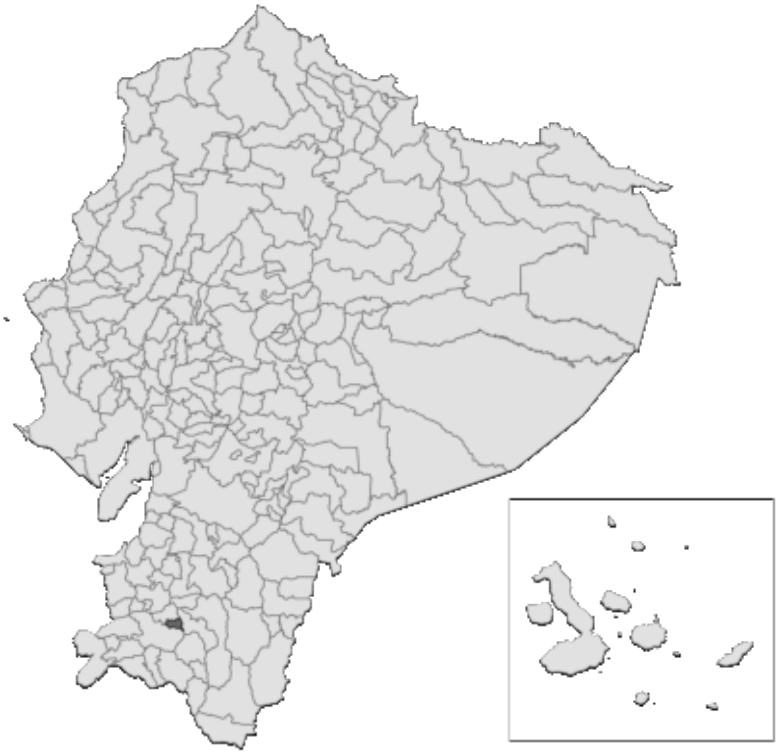
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PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.521 • RANK: 85/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.527 • RANK: 74/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.398 • RANK: 186/221 CANTONS ASSESSED

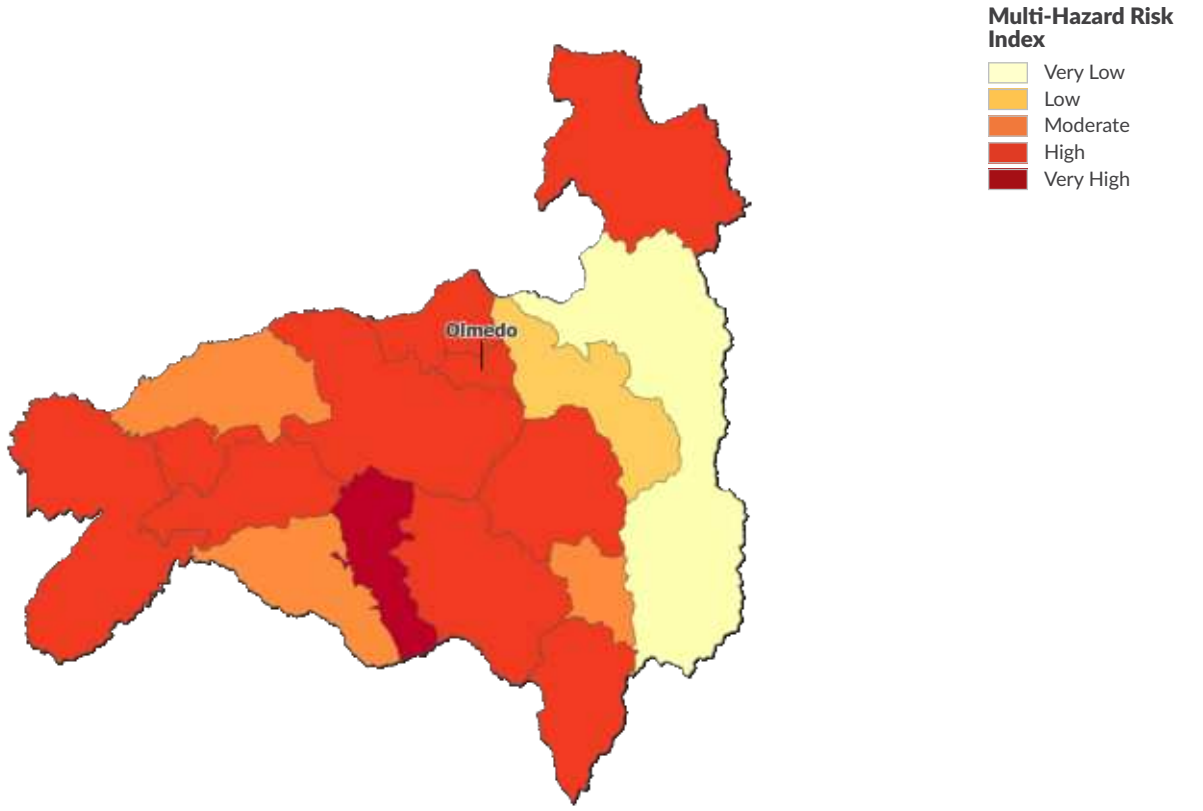
Coping Capacity (CC) - Very Low
SCORE: 0.269 • RANK: 217/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.280 • RANK: 185/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.453 • RANK: 118/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

OLMEDO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	**0.521**
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 185 / 221 CANTONS ASSESSED
SCORE: 0.280



MHE
0.280

Raw MHE
0.220

Relative MHE
0.339

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
14%
757 people exposed
555 structures exposed (16%)
Critical Infrastructure Exposed: 12%

Earthquake
100%
5,491 people exposed
3,566 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Landslide
100%
5,491 people exposed
3,566 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Mosquito-Borne Disease
76%
4,168 people exposed
2,567 structures exposed (72%)
Critical Infrastructure Exposed: 82%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
5,491 people exposed
3,566 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 74 / 221 CANTONS ASSESSED **SCORE: 0.527**

Vulnerability in Olmedo is primarily driven by Information Access Vulnerability and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.667

- **8.6** Average Years of Schooling
- **63.4%** Population (age 24 and over) with General Basic Education Schooling
- **5.6%** Population (age 24 and over) with No Schooling
- **4.1%** Adult Illiteracy Rate
- **66%** Households with No Internet Access
- **89%** Households with No Access to Television
- **88.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.605

- **74.6%** Homes with Access to Public Water Source
- **29.9%** Homes Connected to the Public Sewage System
- **42.8%** Homes without Piped Water
- **6.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.530

- **71.6** Age Dependency Ratio
- **9.5%** Unemployment Rate
- **63.6%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.534

- **4.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.601

- **0.5** Female to Male Labor Ratio (distance from parity)
- **47.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **0.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **100%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **66.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.284

- **10.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **0%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.266

- **0.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **6.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.497

449	9	24	20
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.555

19.9%	0.5%	22.9%	90.3%	10.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.345

36.6	-1.3	1.9	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.627

0.3	0.3	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 217 / 221 CANTONS ASSESSED **SCORE: 0.269**

Olmedo exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.176

47.4%
Labor Force Participation

6,832
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.337

0%
Protected Area (% of land area)

-1,129.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.210

78.1%
Voter Participation

34.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.400

Communications Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.493

6%
Household Access to Fixed Phones

86.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.369

94.8%
Homes Served by the Public Electricity Network

49.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.285

2.4
Nurses and Midwives per 10,000 persons

19.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.454

28.1
Average Distance to Airport (km)

72
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 118 / 221 CANTONS ASSESSED **SCORE: 0.453**

Olmedo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.437

2	9.4%	0	46.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.468

14.6	7.6	3	7.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 186 / 221 CANTONS ASSESSED
SCORE: 0.398

Olmedo's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Healthcare Capacity

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

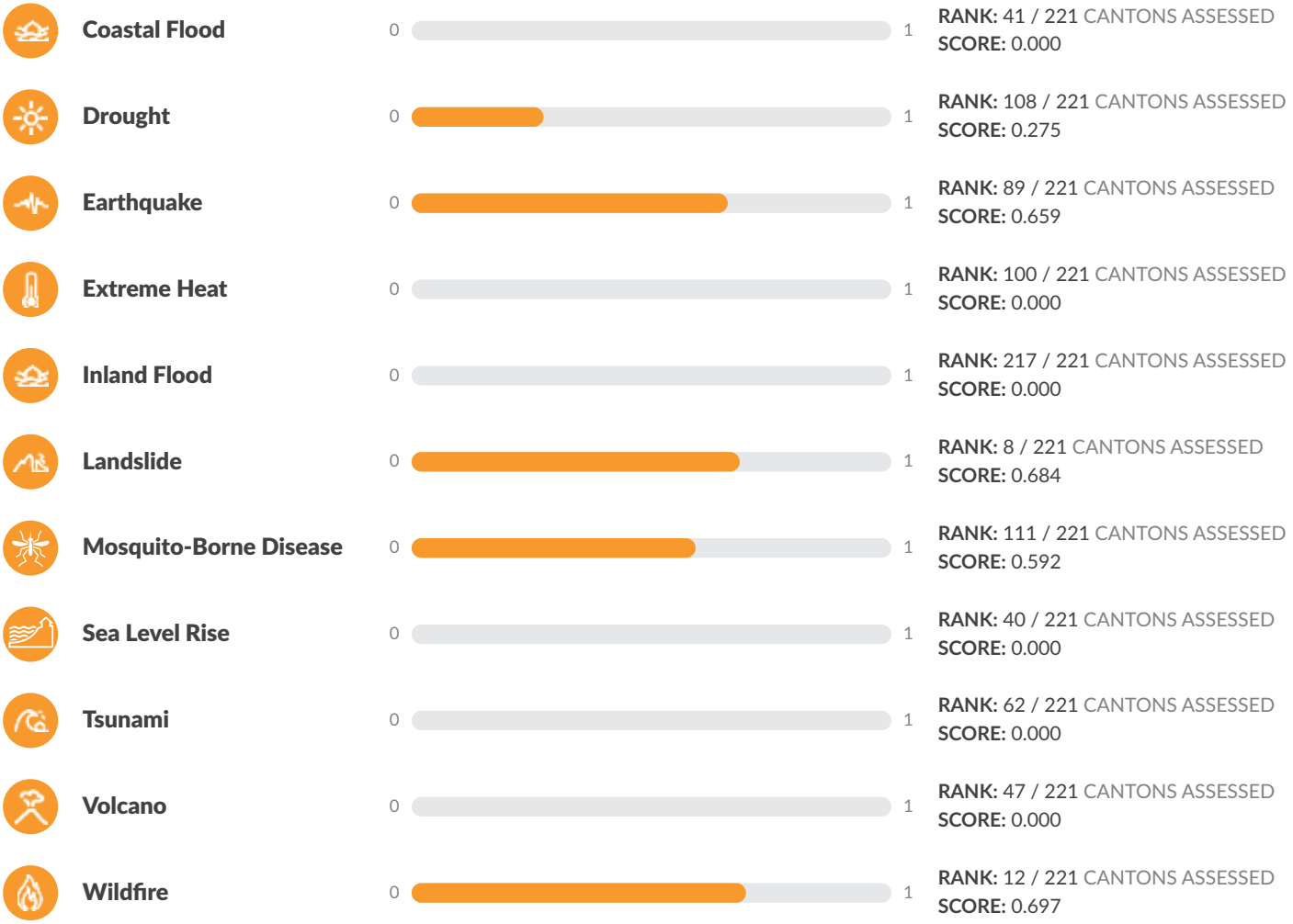
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

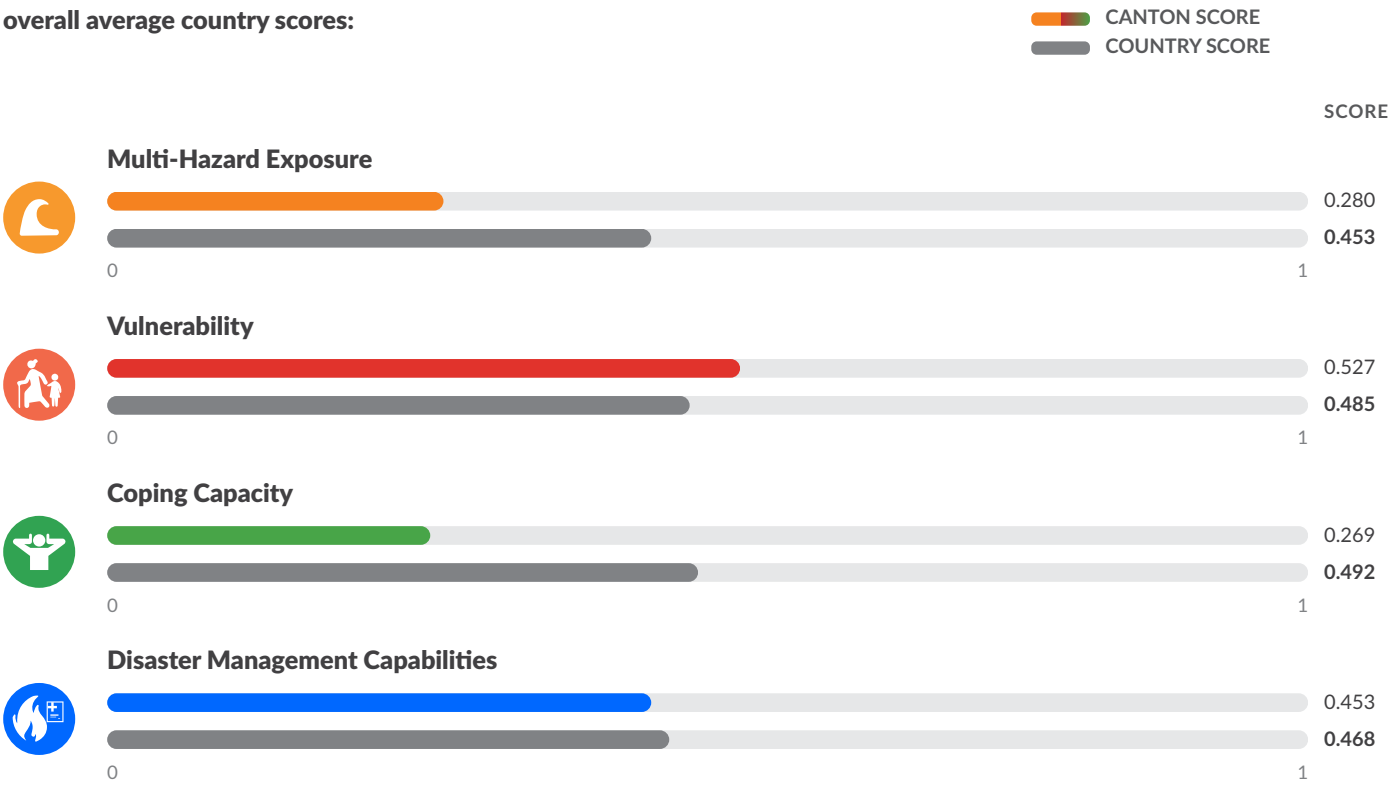


MULTI-HAZARD RISK (MHR)

RANKED
85 / 221
CANTONS ASSESSED
SCORE: 0.521

Olmedo's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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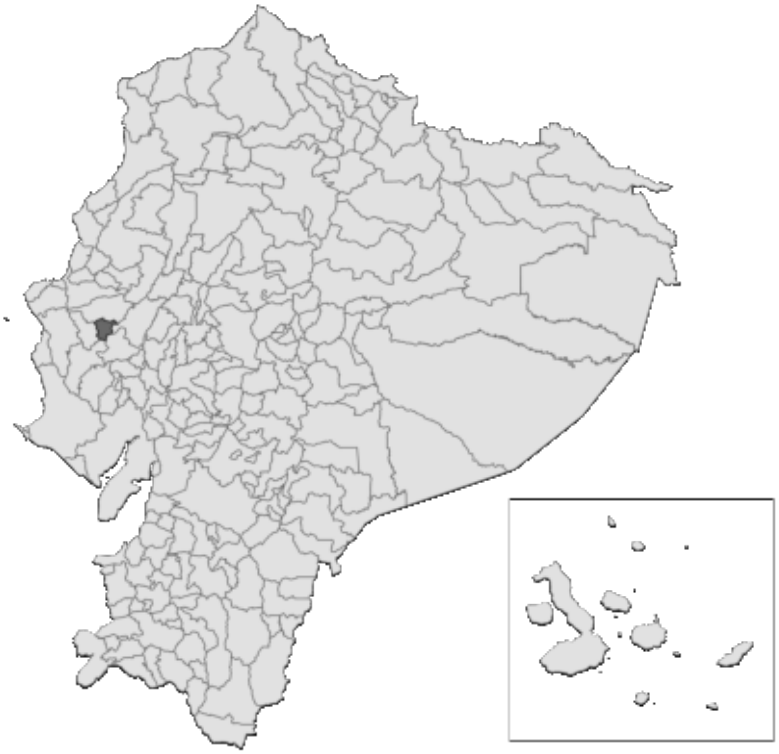
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PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.592 • RANK: 20/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.570 • RANK: 36/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.408 • RANK: 179/221 CANTONS ASSESSED

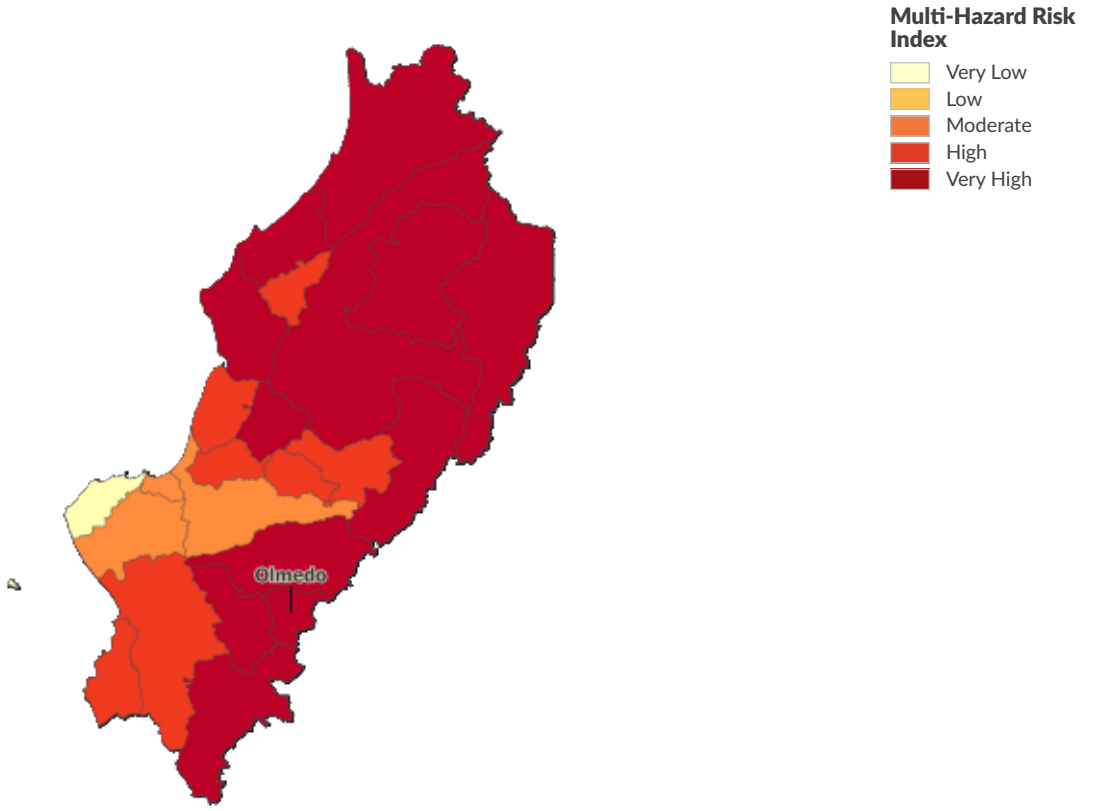
Coping Capacity (CC) - Very Low
SCORE: 0.342 • RANK: 208/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.595 • RANK: 47/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.453 • RANK: 118/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

OLMEDO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638
Santa Ana	0.627
Jama	0.625
Paján	0.623
San Vicente	0.623
Pichincha	0.619
Chone	0.617
24 De Mayo	0.607
Olmedo	**0.592**
Tosagua	0.587
Flavio Alfaro	0.581
El Carmen	0.574
Junín	0.565
Sucre	0.564
Bolívar	0.562
Puerto López	0.544
Jipijapa	0.532
Rocafuerte	0.527
Portoviejo	0.498
Montecristi	0.484
Jaramijó	0.471
Manta	0.415

MULTI-HAZARD EXPOSURE (MHE)

RANK: 47 / 221 CANTONS ASSESSED
SCORE: 0.595



MHE
0.595

Raw MHE
0.417

Relative MHE
0.772

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
57%
6,635 people exposed
3,817 structures exposed (53%)
Critical Infrastructure Exposed: 69%

Earthquake
100%
11,595 people exposed
7,214 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
11,595 people exposed
7,214 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
51%
5,922 people exposed
3,592 structures exposed (50%)
Critical Infrastructure Exposed: 47%

Landslide
43%
5,008 people exposed
3,408 structures exposed (47%)
Critical Infrastructure Exposed: 59%

Mosquito-Borne Disease
94%
10,889 people exposed
6,758 structures exposed (94%)
Critical Infrastructure Exposed: 93%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
11,595 people exposed
7,214 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 36 / 221 CANTONS ASSESSED **SCORE: 0.570**

Vulnerability in Olmedo is primarily driven by Clean Water Access Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.731

- **7.1** Average Years of Schooling
- **52.8%** Population (age 24 and over) with General Basic Education Schooling
- **14.1%** Population (age 24 and over) with No Schooling
- **11.3%** Adult Illiteracy Rate
- **70.9%** Households with No Internet Access
- **83.1%** Households with No Access to Television
- **91.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.746

- **19.4%** Homes with Access to Public Water Source
- **15.7%** Homes Connected to the Public Sewage System
- **80.5%** Homes without Piped Water
- **2.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.643

- **59.6** Age Dependency Ratio
- **15%** Unemployment Rate
- **93.6%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.845

- **14.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.706

- **0.6** Female to Male Labor Ratio (distance from parity)
- **53.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **60%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **96.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.409

- **12.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.343

- **5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.452

43	20	25	25
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.724

29.8%	51.8%	26.1%	90.2%	6.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.402

39.3	0.2%	2.1	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.154

0.2	0	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 208 / 221 CANTONS ASSESSED **SCORE: 0.342**

Olmedo exhibits weaker Coping Capacity in the areas of Economic Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.231

47.9%
Labor Force Participation

13,638
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.336

0%
Protected Area (% of land area)

-1,203.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.422

87%
Voter Participation

52.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.373

Communications Capacity

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.332

3.1%
Household Access to Fixed Phones

80.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.478

95.6%
Homes Served by the Public Electricity Network

64.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.257

2
Nurses and Midwives per 10,000 persons

17.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.425

34
Average Distance to Airport (km)

60.2
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 118 / 221 CANTONS ASSESSED **SCORE: 0.453**

Olmedo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.430

1.9	10.6%	0	55.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.476

29.6	4.1	4	5.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 179 / 221 CANTONS ASSESSED
SCORE: 0.408

Olmedo's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Clean Water Access Vulnerability

Healthcare Capacity

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

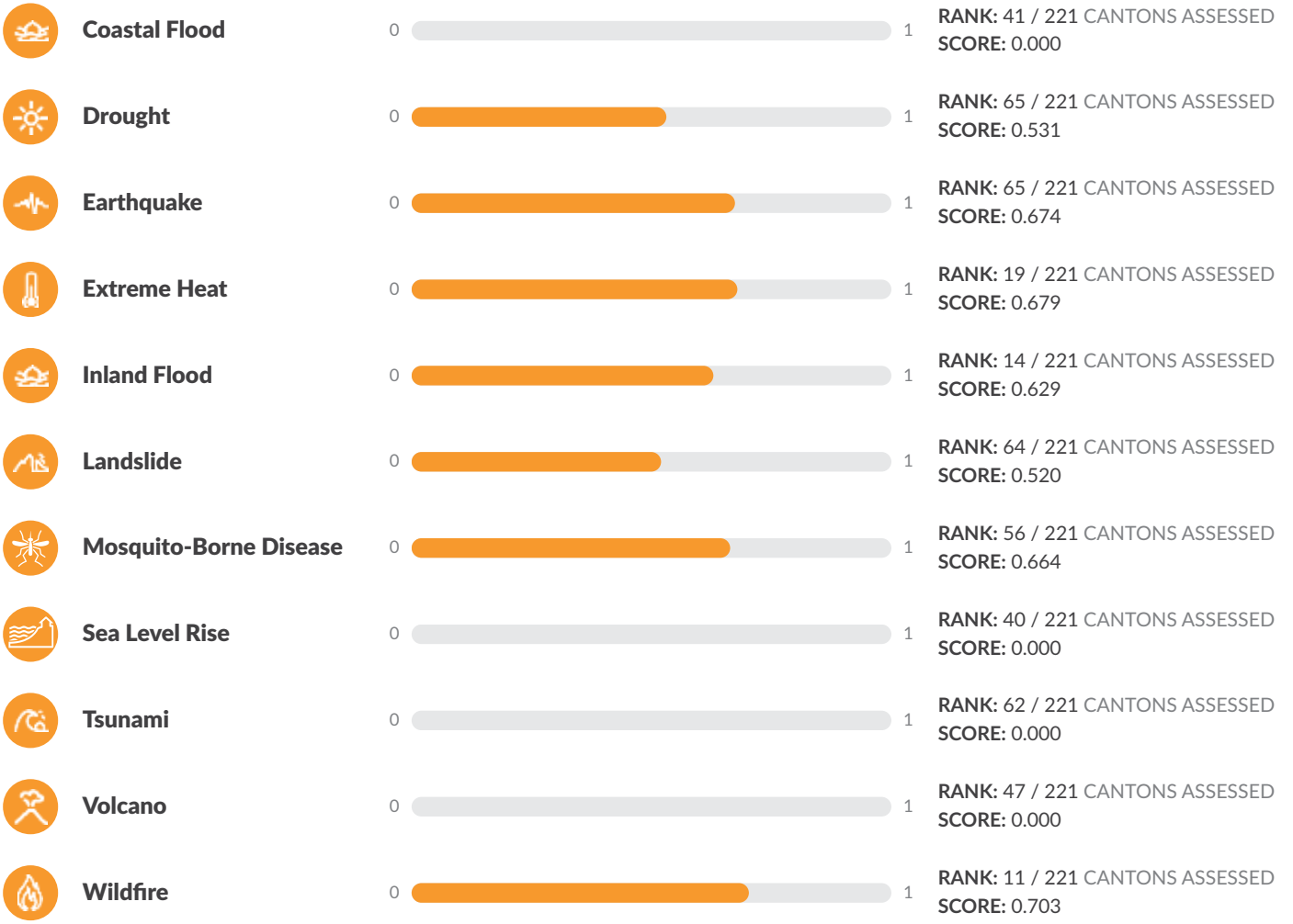
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

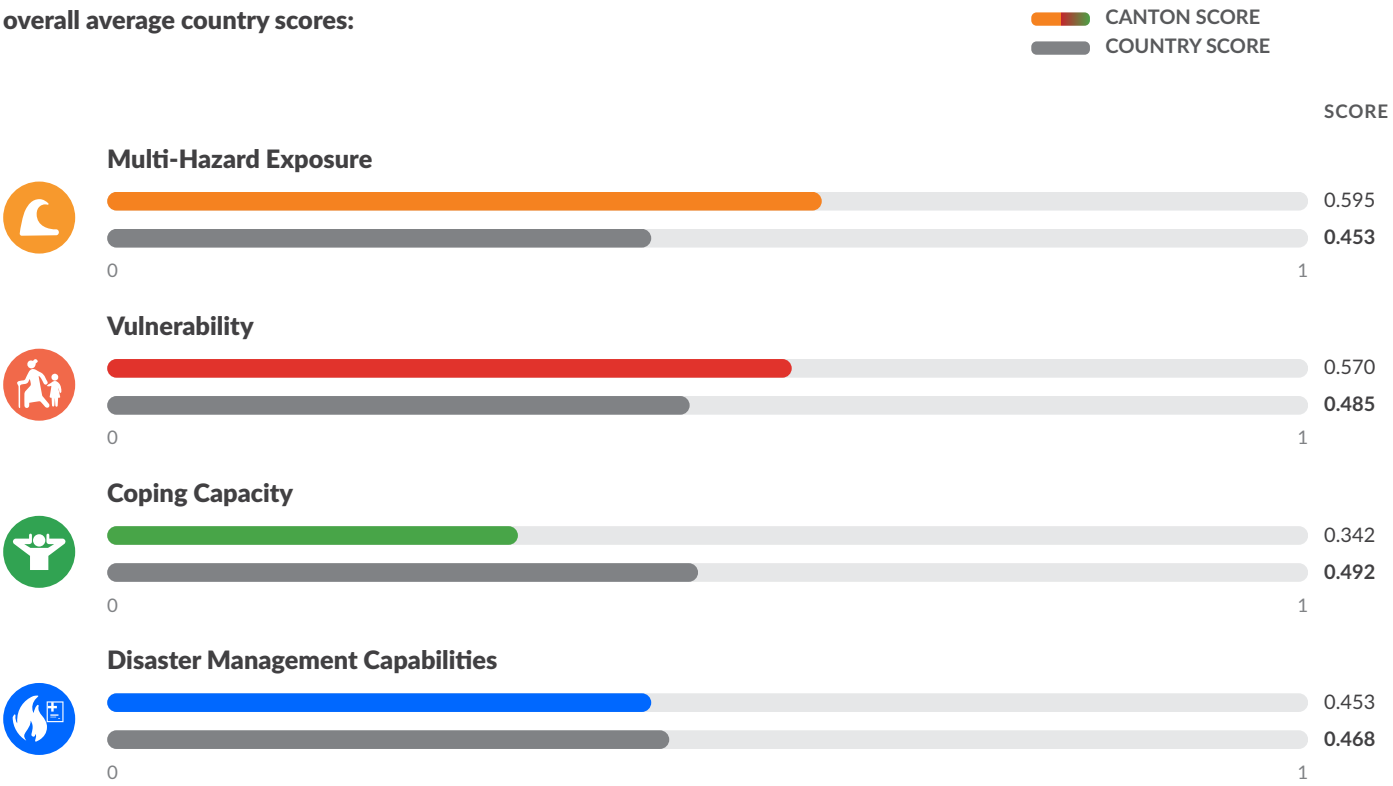


MULTI-HAZARD RISK (MHR)

RANKED
20 / 221
CANTONS ASSESSED
SCORE: 0.592

Olmedo's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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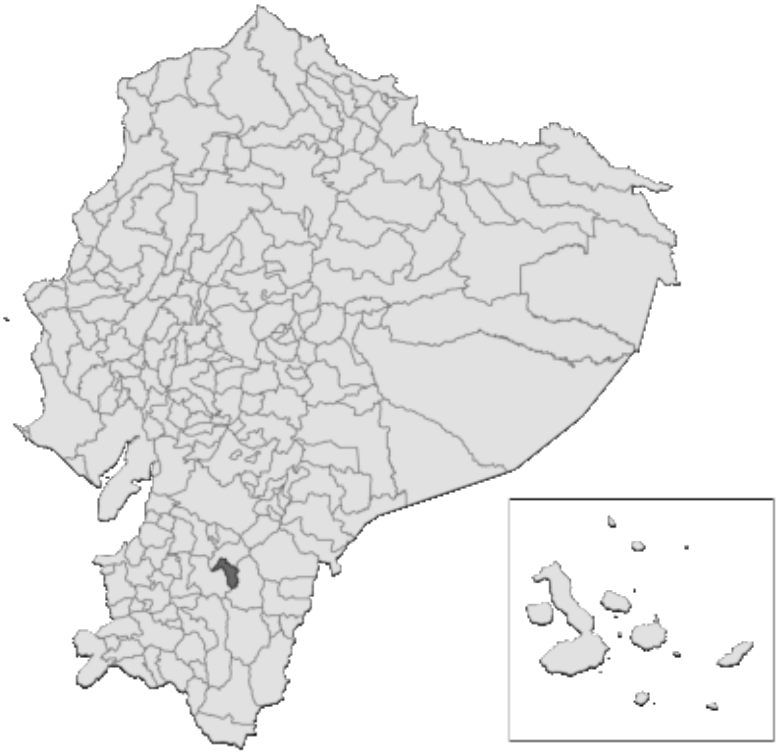
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PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.481 • RANK: 125/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.471 • RANK: 129/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.456 • RANK: 141/221 CANTONS ASSESSED

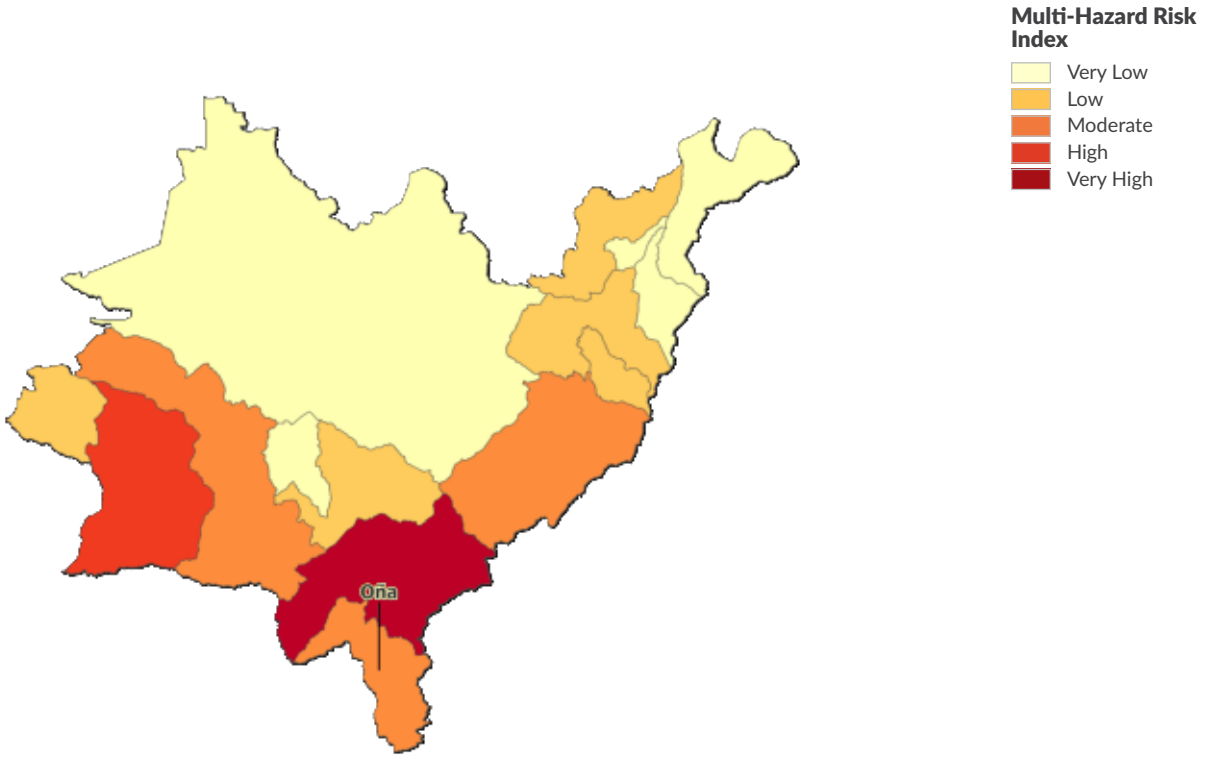
Coping Capacity (CC) - Low
SCORE: 0.394 • RANK: 176/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.291 • RANK: 180/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.445 • RANK: 129/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

OÑA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	**0.481**
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 180 / 221 CANTONS ASSESSED
SCORE: 0.291



MHE
0.291

Raw MHE
0.231

Relative MHE
0.350

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
95%
4,124 people exposed
5,283 structures exposed (94%)
Critical Infrastructure Exposed: 82%

Earthquake
100%
4,333 people exposed
5,596 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
0%
0 people exposed
4 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Landslide
78%
3,360 people exposed
4,403 structures exposed (79%)
Critical Infrastructure Exposed: 88%

Mosquito-Borne Disease
14%
601 people exposed
711 structures exposed (13%)
Critical Infrastructure Exposed: 36%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
83%
3,601 people exposed
4,735 structures exposed (85%)
Critical Infrastructure Exposed: 90%

VULNERABILITY (V)

RANK: 129 / 221 CANTONS ASSESSED **SCORE: 0.471**

Vulnerability in Oña is primarily driven by Information Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.623

- **8.6** Average Years of Schooling
- **51.9%** Population (age 24 and over) with General Basic Education Schooling
- **8.3%** Population (age 24 and over) with No Schooling
- **6.3%** Adult Illiteracy Rate
- **56.3%** Households with No Internet Access
- **90.4%** Households with No Access to Television
- **83.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.538

- **86.1%** Homes with Access to Public Water Source
- **31.9%** Homes Connected to the Public Sewage System
- **33.4%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.534

- **64.9** Age Dependency Ratio
- **12.1%** Unemployment Rate
- **56.4%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.207

- **1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.469

- **0.4** Female to Male Labor Ratio (distance from parity)
- **47.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **0.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **60%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **80%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.435

- **16.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.069

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **5.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.508

89	0	53	59
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.547

22.3%	0.3%	29.8%	84.7%	7.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.341

11.8	-0.3	4.4	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.327

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 176 / 221 CANTONS ASSESSED **SCORE: 0.394**

Oña exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.269

54.7%
Labor Force Participation

6,086
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.690

29.1%
Protected Area (% of land area)

-2,254.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.341

79%
Voter Participation

66.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.472

Communications Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.418

5.6%
Household Access to Fixed Phones

80.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.592

96%
Homes Served by the Public Electricity Network

78.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.572

20.5
Nurses and Midwives per 10,000 persons

20.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.306

61.9
Average Distance to Airport (km)

92.4
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 129 / 221 CANTONS ASSESSED **SCORE: 0.445**

Oña exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.411

2.1	9.6%	0	60.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.478

20.7	4.9	4.8	4.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 141 / 221 CANTONS ASSESSED
SCORE: 0.456

Oña's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Transportation Capacity

Governance

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

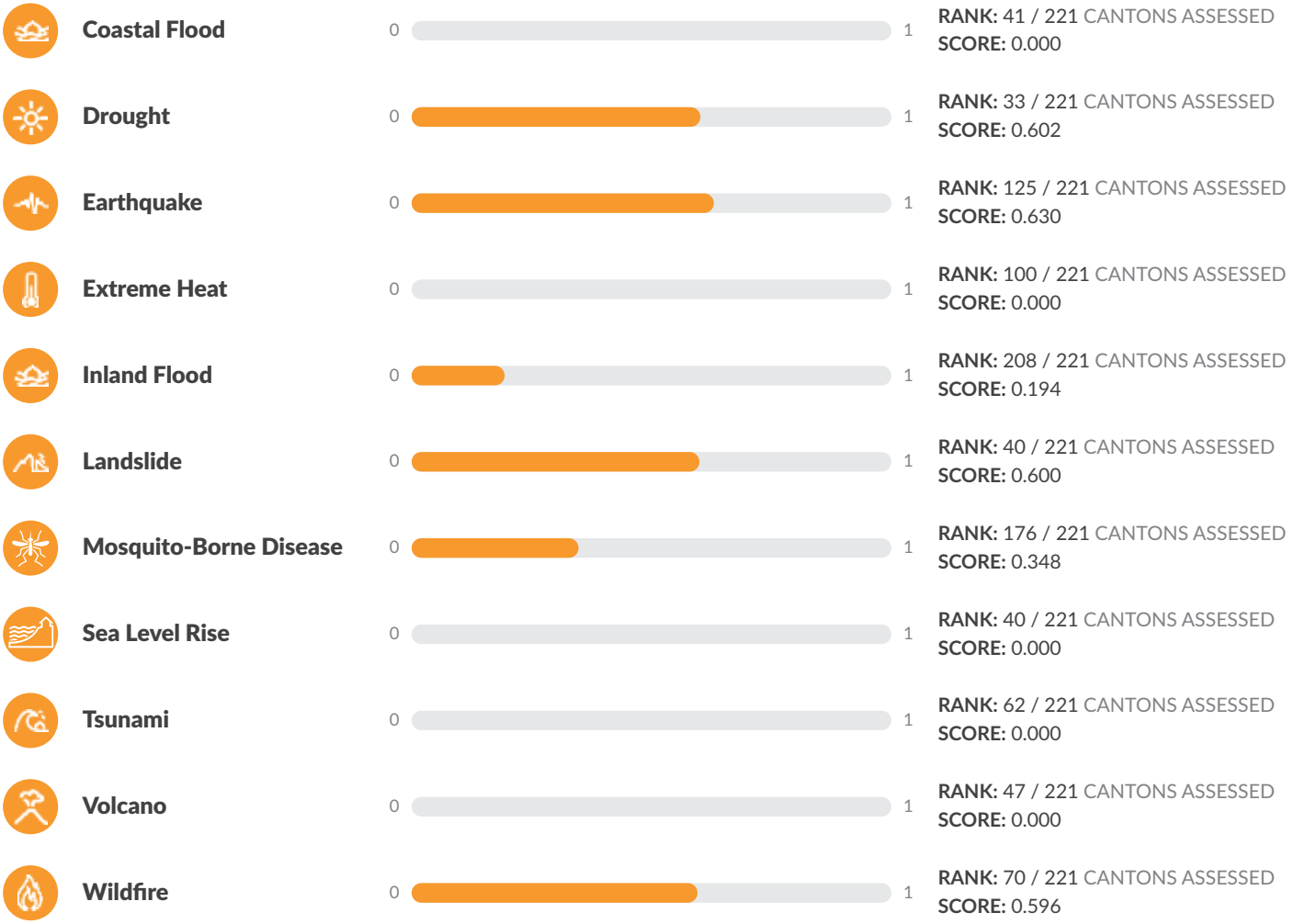
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

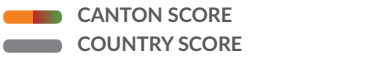


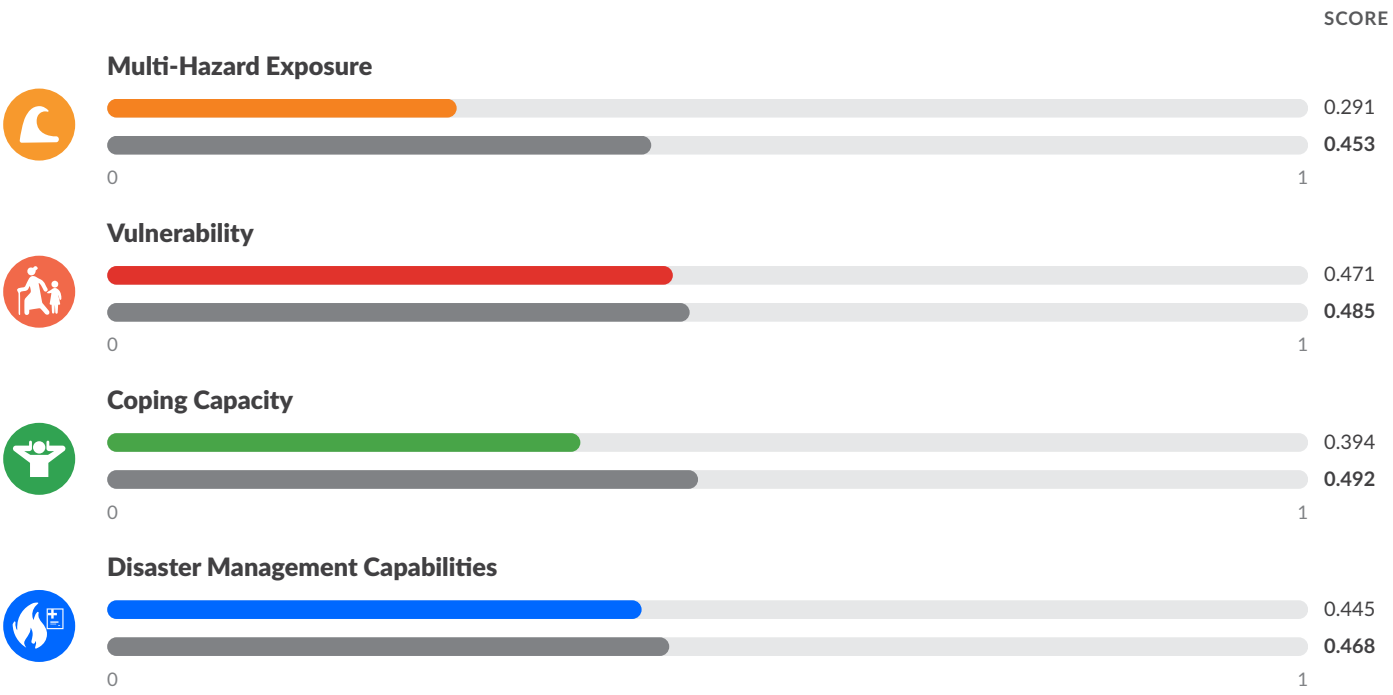
MULTI-HAZARD RISK (MHR)

RANKED
125 / 221
CANTONS ASSESSED
SCORE: 0.481

Oña's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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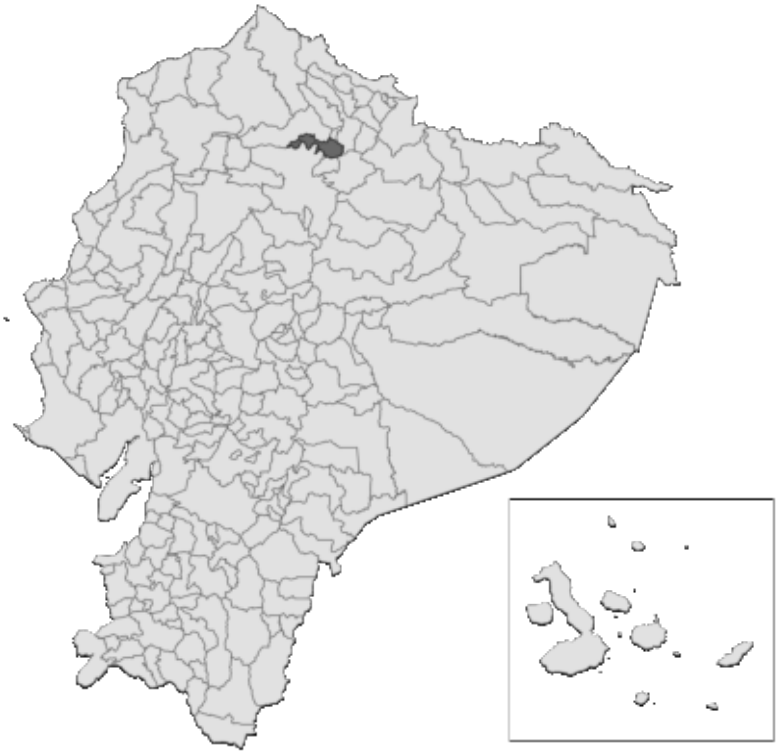
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PROVINCE: IMBABURA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.440 • RANK: 165/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.594 • RANK: 32/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.545 • RANK: 67/221 CANTONS ASSESSED

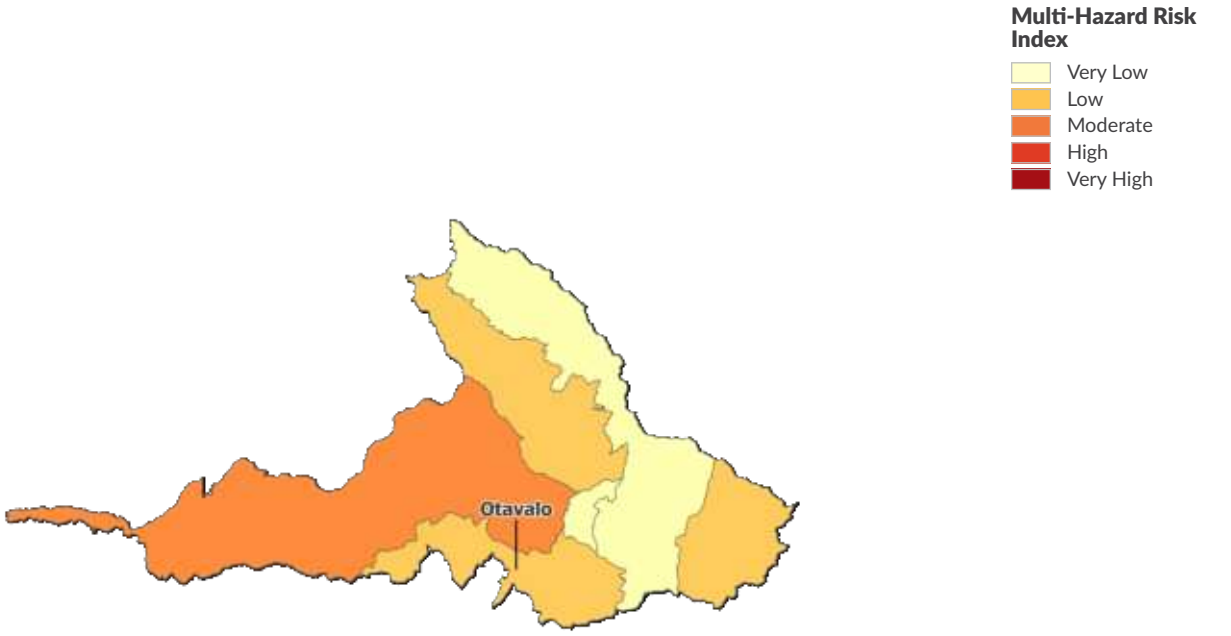
Vulnerability (V) - Low
SCORE: 0.419 • RANK: 171/221 CANTONS ASSESSED

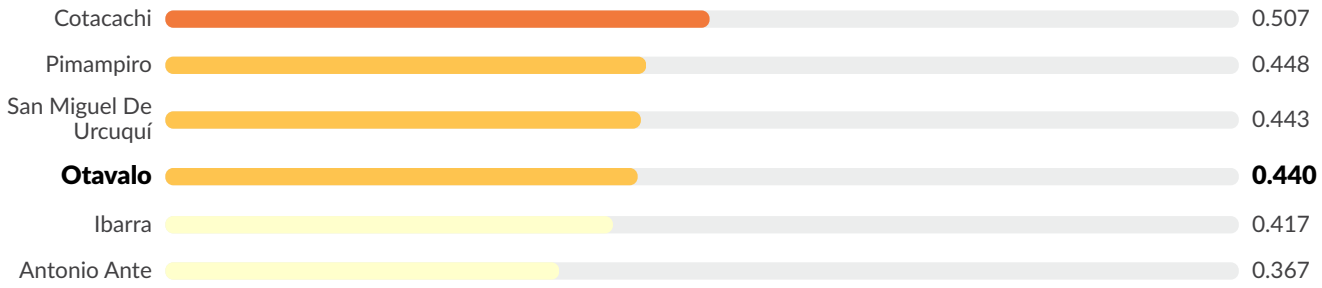
Coping Capacity (CC) - High
SCORE: 0.581 • RANK: 50/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.621 • RANK: 23/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN IMBABURA PROVINCE

OTAVALO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 67 / 221 CANTONS ASSESSED
SCORE: 0.545



MHE
0.545

Raw MHE
0.749

Relative MHE
0.341

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
<1%
- **147** people exposed
- **113** structures exposed (<1%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **123,367** people exposed
- **59,445** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
6%
- **7,031** people exposed
- **3,492** structures exposed (6%)

Critical Infrastructure Exposed: 15%

Landslide
46%
- **56,250** people exposed
- **27,416** structures exposed (46%)

Critical Infrastructure Exposed: 47%

Mosquito-Borne Disease
9%
- **11,604** people exposed
- **5,664** structures exposed (10%)

Critical Infrastructure Exposed: 11%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
97%
- **119,069** people exposed
- **56,828** structures exposed (96%)

Critical Infrastructure Exposed: 86%

Wildfire
92%
- **113,817** people exposed
- **54,591** structures exposed (92%)

Critical Infrastructure Exposed: 92%

VULNERABILITY (V)

RANK: 171 / 221 CANTONS ASSESSED **SCORE: 0.419**

Vulnerability in Otavalo is primarily driven by Population Pressures and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.522

- **9.4** Average Years of Schooling
- **38.7%** Population (age 24 and over) with General Basic Education Schooling
- **14.5%** Population (age 24 and over) with No Schooling
- **11.3%** Adult Illiteracy Rate
- **41.7%** Households with No Internet Access
- **84.1%** Households with No Access to Television
- **66.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.347

- **97.4%** Homes with Access to Public Water Source
- **78%** Homes Connected to the Public Sewage System
- **31.6%** Homes without Piped Water
- **7.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.456

- **52.7** Age Dependency Ratio
- **12.5%** Unemployment Rate
- **44.5%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.604

- **6.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.305

- **0.3** Female to Male Labor Ratio (distance from parity)
- **28.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **57.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **28%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.447

- **6.9%** Prevalence of Disability (among persons age 5 and over)
- **5.2** Perinatal Mortality Rate (per 1,000 births)
- **8.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.276

- **0.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.479

40	19	29	34
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.336

8.7%	0.2%	12.5%	80.8%	7.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.549

215.2	0.7%	17.4	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.356

0.4	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 50 / 221 CANTONS ASSESSED **SCORE: 0.581**

Otavalo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.632

59%
Labor Force Participation

368,724
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.513

5.7%
Protected Area (% of land area)

-3,174.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.583

81.9%
Voter Participation

93.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.551

Communications Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.668

20.9%
Household Access to Fixed Phones

85.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.713

98%
Homes Served by the Public Electricity Network

82.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.378

10.9
Nurses and Midwives per 10,000 persons

11.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.447

19.3
Average Distance to Airport (km)

154.1
Average Distance to Sea or River Port (km)

2.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 23 / 221 CANTONS ASSESSED **SCORE: 0.621**

Otavalo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.546

1.4	2.6%	0.7	20.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.695

5.3	3.6	2.4	2.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 32 / 221 CANTONS ASSESSED
SCORE: 0.594

Otavalo's score and ranking are due to Low Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Transportation Capacity

Population Pressures

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

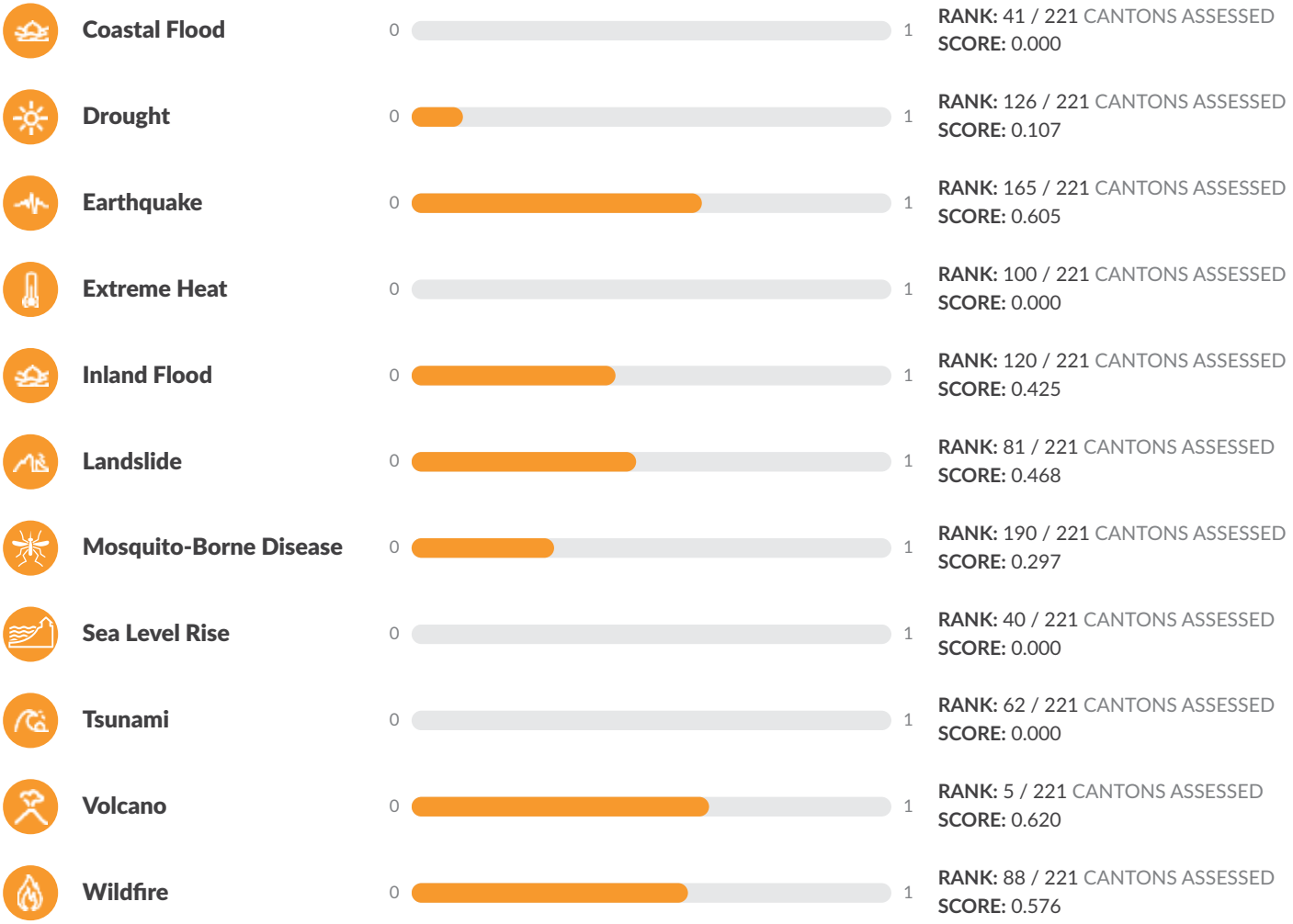
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

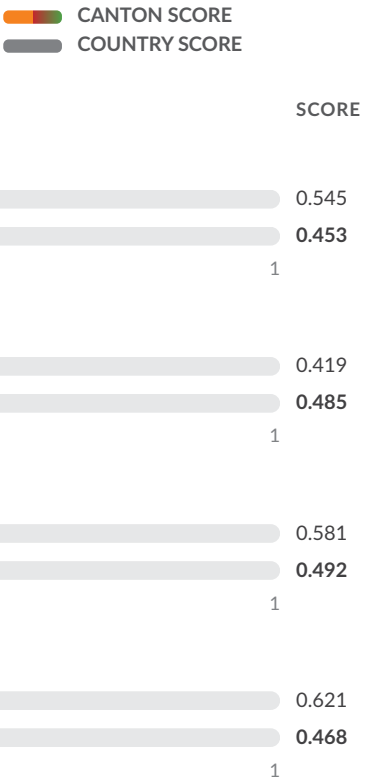


MULTI-HAZARD RISK (MHR)

RANKED
165 / 221
CANTONS ASSESSED
SCORE: 0.440

Otavalo's score and ranking are due to High Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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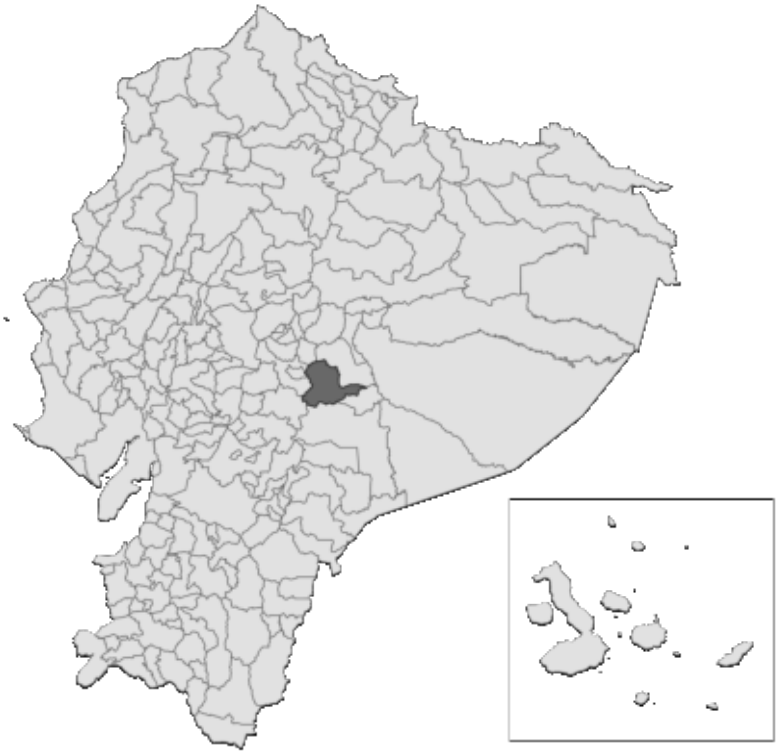
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ECUADOR

PABLO SEXTO

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.442 • RANK: 161/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.439 • RANK: 158/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.086 • RANK: 221/221 CANTONS ASSESSED

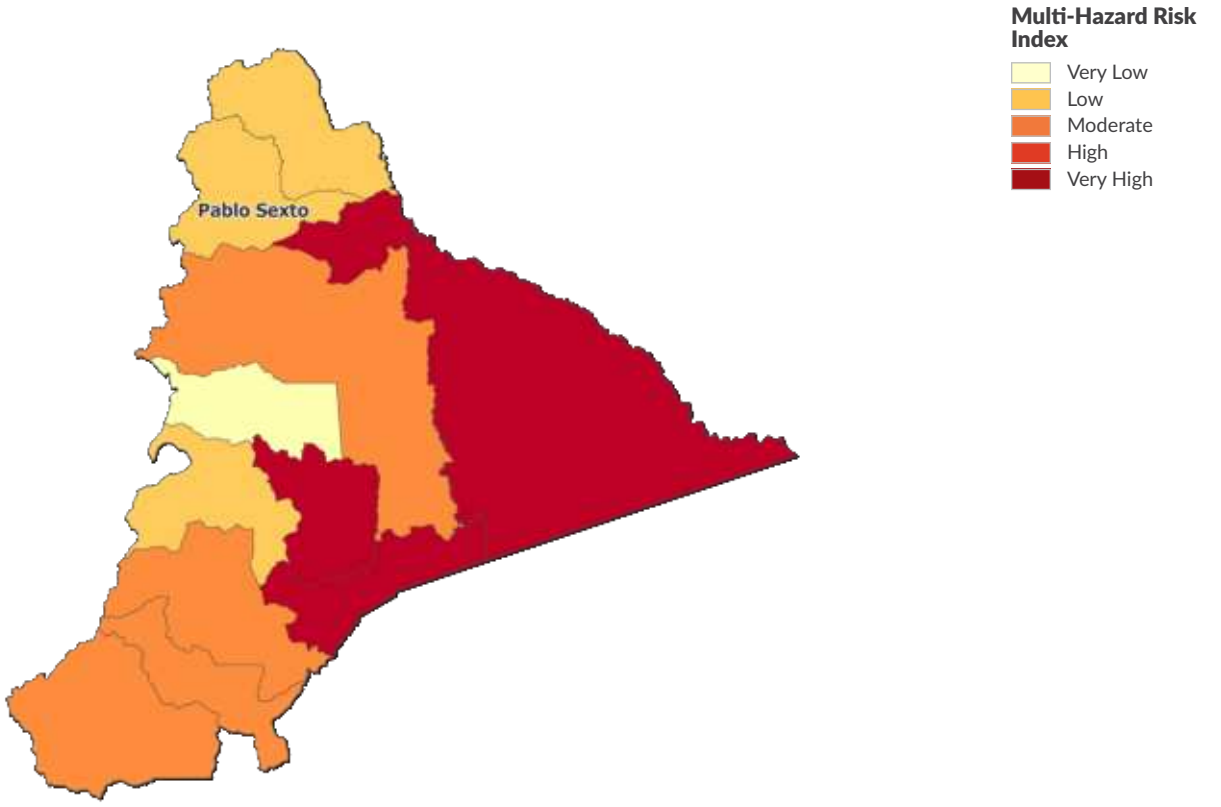
Vulnerability (V) - Moderate
SCORE: 0.498 • RANK: 98/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.377 • RANK: 182/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.438 • RANK: 138/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

PABLO SEXTO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	**0.442**
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 221 / 221 CANTONS ASSESSED
SCORE: 0.086



MHE
0.086

Raw MHE
0.000

Relative MHE
0.172

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
2,397 people exposed
1,269 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
2%
58 people exposed
44 structures exposed (3%)
Critical Infrastructure Exposed: 16%

Landslide
7%
165 people exposed
199 structures exposed (16%)
Critical Infrastructure Exposed: 28%

Mosquito-Borne Disease
93%
2,219 people exposed
1,065 structures exposed (84%)
Critical Infrastructure Exposed: 96%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
<1%
9 people exposed
23 structures exposed (2%)
Critical Infrastructure Exposed: 5%

Wildfire
96%
2,299 people exposed
1,222 structures exposed (96%)
Critical Infrastructure Exposed: 97%

VULNERABILITY (V)

RANK: 98 / 221 CANTONS ASSESSED **SCORE: 0.498**

Vulnerability in Pablo Sexto is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.476

- **10.2** Average Years of Schooling
- **41.9%** Population (age 24 and over) with General Basic Education Schooling
- **8.2%** Population (age 24 and over) with No Schooling
- **3.3%** Adult Illiteracy Rate
- **58.9%** Households with No Internet Access
- **74.4%** Households with No Access to Television
- **79.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.411

- **91.7%** Homes with Access to Public Water Source
- **51.5%** Homes Connected to the Public Sewage System
- **45.8%** Homes without Piped Water
- **2.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.724

- **70.7** Age Dependency Ratio
- **24.3%** Unemployment Rate
- **57.9%** Poverty Rate (based on UBN)
- **2.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.290

- **1.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.683

- **0.5** Female to Male Labor Ratio (distance from parity)
- **94** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **80.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **53.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.287

- **5.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.259

- **28.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.417

48 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**29** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**95** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.633

25% Homes with Exterior Walls in Poor Condition	**1%** Homes with Inadequate Materials Used in Outer Walls	**30.8%** Homes with Roofs in Poor Condition	**85.7%** Households with No Access to Vehicle for Private Use	**13%** Household Overcrowding

Population Pressures

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.480

1.6 Population Density (persons per sq km)	**2.1%** Average Annual Population Change (2010-2022)	**1.8** Net Migration Rate (per 1,000 persons)	**0.36** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.326

0.2 Hazard Susceptibility (recent events 2015-2025)	**0.2** Disaster Loss Ratio (recent events 2015-2025)	**0** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 182 / 221 CANTONS ASSESSED **SCORE: 0.377**

Pablo Sexto exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.163

44.8%
Labor Force Participation

9,220
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.742

86.9%
Protected Area (% of land area)

-6,619.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.442

72.3%
Voter Participation

93.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.403

Communications Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.443

14%
Household Access to Fixed Phones

64.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.380

85.2%
Homes Served by the Public Electricity Network

72.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.559

17.6
Nurses and Midwives per 10,000 persons

22.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.231

42.7
Average Distance to Airport (km)

105.5
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 138 / 221 CANTONS ASSESSED **SCORE: 0.438**

Pablo Sexto exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.482

2.8	31.8%	0	44.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.394

41.6	24.6	3	2.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 158 / 221 CANTONS ASSESSED
SCORE: 0.439

Pablo Sexto's score and ranking are due to Moderate Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Transportation Capacity

Economic Constraints

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

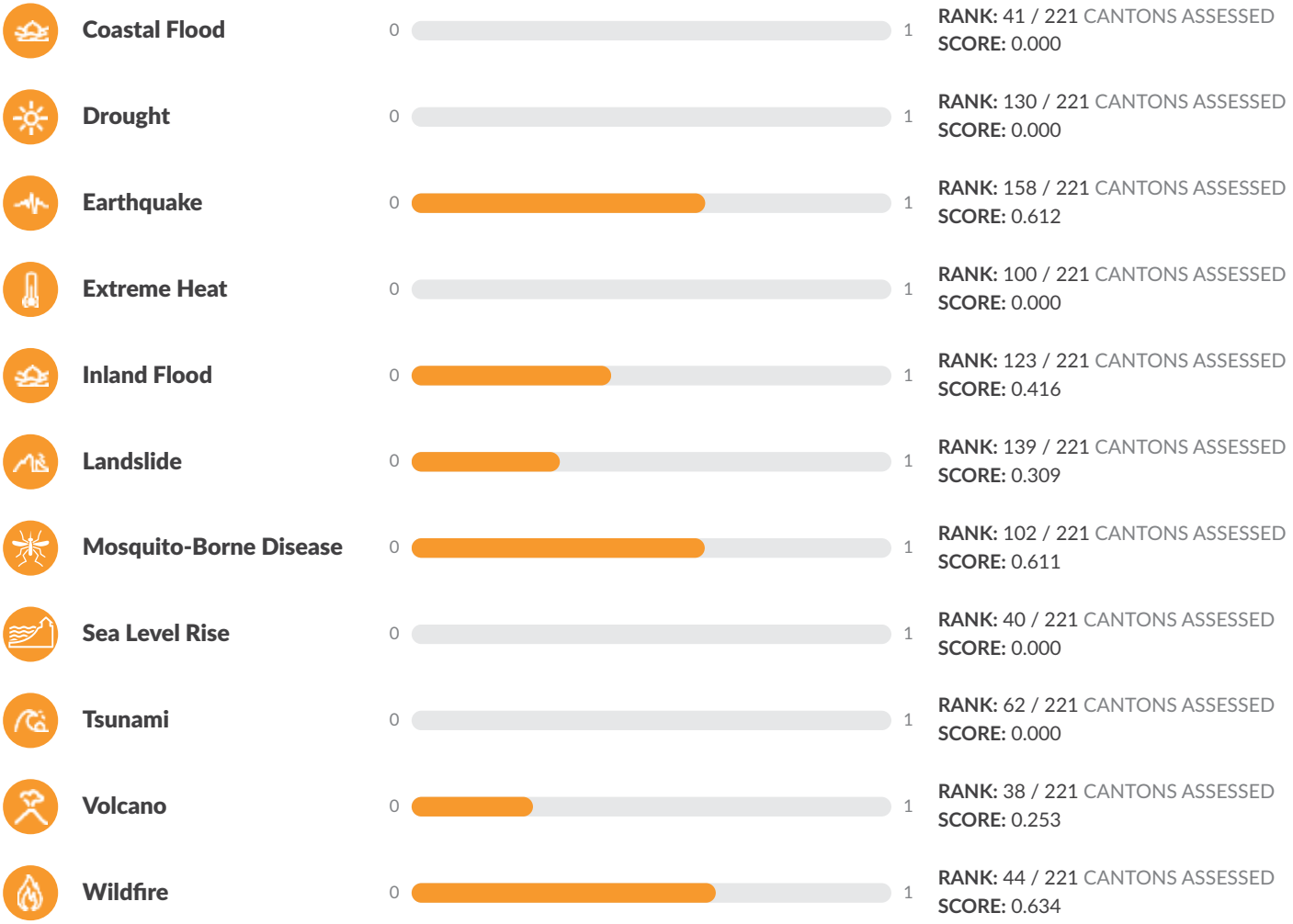
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
161 / 221
CANTONS ASSESSED
SCORE: 0.442

Pablo Sexto's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

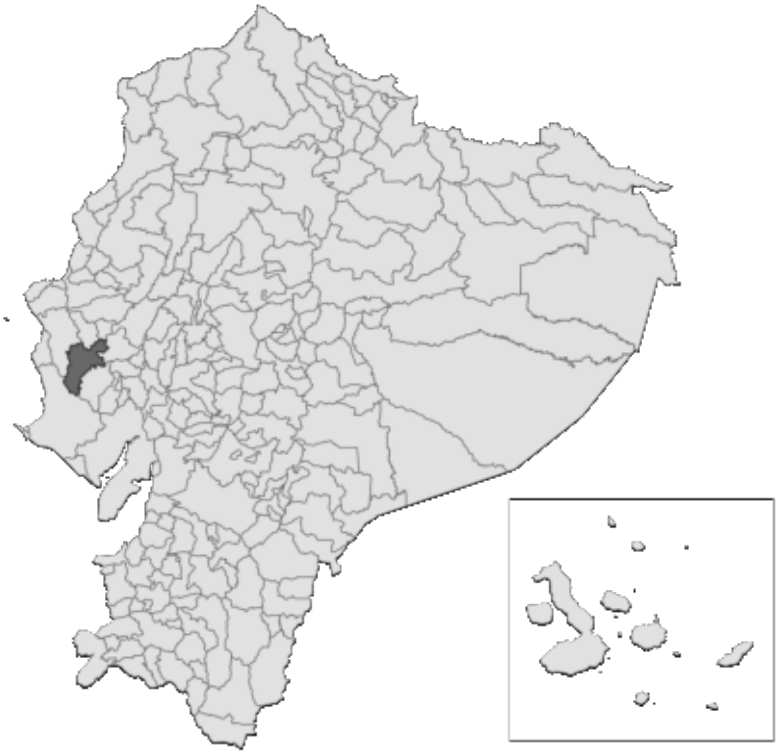
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PAJÁN

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.623 • RANK: 8/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.634 • RANK: 7/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.368 • RANK: 204/221 CANTONS ASSESSED

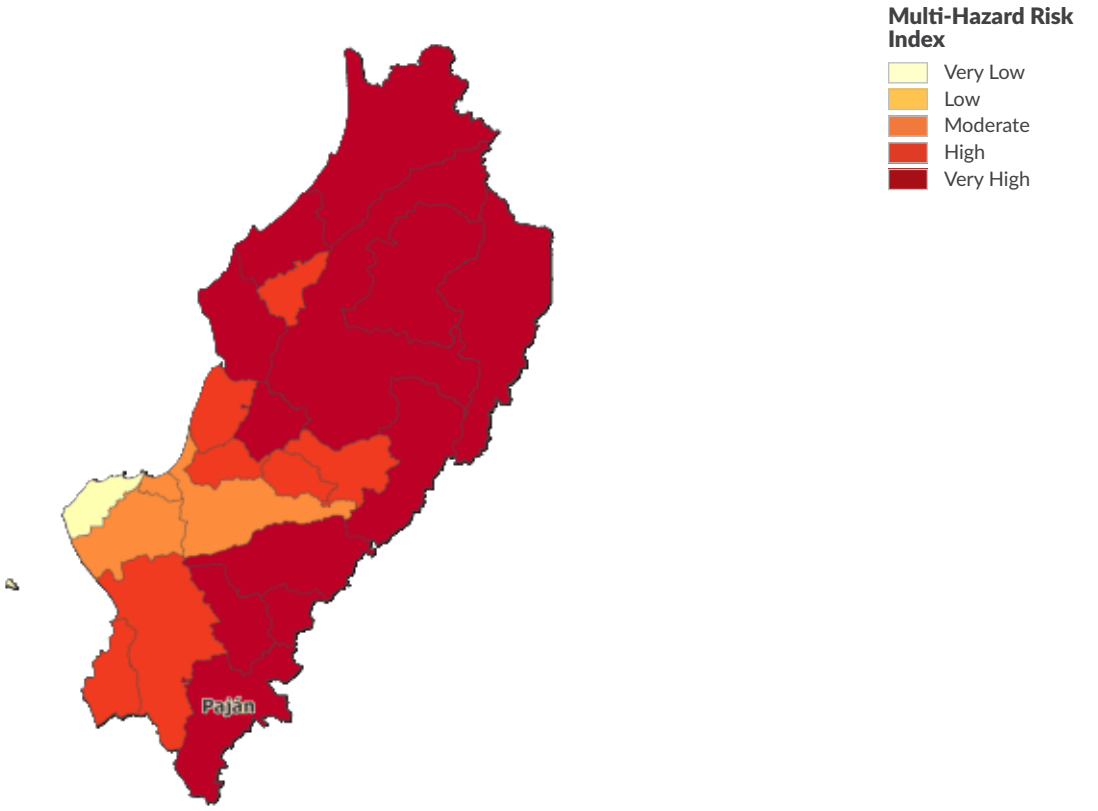
Coping Capacity (CC) - Very Low
SCORE: 0.364 • RANK: 190/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.598 • RANK: 46/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.375 • RANK: 174/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

PAJÁN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	**0.623**	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 46 / 221 CANTONS ASSESSED
SCORE: 0.598



MHE
0.598

Raw MHE
0.623

Relative MHE
0.573

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
55%
- **23,964** people exposed
- **15,818** structures exposed (59%)

Critical Infrastructure Exposed: 45%

Earthquake
100%
- **43,236** people exposed
- **26,919** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
54%
- **23,533** people exposed
- **15,391** structures exposed (57%)

Critical Infrastructure Exposed: 56%

Inland Flood
24%
- **10,463** people exposed
- **6,473** structures exposed (24%)

Critical Infrastructure Exposed: 34%

Landslide
13%
- **5,800** people exposed
- **3,986** structures exposed (15%)

Critical Infrastructure Exposed: 5%

Mosquito-Borne Disease
97%
- **42,074** people exposed
- **26,218** structures exposed (97%)

Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
97%
- **41,840** people exposed
- **25,929** structures exposed (96%)

Critical Infrastructure Exposed: 96%

VULNERABILITY (V)

RANK: 7 / 221 CANTONS ASSESSED **SCORE: 0.634**

Vulnerability in Paján is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.759

- **7.4** Average Years of Schooling
- **54.9%** Population (age 24 and over) with General Basic Education Schooling
- **14.7%** Population (age 24 and over) with No Schooling
- **13.4%** Adult Illiteracy Rate
- **77.4%** Households with No Internet Access
- **83.7%** Households with No Access to Television
- **92.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.850

- **22.3%** Homes with Access to Public Water Source
- **17.9%** Homes Connected to the Public Sewage System
- **81.1%** Homes without Piped Water
- **8.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.619

- **65.8** Age Dependency Ratio
- **12.8%** Unemployment Rate
- **89%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.820

- **13.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.780

- **0.7** Female to Male Labor Ratio (distance from parity)
- **53.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **11.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **75%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **92.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.420

- **11.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.281

- **11** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **6.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.529

47
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

46
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

35
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.797

30%
Homes with Exterior Walls in Poor Condition

41.5%
Homes with Inadequate Materials Used in Outer Walls

26%
Homes with Roofs in Poor Condition

94.3%
Households with No Access to Vehicle for Private Use

12.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.436

38.1
Population Density (persons per sq km)

0.9%
Average Annual Population Change (2010-2022)

4.1
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.378

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 190 / 221 CANTONS ASSESSED **SCORE: 0.364**

Paján exhibits weaker Coping Capacity in the areas of Energy Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.343

47.8%
Labor Force Participation

65,296
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.236

0%
Protected Area (% of land area)

-7,880.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.400

87.8%
Voter Participation

41%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.392

Communications Capacity

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.328

3%
Household Access to Fixed Phones

80.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.324

93%
Homes Served by the Public Electricity Network

47.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.519

15.3
Nurses and Midwives per 10,000 persons

20.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.396

44.9
Average Distance to Airport (km)

54.1
Average Distance to Sea or River Port (km)

0.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 174 / 221 CANTONS ASSESSED **SCORE: 0.375**

Paján exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.364

4.4	5%	0.4	63.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.386

12.4	6.6	7	11.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 204 / 221 CANTONS ASSESSED
SCORE: 0.368

Paján's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

Marginalization

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

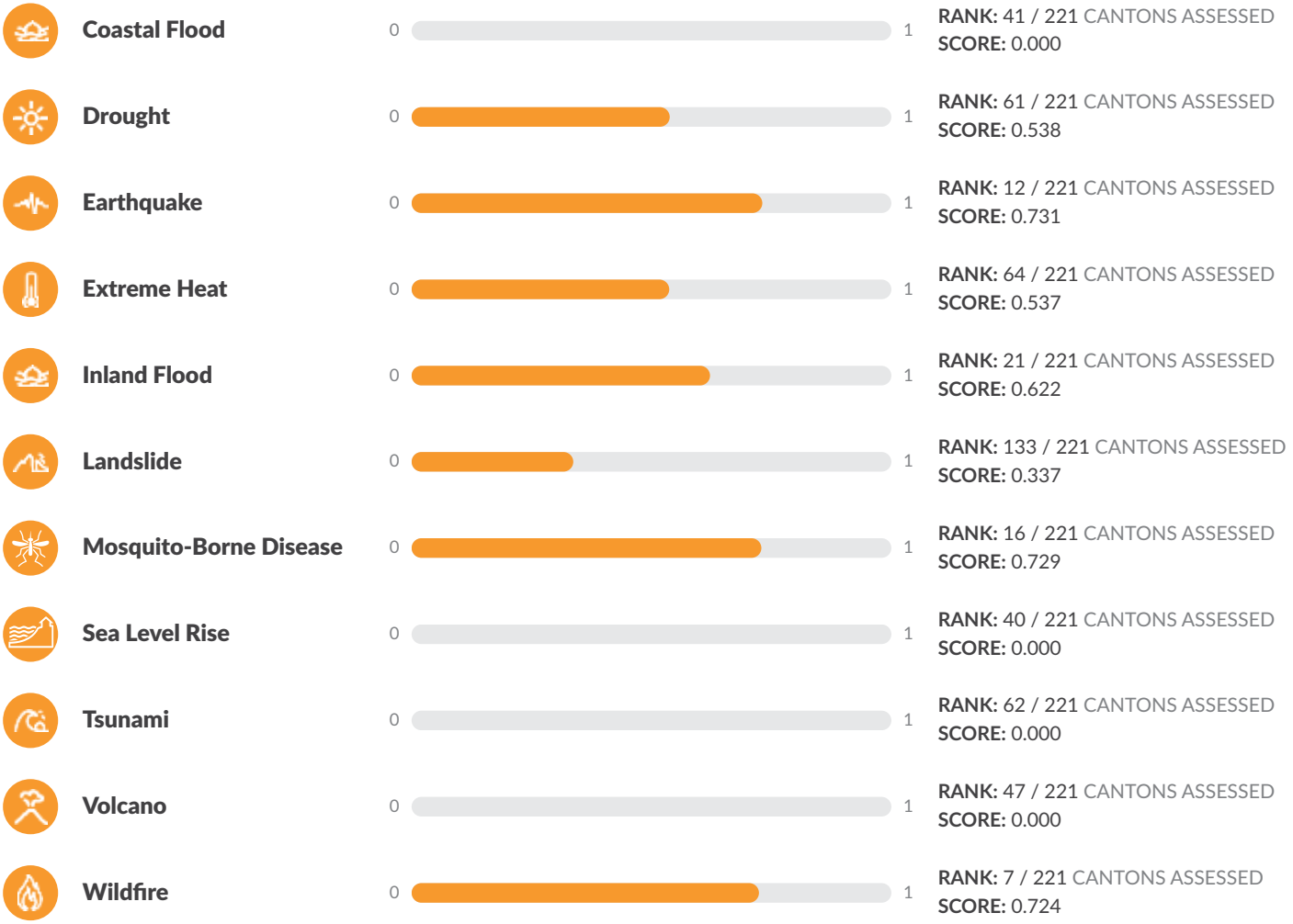
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

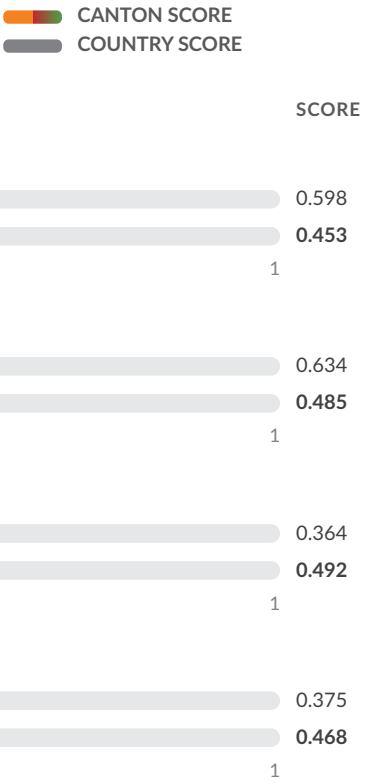


MULTI-HAZARD RISK (MHR)

RANKED
8 / 221
CANTONS ASSESSED
SCORE: 0.623

Paján's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PALANDA

NDPBA SUBNATIONAL PROFILE

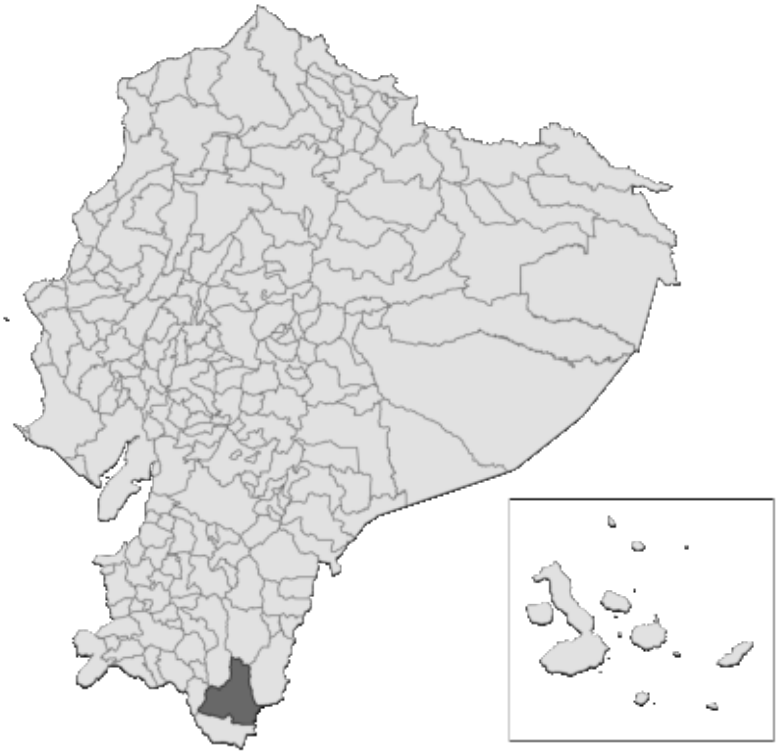
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PALANDA

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.535 • RANK: 68/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.532 • RANK: 71/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.396 • RANK: 188/221 CANTONS ASSESSED

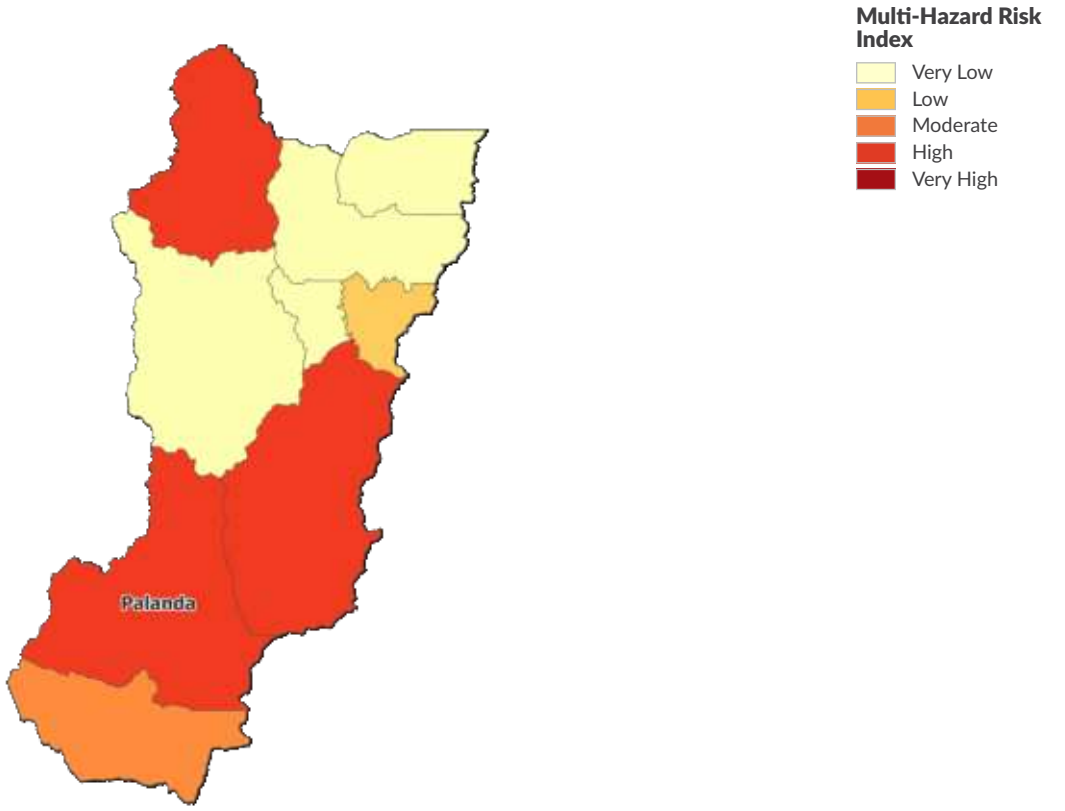
Coping Capacity (CC) - Low
SCORE: 0.410 • RANK: 168/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.328 • RANK: 167/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.308 • RANK: 202/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

PALANDA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Palanda	**0.535**
Yacuambi	0.535
Nangaritza	0.524
Chinchipe	0.511
Paquisha	0.465
Centinela Del Cóndor	0.428
El Pangui	0.428
Zamora	0.419
Yantzaza	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 167 / 221 CANTONS ASSESSED
SCORE: 0.328



MHE
0.328

Raw MHE
0.324

Relative MHE
0.331

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
9,899 people exposed
6,866 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
1%
139 people exposed
85 structures exposed (1%)
Critical Infrastructure Exposed: 2%

Landslide
96%
9,454 people exposed
6,617 structures exposed (96%)
Critical Infrastructure Exposed: 93%

Mosquito-Borne Disease
72%
7,143 people exposed
4,445 structures exposed (65%)
Critical Infrastructure Exposed: 84%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
9,899 people exposed
6,866 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 71 / 221 CANTONS ASSESSED **SCORE: 0.532**

Vulnerability in Palanda is primarily driven by Disaster Impacts and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.537

- **9.8** Average Years of Schooling
- **53%** Population (age 24 and over) with General Basic Education Schooling
- **3.4%** Population (age 24 and over) with No Schooling
- **2.8%** Adult Illiteracy Rate
- **63.1%** Households with No Internet Access
- **88.8%** Households with No Access to Television
- **82.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.627

- **68.5%** Homes with Access to Public Water Source
- **55.2%** Homes Connected to the Public Sewage System
- **47.6%** Homes without Piped Water
- **11.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.621

- **59.2** Age Dependency Ratio
- **16.3%** Unemployment Rate
- **66%** Poverty Rate (based on UBN)
- **2.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.393

- **2.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.490

- **0.5** Female to Male Labor Ratio (distance from parity)
- **46.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **40%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **63.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.312

- **8.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.383

- **3.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **6.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.369

87	3	10	64
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.630

22.8%	0.4%	29.3%	92.7%	12.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.384

4.3	0.8%	2.5	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.674

0.2	0.4	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 168 / 221 CANTONS ASSESSED **SCORE: 0.410**

Palanda exhibits weaker Coping Capacity in the areas of Transportation Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.342

53.7%
Labor Force Participation

20,240
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.582

33.2%
Protected Area (% of land area)

-10,684.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.430

81.9%
Voter Participation

75.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.401

Communications Capacity

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.280

6.3%
Household Access to Fixed Phones

53.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.485

94.8%
Homes Served by the Public Electricity Network

68.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.592

16.9
Nurses and Midwives per 10,000 persons

28.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.248

71.5
Average Distance to Airport (km)

73.7
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 202 / 221 CANTONS ASSESSED **SCORE: 0.308**

Palanda exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.370

3.4	10.1%	0	64.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.247

26.8	38.5	5	9.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 188 / 221 CANTONS ASSESSED
SCORE: 0.396

Palanda's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Emergency Services



Transportation Capacity



Communications Capacity



Disaster Impacts

KEY FACTORS INFLUENCING RESILIENCE



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Communications Capacity

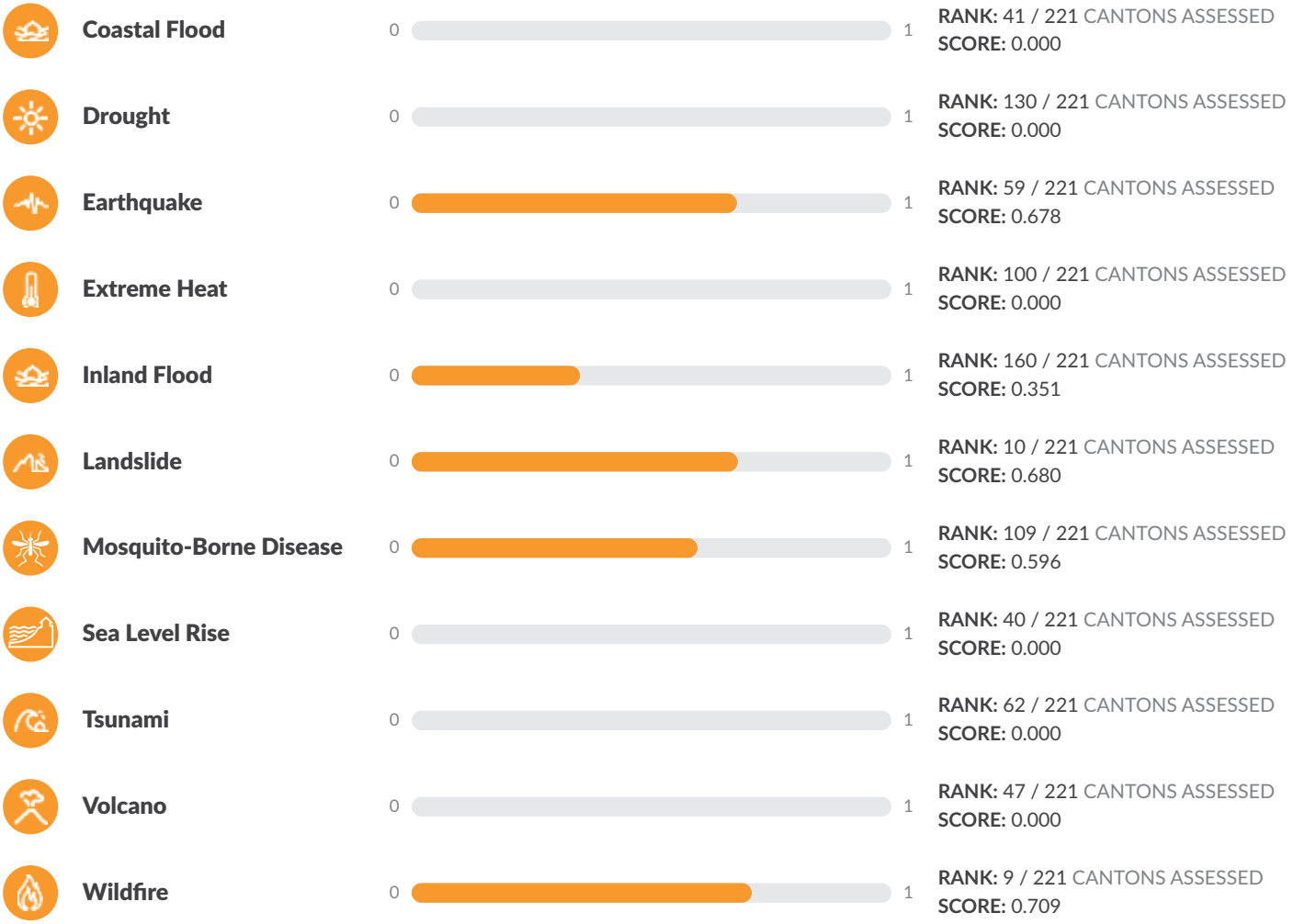
The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

HAZARD-SPECIFIC RISK (HSR)

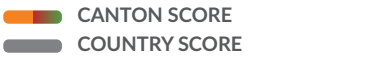


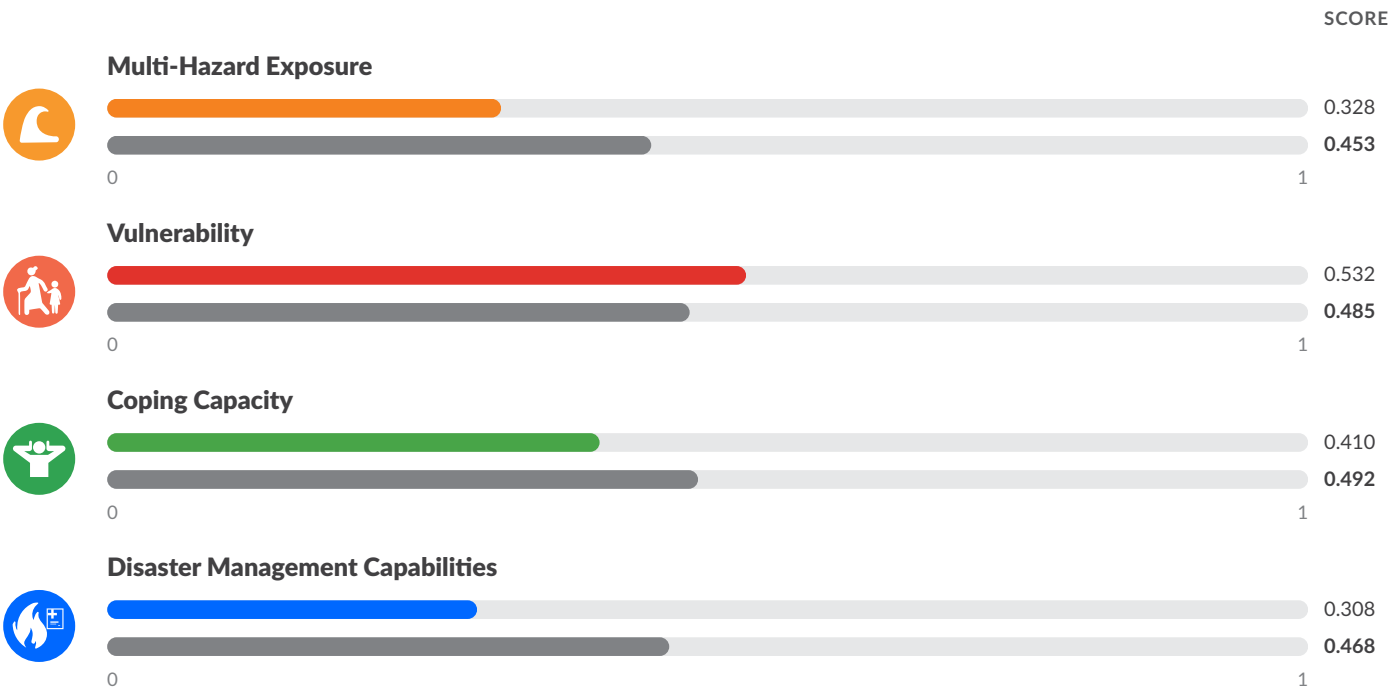
MULTI-HAZARD RISK (MHR)

RANKED
68 / 221
CANTONS ASSESSED
SCORE: 0.535

Palanda's score and ranking are due to Low Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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PALENQUE

NDPBA SUBNATIONAL PROFILE

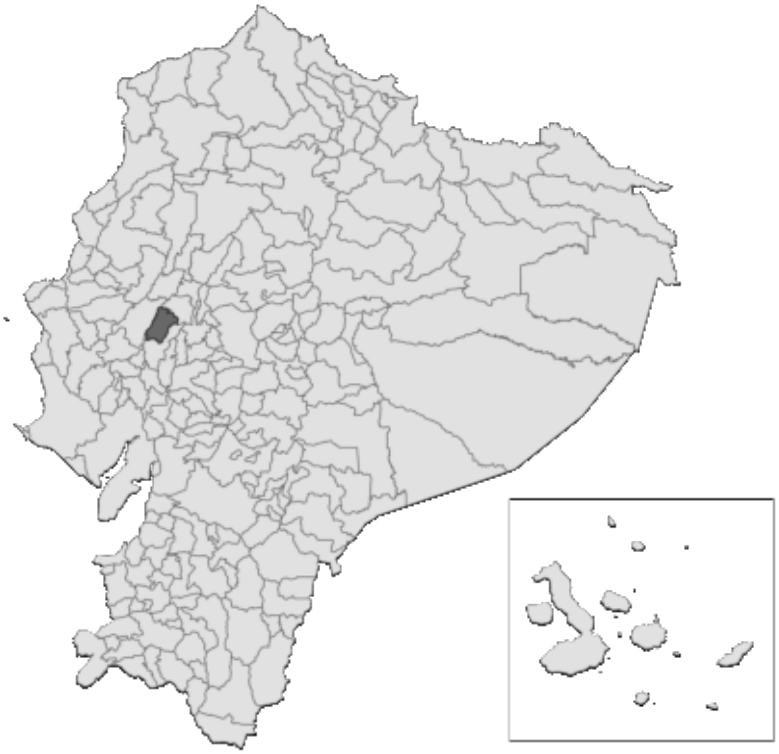
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ECUADOR

PALENQUE

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.575 • RANK: 34/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.627 • RANK: 9/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.358 • RANK: 208/221 CANTONS ASSESSED

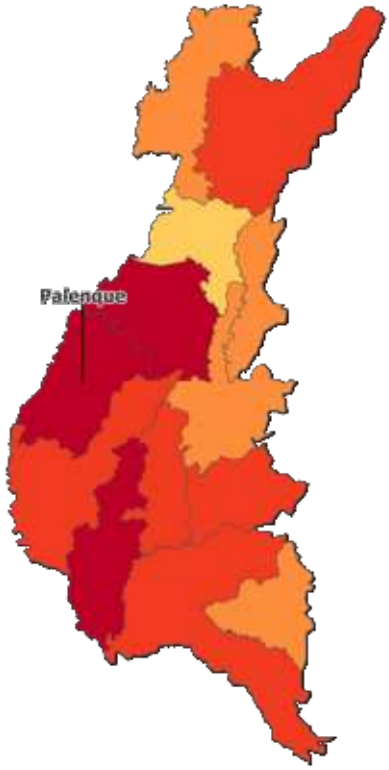
Coping Capacity (CC) - Very Low
SCORE: 0.389 • RANK: 178/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.374 • RANK: 138/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.314 • RANK: 197/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

PALENQUE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	**0.575**
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 138 / 221 CANTONS ASSESSED
SCORE: 0.374



MHE
0.374

Raw MHE
0.468

Relative MHE
0.281

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
27,363 people exposed
13,611 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
27,363 people exposed
13,611 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
5%
1,472 people exposed
806 structures exposed (6%)
Critical Infrastructure Exposed: 13%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
98%
26,914 people exposed
13,385 structures exposed (98%)
Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
2%
415 people exposed
102 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
30%
8,334 people exposed
5,279 structures exposed (39%)
Critical Infrastructure Exposed: 17%

VULNERABILITY (V)

RANK: 9 / 221 CANTONS ASSESSED **SCORE: 0.627**

Vulnerability in Palenque is primarily driven by Housing and Transportation Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.796

- **7.6** Average Years of Schooling
- **57.8%** Population (age 24 and over) with General Basic Education Schooling
- **13.3%** Population (age 24 and over) with No Schooling
- **11.3%** Adult Illiteracy Rate
- **75.4%** Households with No Internet Access
- **88.4%** Households with No Access to Television
- **95.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.718

- **37.3%** Homes with Access to Public Water Source
- **18.1%** Homes Connected to the Public Sewage System
- **67.8%** Homes without Piped Water
- **3.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.636

- **61.3** Age Dependency Ratio
- **16.3%** Unemployment Rate
- **83%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.700

- **8.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.790

- **0.7** Female to Male Labor Ratio (distance from parity)
- **68.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **12.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **64.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **82%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.467

- **10.1%** Prevalence of Disability (among persons age 5 and over)
- **2.7** Perinatal Mortality Rate (per 1,000 births)
- **9.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.359

- **26** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **8.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.374

15 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**12** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**15** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**68** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.875

35.5% Homes with Exterior Walls in Poor Condition	**33.3%** Homes with Inadequate Materials Used in Outer Walls	**34.1%** Homes with Roofs in Poor Condition	**92.2%** Households with No Access to Vehicle for Private Use	**17.4%** Household Overcrowding

Population Pressures

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.422

43.6 Population Density (persons per sq km)	**0.9%** Average Annual Population Change (2010-2022)	**2.5** Net Migration Rate (per 1,000 persons)	**0.29** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.301

0.2 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 178 / 221 CANTONS ASSESSED **SCORE: 0.389**

Palenque exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.394

49.7%
Labor Force Participation

92,058
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.305

0%
Protected Area (% of land area)

-3,226
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.442

89.5%
Voter Participation

42.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.358

Communications Capacity

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.228

2.5%
Household Access to Fixed Phones

70.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.384

93.9%
Homes Served by the Public Electricity Network

55.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.288

8.1
Nurses and Midwives per 10,000 persons

8.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.531

18.6
Average Distance to Airport (km)

37.5
Average Distance to Sea or River Port (km)

0.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 197 / 221 CANTONS ASSESSED **SCORE: 0.314**

Palenque exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.211

6.4	1.7%	0	82.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.416

15.8	7.7	5.3	7.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 208 / 221 CANTONS ASSESSED
SCORE: 0.358

Palenque's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Housing and Transportation Vulnerability

Information Access Vulnerability

Marginalization

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

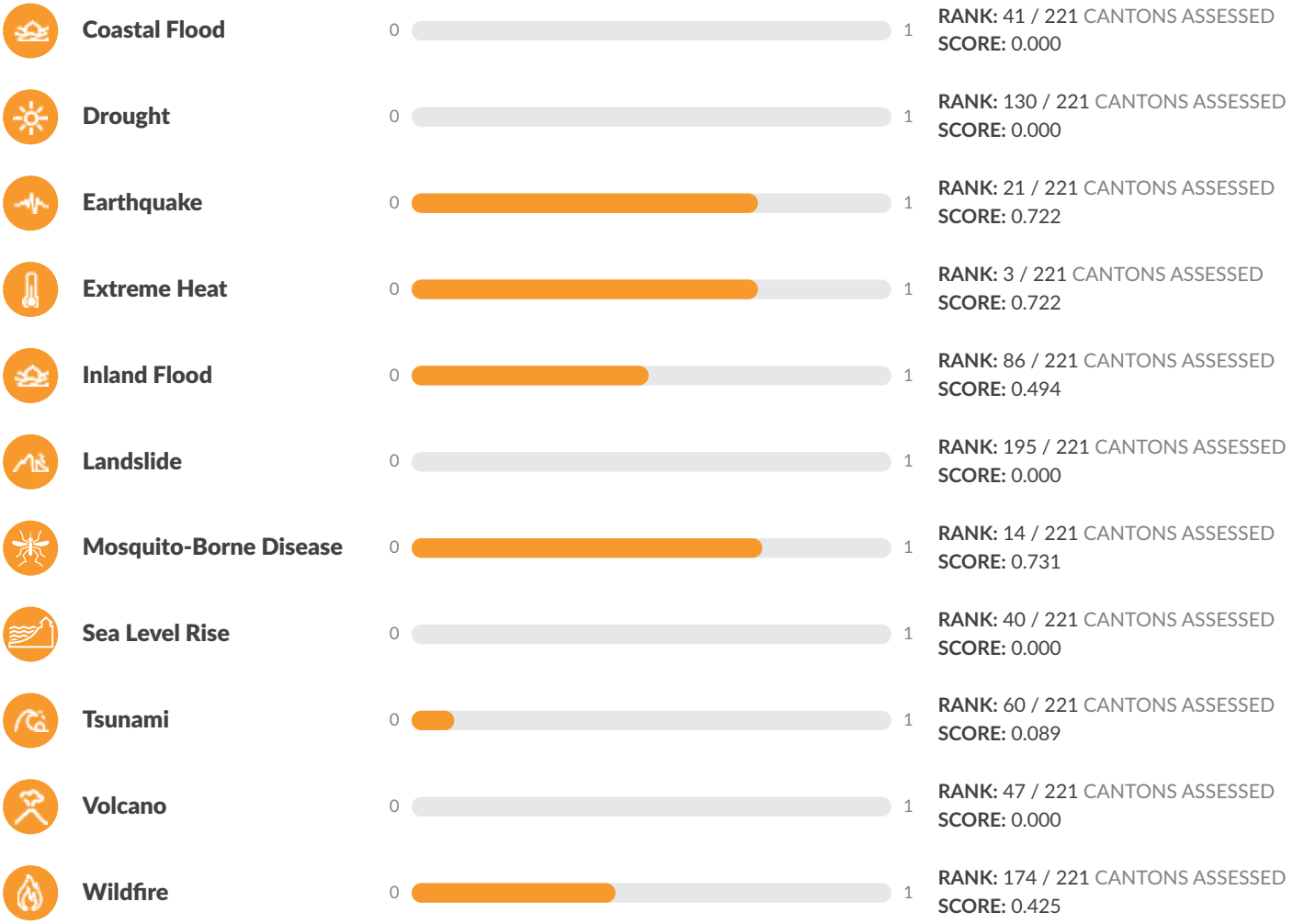
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

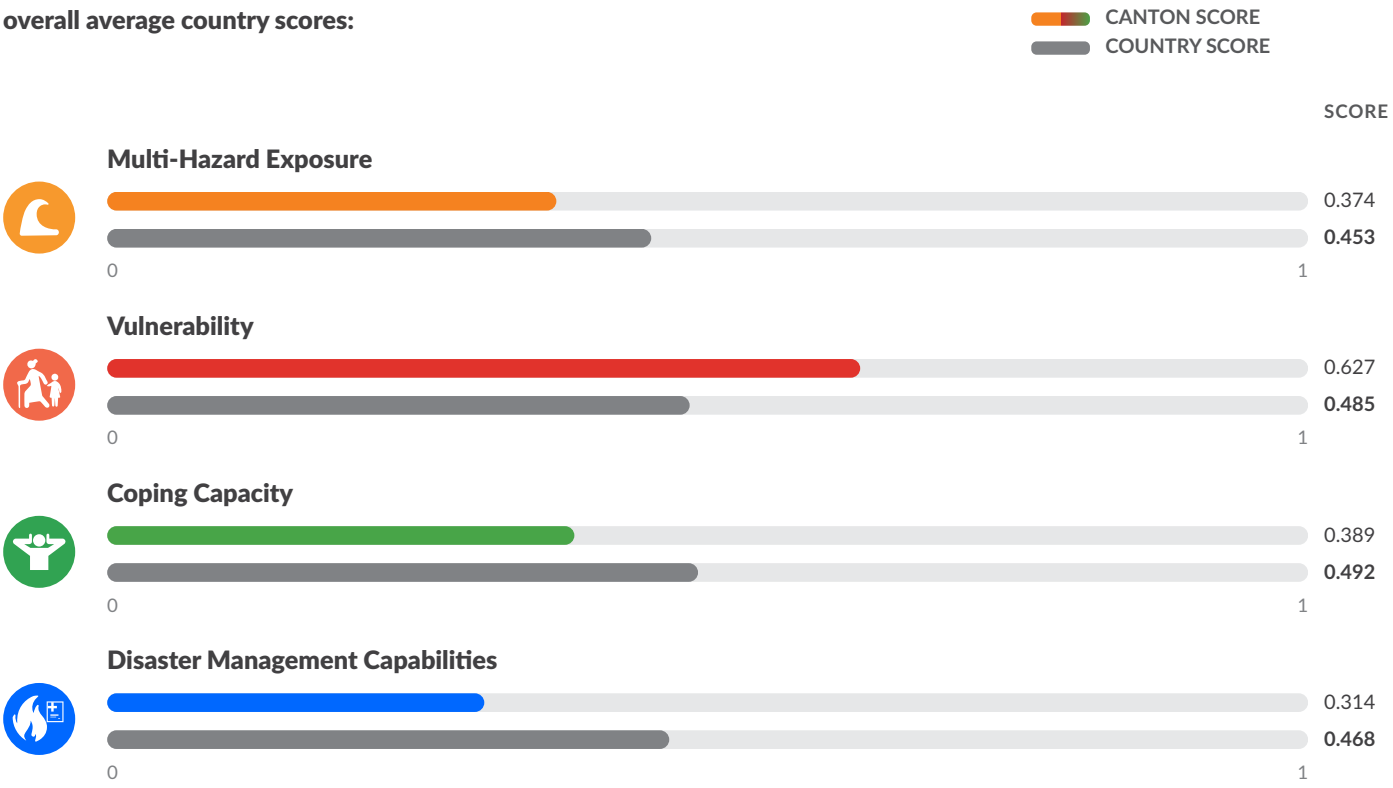


MULTI-HAZARD RISK (MHR)

RANKED
34 / 221
CANTONS ASSESSED
SCORE: 0.575

Palenque's score and ranking are due to Low Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

PALESTINA

NDPBA SUBNATIONAL PROFILE

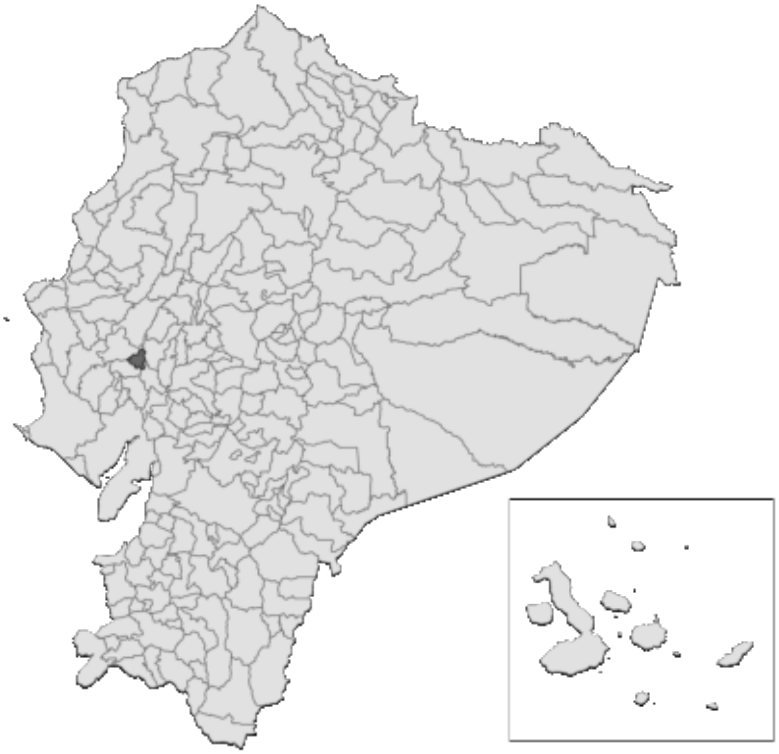
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PALESTINA

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.554 • RANK: 51/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.541 • RANK: 65/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.431 • RANK: 163/221 CANTONS ASSESSED

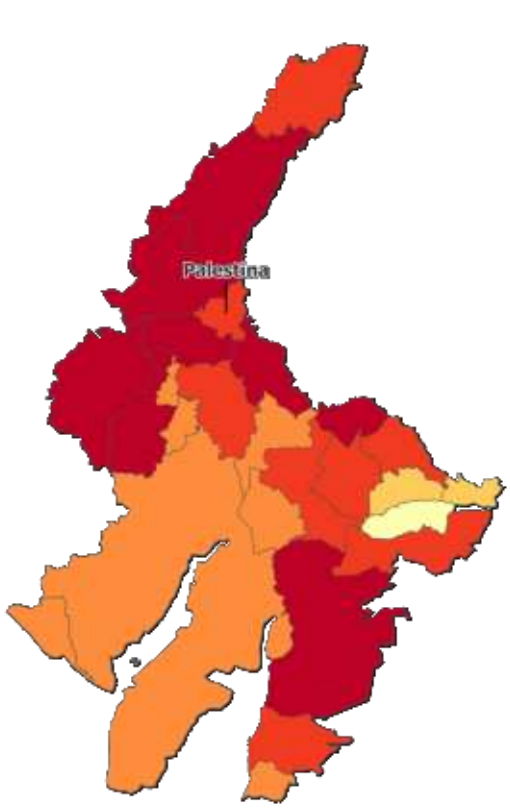
Coping Capacity (CC) - Low
SCORE: 0.404 • RANK: 172/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.510 • RANK: 78/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.430 • RANK: 140/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

PALESTINA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	**0.554**
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 78 / 221 CANTONS ASSESSED
SCORE: 0.510



MHE
0.510

Raw MHE
0.451

Relative MHE
0.570

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
19,203 people exposed
8,527 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
19,203 people exposed
8,527 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
18%
3,372 people exposed
1,361 structures exposed (16%)
Critical Infrastructure Exposed: 16%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
19,203 people exposed
8,527 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
89%
17,138 people exposed
7,669 structures exposed (90%)
Critical Infrastructure Exposed: 77%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
60%
11,582 people exposed
5,184 structures exposed (61%)
Critical Infrastructure Exposed: 59%

VULNERABILITY (V)

RANK: 65 / 221 CANTONS ASSESSED **SCORE: 0.541**

Vulnerability in Palestina is primarily driven by Housing and Transportation Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.669

- **8.4** Average Years of Schooling
- **54.3%** Population (age 24 and over) with General Basic Education Schooling
- **10.6%** Population (age 24 and over) with No Schooling
- **8.2%** Adult Illiteracy Rate
- **65.9%** Households with No Internet Access
- **82.1%** Households with No Access to Television
- **90.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.577

- **60.6%** Homes with Access to Public Water Source
- **39.7%** Homes Connected to the Public Sewage System
- **48.2%** Homes without Piped Water
- **3.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.534

- **58.1** Age Dependency Ratio
- **17%** Unemployment Rate
- **67.4%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.548

- **4.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.663

- **0.7** Female to Male Labor Ratio (distance from parity)
- **43.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **63.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **67%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.338

- **9.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.193

- **14** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **9.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.334

12	2	42	23
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.748

24.9%	16.2%	27.7%	93.5%	14.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.467

96.7	1%	4.7	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.333

0.3	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 172 / 221 CANTONS ASSESSED **SCORE: 0.404**

Palestina exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.276

47%
Labor Force Participation

29,562
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.333

0%
Protected Area (% of land area)

-1,399
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.584

90.8%
Voter Participation

69.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.377

Communications Capacity

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.421

4.4%
Household Access to Fixed Phones

84.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.469

96.4%
Homes Served by the Public Electricity Network

59.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.033

2.8
Nurses and Midwives per 10,000 persons

3.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.584

24.7
Average Distance to Airport (km)

25.3
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 140 / 221 CANTONS ASSESSED **SCORE: 0.430**

Palestina exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.325

3.3	3%	0	55
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.535

21.9	3.8	2.6	5.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 163 / 221 CANTONS ASSESSED
SCORE: 0.431

Palestina's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Housing and Transportation Vulnerability



Economic Capacity



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.



Economic Capacity

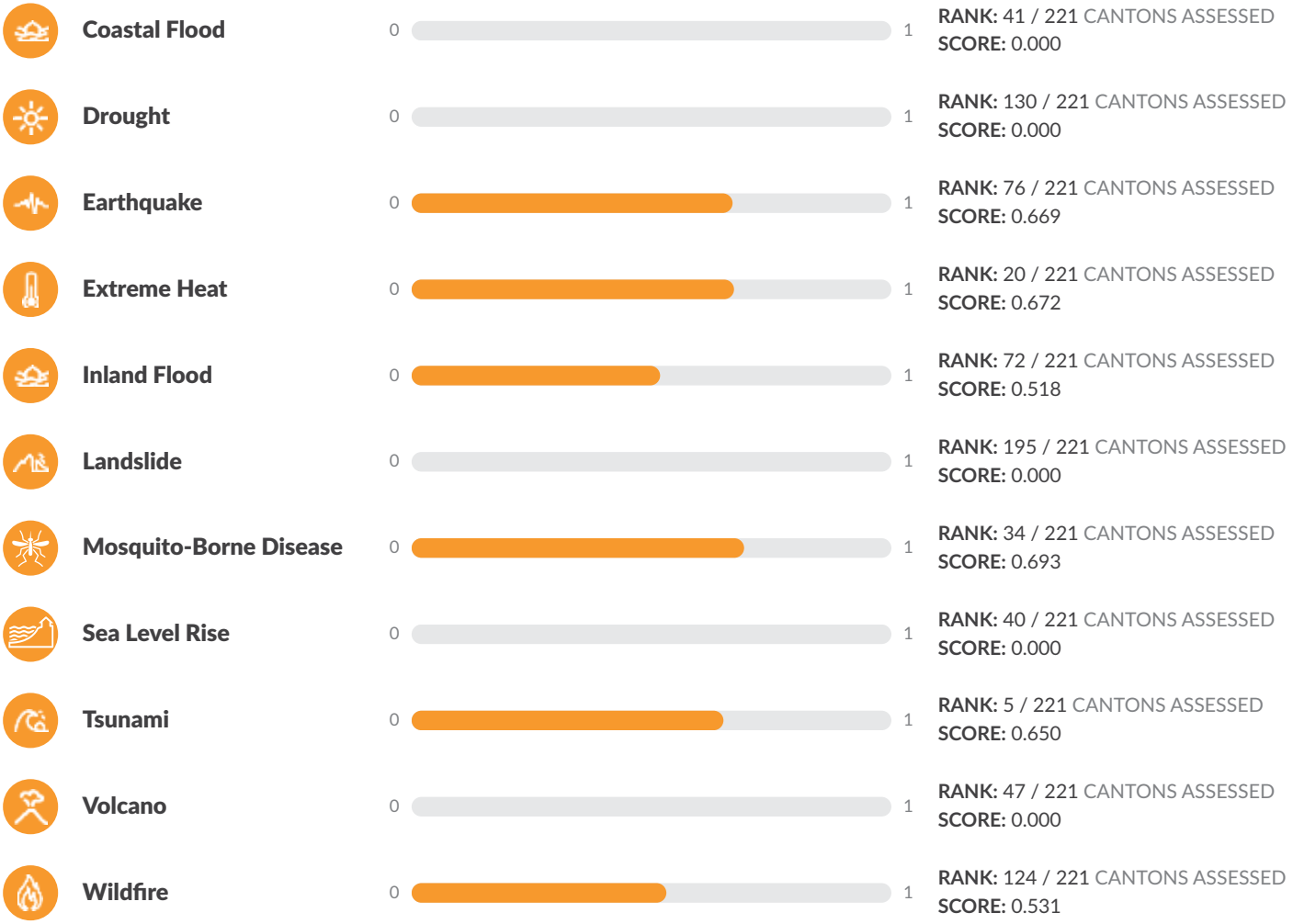
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

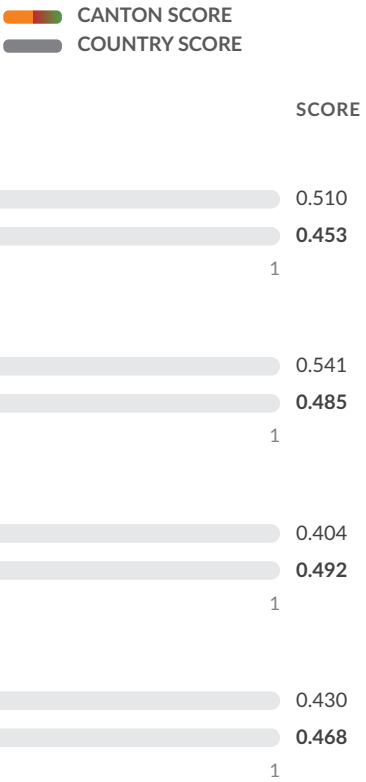


MULTI-HAZARD RISK (MHR)

RANKED
51 / 221
CANTONS ASSESSED
SCORE: 0.554

Palestina's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PALLATANGA

PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.487 • RANK: 116/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.435 • RANK: 161/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.253 • RANK: 191/221 CANTONS ASSESSED

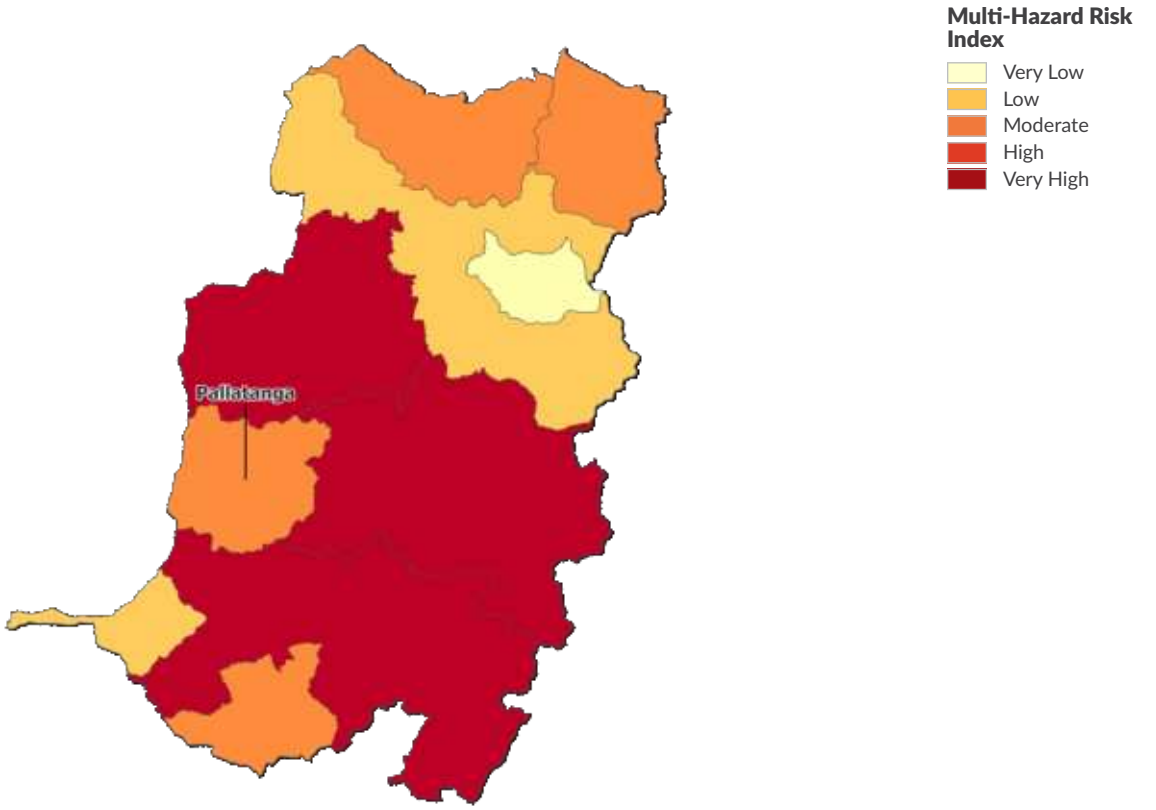
Vulnerability (V) - High
SCORE: 0.508 • RANK: 87/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.355 • RANK: 198/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.459 • RANK: 108/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

PALLATANGA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	0.571
Guano	0.512
Penipe	0.500

Pallatanga	**0.487**
Chunchi	0.483
Cumandá	0.442
Riobamba	0.442
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 191 / 221 CANTONS ASSESSED
SCORE: 0.253



MHE
0.253

Raw MHE
0.346

Relative MHE
0.160

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
13,273 people exposed
10,340 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
8%
1,018 people exposed
675 structures exposed (7%)
Critical Infrastructure Exposed: 6%

Landslide
100%
13,273 people exposed
10,340 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Mosquito-Borne Disease
13%
1,754 people exposed
1,606 structures exposed (16%)
Critical Infrastructure Exposed: 13%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
67%
8,867 people exposed
6,986 structures exposed (68%)
Critical Infrastructure Exposed: 83%

VULNERABILITY (V)

RANK: 87 / 221 CANTONS ASSESSED **SCORE: 0.508**

Vulnerability in Pallatanga is primarily driven by Information Access Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.609

- **8.1** Average Years of Schooling
- **49.1%** Population (age 24 and over) with General Basic Education Schooling
- **13%** Population (age 24 and over) with No Schooling
- **10.9%** Adult Illiteracy Rate
- **52.5%** Households with No Internet Access
- **73.7%** Households with No Access to Television
- **85.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.604

- **64.1%** Homes with Access to Public Water Source
- **44.1%** Homes Connected to the Public Sewage System
- **37.9%** Homes without Piped Water
- **8.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.537

- **68.3** Age Dependency Ratio
- **7.5%** Unemployment Rate
- **64.8%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.399

- **2.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.456

- **0.3** Female to Male Labor Ratio (distance from parity)
- **46.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **76.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **55.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.484

- **12.8%** Prevalence of Disability (among persons age 5 and over)
- **7.1** Perinatal Mortality Rate (per 1,000 births)
- **6.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.117

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **17.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.519

27	29	48	19
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.445

12.6%	0.6%	17.9%	87.7%	7.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.439

31	0.3%	6	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.510

0.4	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 198 / 221 CANTONS ASSESSED **SCORE: 0.355**

Pallatanga exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.453

58.3%
Labor Force Participation

36,124
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.308

0%
Protected Area (% of land area)

-3,016.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.209

73.3%
Voter Participation

54%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.417

Communications Capacity

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.504

10%
Household Access to Fixed Phones

80.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.545

96.1%
Homes Served by the Public Electricity Network

72.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.188

5.1
Nurses and Midwives per 10,000 persons

6.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.430

35.5
Average Distance to Airport (km)

68.4
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 108 / 221 CANTONS ASSESSED **SCORE: 0.459**

Pallatanga exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.377

2.5	4.3%	0	46.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.541

13.6	4.5	4.5	3.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 161 / 221 CANTONS ASSESSED
SCORE: 0.435

Pallatanga's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Governance

Mass Care Support

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

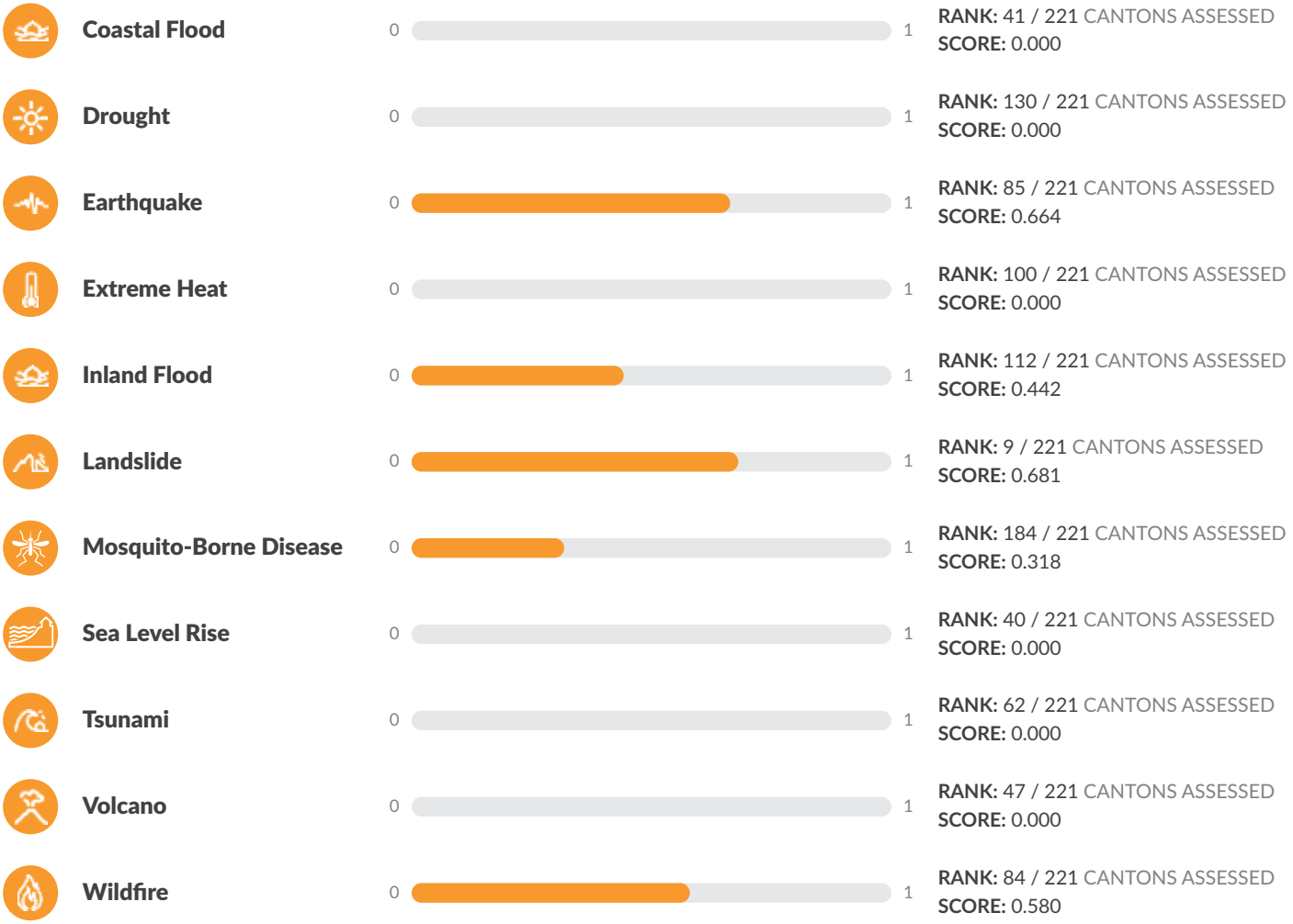
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
116 / 221
CANTONS ASSESSED
SCORE: 0.487

Pallatanga's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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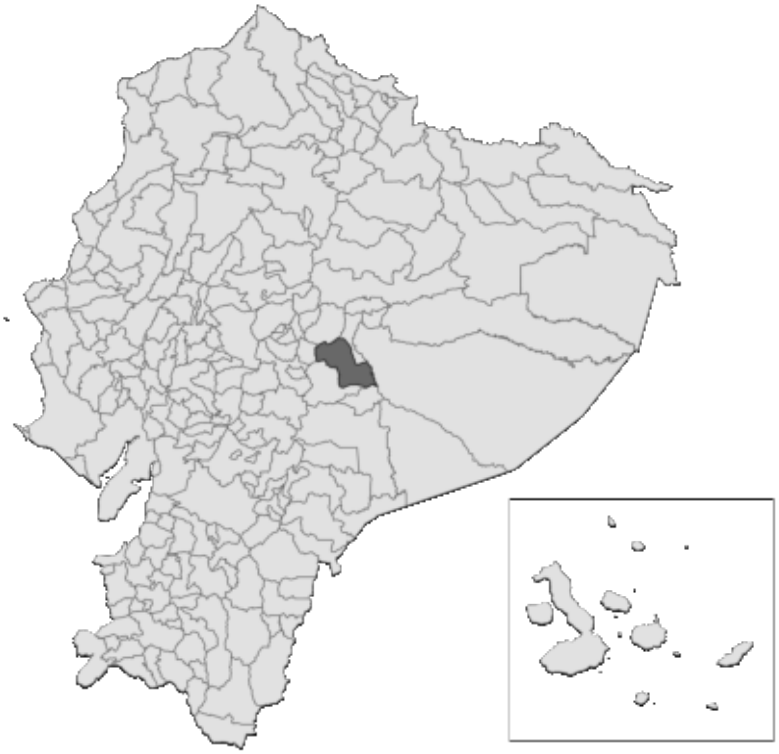
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PALORA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.429 • RANK: 175/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.473 • RANK: 129/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.137 • RANK: 218/221 CANTONS ASSESSED

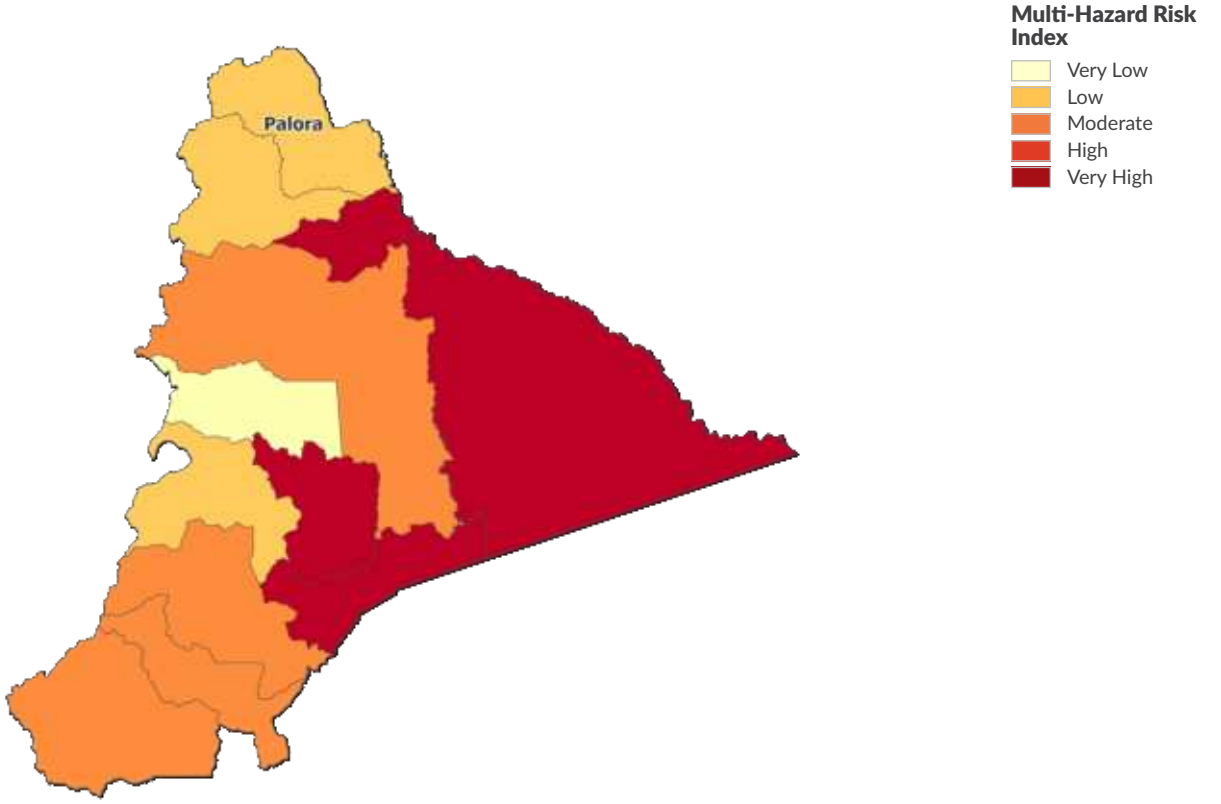
Vulnerability (V) - Moderate
SCORE: 0.502 • RANK: 95/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.520 • RANK: 87/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.402 • RANK: 158/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

PALORA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 218 / 221 CANTONS ASSESSED
SCORE: 0.137



MHE
0.137

Raw MHE
0.224

Relative MHE
0.050

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **9,120** people exposed
- **5,845** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
1%
- **102** people exposed
- **64** structures exposed (1%)

Critical Infrastructure Exposed: 6%

Landslide
7%
- **599** people exposed
- **536** structures exposed (9%)

Critical Infrastructure Exposed: 14%

Mosquito-Borne Disease
100%
- **9,120** people exposed
- **5,824** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **2** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Wildfire
30%
- **2,756** people exposed
- **1,966** structures exposed (34%)

Critical Infrastructure Exposed: 40%

VULNERABILITY (V)

RANK: 95 / 221 CANTONS ASSESSED **SCORE: 0.502**

Vulnerability in Palora is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.471

10.5 Average Years of Schooling	**42.7%** Population (age 24 and over) with General Basic Education Schooling	**4.6%** Population (age 24 and over) with No Schooling	**3.2%** Adult Illiteracy Rate	**53.6%** Households with No Internet Access
85.1% Households with No Access to Television	**80.5%** Households with No Access to Computer			

Clean Water Access Vulnerability

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.602

75.4% Homes with Access to Public Water Source	**49.7%** Homes Connected to the Public Sewage System	**41.1%** Homes without Piped Water	**10.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.511

63.5 Age Dependency Ratio	**11.5%** Unemployment Rate	**54%** Poverty Rate (based on UBN)	**0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.583

5.7% Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.482

0.4 Female to Male Labor Ratio (distance from parity)	**47.3** Adolescent Birth Rate (among females age 15-19) per 1,000	**6.6%** Prevalence of Child Marriage (among adolescents age 12-17)	**80.9%** Population with Unmet Basic Needs (UBN) that is Indigenous	**25.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.382

7.6% Prevalence of Disability (among persons age 5 and over)	**0** Perinatal Mortality Rate (per 1,000 births)	**9.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.414

24.5 Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)	**21.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)	**3.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.490

52	12	40	31
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.481

16.9%	1.3%	17.2%	81.3%	10.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.730

8.2	4.6%	52.1	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.343

0.1	0.2	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 87 / 221 CANTONS ASSESSED **SCORE: 0.520**

Palora exhibits weaker Coping Capacity in the areas of Transportation Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.569

63.4%
Labor Force Participation

52,478
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.720

50.9%
Protected Area (% of land area)

-4,233.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.444

78.3%
Voter Participation

85.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.479

Communications Capacity

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.534

14.4%
Household Access to Fixed Phones

78.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.442

93.1%
Homes Served by the Public Electricity Network

67.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.591

19.4
Nurses and Midwives per 10,000 persons

24.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.350

27.8
Average Distance to Airport (km)

84.8
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 158 / 221 CANTONS ASSESSED **SCORE: 0.402**

Palora exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.349

3.6	7.6%	0	64.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.456

26.6	6	3.7	5.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 129 / 221 CANTONS ASSESSED
SCORE: 0.473

Palora's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Population Pressures



Mass Care Support



Transportation Capacity



Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Transportation Capacity

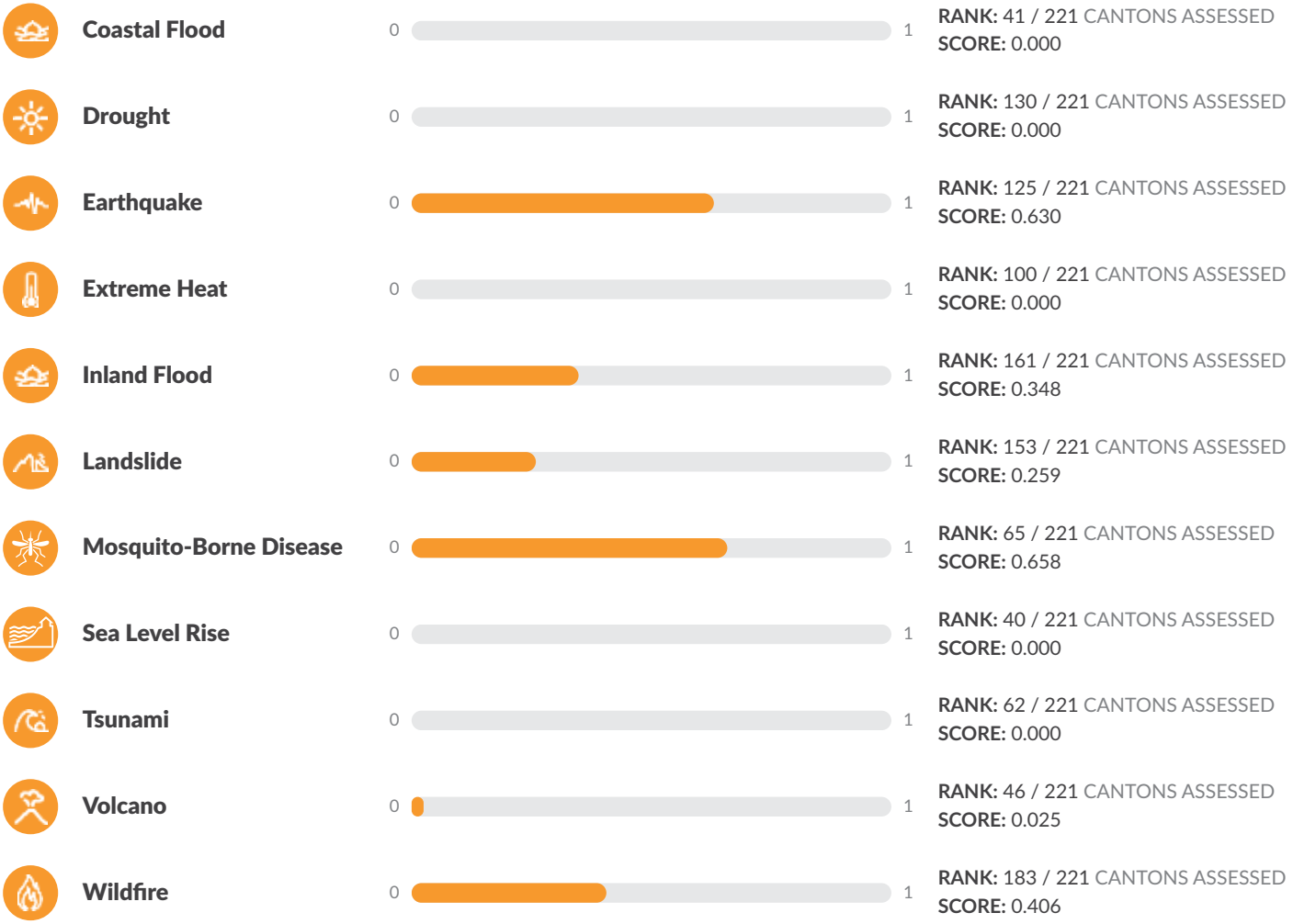
Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

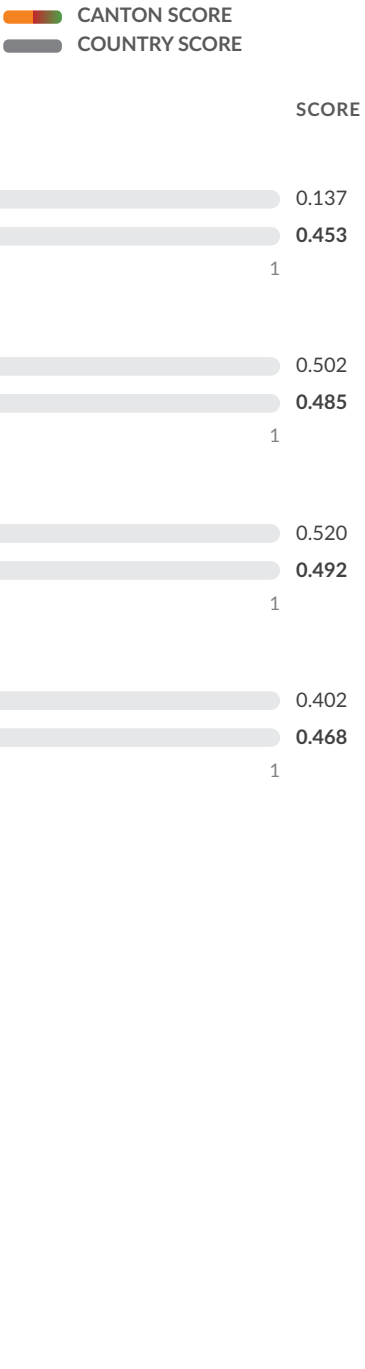


MULTI-HAZARD RISK (MHR)

RANKED
175 / 221
CANTONS ASSESSED
SCORE: 0.429

Palora's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PALTAS

NDPBA SUBNATIONAL PROFILE

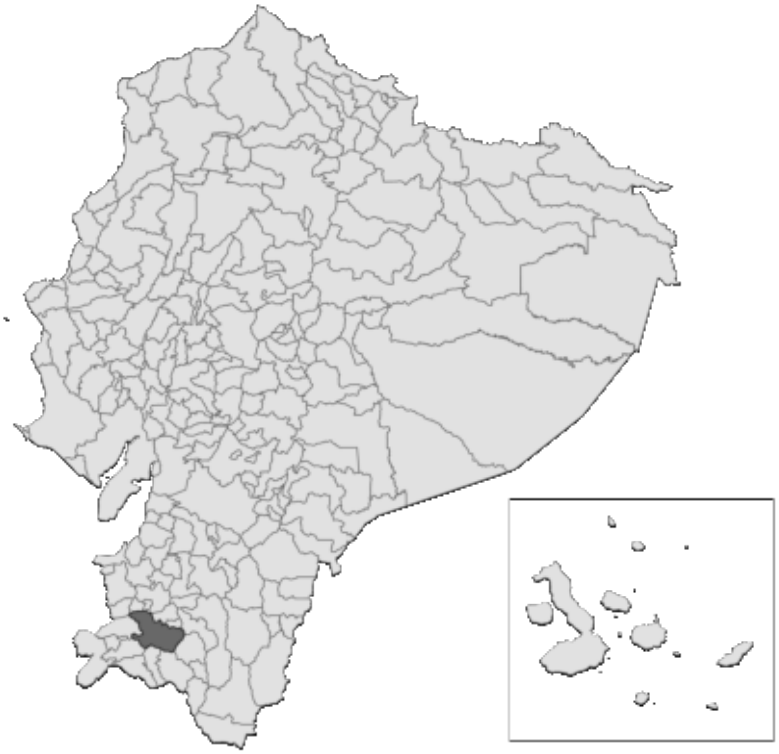
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PALTAS

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.532 • RANK: 70/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.492 • RANK: 104/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.449 • RANK: 145/221 CANTONS ASSESSED

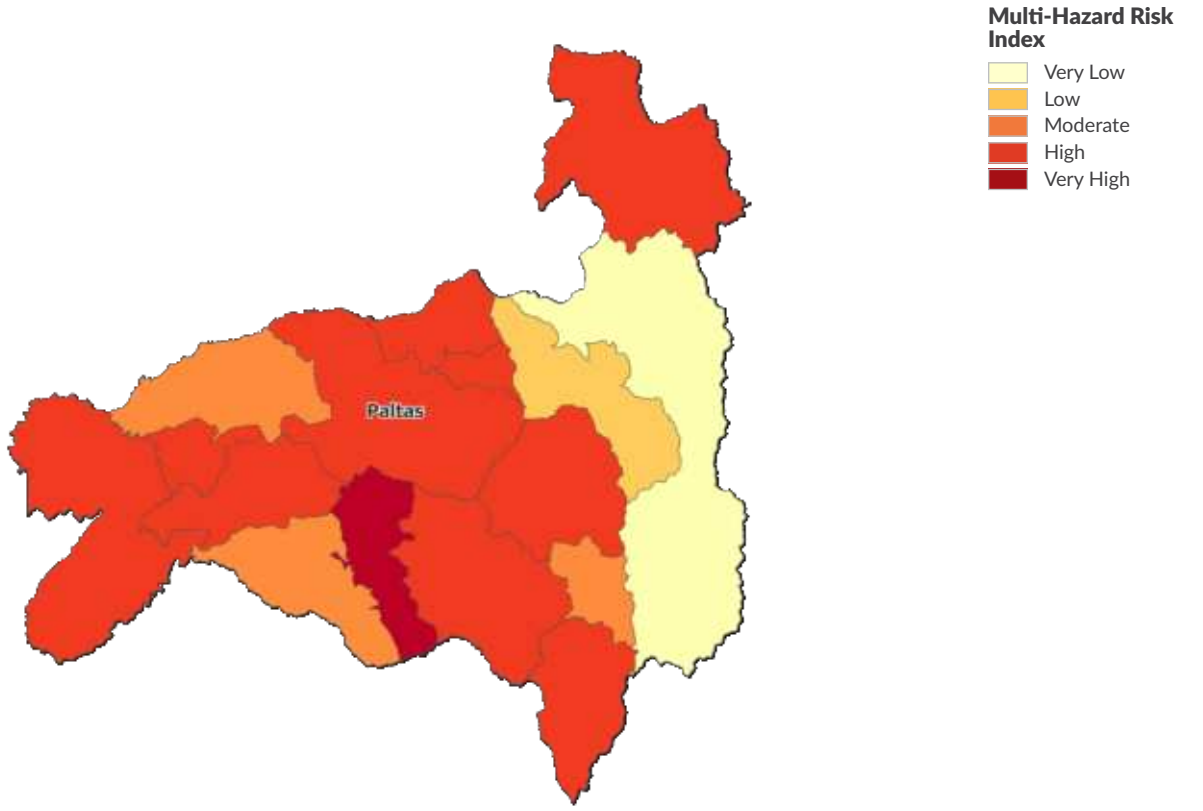
Coping Capacity (CC) - Low
SCORE: 0.391 • RANK: 177/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.473 • RANK: 93/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.447 • RANK: 128/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

PALTAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590	Chaguarpamba	0.524
Espíndola	0.548	Olmedo	0.521
Saraguro	0.548	Celica	0.520
Zapotillo	0.546	Quilanga	0.494
Gonzanamá	0.544	Puyango	0.493
Calvas	0.536	Macará	0.492
Paltas	**0.532**	Catamayo	0.467
Pindal	0.528	Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 93 / 221 CANTONS ASSESSED
SCORE: 0.473



MHE
0.473

Raw MHE
0.534

Relative MHE
0.412

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
86%
- **22,903** people exposed
- **17,624** structures exposed (86%)
- **Critical Infrastructure Exposed:** 78%

Earthquake
100%
- **26,626** people exposed
- **20,602** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
1%
- **386** people exposed
- **372** structures exposed (2%)
- **Critical Infrastructure Exposed:** 5%

Landslide
86%
- **22,852** people exposed
- **17,888** structures exposed (87%)
- **Critical Infrastructure Exposed:** 84%

Mosquito-Borne Disease
59%
- **15,626** people exposed
- **11,737** structures exposed (57%)
- **Critical Infrastructure Exposed:** 24%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
66%
- **17,657** people exposed
- **14,662** structures exposed (71%)
- **Critical Infrastructure Exposed:** 54%

VULNERABILITY (V)

RANK: 104 / 221 CANTONS ASSESSED **SCORE: 0.492**

Vulnerability in Paltas is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.469

- **9.8** Average Years of Schooling
- **53.6%** Population (age 24 and over) with General Basic Education Schooling
- **3.2%** Population (age 24 and over) with No Schooling
- **3%** Adult Illiteracy Rate
- **53.8%** Households with No Internet Access
- **74.2%** Households with No Access to Television
- **79%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.577

- **75.4%** Homes with Access to Public Water Source
- **40.9%** Homes Connected to the Public Sewage System
- **36.9%** Homes without Piped Water
- **7.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.598

- **68.4** Age Dependency Ratio
- **16.9%** Unemployment Rate
- **57%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.528

- **4.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.414

- **0.4** Female to Male Labor Ratio (distance from parity)
- **45** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **50%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **47.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.339

- **9.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.331

- **5.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **18.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.543

64	19	37	37
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.483

13.4%	1%	15.8%	86.7%	12.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.349

19.8	-0.4	2.2	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.699

0.6	0.4	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 177 / 221 CANTONS ASSESSED **SCORE: 0.391**

Paltas exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.350

50.9%
Labor Force Participation

40,046
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.220

0%
Protected Area (% of land area)

-9,030.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.307

79.5%
Voter Participation

57%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.571

Communications Capacity

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.634

12.2%
Household Access to Fixed Phones

88.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.520

96.7%
Homes Served by the Public Electricity Network

66.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.720

26.7
Nurses and Midwives per 10,000 persons

36.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.410

37.2
Average Distance to Airport (km)

74.4
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 128 / 221 CANTONS ASSESSED **SCORE: 0.447**

Paltas exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.515

3.4	9.9%	1.3	58
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.380

10.8	17.1	4.3	9.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 145 / 221 CANTONS ASSESSED
SCORE: 0.449

Paltas's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Disaster Impacts


Governance


Economic Capacity


Emergency Services

KEY FACTORS INFLUENCING RESILIENCE



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Economic Capacity

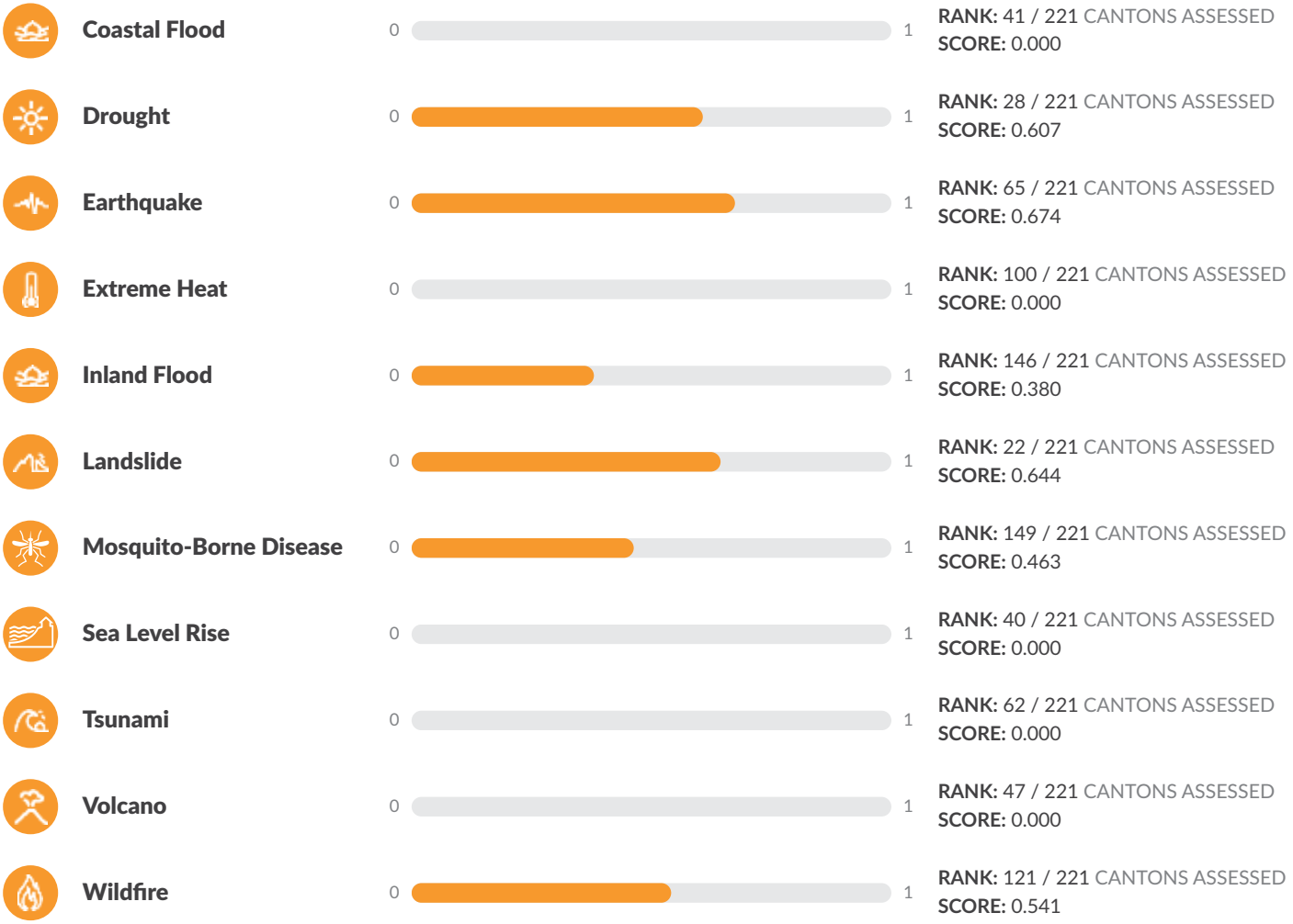
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
70 / 221
CANTONS ASSESSED
SCORE: 0.532

Paltas's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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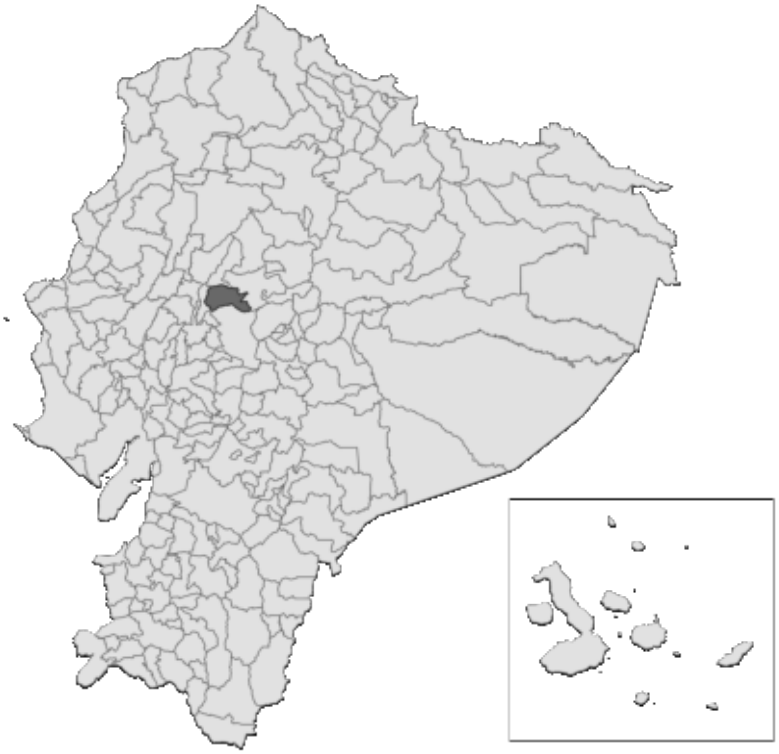
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PANGUA

PROVINCE: COTOPAXI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.486 • RANK: 117/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.520 • RANK: 79/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.449 • RANK: 145/221 CANTONS ASSESSED

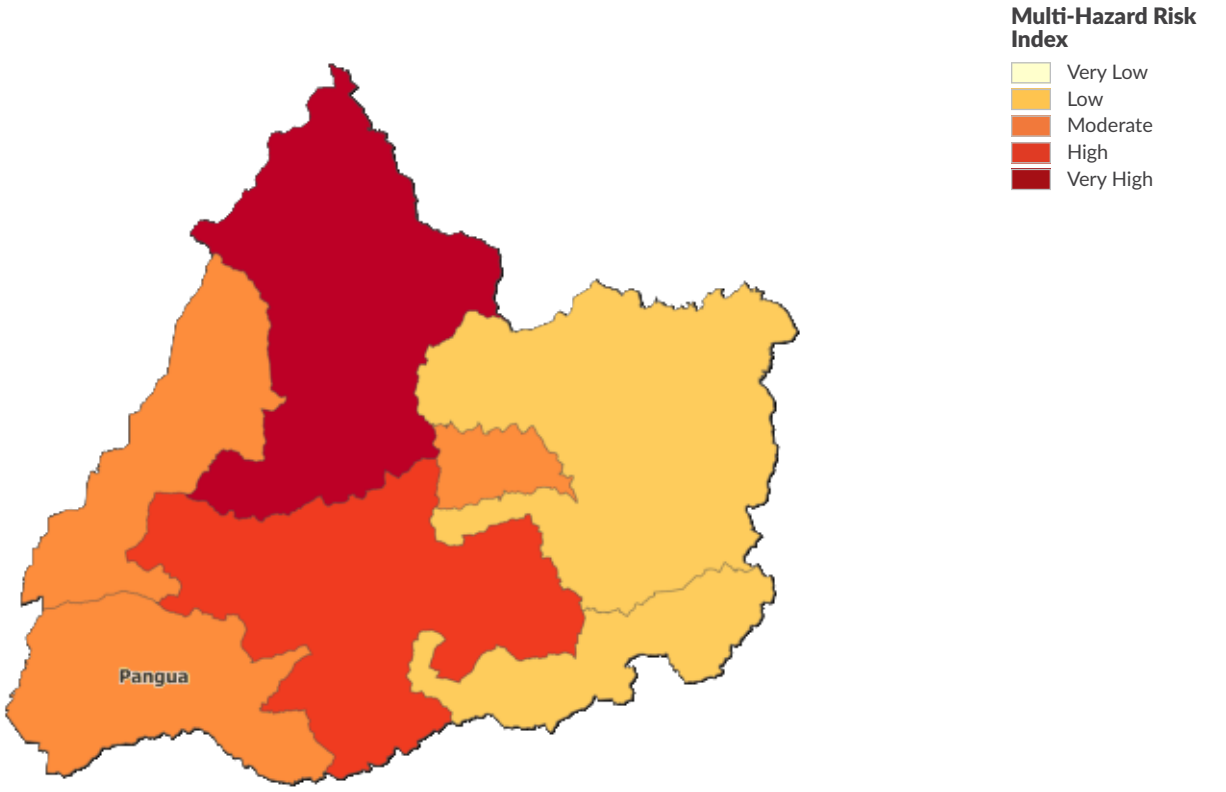
Coping Capacity (CC) - Low
SCORE: 0.436 • RANK: 158/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.291 • RANK: 180/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.430 • RANK: 140/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN COTOPAXI PROVINCE

PANGUA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sigchos	0.585	La Maná	0.475
Pujilí	0.541	Salcedo	0.460
Saquisilí	0.490	Latacunga	0.440
Pangua	**0.486**		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 180 / 221 CANTONS ASSESSED
SCORE: 0.291



MHE
0.291

Raw MHE
0.438

Relative MHE
0.143

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
26,055 people exposed
14,481 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
22%
5,724 people exposed
2,560 structures exposed (18%)
Critical Infrastructure Exposed: 24%

Landslide
52%
13,463 people exposed
8,561 structures exposed (59%)
Critical Infrastructure Exposed: 27%

Mosquito-Borne Disease
67%
17,327 people exposed
9,044 structures exposed (62%)
Critical Infrastructure Exposed: 32%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
46%
12,032 people exposed
7,225 structures exposed (50%)
Critical Infrastructure Exposed: 33%

VULNERABILITY (V)

RANK: 79 / 221 CANTONS ASSESSED **SCORE: 0.520**

Vulnerability in Pangua is primarily driven by Information Access Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.716

- **8.1** Average Years of Schooling
- **53%** Population (age 24 and over) with General Basic Education Schooling
- **11.7%** Population (age 24 and over) with No Schooling
- **10%** Adult Illiteracy Rate
- **62.8%** Households with No Internet Access
- **93%** Households with No Access to Television
- **89.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.656

- **51.8%** Homes with Access to Public Water Source
- **20.3%** Homes Connected to the Public Sewage System
- **50.4%** Homes without Piped Water
- **3.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.510

- **57.8** Age Dependency Ratio
- **6.9%** Unemployment Rate
- **69%** Poverty Rate (based on UBN)
- **1.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.480

- **3.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.623

- **0.5** Female to Male Labor Ratio (distance from parity)
- **54.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **92.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **60.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.324

- **8.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.339

- **33.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **9.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.387

47
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

5
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

31
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

21
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.524

16.7%
Homes with Exterior Walls in Poor Condition

2.2%
Homes with Inadequate Materials Used in Outer Walls

21.3%
Homes with Roofs in Poor Condition

89%
Households with No Access to Vehicle for Private Use

8.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.380

30.4
Population Density (persons per sq km)

0%
Average Annual Population Change (2010-2022)

3.5
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.429

0.2
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 158 / 221 CANTONS ASSESSED **SCORE: 0.436**

Pangua exhibits weaker Coping Capacity in the areas of Governance and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.473

57.8%
Labor Force Participation

53,117
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.495

10.3%
Protected Area (% of land area)

-8,259
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.348

84.6%
Voter Participation

44.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.466

Communications Capacity

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.362

6.3%
Household Access to Fixed Phones

70.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.417

92.4%
Homes Served by the Public Electricity Network

65.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.603

22
Nurses and Midwives per 10,000 persons

22.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.482

25.7
Average Distance to Airport (km)

55.8
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 140 / 221 CANTONS ASSESSED **SCORE: 0.430**

Pangua exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.412

3.4	3.5%	0.7	57.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.447

11.3	6.4	5.2	8.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 145 / 221 CANTONS ASSESSED
SCORE: 0.449

Pangua's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Information Access Vulnerability

Clean Water Access Vulnerability

Governance

Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

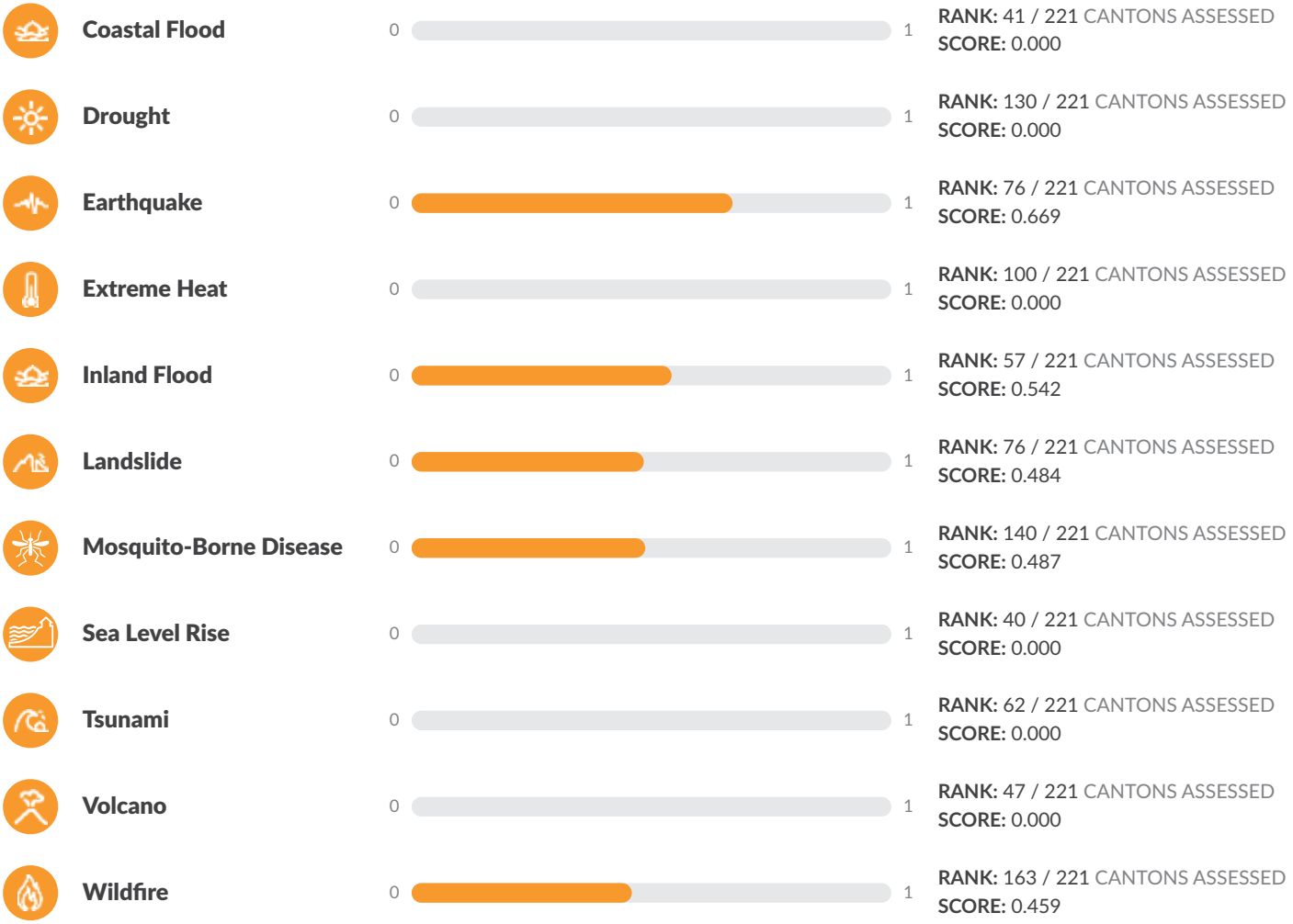
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

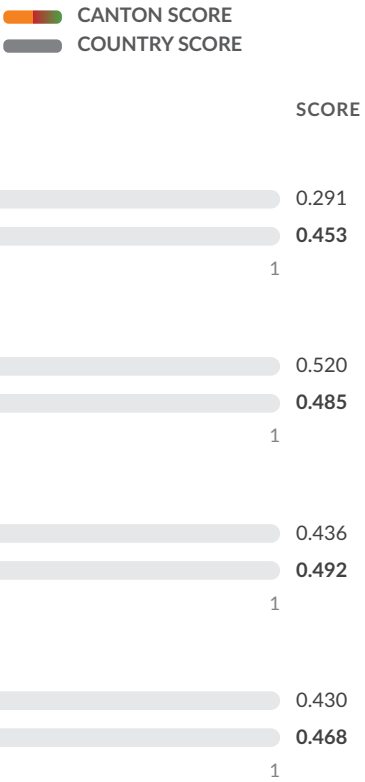


MULTI-HAZARD RISK (MHR)

RANKED
117 / 221
CANTONS ASSESSED
SCORE: 0.486

Pangua's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PAQUISHA

NDPBA SUBNATIONAL PROFILE

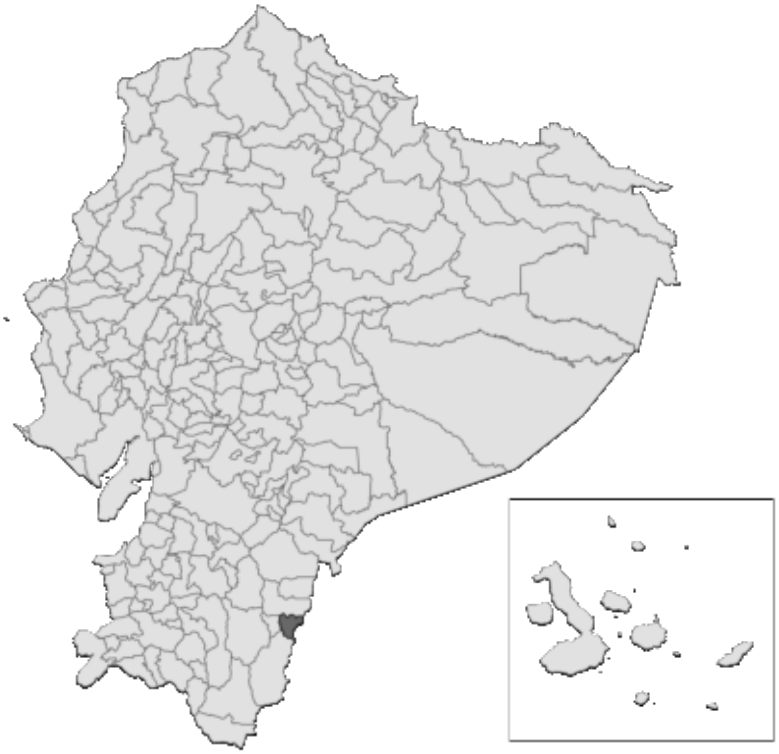
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PAQUISHA

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.465 • RANK: 137/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.458 • RANK: 139/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.233 • RANK: 202/221 CANTONS ASSESSED

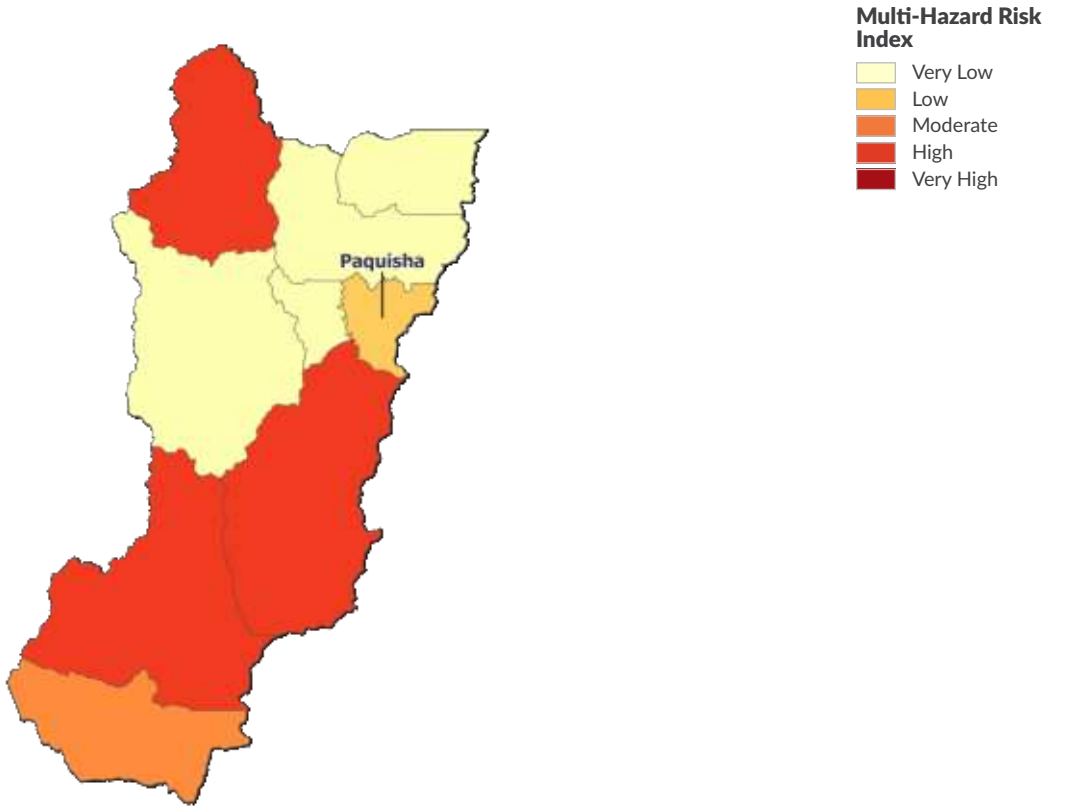
Vulnerability (V) - High
SCORE: 0.535 • RANK: 68/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.492 • RANK: 105/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.416 • RANK: 151/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

PAQUISHA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Palanda	0.535	Centinela Del Cóndor	0.428
Yacuambi	0.535	El Pangui	0.428
Nangaritza	0.524	Zamora	0.419
Chinchipe	0.511	Yantzaza	0.399
Paquisha	**0.465**		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 202 / 221 CANTONS ASSESSED
SCORE: 0.233



MHE
0.233

Raw MHE
0.194

Relative MHE
0.272

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
4,684 people exposed
3,811 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
15%
722 people exposed
535 structures exposed (14%)
Critical Infrastructure Exposed: 9%

Landslide
47%
2,216 people exposed
1,806 structures exposed (47%)
Critical Infrastructure Exposed: 39%

Mosquito-Borne Disease
95%
4,427 people exposed
3,341 structures exposed (88%)
Critical Infrastructure Exposed: 87%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
4,671 people exposed
3,804 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 68 / 221 CANTONS ASSESSED **SCORE: 0.535**

Vulnerability in Paquisha is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.425

- **10.2** Average Years of Schooling
- **45.6%** Population (age 24 and over) with General Basic Education Schooling
- **4.3%** Population (age 24 and over) with No Schooling
- **3.2%** Adult Illiteracy Rate
- **37.9%** Households with No Internet Access
- **78.9%** Households with No Access to Television
- **77.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.646

- **75.3%** Homes with Access to Public Water Source
- **52.5%** Homes Connected to the Public Sewage System
- **41.3%** Homes without Piped Water
- **15.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.650

- **59.3** Age Dependency Ratio
- **20.3%** Unemployment Rate
- **62.9%** Poverty Rate (based on UBN)
- **2.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.481

- **3.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.564

- **0.4** Female to Male Labor Ratio (distance from parity)
- **84.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **76.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **41.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.330

- **5.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **10.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.210

- **9.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **16.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.550

7	48	38	48
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.475

15.9%	0.6%	18.6%	85.2%	9.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.558

14	2%	13.3	0.34
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.639

0.2	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 105 / 221 CANTONS ASSESSED **SCORE: 0.492**

Paquisha exhibits weaker Coping Capacity in the areas of Economic Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.442

60.9%
Labor Force Participation

16,908
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.340

0%
Protected Area (% of land area)

-916.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.508

81.8%
Voter Participation

87%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.577

Communications Capacity

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.470

2.4%
Household Access to Fixed Phones

92%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.675

96.4%
Homes Served by the Public Electricity Network

84.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.661

25.3
Nurses and Midwives per 10,000 persons

27.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.500

29.1
Average Distance to Airport (km)

21.8
Average Distance to Sea or River Port (km)

0.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 151 / 221 CANTONS ASSESSED **SCORE: 0.416**

Paquisha exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.453

3	16.5%	0	37.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.380

20.1	17.6	5.6	4.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 139 / 221 CANTONS ASSESSED
SCORE: 0.458

Paquisha's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Economic Constraints



Clean Water Access Vulnerability



Disaster Impacts



Emergency Services

KEY FACTORS INFLUENCING RESILIENCE



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Disaster Impacts

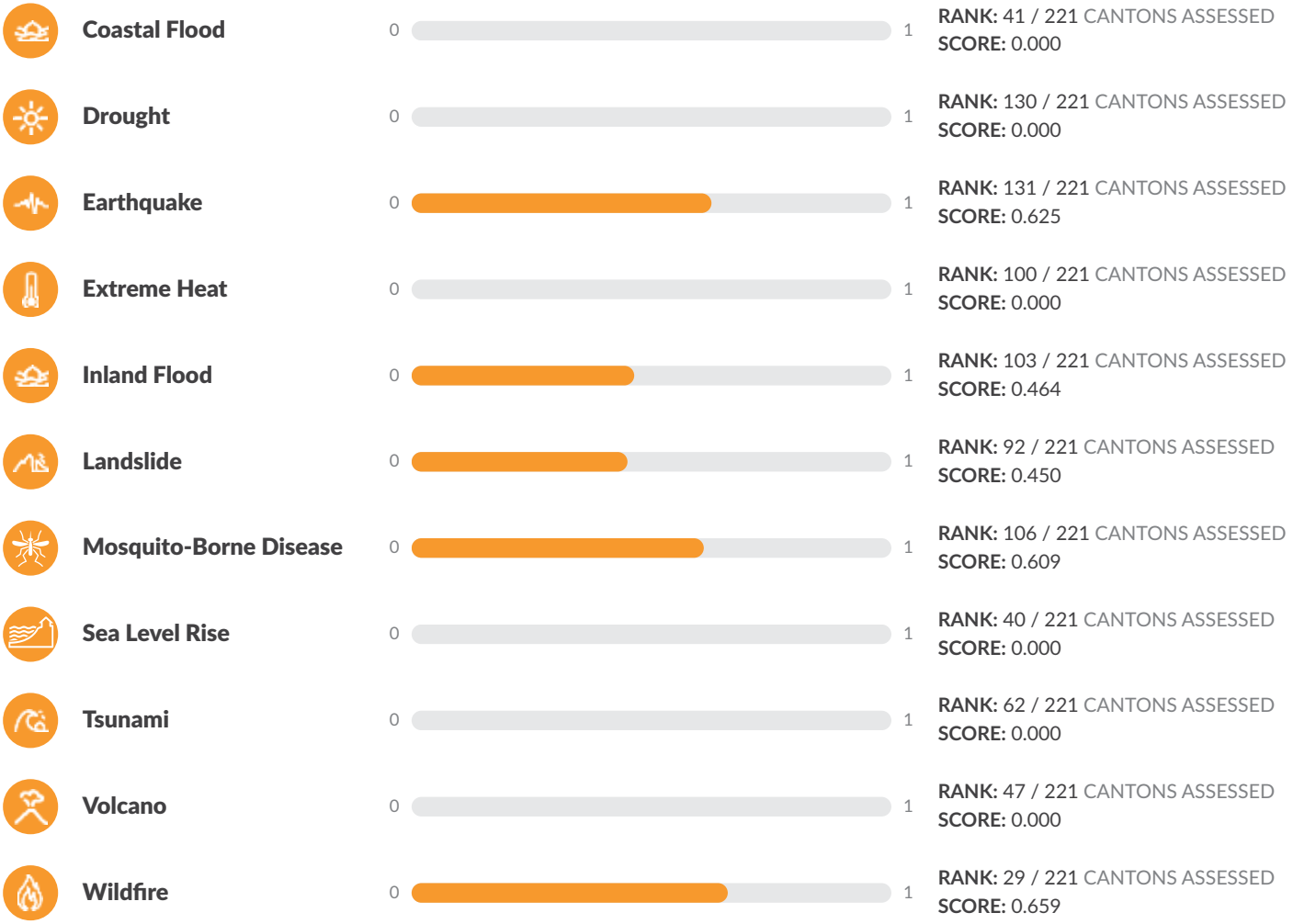
Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

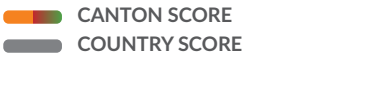


MULTI-HAZARD RISK (MHR)

RANKED
137 / 221
CANTONS ASSESSED
SCORE: 0.465

Paquisha's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PASAJE

NDPBA SUBNATIONAL PROFILE

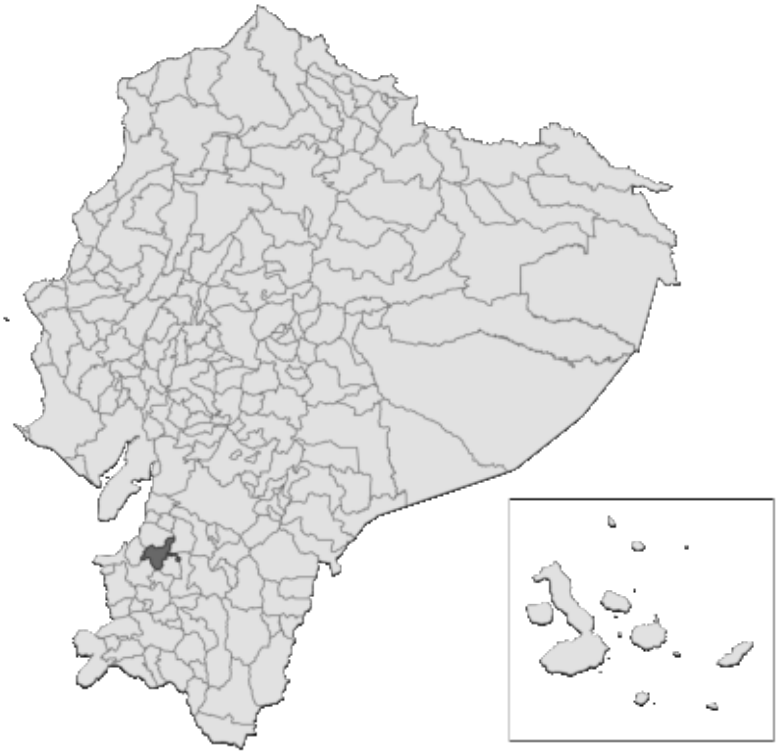
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ECUADOR

PASAJE

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.454 • RANK: 148/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.612 • RANK: 23/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.654 • RANK: 28/221 CANTONS ASSESSED

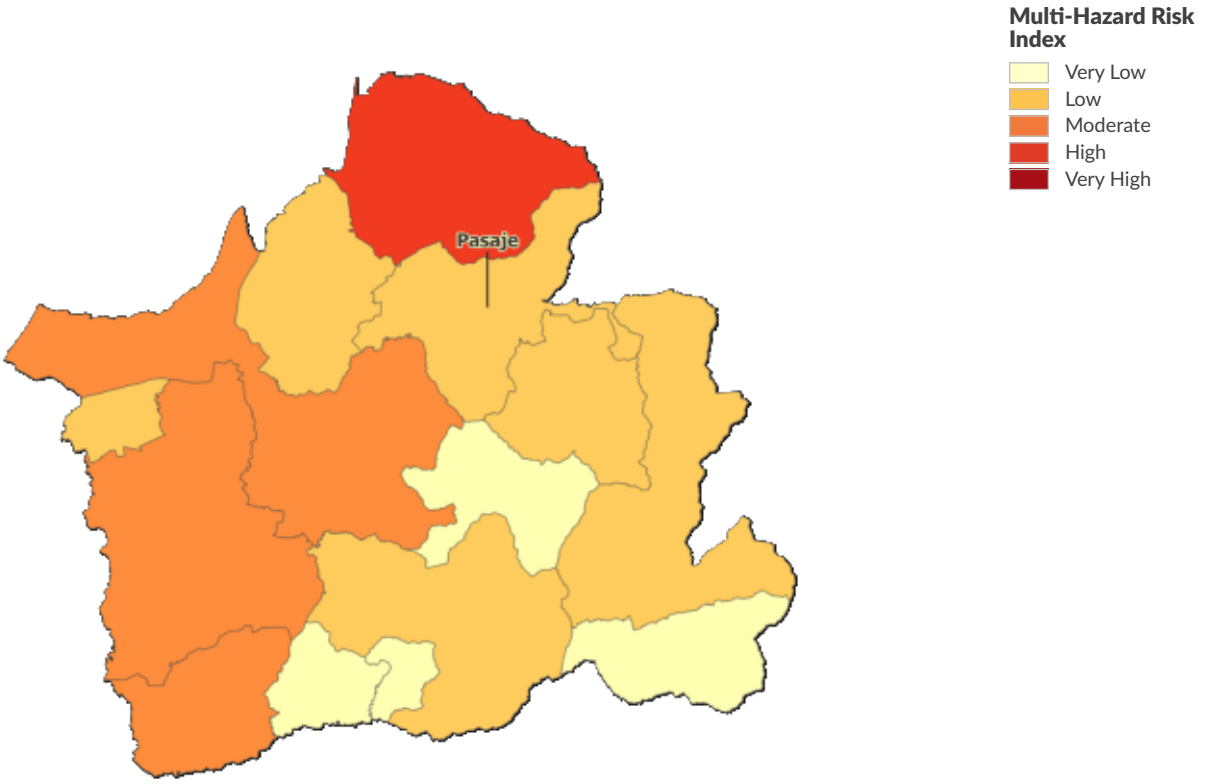
Vulnerability (V) - Very Low
SCORE: 0.412 • RANK: 178/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.585 • RANK: 48/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.663 • RANK: 13/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

PASAJE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521	Piñas	0.440
Santa Rosa	0.502	Zaruma	0.440
Arenillas	0.496	Huaquillas	0.435
Las Lajas	0.485	Portovelo	0.424
Machala	0.469	Balsas	0.420
Pasaje	**0.454**	Marcabelí	0.394
Chilla	0.453	Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 28 / 221 CANTONS ASSESSED
SCORE: 0.654



MHE
0.654

Raw MHE
0.703

Relative MHE
0.605

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
93%
- **78,407** people exposed
- **27,577** structures exposed (87%)

Critical Infrastructure Exposed: 82%

Earthquake
100%
- **84,457** people exposed
- **31,845** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
91%
- **76,947** people exposed
- **26,421** structures exposed (83%)

Critical Infrastructure Exposed: 69%

Inland Flood
18%
- **15,325** people exposed
- **6,474** structures exposed (20%)

Critical Infrastructure Exposed: 24%

Landslide
6%
- **5,263** people exposed
- **3,410** structures exposed (11%)

Critical Infrastructure Exposed: 25%

Mosquito-Borne Disease
98%
- **82,379** people exposed
- **30,602** structures exposed (96%)

Critical Infrastructure Exposed: 98%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
4%
- **3,396** people exposed
- **1,342** structures exposed (4%)

Critical Infrastructure Exposed: 5%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
43%
- **36,153** people exposed
- **15,201** structures exposed (48%)

Critical Infrastructure Exposed: 46%

VULNERABILITY (V)

RANK: 178 / 221 CANTONS ASSESSED **SCORE: 0.412**

Vulnerability in Pasaje is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.317

- **11.1** Average Years of Schooling
- **39%** Population (age 24 and over) with General Basic Education Schooling
- **3.3%** Population (age 24 and over) with No Schooling
- **2.4%** Adult Illiteracy Rate
- **33.4%** Households with No Internet Access
- **69.3%** Households with No Access to Television
- **69.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.322

- **91.2%** Homes with Access to Public Water Source
- **80.6%** Homes Connected to the Public Sewage System
- **17.7%** Homes without Piped Water
- **6.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.369

- **52.9** Age Dependency Ratio
- **12.4%** Unemployment Rate
- **35.8%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.562

- **5.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.478

- **0.4** Female to Male Labor Ratio (distance from parity)
- **44.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **69.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **50.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.495

- **8.6%** Prevalence of Disability (among persons age 5 and over)
- **2.1** Perinatal Mortality Rate (per 1,000 births)
- **7.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.625

- **55.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **23.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.517

61	18	26	52
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.399

10.2%	3.6%	12.3%	82.4%	6.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.497

183.3	1.2%	14.4	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.393

0.2	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 48 / 221 CANTONS ASSESSED **SCORE: 0.585**

Pasaje exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.594

57.8%
Labor Force Participation

286,017
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.272

0%
Protected Area (% of land area)

-5,440.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.631

81.3%
Voter Participation

97.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.635

Communications Capacity

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.601

13.2%
Household Access to Fixed Phones

85.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.750

98.8%
Homes Served by the Public Electricity Network

81.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.445

13.9
Nurses and Midwives per 10,000 persons

14.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.743

4.6
Average Distance to Airport (km)

24.5
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 13 / 221 CANTONS ASSESSED **SCORE: 0.663**

Pasaje exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.607

1.2	3.2%	1.2	19.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.720

4.5	4	1.5	3.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 23 / 221 CANTONS ASSESSED
SCORE: 0.612

Pasaje's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Population Pressures



Vulnerable Health Status



Marginalization

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Vulnerable Health Status

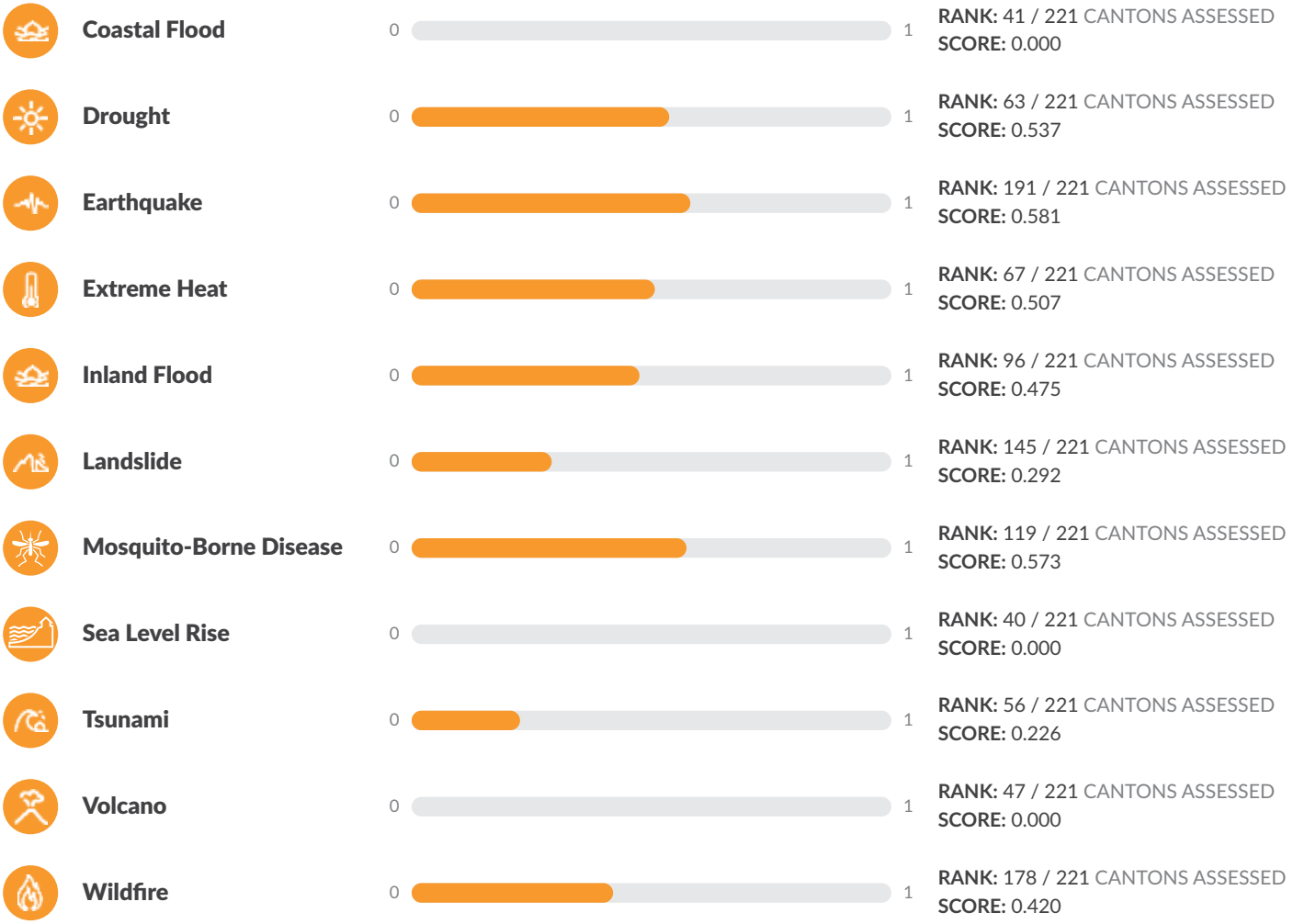
A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

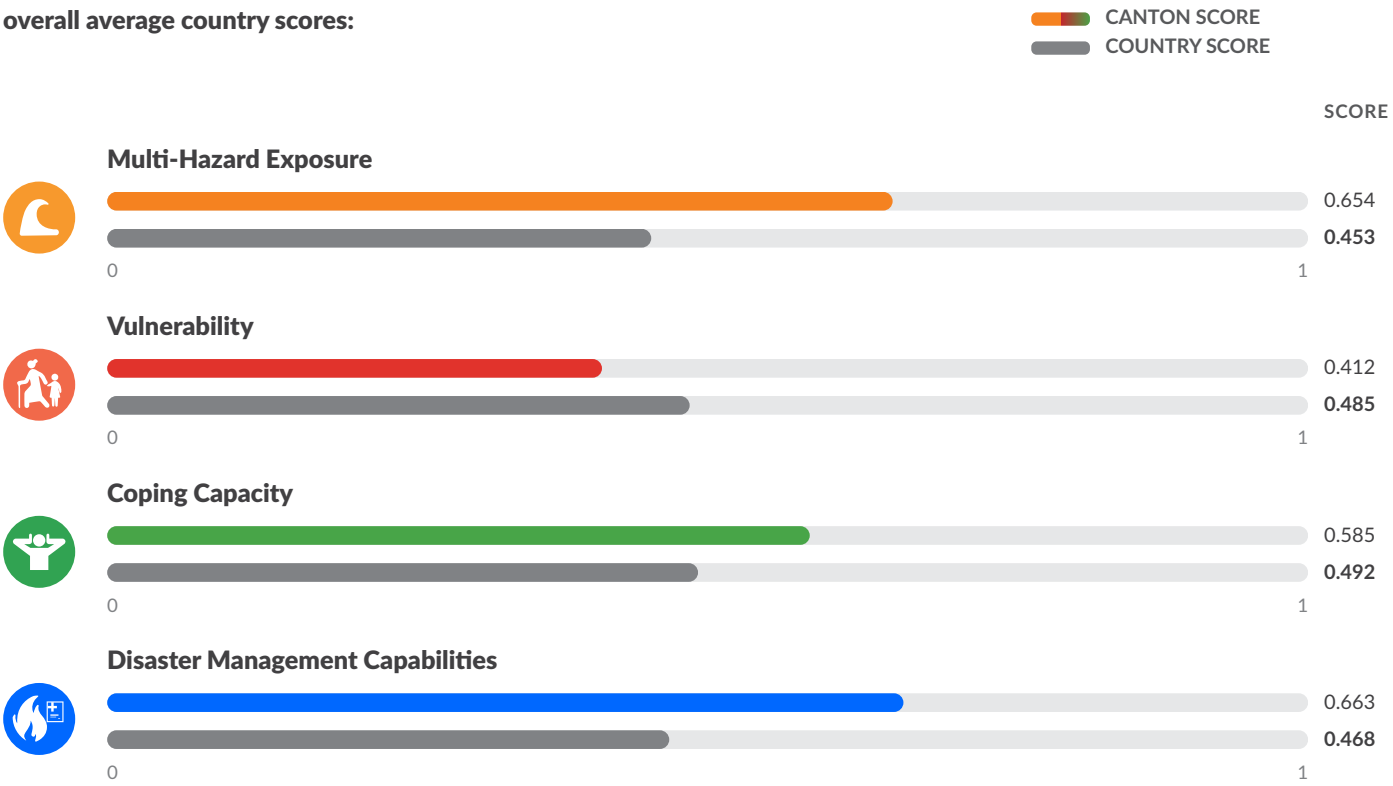


MULTI-HAZARD RISK (MHR)

RANKED
148 / 221
CANTONS ASSESSED
SCORE: 0.454

Pasaje's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PASTAZA

NDPBA SUBNATIONAL PROFILE

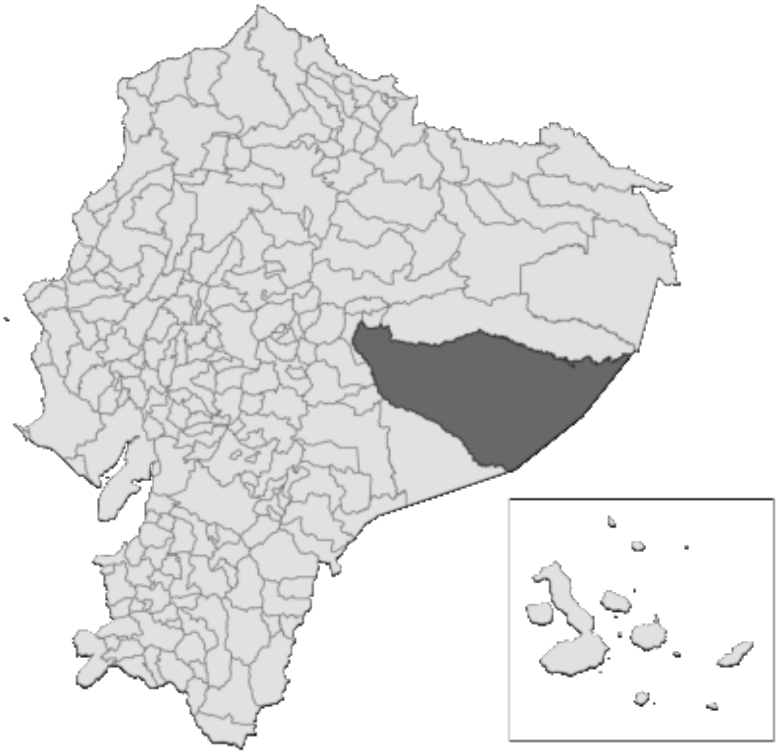
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PASTAZA

PROVINCE: PASTAZA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.531 • RANK: 72/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.462 • RANK: 137/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.440 • RANK: 156/221 CANTONS ASSESSED

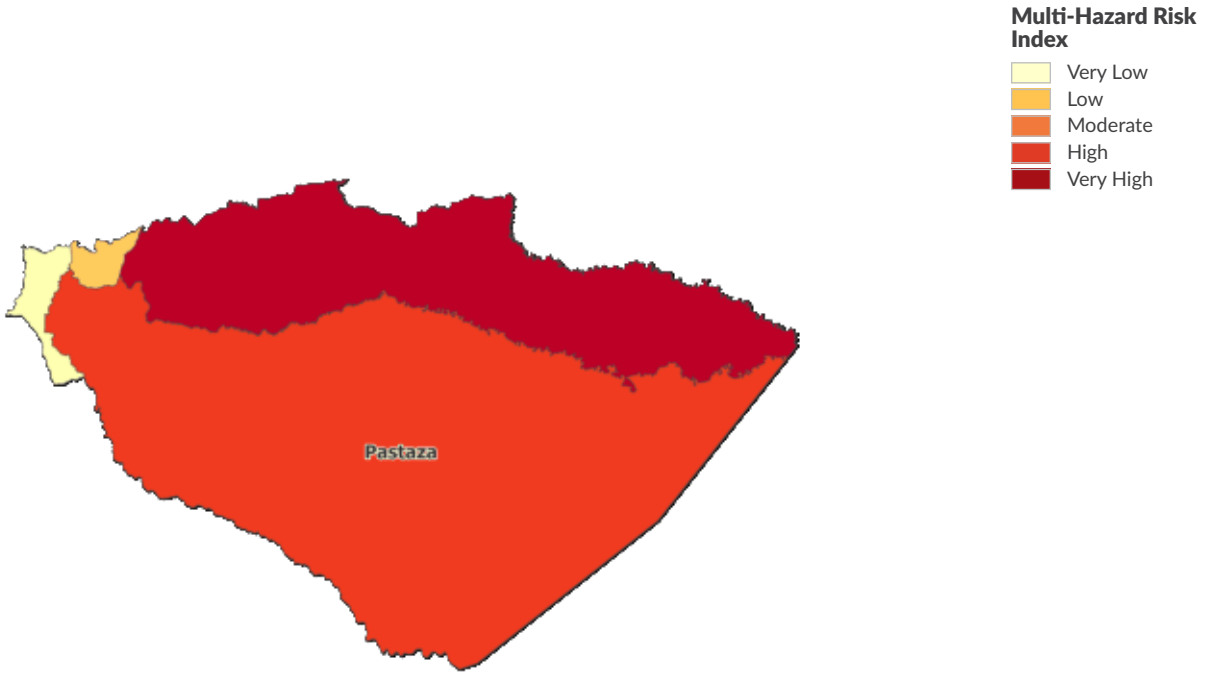
Coping Capacity (CC) - High
SCORE: 0.520 • RANK: 87/221 CANTONS ASSESSED

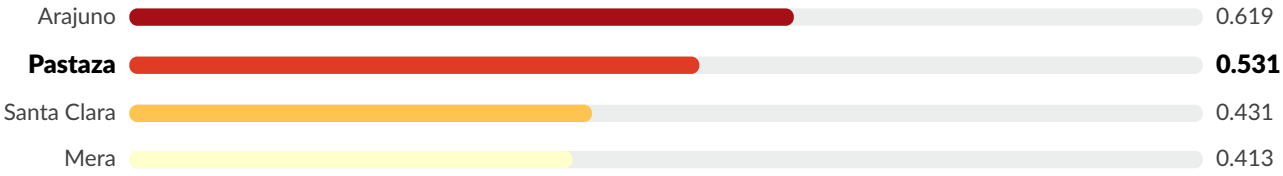
Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.446 • RANK: 110/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.263 • RANK: 217/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PASTAZA PROVINCE

PASTAZA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 110 / 221 CANTONS ASSESSED
SCORE: 0.446



MHE
0.446

Raw MHE
0.645

Relative MHE
0.247

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
88,459 people exposed
36,380 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
8%
6,960 people exposed
3,140 structures exposed (9%)
Critical Infrastructure Exposed: 16%

Inland Flood
8%
7,022 people exposed
3,723 structures exposed (10%)
Critical Infrastructure Exposed: 9%

Landslide
6%
5,448 people exposed
2,620 structures exposed (7%)
Critical Infrastructure Exposed: 7%

Mosquito-Borne Disease
99%
87,187 people exposed
35,928 structures exposed (99%)
Critical Infrastructure Exposed: 98%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
79%
70,033 people exposed
28,143 structures exposed (77%)
Critical Infrastructure Exposed: 82%

VULNERABILITY (V)

RANK: 137 / 221 CANTONS ASSESSED **SCORE: 0.462**

Vulnerability in Pastaza is primarily driven by Economic Constraints and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.324

- **11.8** Average Years of Schooling
- **31%** Population (age 24 and over) with General Basic Education Schooling
- **4.8%** Population (age 24 and over) with No Schooling
- **3.7%** Adult Illiteracy Rate
- **42.3%** Households with No Internet Access
- **69.4%** Households with No Access to Television
- **61.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.470

- **78.8%** Homes with Access to Public Water Source
- **54.4%** Homes Connected to the Public Sewage System
- **31.4%** Homes without Piped Water
- **4.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.617

- **63.5** Age Dependency Ratio
- **13.6%** Unemployment Rate
- **49.5%** Poverty Rate (based on UBN)
- **3.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.306

- **1.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.464

- **0.2** Female to Male Labor Ratio (distance from parity)
- **76.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **80.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **25.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.375

- **5.5%** Prevalence of Disability (among persons age 5 and over)
- **2.4** Perinatal Mortality Rate (per 1,000 births)
- **6.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.401

- **20.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.446

36
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

13
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

40
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.369

9.8%
Homes with Exterior Walls in Poor Condition

2.1%
Homes with Inadequate Materials Used in Outer Walls

11.3%
Homes with Roofs in Poor Condition

74.8%
Households with No Access to Vehicle for Private Use

8.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.489

4.2
Population Density (persons per sq km)

2.4%
Average Annual Population Change (2010-2022)

17.4
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.609

0.4
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 87 / 221 CANTONS ASSESSED **SCORE: 0.520**

Pastaza exhibits weaker Coping Capacity in the areas of Energy Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.695

59.2%
Labor Force Participation

854,896
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.229

7.2%
Protected Area (% of land area)

-135,691.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.421

79.9%
Voter Participation

79.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.538

Communications Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.567

19.5%
Household Access to Fixed Phones

76.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.389

87.9%
Homes Served by the Public Electricity Network

70.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.803

34
Nurses and Midwives per 10,000 persons

45.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.395

13.7
Average Distance to Airport (km)

72.2
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 217 / 221 CANTONS ASSESSED **SCORE: 0.263**

Pastaza exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.328

14.8	2.5%	1.8	84.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.198

19.3	18.3	14.2	14.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 156 / 221 CANTONS ASSESSED
SCORE: 0.440

Pastaza's score and ranking are due to Low Vulnerability combined with High Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Emergency Services



Mass Care Support



Economic Constraints



Energy Capacity

KEY FACTORS INFLUENCING RESILIENCE



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Economic Constraints

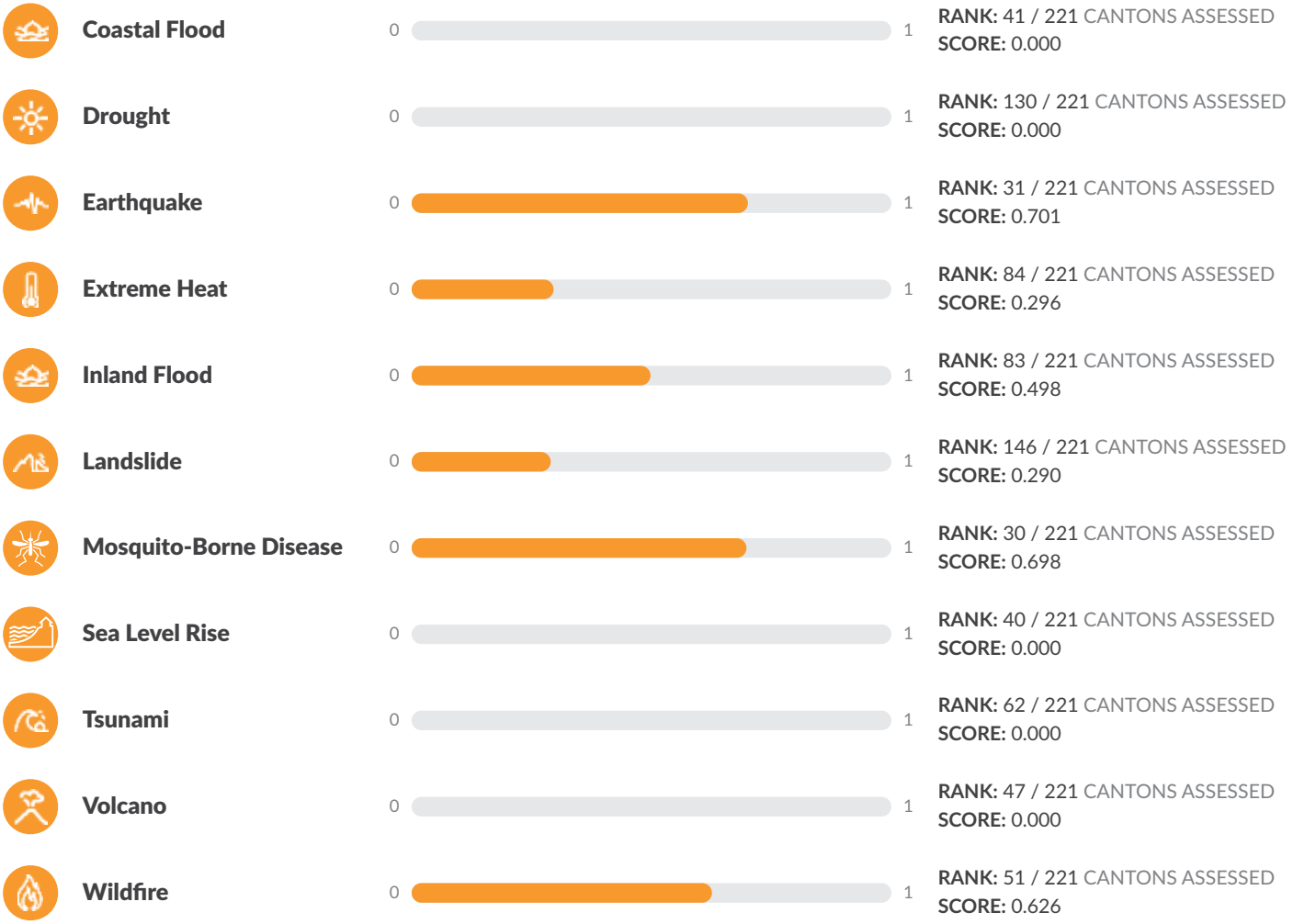
Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
72 / 221
CANTONS ASSESSED
SCORE: 0.531

Pastaza's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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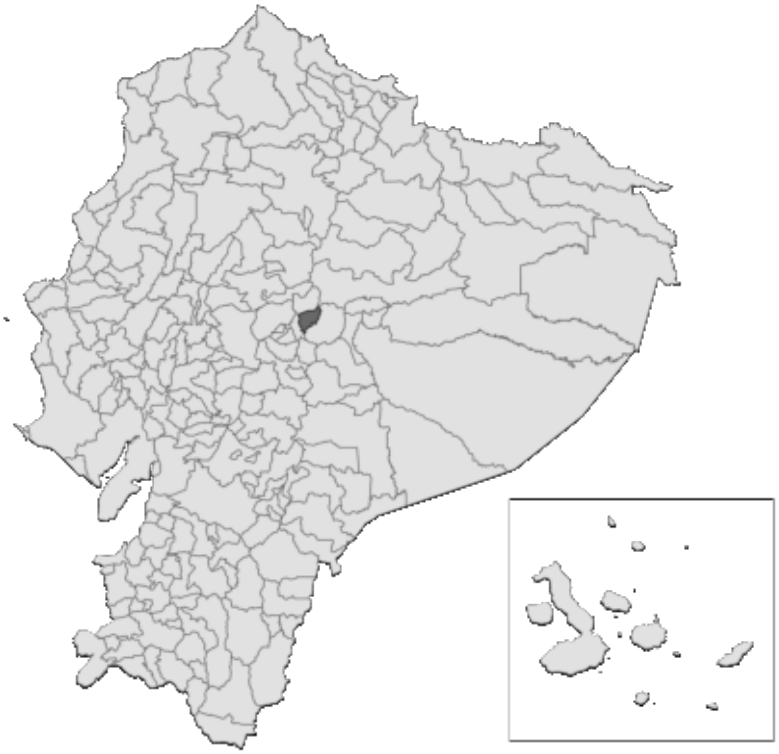
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PATATE

PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.431 • RANK: 172/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.400 • RANK: 187/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.547 • RANK: 63/221 CANTONS ASSESSED

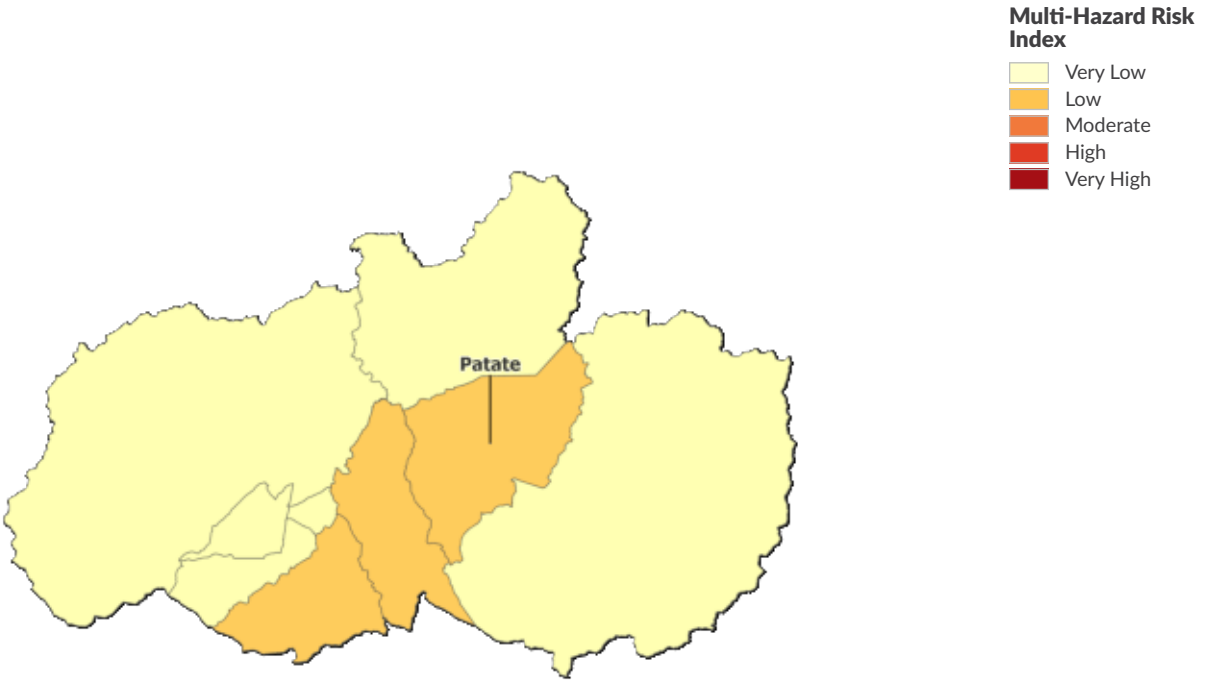
Coping Capacity (CC) - High
SCORE: 0.556 • RANK: 66/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.365 • RANK: 142/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.486 • RANK: 88/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

PATATE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454	Mocha	0.379
San Pedro De Pelileo	0.436	Baños De Agua Santa	0.364
Patate	**0.431**	Tisaleo	0.361
Santiago De Píllaro	0.410	Cevallos	0.340
Ambato	0.409		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 142 / 221 CANTONS ASSESSED
SCORE: 0.365



MHE
0.365

Raw MHE
0.412

Relative MHE
0.318

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
15,639 people exposed
11,921 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
47 people exposed
34 structures exposed (<1%)
Critical Infrastructure Exposed: 1%

Landslide
100%
15,639 people exposed
11,921 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Mosquito-Borne Disease
6%
967 people exposed
709 structures exposed (6%)
Critical Infrastructure Exposed: 11%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
75%
11,713 people exposed
9,375 structures exposed (79%)
Critical Infrastructure Exposed: 80%

Wildfire
73%
11,484 people exposed
8,428 structures exposed (71%)
Critical Infrastructure Exposed: 61%

VULNERABILITY (V)

RANK: 187 / 221 CANTONS ASSESSED **SCORE: 0.400**

Vulnerability in Patate is primarily driven by Information Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.511

- **9.6** Average Years of Schooling
- **48.1%** Population (age 24 and over) with General Basic Education Schooling
- **7.5%** Population (age 24 and over) with No Schooling
- **6.4%** Adult Illiteracy Rate
- **48.6%** Households with No Internet Access
- **80.5%** Households with No Access to Television
- **72%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.354

- **96.2%** Homes with Access to Public Water Source
- **55.5%** Homes Connected to the Public Sewage System
- **27.3%** Homes without Piped Water
- **4.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.480

- **55.1** Age Dependency Ratio
- **12.1%** Unemployment Rate
- **53.5%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.237

- **1.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.307

- **0.2** Female to Male Labor Ratio (distance from parity)
- **15.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **74.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **36.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.509

- **8.9%** Prevalence of Disability (among persons age 5 and over)
- **14.4** Perinatal Mortality Rate (per 1,000 births)
- **9.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.145

- **1.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.443

74	17	44	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.280

9%	0.6%	14.2%	68.7%	3.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.354

47.4	0.4%	-1.3	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.434

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 66 / 221 CANTONS ASSESSED **SCORE: 0.556**

Patate exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.524

62.4%
Labor Force Participation

36,049
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.735

42.4%
Protected Area (% of land area)

-1,929.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.522

82.6%
Voter Participation

87.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.561

Communications Capacity

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.561

15.3%
Household Access to Fixed Phones

80.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.706

97.7%
Homes Served by the Public Electricity Network

83.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.470

15.9
Nurses and Midwives per 10,000 persons

14.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.506

15.2
Average Distance to Airport (km)

96.1
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 88 / 221 CANTONS ASSESSED **SCORE: 0.486**

Patate exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.359

4.3	6.4%	0	45.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.614

7.2	4.7	2.5	4.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 63 / 221 CANTONS ASSESSED
SCORE: 0.547

Patate's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Healthcare Capacity

Information Access Vulnerability

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

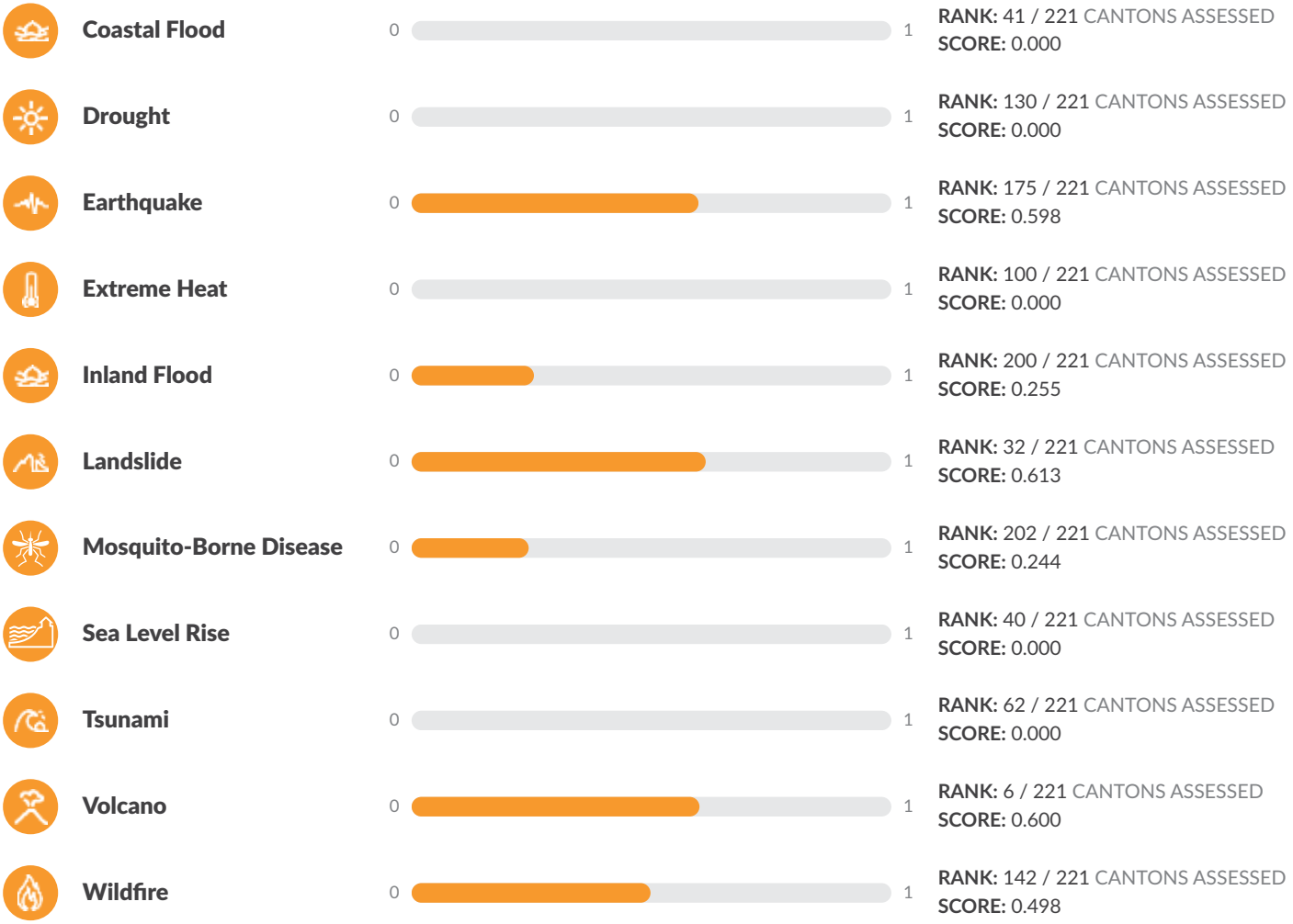
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

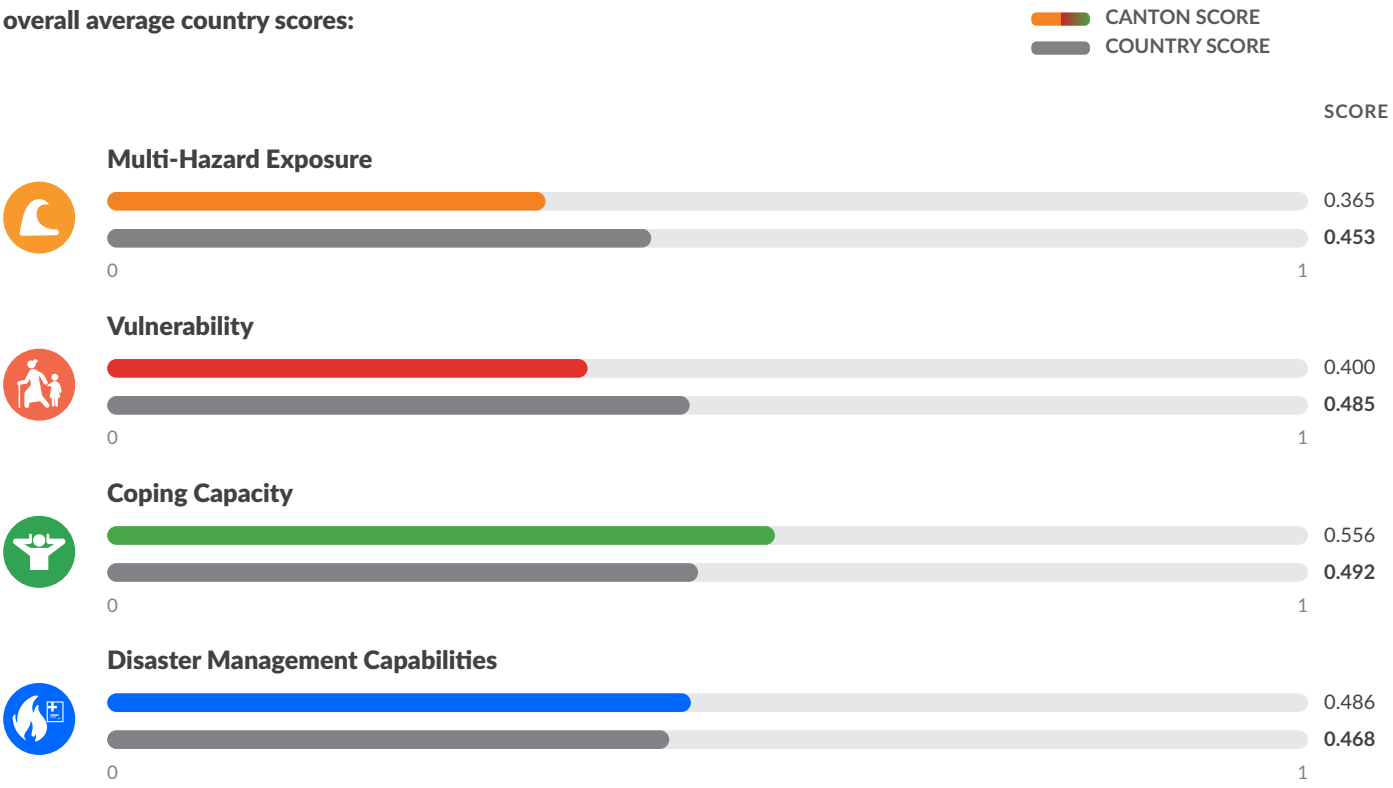


MULTI-HAZARD RISK (MHR)

RANKED
172 / 221
CANTONS ASSESSED
SCORE: 0.431

Patate's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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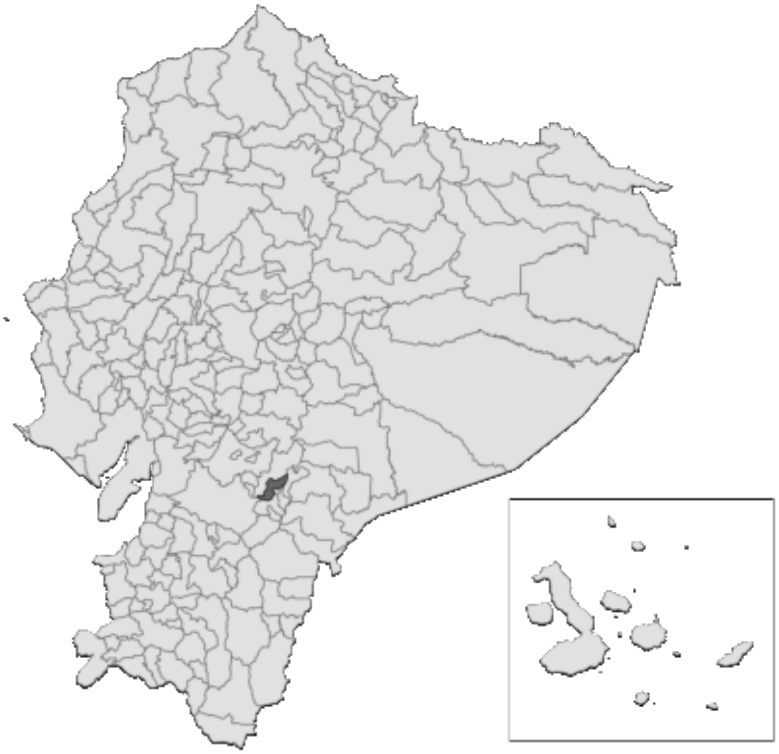
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PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.461 • RANK: 140/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.543 • RANK: 66/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.475 • RANK: 89/221 CANTONS ASSESSED

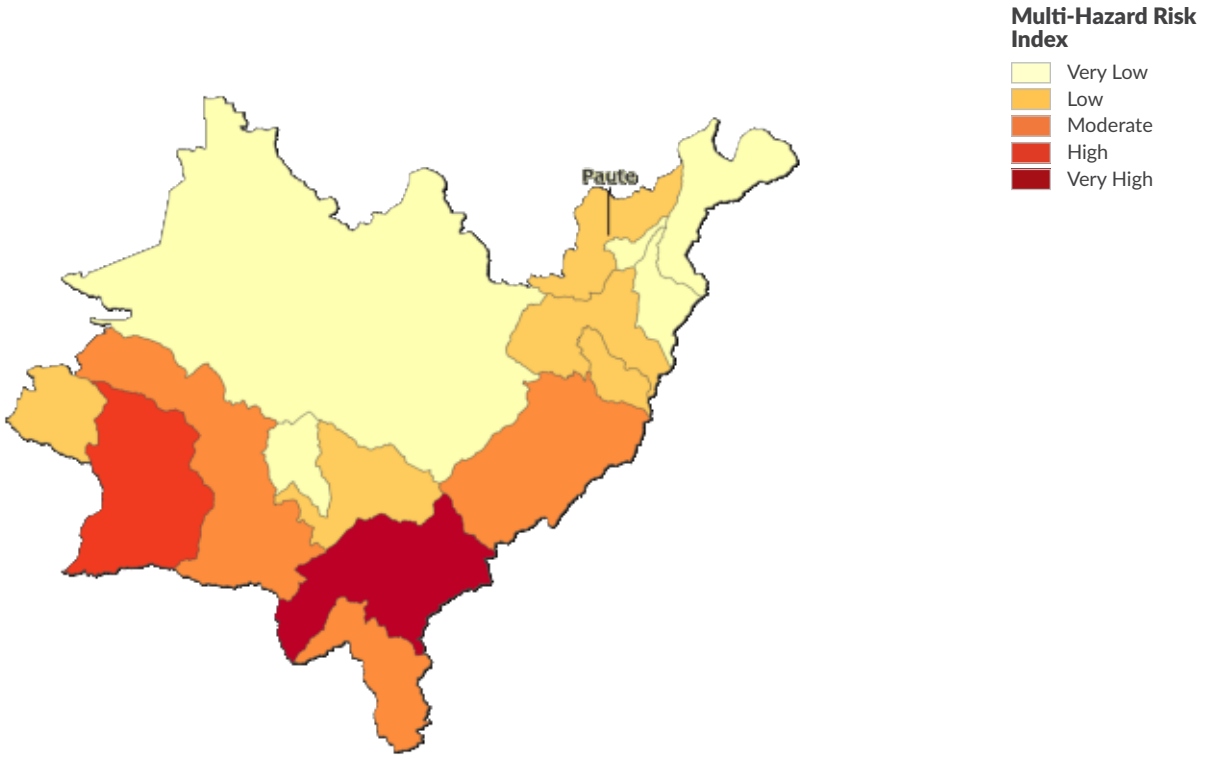
Vulnerability (V) - Low
SCORE: 0.418 • RANK: 172/221 CANTONS ASSESSED

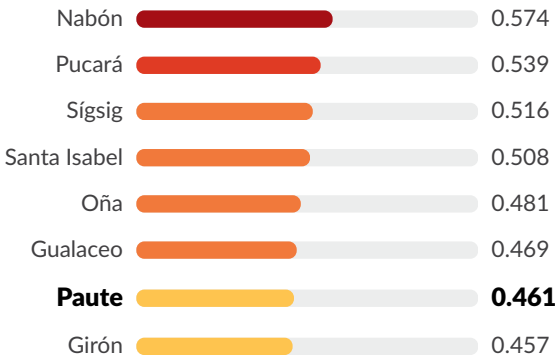
Coping Capacity (CC) - Low
SCORE: 0.455 • RANK: 138/221 CANTONS ASSESSED

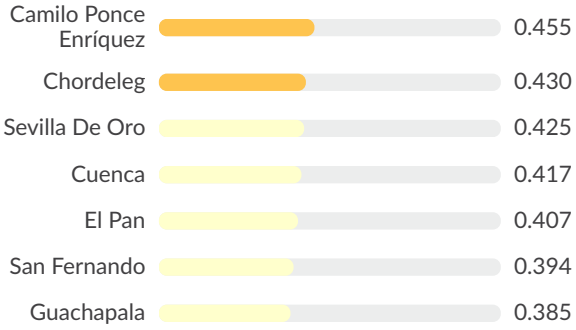
Disaster Management Capabilities (DMC) - Very High
SCORE: 0.593 • RANK: 32/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

PAUTE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE







MULTI-HAZARD EXPOSURE (MHE)

RANK: 89 / 221 CANTONS ASSESSED
SCORE: 0.475



MHE
0.475

Raw MHE
0.564

Relative MHE
0.387

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
86%
- **26,408** people exposed
- **21,340** structures exposed (80%)

Critical Infrastructure Exposed: 70%

Earthquake
100%
- **30,838** people exposed
- **26,821** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
10%
- **3,072** people exposed
- **1,962** structures exposed (7%)

Critical Infrastructure Exposed: 6%

Landslide
96%
- **29,569** people exposed
- **25,758** structures exposed (96%)

Critical Infrastructure Exposed: 96%

Mosquito-Borne Disease
26%
- **8,037** people exposed
- **7,227** structures exposed (27%)

Critical Infrastructure Exposed: 17%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
65%
- **19,917** people exposed
- **19,322** structures exposed (72%)

Critical Infrastructure Exposed: 59%

VULNERABILITY (V)

RANK: 172 / 221 CANTONS ASSESSED **SCORE: 0.418**

Vulnerability in Paute is primarily driven by Vulnerable Health Status and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.473

- **8.9** Average Years of Schooling
- **53.2%** Population (age 24 and over) with General Basic Education Schooling
- **7.6%** Population (age 24 and over) with No Schooling
- **6.8%** Adult Illiteracy Rate
- **30.9%** Households with No Internet Access
- **69.1%** Households with No Access to Television
- **68.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.387

- **90.5%** Homes with Access to Public Water Source
- **46.7%** Homes Connected to the Public Sewage System
- **20.8%** Homes without Piped Water
- **3.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.394

- **60.1** Age Dependency Ratio
- **8.5%** Unemployment Rate
- **32.5%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.524

- **4.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.337

- **0.3** Female to Male Labor Ratio (distance from parity)
- **34.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **46.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **38.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.542

- **12.2%** Prevalence of Disability (among persons age 5 and over)
- **3.4** Perinatal Mortality Rate (per 1,000 births)
- **15.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.166

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.5** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.432

81
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

8
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

33
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.346

9%
Homes with Exterior Walls in Poor Condition

2.8%
Homes with Inadequate Materials Used in Outer Walls

15.6%
Homes with Roofs in Poor Condition

73.3%
Households with No Access to Vehicle for Private Use

4.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.444

100
Population Density (persons per sq km)

0.5%
Average Annual Population Change (2010-2022)

3.7
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.403

0.4
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 138 / 221 CANTONS ASSESSED **SCORE: 0.455**

Paute exhibits weaker Coping Capacity in the areas of Governance and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.470

56.7%
Labor Force Participation

64,309
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.321

0%
Protected Area (% of land area)

-2,154.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.334

75.4%
Voter Participation

75.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.606

Communications Capacity

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.689

16.2%
Household Access to Fixed Phones

89.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.805

98.4%
Homes Served by the Public Electricity Network

88%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.461

13.8
Nurses and Midwives per 10,000 persons

15.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.469

26.6
Average Distance to Airport (km)

116.2
Average Distance to Sea or River Port (km)

3.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 32 / 221 CANTONS ASSESSED **SCORE: 0.593**

Paute exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.535

2.1	2.6%	1.1	24.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.650

5.1	4.1	2.2	4.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 66 / 221 CANTONS ASSESSED
SCORE: 0.543

Paute's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Governance
- Vulnerable Health Status
- Healthcare Capacity
- Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

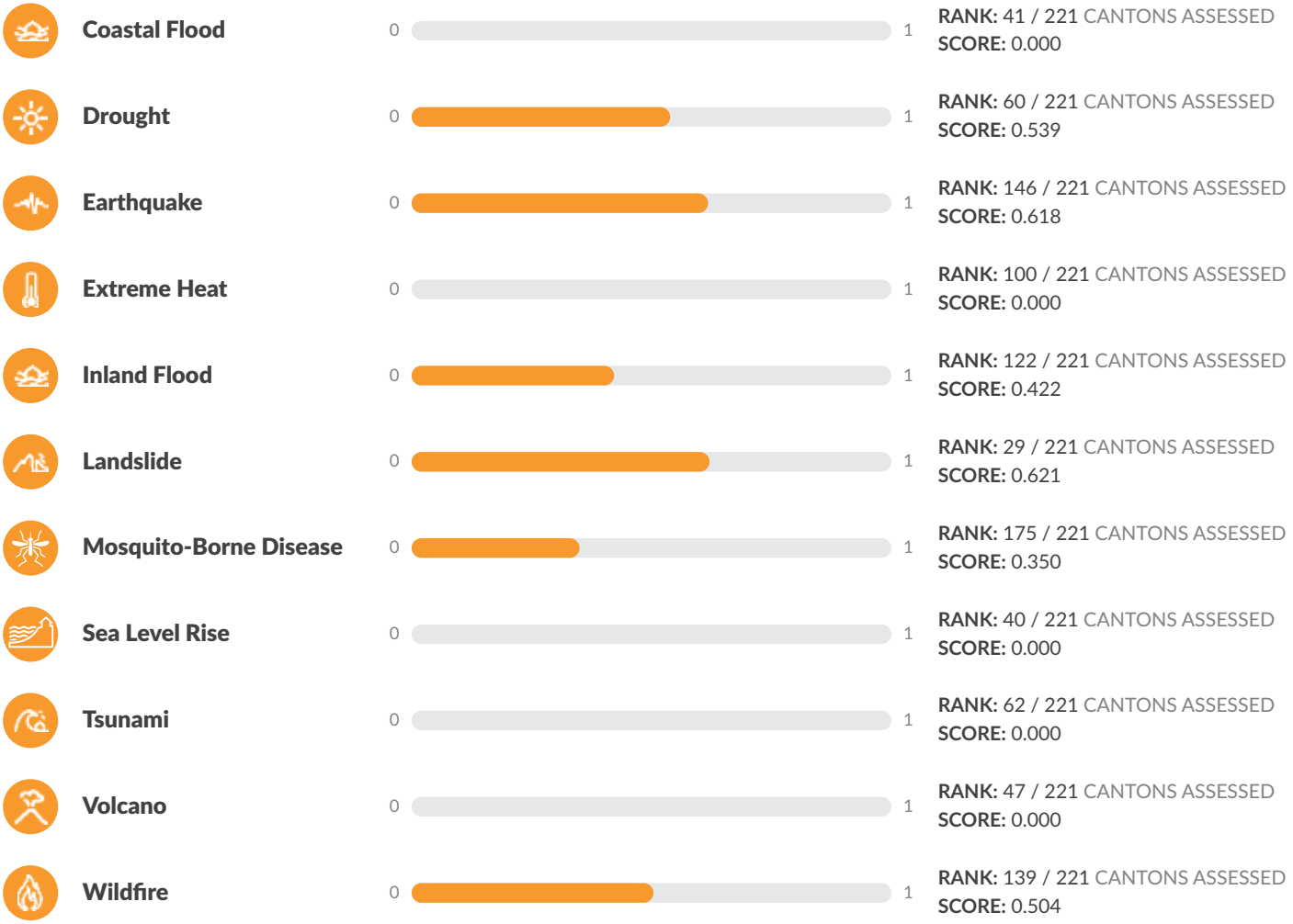
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

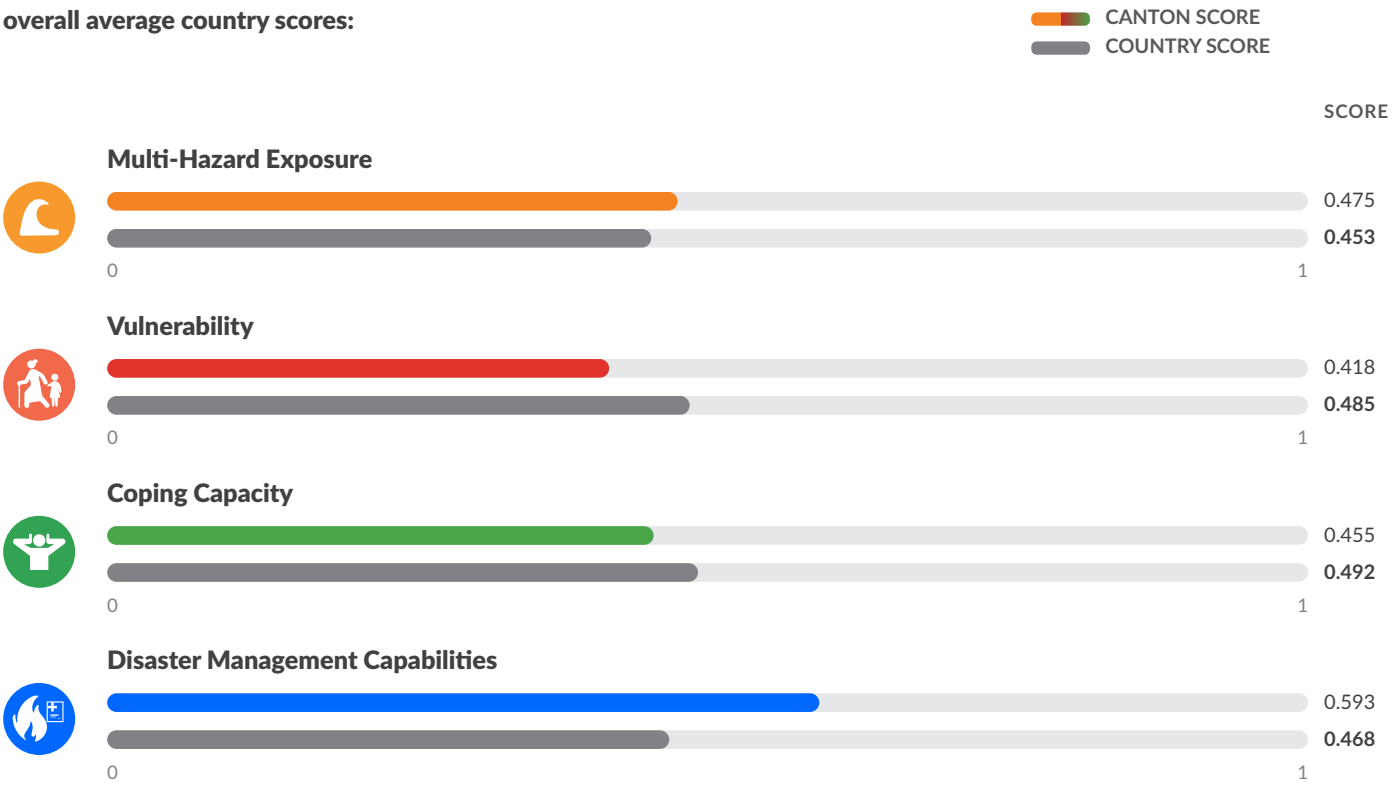


MULTI-HAZARD RISK (MHR)

RANKED
140 / 221
CANTONS ASSESSED
SCORE: 0.461

Paute's score and ranking are due to High Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

PEDERNALES

NDPBA SUBNATIONAL PROFILE

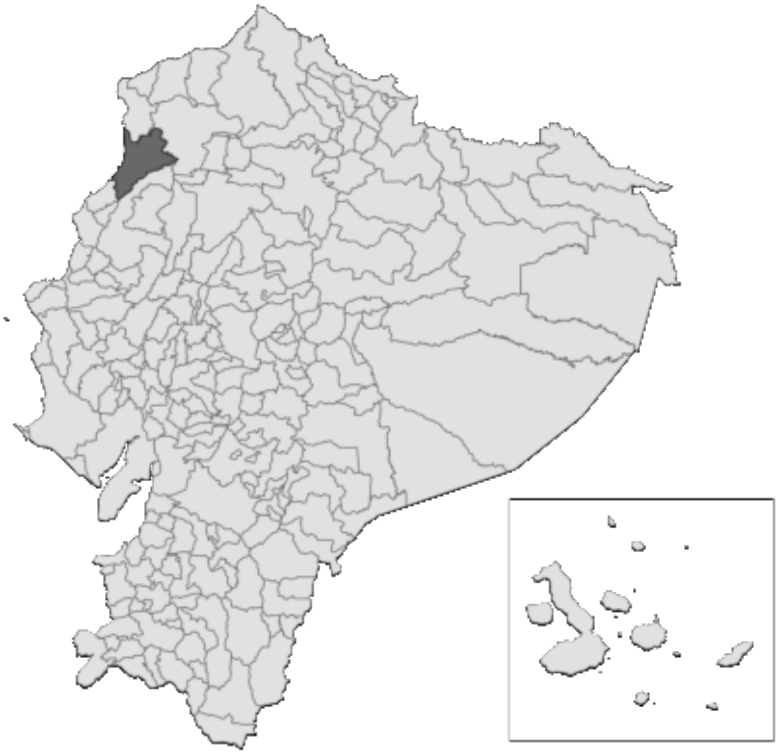
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PEDERNALES

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.638 • RANK: 2/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.658 • RANK: 2/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.334 • RANK: 216/221 CANTONS ASSESSED

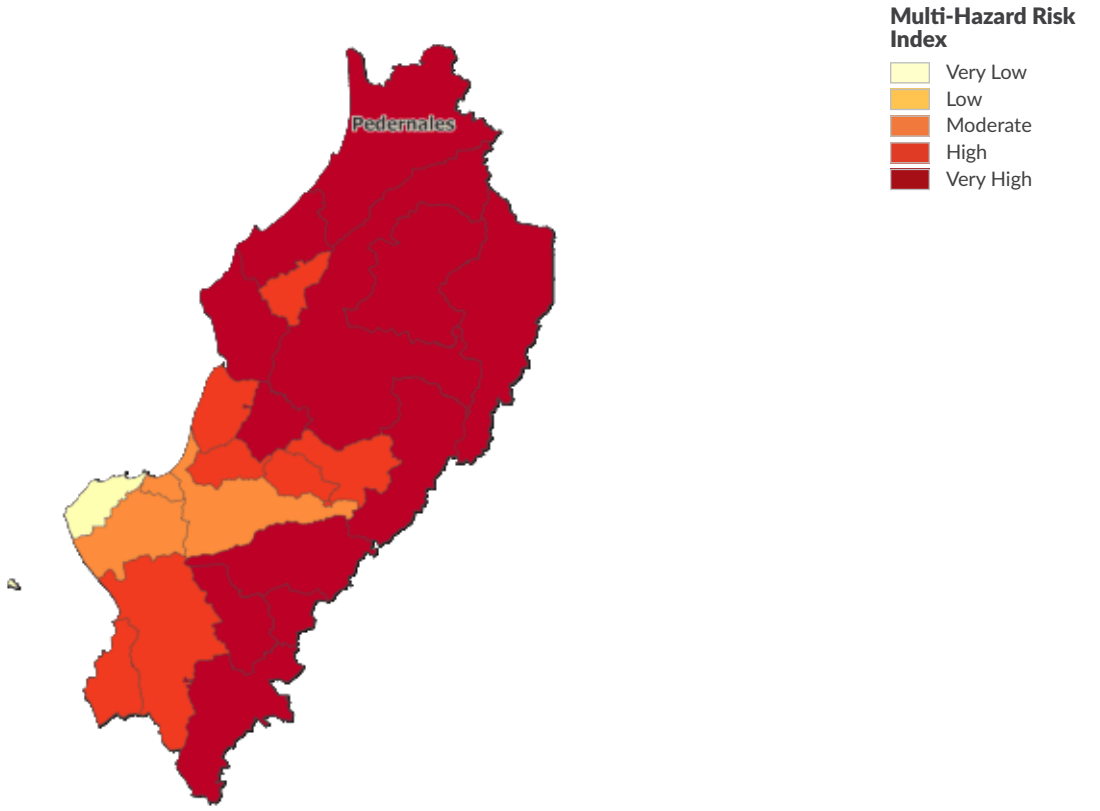
Coping Capacity (CC) - Very Low
SCORE: 0.381 • RANK: 181/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.552 • RANK: 62/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.280 • RANK: 212/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

PEDERNALES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	**0.638**
Santa Ana	0.627
Jama	0.625
Paján	0.623
San Vicente	0.623
Pichincha	0.619
Chone	0.617
24 De Mayo	0.607
Olmedo	0.592
Tosagua	0.587
Flavio Alfaro	0.581
El Carmen	0.574
Junín	0.565
Sucre	0.564
Bolívar	0.562
Puerto López	0.544
Jipijapa	0.532
Rocafuerte	0.527
Portoviejo	0.498
Montecristi	0.484
Jaramijó	0.471
Manta	0.415

MULTI-HAZARD EXPOSURE (MHE)

RANK: 62 / 221 CANTONS ASSESSED
SCORE: 0.552



MHE
0.552

Raw MHE
0.651

Relative MHE
0.454

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
4%
- **2,666** people exposed
- **2,197** structures exposed (7%)
- **Critical Infrastructure Exposed:** 6%

Drought
40%
- **25,649** people exposed
- **12,317** structures exposed (41%)
- **Critical Infrastructure Exposed:** 50%

Earthquake
100%
- **64,607** people exposed
- **30,315** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
36%
- **23,094** people exposed
- **11,138** structures exposed (37%)
- **Critical Infrastructure Exposed:** 47%

Inland Flood
7%
- **4,844** people exposed
- **2,241** structures exposed (7%)
- **Critical Infrastructure Exposed:** 7%

Landslide
13%
- **8,380** people exposed
- **3,707** structures exposed (12%)
- **Critical Infrastructure Exposed:** 13%

Mosquito-Borne Disease
95%
- **61,514** people exposed
- **27,982** structures exposed (92%)
- **Critical Infrastructure Exposed:** 93%

Sea Level Rise
2%
- **1,006** people exposed
- **697** structures exposed (2%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
27%
- **17,393** people exposed
- **8,726** structures exposed (29%)
- **Critical Infrastructure Exposed:** 18%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
74%
- **47,637** people exposed
- **21,753** structures exposed (72%)
- **Critical Infrastructure Exposed:** 71%

VULNERABILITY (V)

RANK: 2 / 221 CANTONS ASSESSED **SCORE: 0.658**

Vulnerability in Pedernales is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.697

- **8** Average Years of Schooling
- **51.5%** Population (age 24 and over) with General Basic Education Schooling
- **12.9%** Population (age 24 and over) with No Schooling
- **10%** Adult Illiteracy Rate
- **73.5%** Households with No Internet Access
- **82.4%** Households with No Access to Television
- **90.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.777

- **45.5%** Homes with Access to Public Water Source
- **15.1%** Homes Connected to the Public Sewage System
- **63.8%** Homes without Piped Water
- **8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.644

- **64.5** Age Dependency Ratio
- **24.3%** Unemployment Rate
- **79.3%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.716

- **9.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.702

- **0.6** Female to Male Labor Ratio (distance from parity)
- **76.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **53.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **83.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.423

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **0.8** Perinatal Mortality Rate (per 1,000 births)
- **8.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.450

- **49.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **26.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.539

49
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

35
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

66
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.729

24.8%
Homes with Exterior Walls in Poor Condition

16%
Homes with Inadequate Materials Used in Outer Walls

25.5%
Homes with Roofs in Poor Condition

94.2%
Households with No Access to Vehicle for Private Use

13.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.577

35.8
Population Density (persons per sq km)

2%
Average Annual Population Change (2010-2022)

11.9
Net Migration Rate (per 1,000 persons)

0.34
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.708

0.8
Hazard Susceptibility (recent events 2015-2025)

0.4
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 181 / 221 CANTONS ASSESSED **SCORE: 0.381**

Pedernales exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.463

50.7%
Labor Force Participation

199,850
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.440

22%
Protected Area (% of land area)

-18,313.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.433

83.8%
Voter Participation

69.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.227

Communications Capacity

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.163

1.8%
Household Access to Fixed Phones

67.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.219

83.3%
Homes Served by the Public Electricity Network

49.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.204

6
Nurses and Midwives per 10,000 persons

6.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.322

62.9
Average Distance to Airport (km)

86.6
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 212 / 221 CANTONS ASSESSED **SCORE: 0.280**

Pedernales exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.256

7.2	3%	0.4	105.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.304

15.9	13.6	5.9	15.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 216 / 221 CANTONS ASSESSED
SCORE: 0.334

Pedernales's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Communications Capacity

Healthcare Capacity

Energy Capacity

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

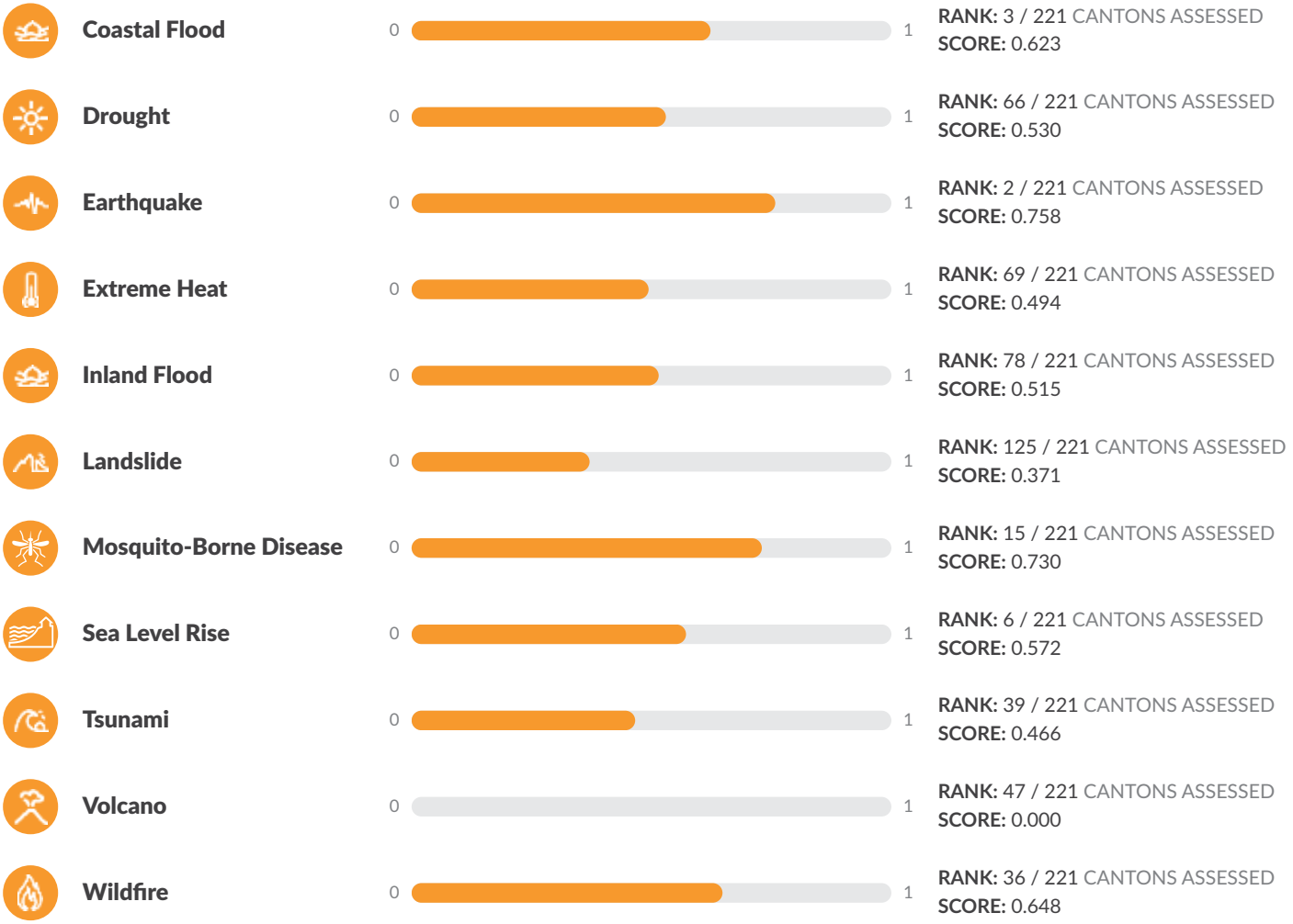
Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

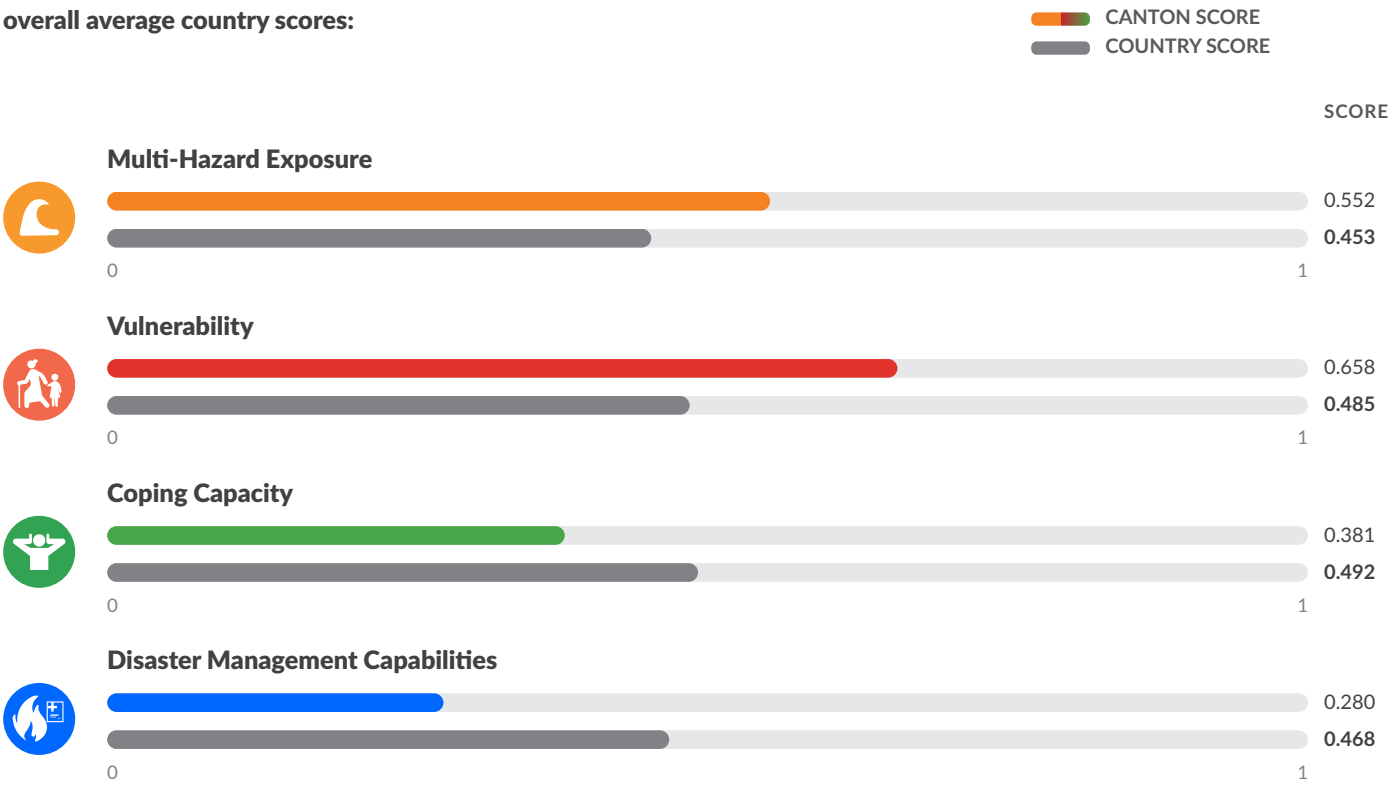


MULTI-HAZARD RISK (MHR)

RANKED
2 / 221
CANTONS ASSESSED
SCORE: 0.638

Pedernales's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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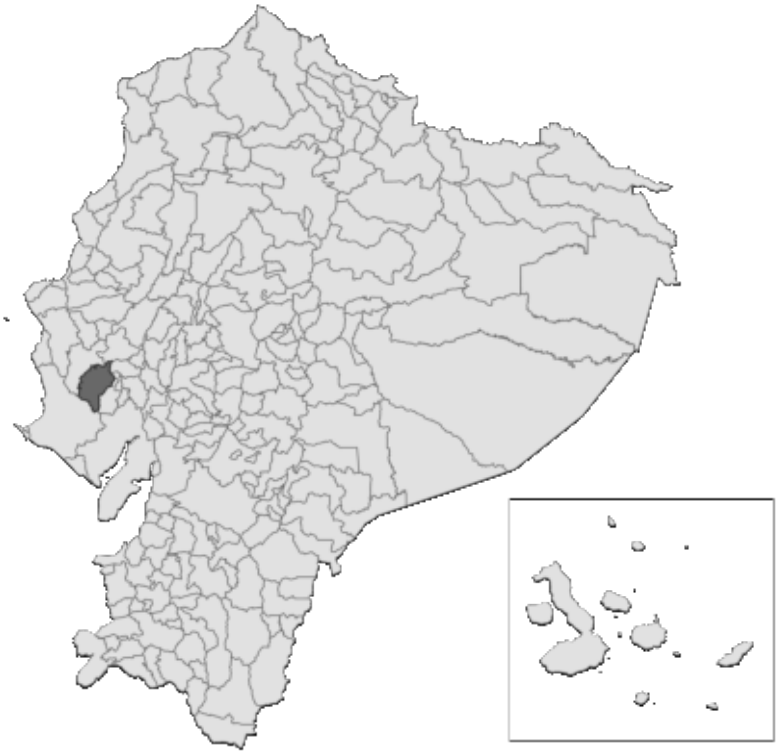
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ECUADOR

PEDRO CARBO

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.611 • RANK: 15/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.593 • RANK: 23/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.395 • RANK: 191/221 CANTONS ASSESSED

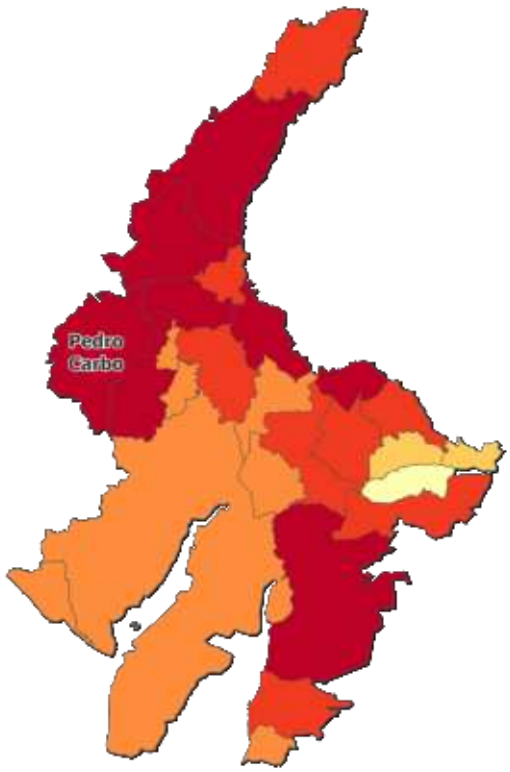
Coping Capacity (CC) - Low
SCORE: 0.442 • RANK: 150/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.626 • RANK: 41/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.335 • RANK: 192/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

PEDRO CARBO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	**0.611**
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 41 / 221 CANTONS ASSESSED
SCORE: 0.626



MHE
0.626

Raw MHE
0.640

Relative MHE
0.612

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
100%
52,453 people exposed
23,366 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Earthquake
100%
52,453 people exposed
23,366 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
94%
49,418 people exposed
22,053 structures exposed (94%)
Critical Infrastructure Exposed: 94%

Inland Flood
15%
7,758 people exposed
3,516 structures exposed (15%)
Critical Infrastructure Exposed: 33%

Landslide
2%
1,172 people exposed
528 structures exposed (2%)
Critical Infrastructure Exposed: 1%

Mosquito-Borne Disease
89%
46,896 people exposed
21,076 structures exposed (90%)
Critical Infrastructure Exposed: 87%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
73%
38,429 people exposed
17,303 structures exposed (74%)
Critical Infrastructure Exposed: 81%

VULNERABILITY (V)

RANK: 23 / 221 CANTONS ASSESSED **SCORE: 0.593**

Vulnerability in Pedro Carbo is primarily driven by Housing and Transportation Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.697

- **8.4** Average Years of Schooling
- **50.1%** Population (age 24 and over) with General Basic Education Schooling
- **11.7%** Population (age 24 and over) with No Schooling
- **9.7%** Adult Illiteracy Rate
- **76.9%** Households with No Internet Access
- **87.3%** Households with No Access to Television
- **90.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.667

- **72.4%** Homes with Access to Public Water Source
- **26.9%** Homes Connected to the Public Sewage System
- **56.4%** Homes without Piped Water
- **7.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.613

- **61.1** Age Dependency Ratio
- **23.3%** Unemployment Rate
- **72.2%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.667

- **7.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.666

- **0.6** Female to Male Labor Ratio (distance from parity)
- **48.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **73.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **77.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.542

- **11.1%** Prevalence of Disability (among persons age 5 and over)
- **4.2** Perinatal Mortality Rate (per 1,000 births)
- **11.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.406

- **3.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **8.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.456

43
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

30
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

28
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.750

26%
Homes with Exterior Walls in Poor Condition

20.9%
Homes with Inadequate Materials Used in Outer Walls

25%
Homes with Roofs in Poor Condition

94.5%
Households with No Access to Vehicle for Private Use

13.9%
Household Overcrowding

Population Pressures

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.517

55.5
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

13.4
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.283

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 150 / 221 CANTONS ASSESSED **SCORE: 0.442**

Pedro Carbo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.421

52.6%
Labor Force Participation

77,417
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.208

0%
Protected Area (% of land area)

-9,888.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.651

92.2%
Voter Participation

75%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.330

Communications Capacity

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.293

4%
Household Access to Fixed Phones

70.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.282

91.5%
Homes Served by the Public Electricity Network

44.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.281

7.7
Nurses and Midwives per 10,000 persons

8.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.464

46.5
Average Distance to Airport (km)

31.5
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 192 / 221 CANTONS ASSESSED **SCORE: 0.335**

Pedro Carbo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.294

5.7	1.1%	0.3	51
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.377

28.7	6.8	5.4	8.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 191 / 221 CANTONS ASSESSED
SCORE: 0.395

Pedro Carbo's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Housing and Transportation Vulnerability

Healthcare Capacity

Energy Capacity

Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

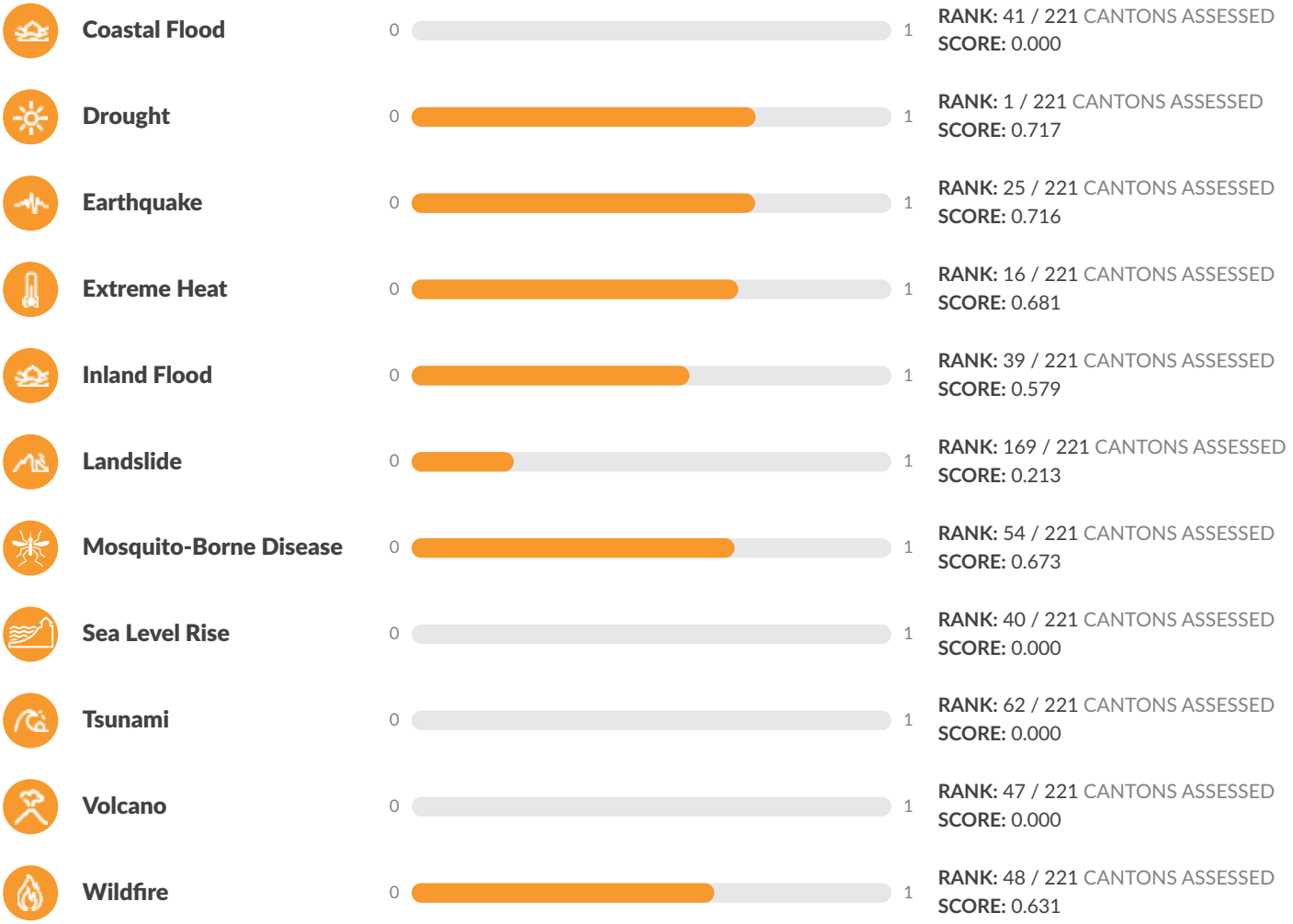
Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

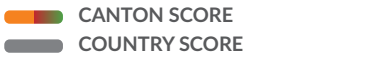


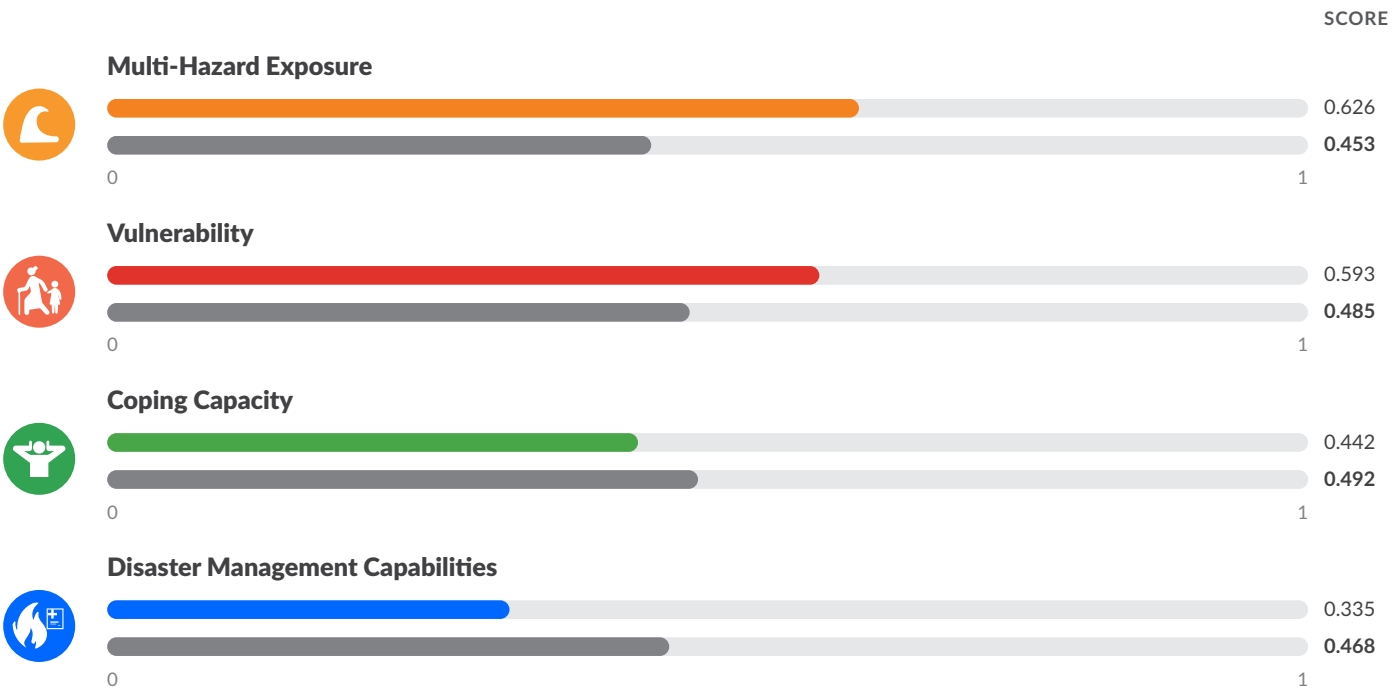
MULTI-HAZARD RISK (MHR)

RANKED
15 / 221
CANTONS ASSESSED
SCORE: 0.611

Pedro Carbo's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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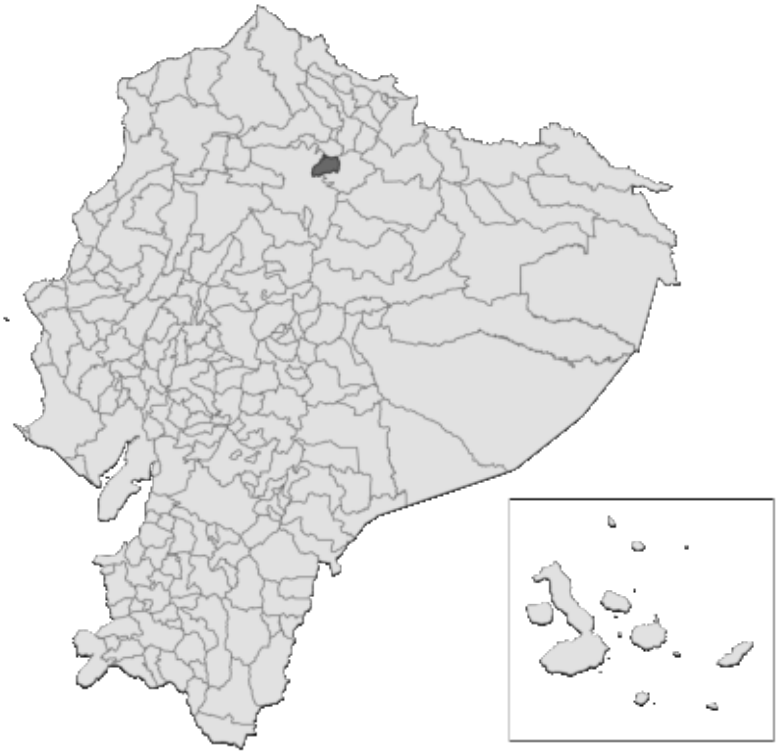
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ECUADOR

PEDRO MONCAYO

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.381 • RANK: 209/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.402 • RANK: 186/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.603 • RANK: 25/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.659 • RANK: 17/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.335 • RANK: 162/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.552 • RANK: 60/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

PEDRO MONCAYO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	0.504
San Miguel De Los Bancos	0.463
Pedro Vicente Maldonado	0.449
Mejía	0.442
Cayambe	0.412
Distrito Metropolitano De Quito	0.393
Pedro Moncayo	**0.381**
Rumiñahui	0.313

MULTI-HAZARD EXPOSURE (MHE)

RANK: 162 / 221 CANTONS ASSESSED
SCORE: 0.335



MHE
0.335

Raw MHE
0.527

Relative MHE
0.144

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
36%
- **14,877** people exposed
- **12,334** structures exposed (42%)

Critical Infrastructure Exposed: 32%

Earthquake
100%
- **41,058** people exposed
- **29,683** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **33** people exposed
- **49** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
20%
- **8,017** people exposed
- **7,546** structures exposed (25%)

Critical Infrastructure Exposed: 36%

Mosquito-Borne Disease
3%
- **1,256** people exposed
- **1,272** structures exposed (4%)

Critical Infrastructure Exposed: <1%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
<1%
- **113** people exposed
- **101** structures exposed (<1%)

Critical Infrastructure Exposed: 1%

Wildfire
94%
- **38,666** people exposed
- **27,042** structures exposed (91%)

Critical Infrastructure Exposed: 93%

VULNERABILITY (V)

RANK: 186 / 221 CANTONS ASSESSED **SCORE: 0.402**

Vulnerability in Pedro Moncayo is primarily driven by Population Pressures and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.446

- **9.8** Average Years of Schooling
- **45.1%** Population (age 24 and over) with General Basic Education Schooling
- **6.5%** Population (age 24 and over) with No Schooling
- **5.1%** Adult Illiteracy Rate
- **33.9%** Households with No Internet Access
- **85.1%** Households with No Access to Television
- **60.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.402

- **98.2%** Homes with Access to Public Water Source
- **63.1%** Homes Connected to the Public Sewage System
- **27.2%** Homes without Piped Water
- **10.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.313

- **50.6** Age Dependency Ratio
- **6.6%** Unemployment Rate
- **38.3%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.669

- **7.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.372

- **0.2** Female to Male Labor Ratio (distance from parity)
- **53.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **56.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **39.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.415

- **6.1%** Prevalence of Disability (among persons age 5 and over)
- **9.3** Perinatal Mortality Rate (per 1,000 births)
- **11.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.046

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.281

47	3	18	13
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.280

6.1%	0.1%	8.9%	79.2%	6.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.628

120.9	1.7%	22.7	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.317

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 17 / 221 CANTONS ASSESSED **SCORE: 0.659**

Pedro Moncayo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.779

67.2%
Labor Force Participation

343,097
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.332

0%
Protected Area (% of land area)

-1,438.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.716

89.4%
Voter Participation

92.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.592

Communications Capacity

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.667

14.1%
Household Access to Fixed Phones

89.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.748

98.3%
Homes Served by the Public Electricity Network

84.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.358

9.6
Nurses and Midwives per 10,000 persons

11.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.594

4.2
Average Distance to Airport (km)

136
Average Distance to Sea or River Port (km)

3.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 60 / 221 CANTONS ASSESSED **SCORE: 0.552**

Pedro Moncayo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.451

1.8	7%	0	35.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.653

7.9	4.3	1.9	3.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 25 / 221 CANTONS ASSESSED
SCORE: 0.603

Pedro Moncayo's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Population Pressures



Mass Care Support



Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Mass Care Support

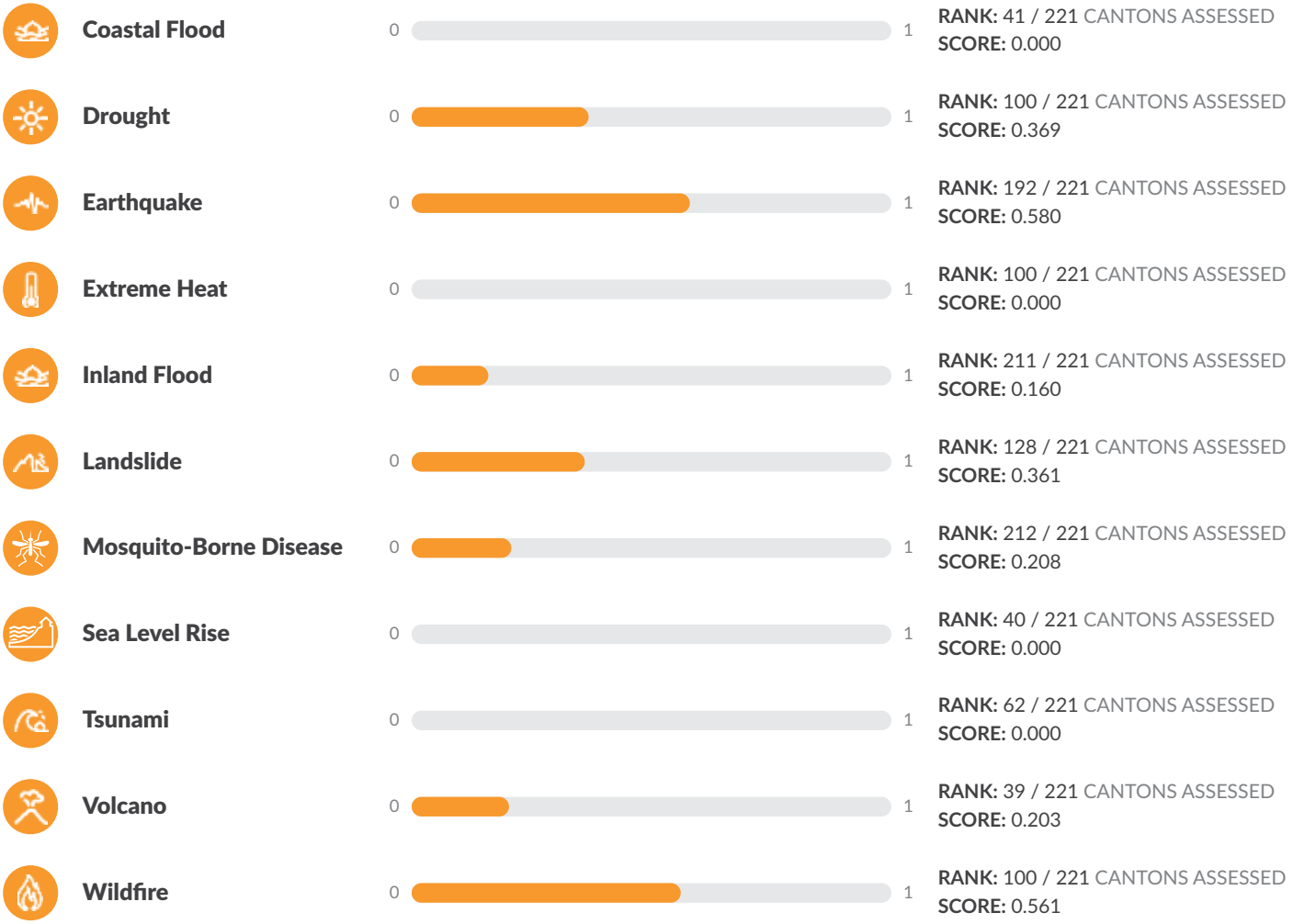
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

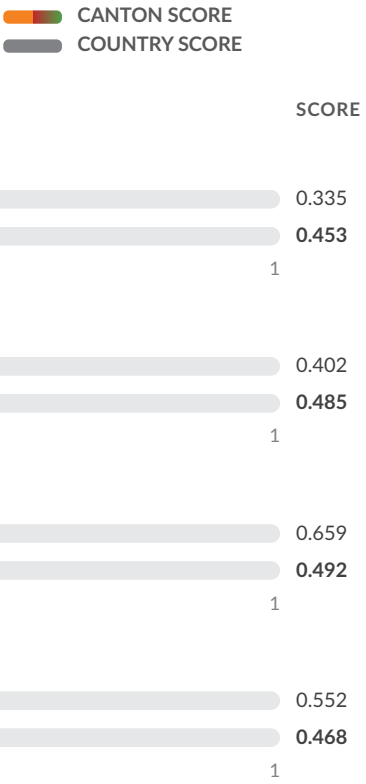


MULTI-HAZARD RISK (MHR)

RANKED
209 / 221
CANTONS ASSESSED
SCORE: 0.381

Pedro Moncayo's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PEDRO VICENTE MALDONADO

NDPBA SUBNATIONAL PROFILE

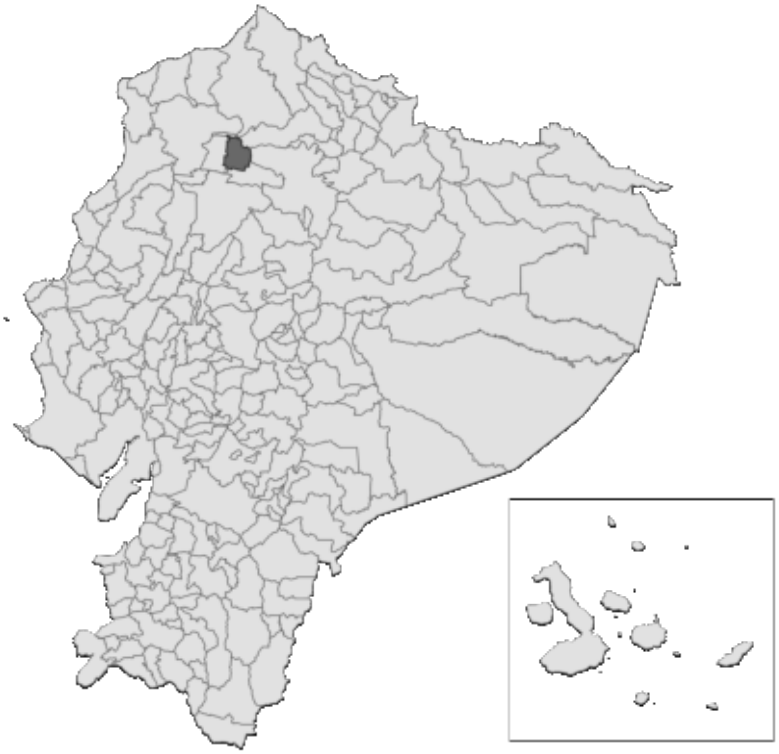
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ECUADOR

PEDRO VICENTE MALDONADO

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.449 • RANK: 152/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.474 • RANK: 126/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.489 • RANK: 104/221 CANTONS ASSESSED

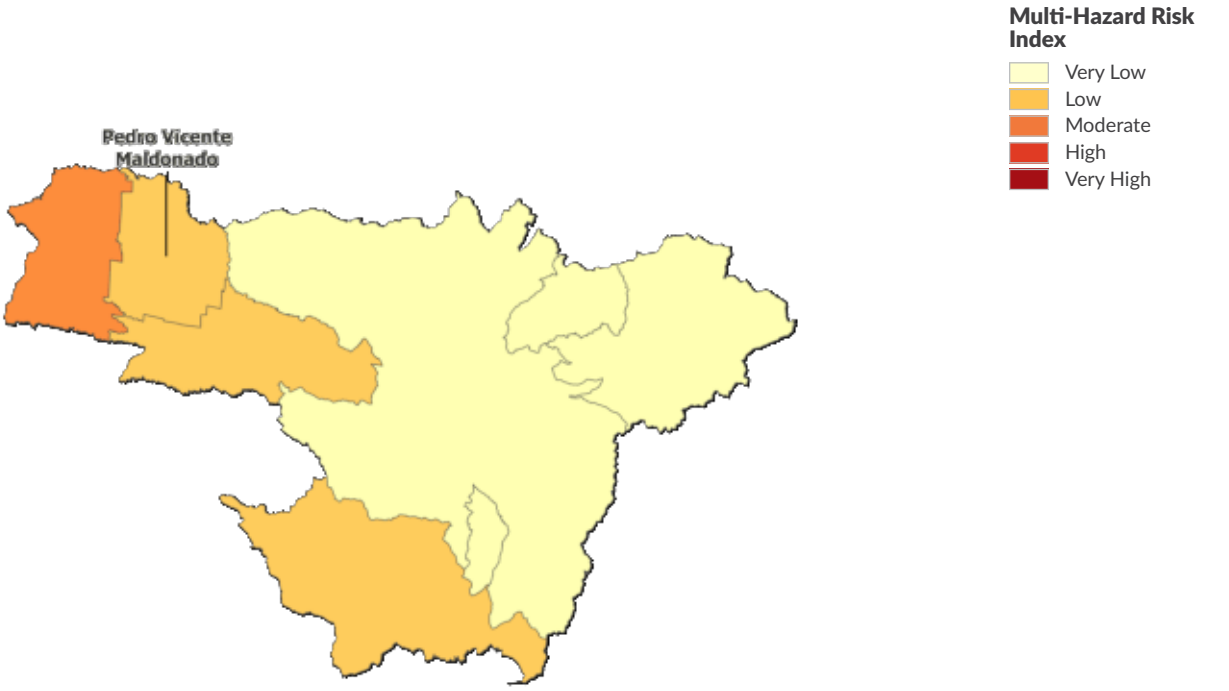
Coping Capacity (CC) - Moderate
SCORE: 0.486 • RANK: 111/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.263 • RANK: 190/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.456 • RANK: 112/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

PEDRO VICENTE MALDONADO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	0.504
San Miguel De Los Bancos	0.463
Pedro Vicente Maldonado	**0.449**
Mejía	0.442
Cayambe	0.412
Distrito Metropolitano De Quito	0.393
Pedro Moncayo	0.381
Rumiñahui	0.313

MULTI-HAZARD EXPOSURE (MHE)

RANK: 190 / 221 CANTONS ASSESSED
SCORE: 0.263



MHE
0.263

Raw MHE
0.368

Relative MHE
0.159

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
16,757 people exposed
11,007 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
18%
2,995 people exposed
1,852 structures exposed (17%)
Critical Infrastructure Exposed: 10%

Landslide
8%
1,260 people exposed
763 structures exposed (7%)
Critical Infrastructure Exposed: 7%

Mosquito-Borne Disease
100%
16,757 people exposed
11,007 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
57%
9,473 people exposed
6,307 structures exposed (57%)
Critical Infrastructure Exposed: 47%

VULNERABILITY (V)

RANK: 126 / 221 CANTONS ASSESSED **SCORE: 0.474**

Vulnerability in Pedro Vicente Maldonado is primarily driven by Marginalization and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.483

- **9.7** Average Years of Schooling
- **47.5%** Population (age 24 and over) with General Basic Education Schooling
- **6%** Population (age 24 and over) with No Schooling
- **4.9%** Adult Illiteracy Rate
- **44.2%** Households with No Internet Access
- **78.7%** Households with No Access to Television
- **77%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.548

- **71.6%** Homes with Access to Public Water Source
- **41.5%** Homes Connected to the Public Sewage System
- **32%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.446

- **59.5** Age Dependency Ratio
- **7%** Unemployment Rate
- **52.9%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.692

- **8.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.558

- **0.4** Female to Male Labor Ratio (distance from parity)
- **64.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **39.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **70.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.557

- **5.4%** Prevalence of Disability (among persons age 5 and over)
- **12.6** Perinatal Mortality Rate (per 1,000 births)
- **8.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.678

- **29** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **6.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **31.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.547

40
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

18
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

67
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.392

8.8%
Homes with Exterior Walls in Poor Condition

0.9%
Homes with Inadequate Materials Used in Outer Walls

14%
Homes with Roofs in Poor Condition

85.4%
Households with No Access to Vehicle for Private Use

7.6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.534

25
Population Density (persons per sq km)

1.6%
Average Annual Population Change (2010-2022)

22.4
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.239

0.1
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 111 / 221 CANTONS ASSESSED **SCORE: 0.486**

Pedro Vicente Maldonado exhibits weaker Coping Capacity in the areas of Communications Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.556

61.9%
Labor Force Participation

63,099
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.265

0%
Protected Area (% of land area)

-5,913.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.543

83.2%
Voter Participation

88.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.434

Communications Capacity

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.253

6.1%
Household Access to Fixed Phones

47.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.638

98.5%
Homes Served by the Public Electricity Network

71.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.486

11.6
Nurses and Midwives per 10,000 persons

21.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.360

36.7
Average Distance to Airport (km)

106.1
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 112 / 221 CANTONS ASSESSED **SCORE: 0.456**

Pedro Vicente Maldonado exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.442

4.1	13.3%	1.2	106.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.470

7.3	7.1	5.6	7.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 104 / 221 CANTONS ASSESSED
SCORE: 0.489

Pedro Vicente Maldonado's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Communications Capacity

Transportation Capacity

Marginalization

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

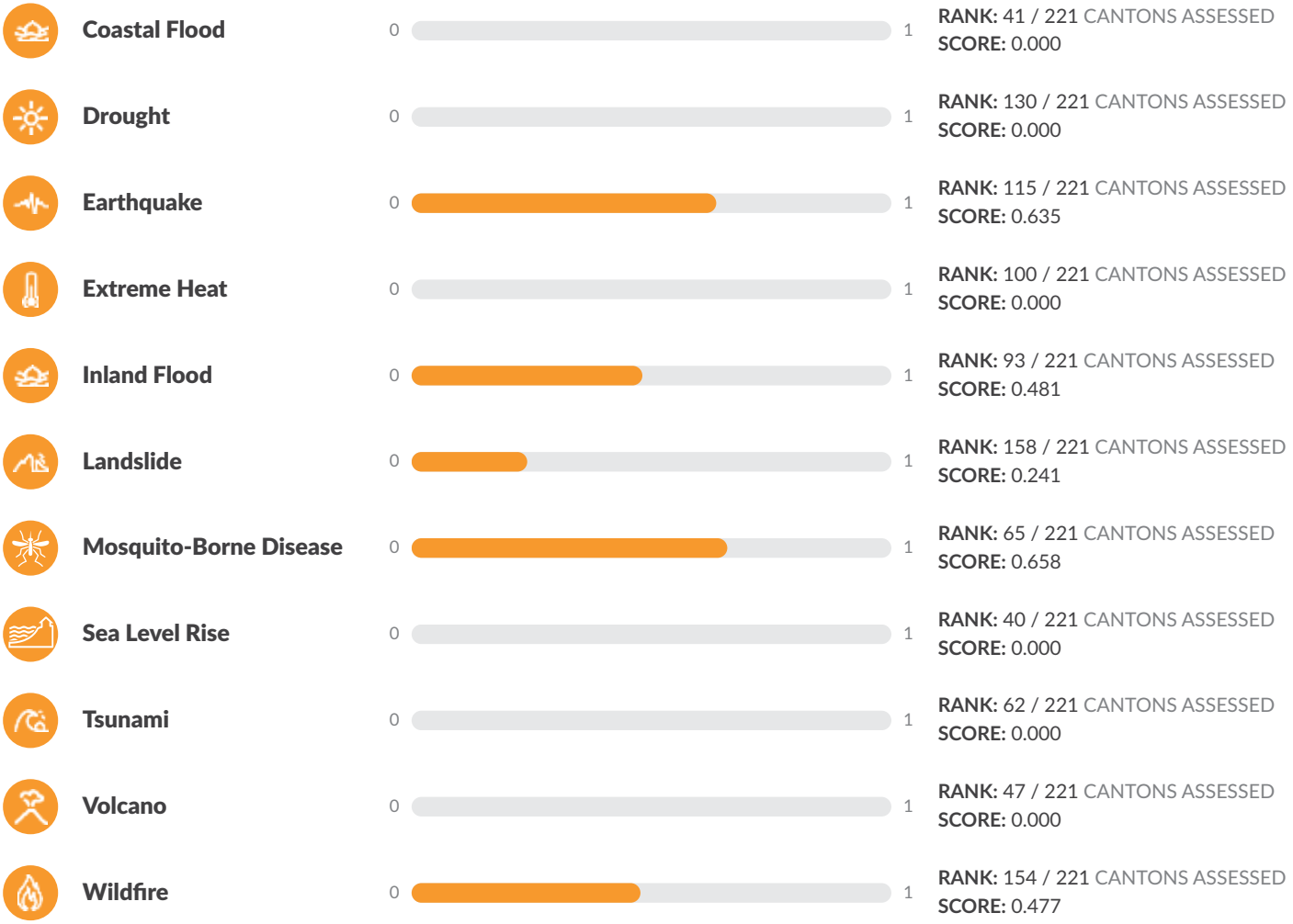
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

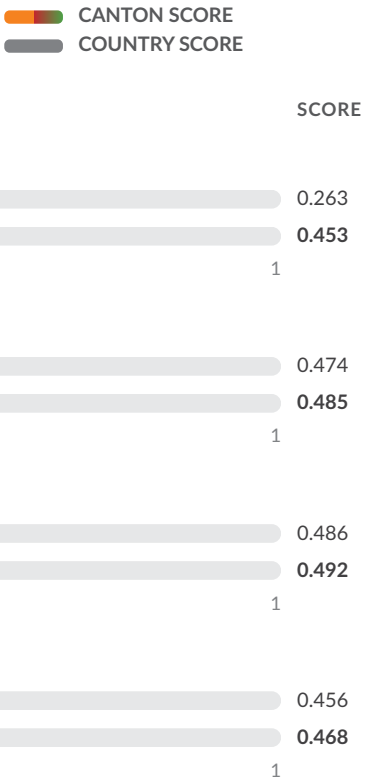


MULTI-HAZARD RISK (MHR)

RANKED
152 / 221
CANTONS ASSESSED
SCORE: 0.449

Pedro Vicente Maldonado's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PENIPE

NDPBA SUBNATIONAL PROFILE

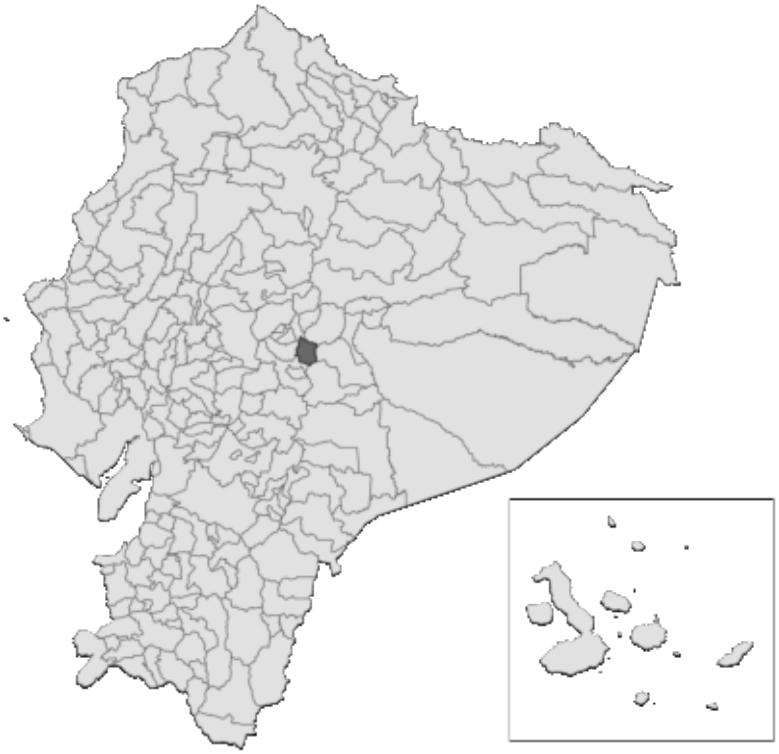
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ECUADOR

PENIPE

PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.500 • RANK: 105/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.427 • RANK: 164/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.494 • RANK: 98/221 CANTONS ASSESSED

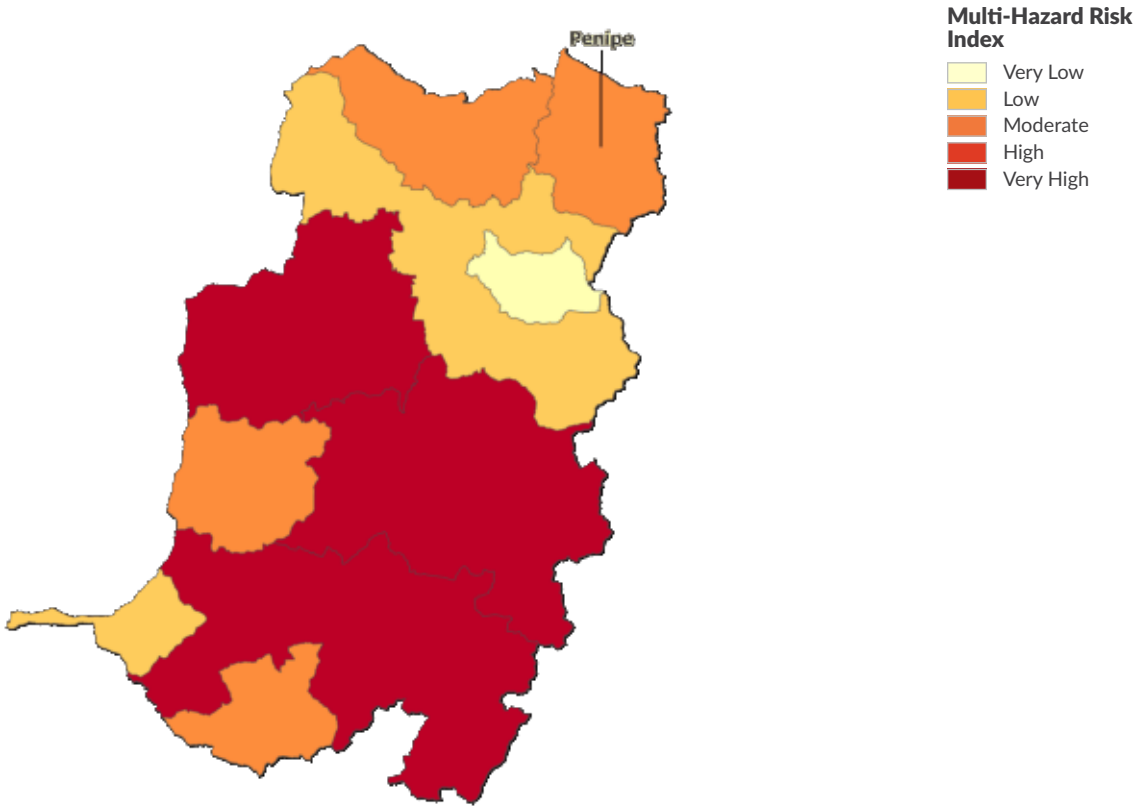
Coping Capacity (CC) - Moderate
SCORE: 0.466 • RANK: 129/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.481 • RANK: 87/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.443 • RANK: 132/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

PENIPE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	0.571
Guano	0.512
Penipe	**0.500**
Pallatanga	0.487
Chunchi	0.483
Cumandá	0.442
Riobamba	0.442
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 87 / 221 CANTONS ASSESSED
SCORE: 0.481



MHE
0.481

Raw MHE
0.369

Relative MHE
0.594

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
82%
- **6,353** people exposed
- **6,308** structures exposed (78%)
- **Critical Infrastructure Exposed:** 70%

Earthquake
100%
- **7,748** people exposed
- **8,043** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
1%
- **97** people exposed
- **134** structures exposed (2%)
- **Critical Infrastructure Exposed:** 5%

Landslide
99%
- **7,663** people exposed
- **7,922** structures exposed (98%)
- **Critical Infrastructure Exposed:** 97%

Mosquito-Borne Disease
14%
- **1,110** people exposed
- **1,159** structures exposed (14%)
- **Critical Infrastructure Exposed:** 11%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
93%
- **7,189** people exposed
- **7,525** structures exposed (94%)
- **Critical Infrastructure Exposed:** 92%

Wildfire
98%
- **7,628** people exposed
- **7,912** structures exposed (98%)
- **Critical Infrastructure Exposed:** 98%

VULNERABILITY (V)

RANK: 164 / 221 CANTONS ASSESSED **SCORE: 0.427**

Vulnerability in Penipe is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.611

- **9.1** Average Years of Schooling
- **50.4%** Population (age 24 and over) with General Basic Education Schooling
- **8.9%** Population (age 24 and over) with No Schooling
- **7.4%** Adult Illiteracy Rate
- **63.2%** Households with No Internet Access
- **85.9%** Households with No Access to Television
- **83.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.430

- **96.2%** Homes with Access to Public Water Source
- **45.1%** Homes Connected to the Public Sewage System
- **36.9%** Homes without Piped Water
- **5.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.512

- **66.5** Age Dependency Ratio
- **8.6%** Unemployment Rate
- **49.1%** Poverty Rate (based on UBN)
- **1.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.123

- **0.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.326

- **0.3** Female to Male Labor Ratio (distance from parity)
- **25.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **55.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **35.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.385

- **15.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.086

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **9.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.425

25	31	43	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.429

16.4%	0.6%	20.4%	83%	5.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.312

18.2	0.1%	3.7	0.26
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.465

0.3	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 129 / 221 CANTONS ASSESSED **SCORE: 0.466**

Penipe exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.374

54.8%
Labor Force Participation

25,362
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.532

7%
Protected Area (% of land area)

-3,161.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.487

84.3%
Voter Participation

77.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.516

Communications Capacity

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.478

12%
Household Access to Fixed Phones

74.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.586

96.7%
Homes Served by the Public Electricity Network

74.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.586

16.3
Nurses and Midwives per 10,000 persons

28.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.413

19.7
Average Distance to Airport (km)

106.2
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 132 / 221 CANTONS ASSESSED **SCORE: 0.443**

Penipe exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.349

3.7	1.1%	0	20
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.538

16.6	4.1	4	4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 98 / 221 CANTONS ASSESSED
SCORE: 0.494

Penipe's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Economic Capacity

Information Access Vulnerability

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

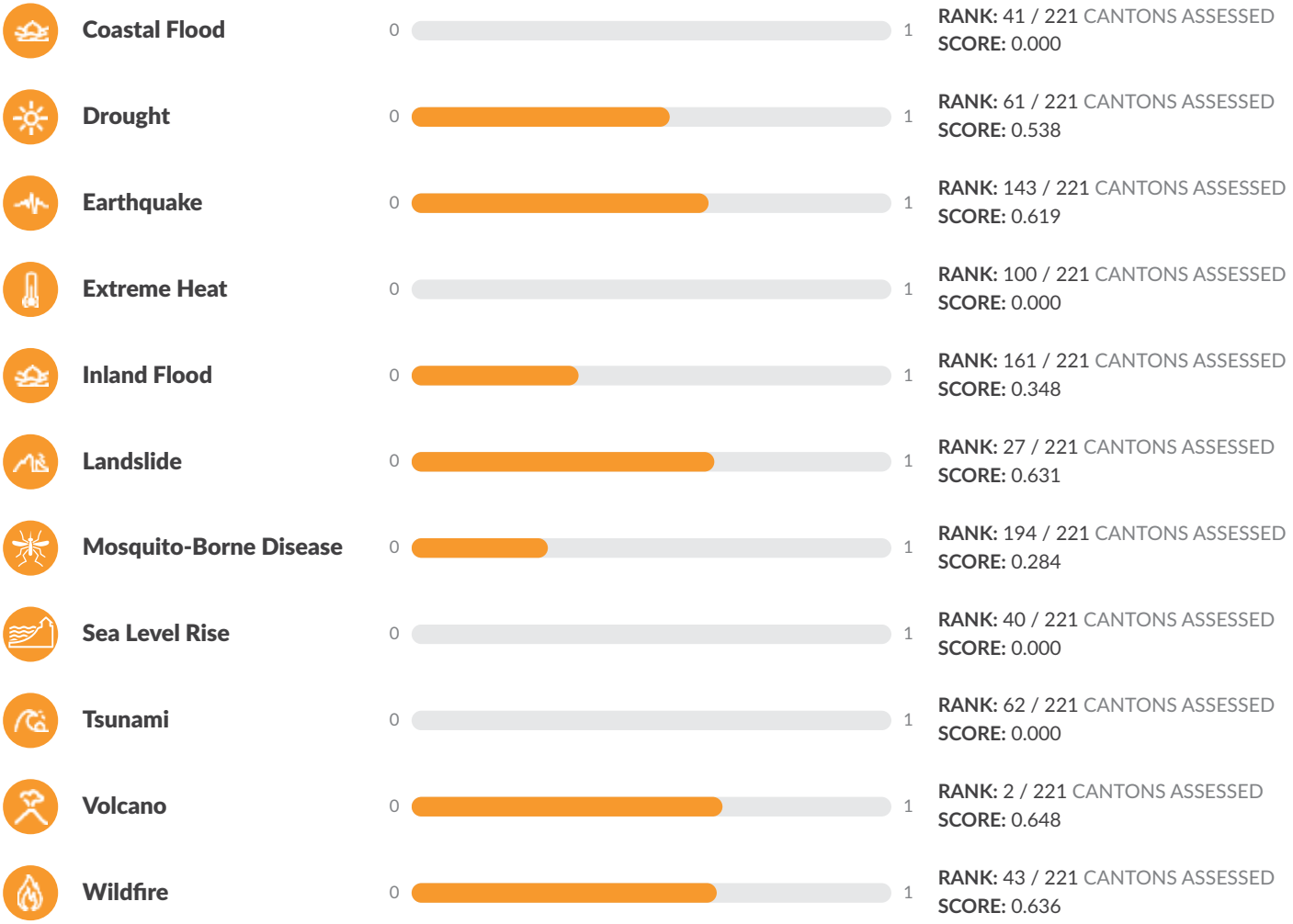
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

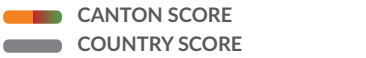


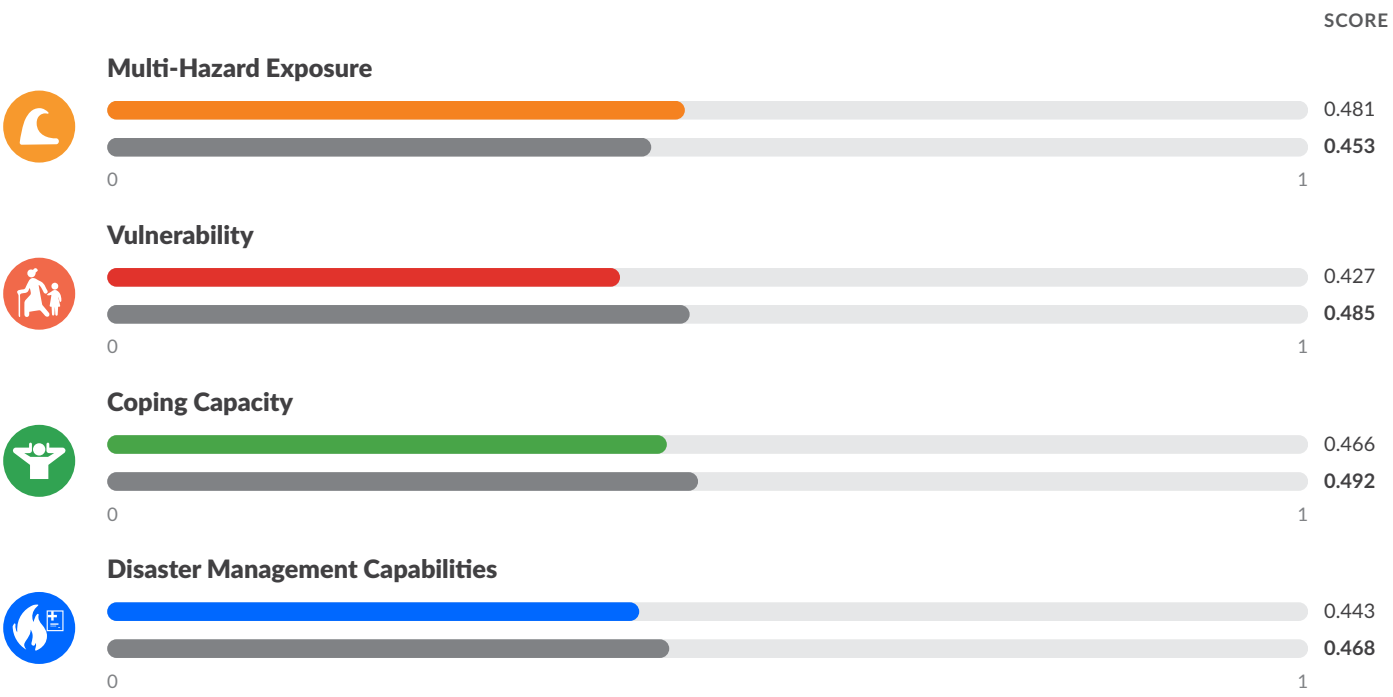
MULTI-HAZARD RISK (MHR)

RANKED
105 / 221
CANTONS ASSESSED
SCORE: 0.500

Penipe's score and ranking are due to High Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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PICHINCHA

NDPBA SUBNATIONAL PROFILE

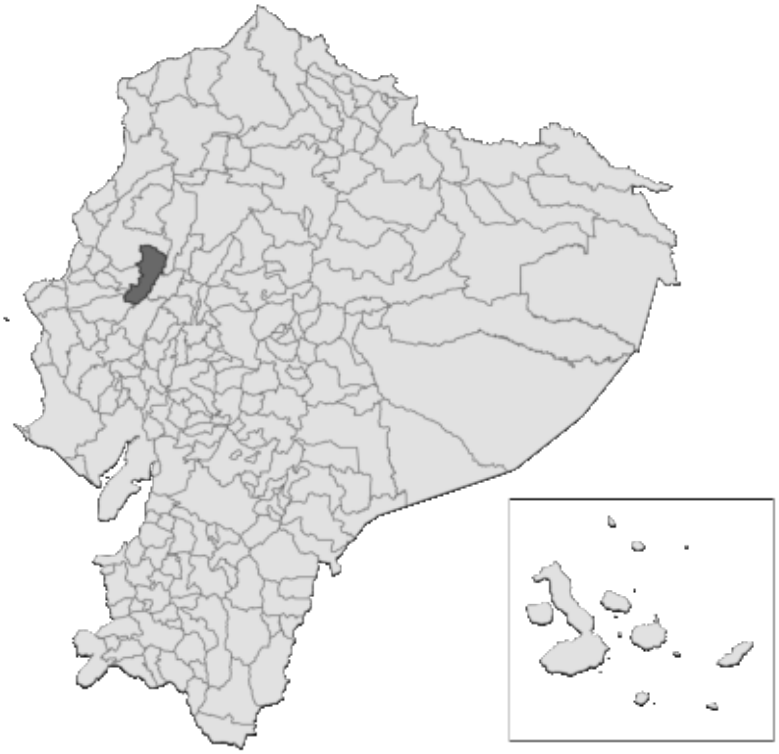
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PICHINCHA

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.619 • RANK: 10/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.632 • RANK: 8/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.341 • RANK: 215/221 CANTONS ASSESSED

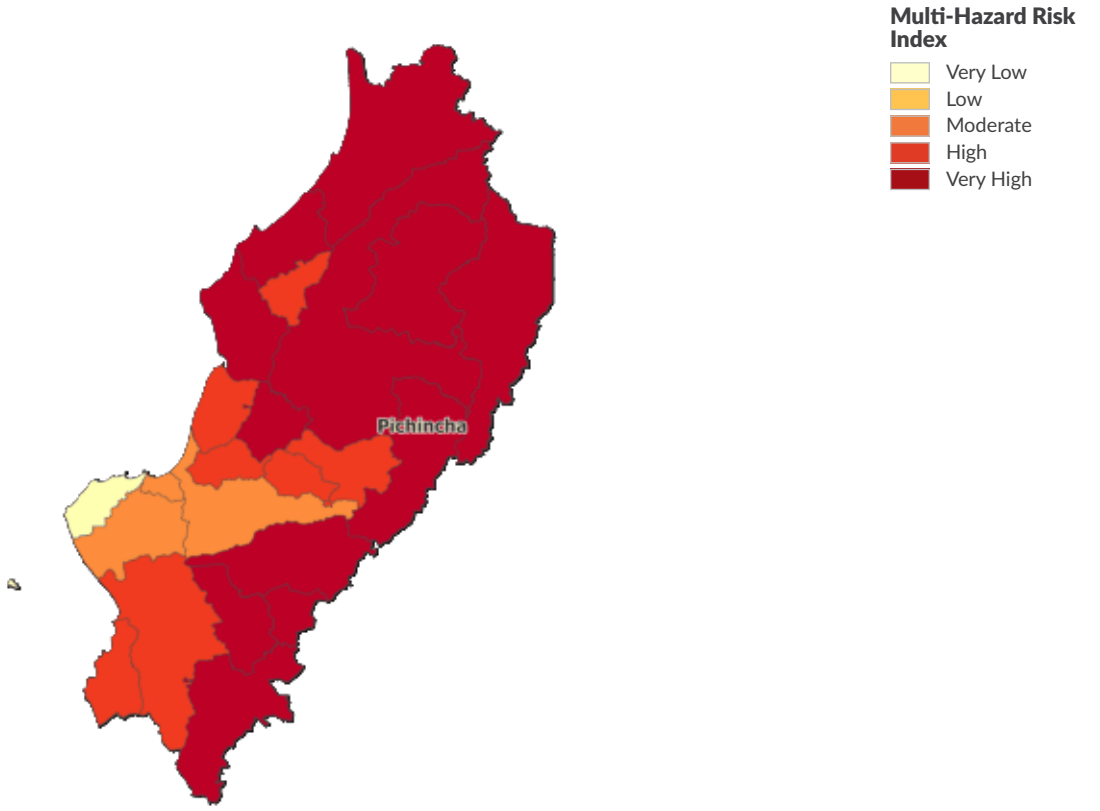
Coping Capacity (CC) - Very Low
SCORE: 0.346 • RANK: 204/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.498 • RANK: 82/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.309 • RANK: 201/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

PICHINCHA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	**0.619**	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 82 / 221 CANTONS ASSESSED
SCORE: 0.498



MHE
0.498

Raw MHE
0.554

Relative MHE
0.442

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
35,408 people exposed
18,407 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
35,408 people exposed
18,407 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
<1%
263 people exposed
127 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Landslide
29%
10,200 people exposed
5,266 structures exposed (29%)
Critical Infrastructure Exposed: 24%

Mosquito-Borne Disease
99%
35,153 people exposed
18,286 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
79%
28,120 people exposed
15,028 structures exposed (82%)
Critical Infrastructure Exposed: 84%

VULNERABILITY (V)

RANK: 8 / 221 CANTONS ASSESSED **SCORE: 0.632**

Vulnerability in Pichincha is primarily driven by Marginalization and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.775

- **7** Average Years of Schooling
- **58.2%** Population (age 24 and over) with General Basic Education Schooling
- **15.5%** Population (age 24 and over) with No Schooling
- **13.1%** Adult Illiteracy Rate
- **70.2%** Households with No Internet Access
- **85.1%** Households with No Access to Television
- **92.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.746

- **28.7%** Homes with Access to Public Water Source
- **7.8%** Homes Connected to the Public Sewage System
- **72.3%** Homes without Piped Water
- **2.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.612

- **56.4** Age Dependency Ratio
- **20.3%** Unemployment Rate
- **86.1%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.619

- **6.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.923

- **0.7** Female to Male Labor Ratio (distance from parity)
- **71.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **12.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **100%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **88.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.539

- **10.8%** Prevalence of Disability (among persons age 5 and over)
- **4.6** Perinatal Mortality Rate (per 1,000 births)
- **7.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.510

- **12.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **27.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.541

62
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

23
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

33
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

36
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.801

31.7%
Homes with Exterior Walls in Poor Condition

23.9%
Homes with Inadequate Materials Used in Outer Walls

30.8%
Homes with Roofs in Poor Condition

94.2%
Households with No Access to Vehicle for Private Use

12.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.384

28.3
Population Density (persons per sq km)

0%
Average Annual Population Change (2010-2022)

1.6
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.279

0.1
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 204 / 221 CANTONS ASSESSED **SCORE: 0.346**

Pichincha exhibits weaker Coping Capacity in the areas of Communications Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.326

46.6%
Labor Force Participation

64,893
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.189

0%
Protected Area (% of land area)

-11,291.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.372

87.5%
Voter Participation

34%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.392

Communications Capacity

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.231

2.2%
Household Access to Fixed Phones

73.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.348

91.2%
Homes Served by the Public Electricity Network

57.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.446

11.8
Nurses and Midwives per 10,000 persons

16.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.543

28.1
Average Distance to Airport (km)

25.9
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 201 / 221 CANTONS ASSESSED **SCORE: 0.309**

Pichincha exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.378

6	5.5%	1.1	88.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.240

18.4	25	6.8	14.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 215 / 221 CANTONS ASSESSED
SCORE: 0.341

Pichincha's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Marginalization



Housing and Transportation Vulnerability



Information Access Vulnerability



Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.



Information Access Vulnerability

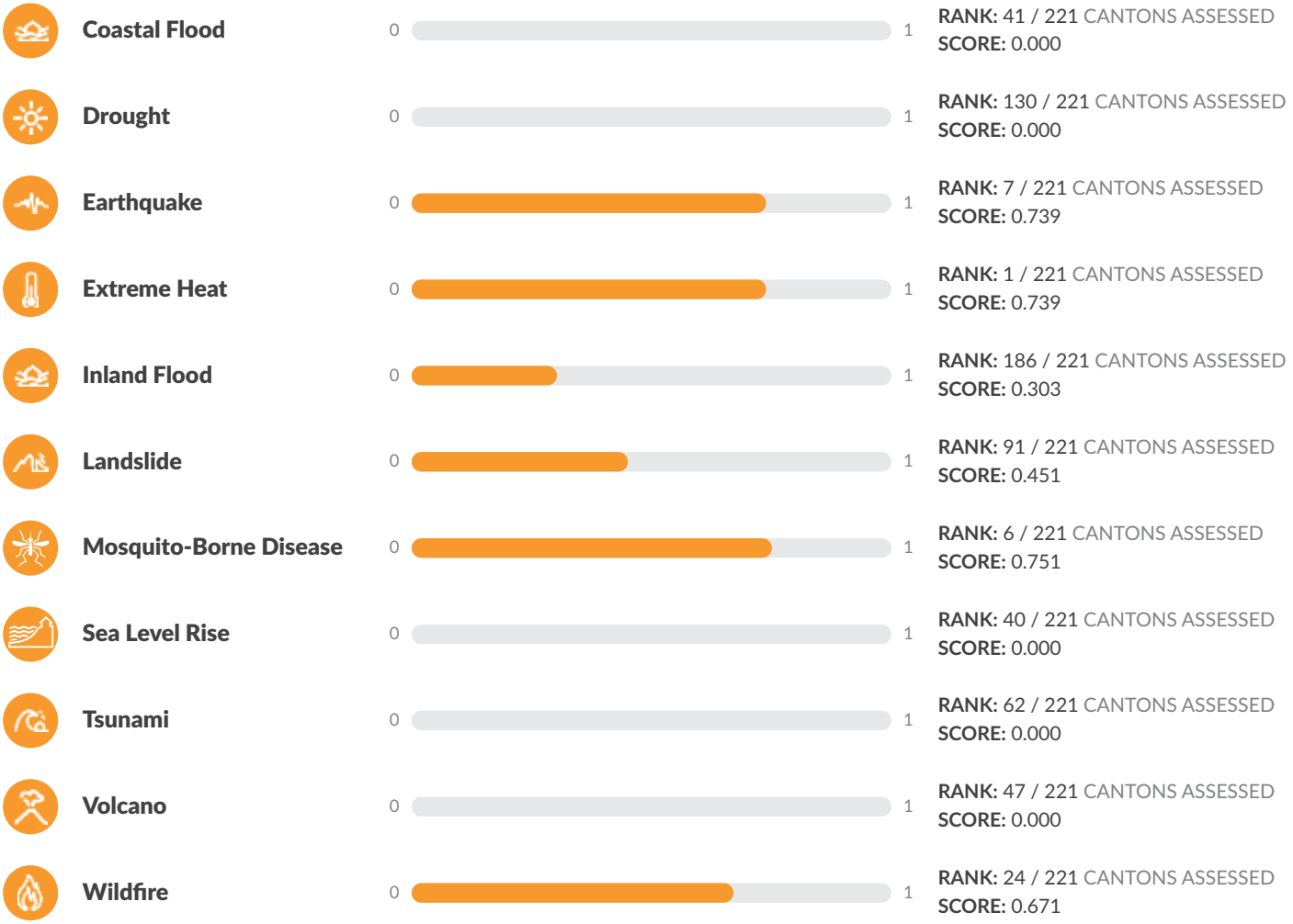
The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

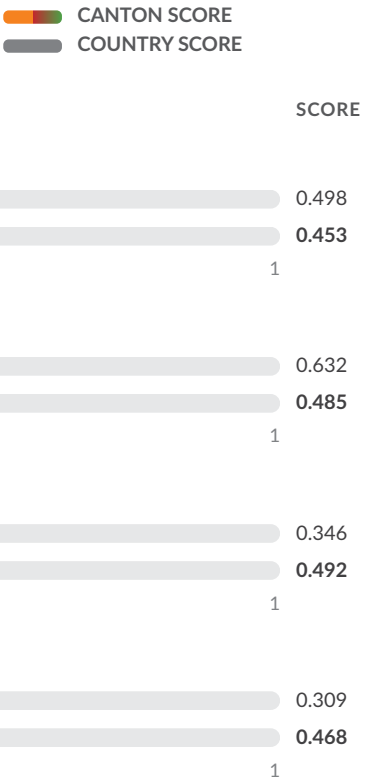


MULTI-HAZARD RISK (MHR)

RANKED
10 / 221
CANTONS ASSESSED
SCORE: 0.619

Pichincha's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

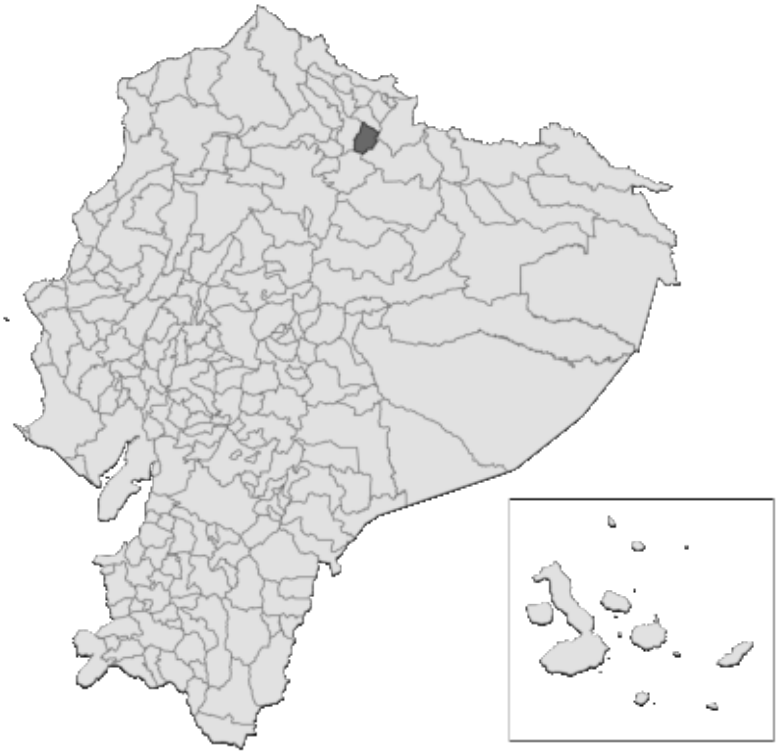
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PROVINCE: IMBABURA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.448 • RANK: 155/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.480 • RANK: 119/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.505 • RANK: 91/221 CANTONS ASSESSED

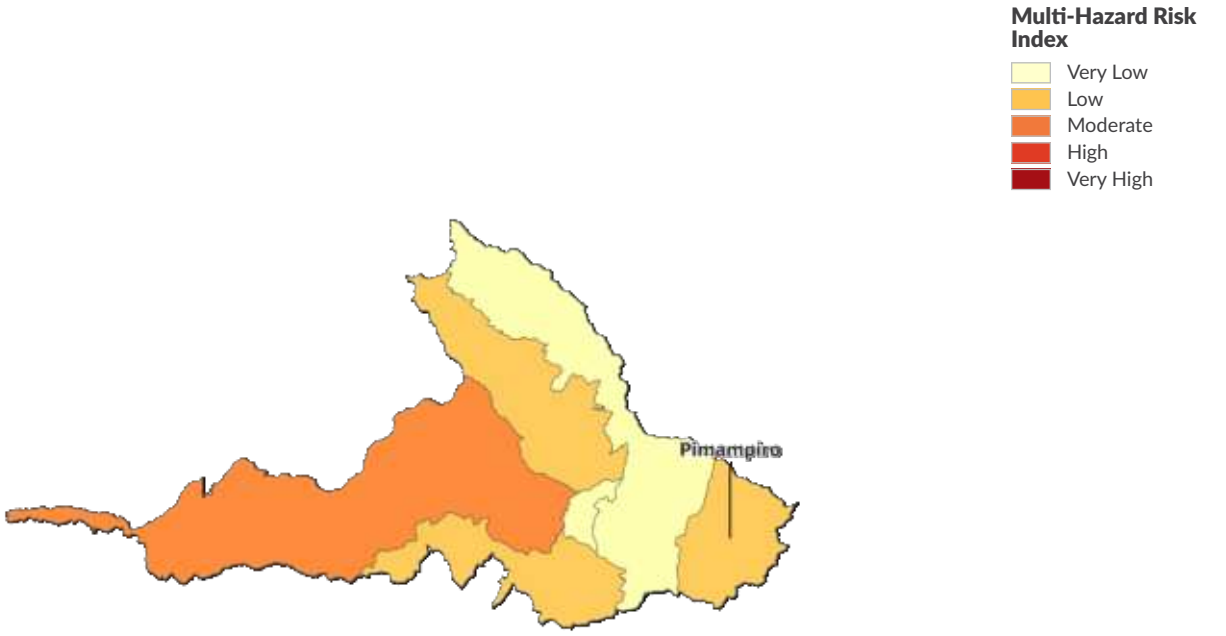
Coping Capacity (CC) - High
SCORE: 0.546 • RANK: 72/221 CANTONS ASSESSED

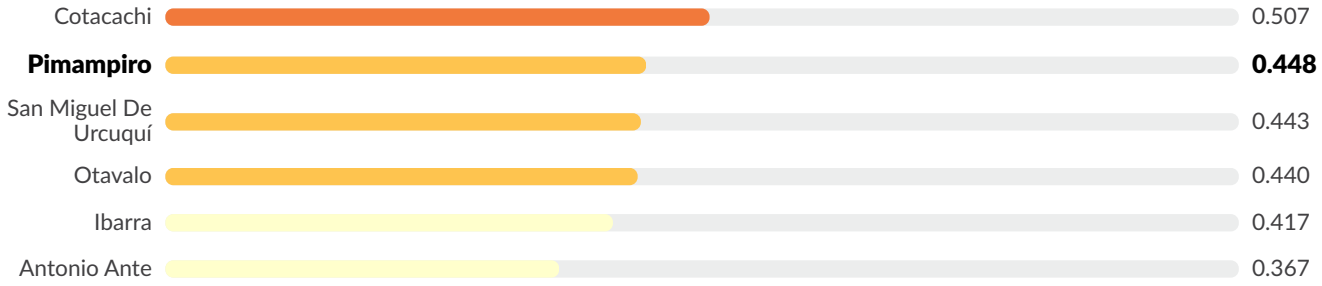
Multi-Hazard Exposure (MHE) - Low
SCORE: 0.306 • RANK: 172/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.448 • RANK: 124/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN IMBABURA PROVINCE

PIMAMPIRO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 172 / 221 CANTONS ASSESSED
SCORE: 0.306



MHE
0.306

Raw MHE
0.363

Relative MHE
0.250

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
52%
- **7,887** people exposed
- **4,074** structures exposed (43%)

Critical Infrastructure Exposed: 50%

Earthquake
100%
- **15,225** people exposed
- **9,579** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **57** people exposed
- **75** structures exposed (<1%)

Critical Infrastructure Exposed: 6%

Landslide
100%
- **15,218** people exposed
- **9,549** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Mosquito-Borne Disease
5%
- **753** people exposed
- **520** structures exposed (5%)

Critical Infrastructure Exposed: 3%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
53%
- **8,056** people exposed
- **5,330** structures exposed (56%)

Critical Infrastructure Exposed: 62%

VULNERABILITY (V)

RANK: 119 / 221 CANTONS ASSESSED **SCORE: 0.480**

Vulnerability in Pimampiro is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.574

- **8.9** Average Years of Schooling
- **52%** Population (age 24 and over) with General Basic Education Schooling
- **8.5%** Population (age 24 and over) with No Schooling
- **6.8%** Adult Illiteracy Rate
- **49.4%** Households with No Internet Access
- **85.1%** Households with No Access to Television
- **77.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.399

- **96.5%** Homes with Access to Public Water Source
- **68.7%** Homes Connected to the Public Sewage System
- **26.6%** Homes without Piped Water
- **10.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.423

- **56.2** Age Dependency Ratio
- **10.5%** Unemployment Rate
- **42.5%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.215

- **1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.362

- **0.4** Female to Male Labor Ratio (distance from parity)
- **36.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **67.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **23.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.429

- **7.8%** Prevalence of Disability (among persons age 5 and over)
- **6.2** Perinatal Mortality Rate (per 1,000 births)
- **9.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.156

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **1.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.353

28	18	34	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.388

12.8%	0.2%	15.3%	85.3%	6.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.513

30.4	0.3%	39.7	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.794

0.3	0.5	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 72 / 221 CANTONS ASSESSED **SCORE: 0.546**

Pimampiro exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.478

62.1%
Labor Force Participation

20,782
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.671

24.2%
Protected Area (% of land area)

-2,236.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.586

84.5%
Voter Participation

90.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.532

Communications Capacity

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.633

16.9%
Household Access to Fixed Phones

85.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.760

99.2%
Homes Served by the Public Electricity Network

79.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.448

15.7
Nurses and Midwives per 10,000 persons

12.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.288

45.5
Average Distance to Airport (km)

141
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.448**

Pimampiro exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.444

2.7	6%	0	20.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.453

20.7	5.4	5.4	5.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 91 / 221 CANTONS ASSESSED
SCORE: 0.505

Pimampiro's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Transportation Capacity

Information Access Vulnerability

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

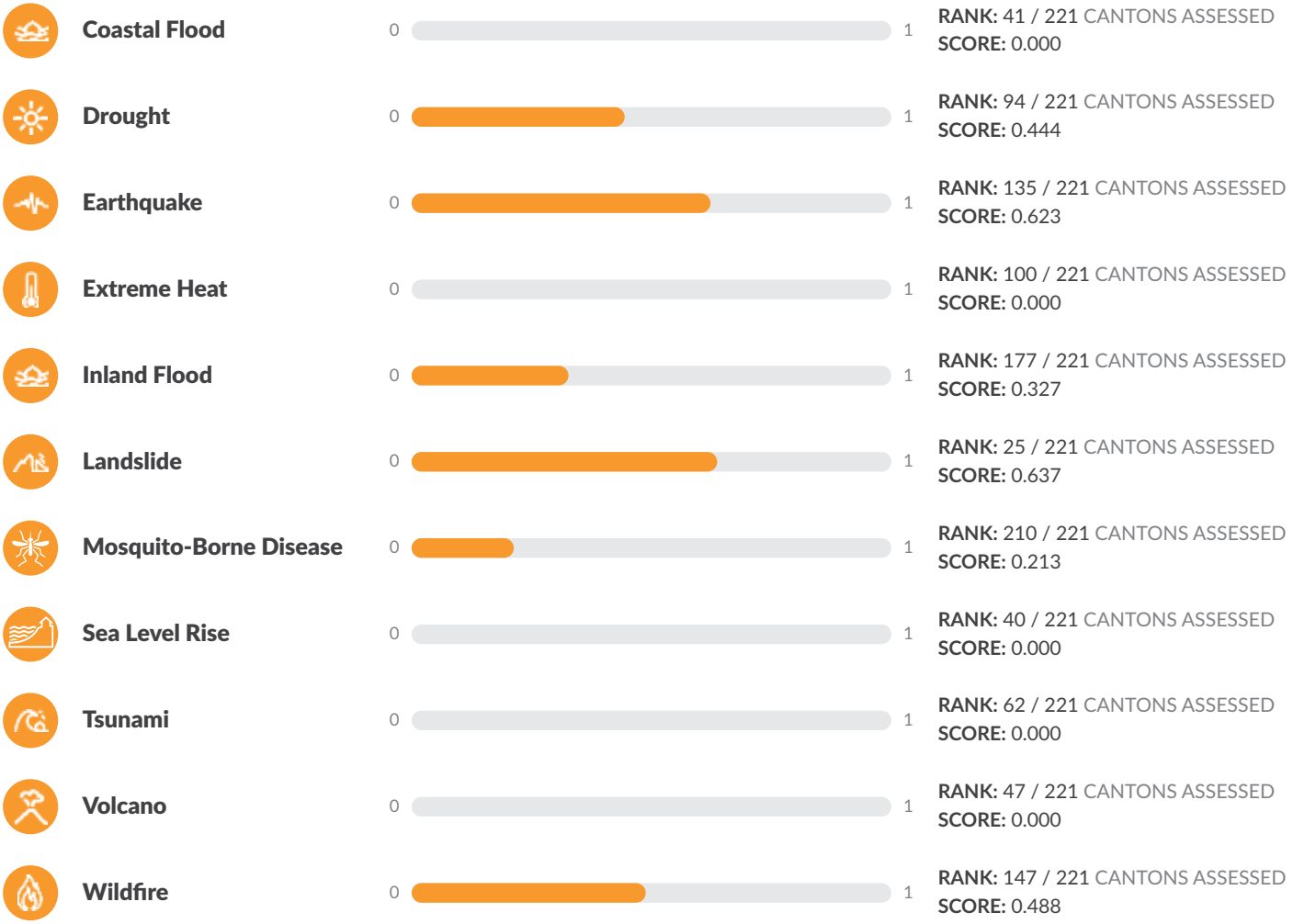
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
155 / 221
CANTONS ASSESSED
SCORE: 0.448

Pimampiro's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

PIÑAS

NDPBA SUBNATIONAL PROFILE

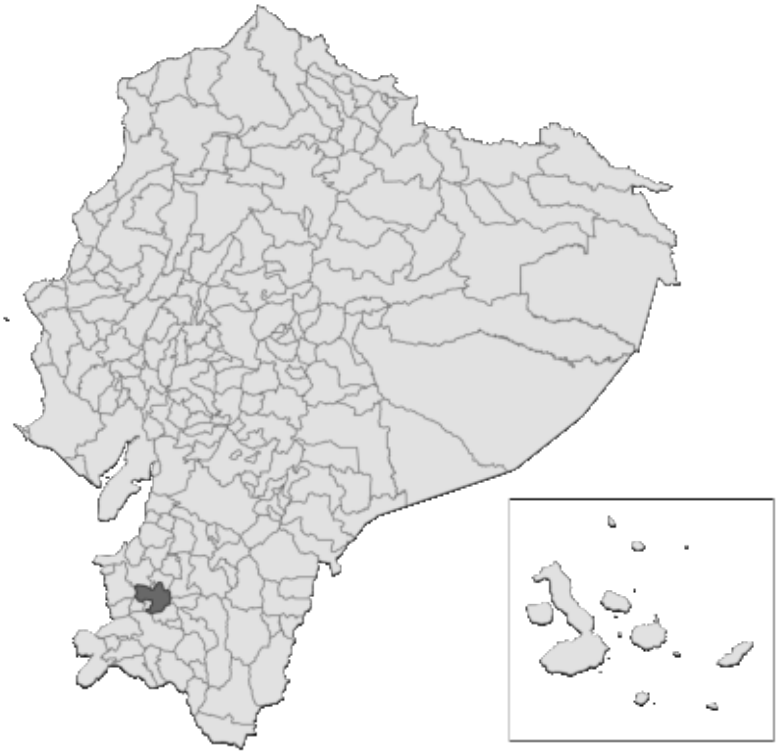
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PIÑAS

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.440 • RANK: 165/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.599 • RANK: 29/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.556 • RANK: 60/221 CANTONS ASSESSED

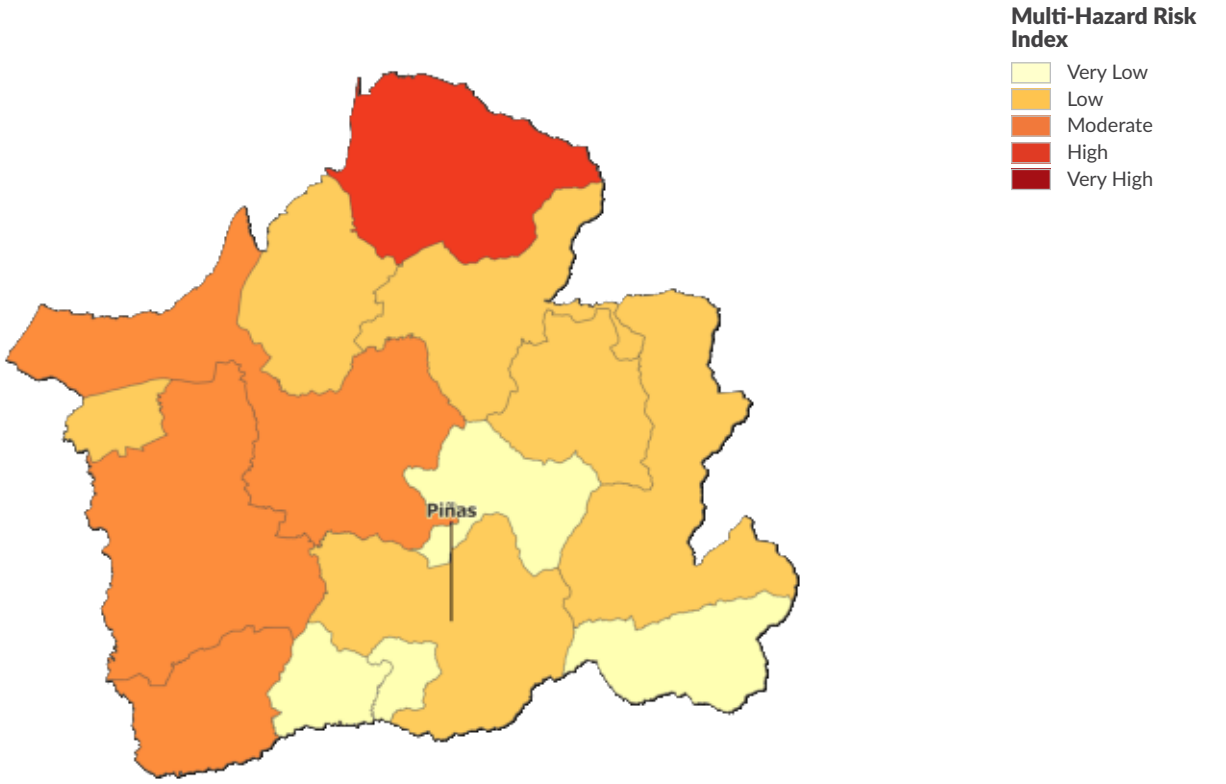
Vulnerability (V) - Very Low
SCORE: 0.359 • RANK: 206/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.591 • RANK: 44/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.563 • RANK: 49/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

PIÑAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453

Piñas	**0.440**
Zaruma	0.440
Huaquillas	0.435
Portovelo	0.424
Balsas	0.420
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 60 / 221 CANTONS ASSESSED
SCORE: 0.556



MHE
0.556

Raw MHE
0.544

Relative MHE
0.568

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
90%
- **27,134** people exposed
- **13,197** structures exposed (83%)

Critical Infrastructure Exposed: 83%

Earthquake
100%
- **30,094** people exposed
- **15,963** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
<1%
- **228** people exposed
- **194** structures exposed (1%)

Critical Infrastructure Exposed: 1%

Inland Flood
1%
- **328** people exposed
- **298** structures exposed (2%)

Critical Infrastructure Exposed: 5%

Landslide
91%
- **27,492** people exposed
- **13,399** structures exposed (84%)

Critical Infrastructure Exposed: 83%

Mosquito-Borne Disease
81%
- **24,380** people exposed
- **13,772** structures exposed (86%)

Critical Infrastructure Exposed: 94%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
90%
- **26,936** people exposed
- **14,807** structures exposed (93%)

Critical Infrastructure Exposed: 73%

VULNERABILITY (V)

RANK: 206 / 221 CANTONS ASSESSED **SCORE: 0.359**

Vulnerability in Piñas is primarily driven by Disaster Impacts and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.253

- **11** Average Years of Schooling
- **43.6%** Population (age 24 and over) with General Basic Education Schooling
- **1.8%** Population (age 24 and over) with No Schooling
- **1.7%** Adult Illiteracy Rate
- **28.7%** Households with No Internet Access
- **62.5%** Households with No Access to Television
- **60.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.250

- **85.3%** Homes with Access to Public Water Source
- **65.5%** Homes Connected to the Public Sewage System
- **6.2%** Homes without Piped Water
- **2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.321

- **53.4** Age Dependency Ratio
- **8.8%** Unemployment Rate
- **35.7%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.371

- **2.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.344

- **0.4** Female to Male Labor Ratio (distance from parity)
- **29.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **40%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.436

- **8.2%** Prevalence of Disability (among persons age 5 and over)
- **3.1** Perinatal Mortality Rate (per 1,000 births)
- **5.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.434

- **6.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **35.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.508

75	14	49	13
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.234

5.9%	0.6%	9.1%	71.8%	3.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.434

47.9	1.1%	25.8	0.24
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.594

0.4	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 44 / 221 CANTONS ASSESSED **SCORE: 0.591**

Piñas exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.587

61.6%
Labor Force Participation

104,456
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.259

0%
Protected Area (% of land area)

-6,297.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.583

83.3%
Voter Participation

92.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.713

Communications Capacity

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.828

21.9%
Household Access to Fixed Phones

93.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.890

99.3%
Homes Served by the Public Electricity Network

88.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.660

22.1
Nurses and Midwives per 10,000 persons

32
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.474

38
Average Distance to Airport (km)

41.7
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 49 / 221 CANTONS ASSESSED **SCORE: 0.563**

Piñas exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.605

2	6.1%	2.4	53.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.522

10.2	4.9	3.7	6.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 29 / 221 CANTONS ASSESSED
SCORE: 0.599

Piñas's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Disaster Impacts



Transportation Capacity



Emergency Services



Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Emergency Services

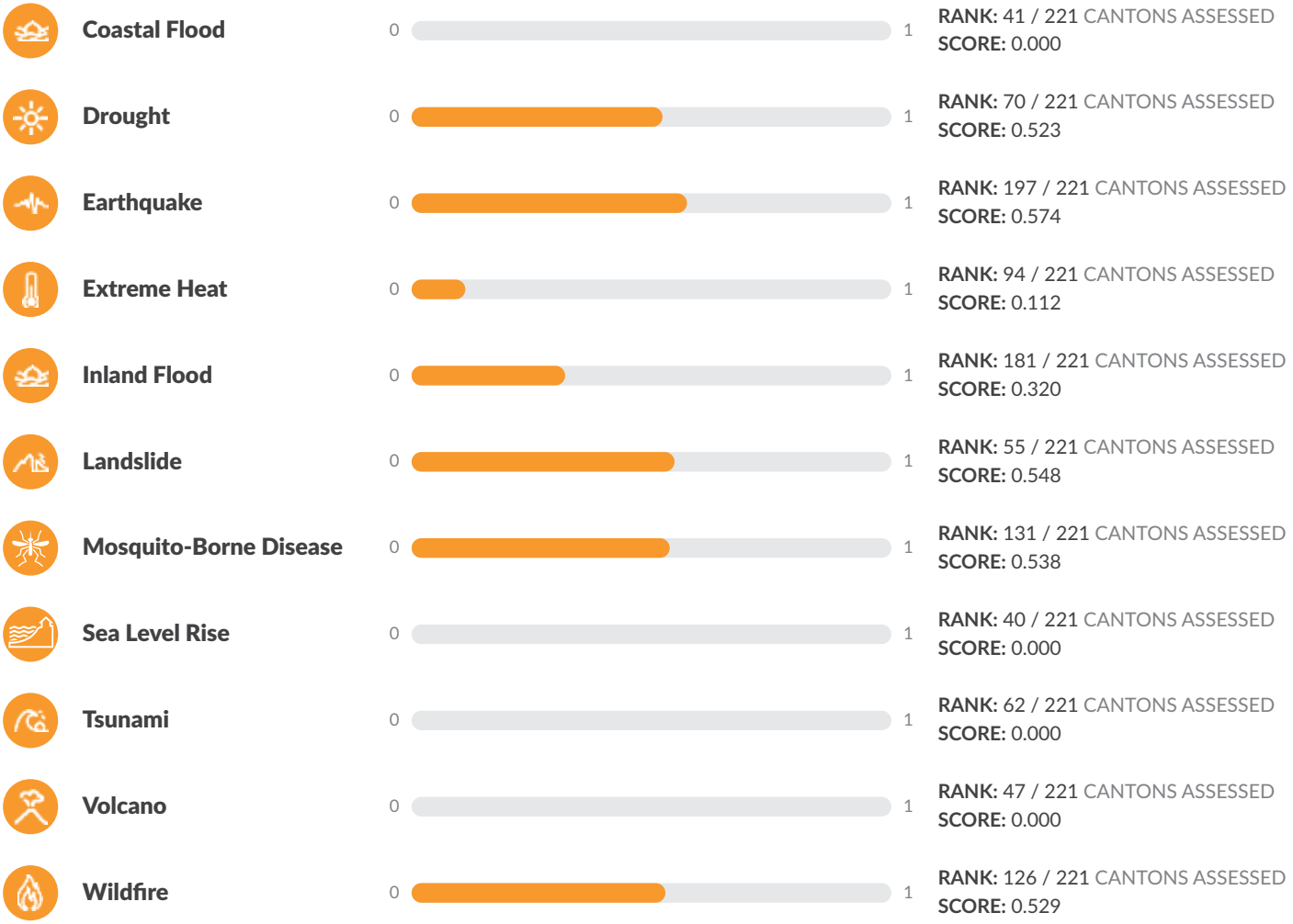
Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

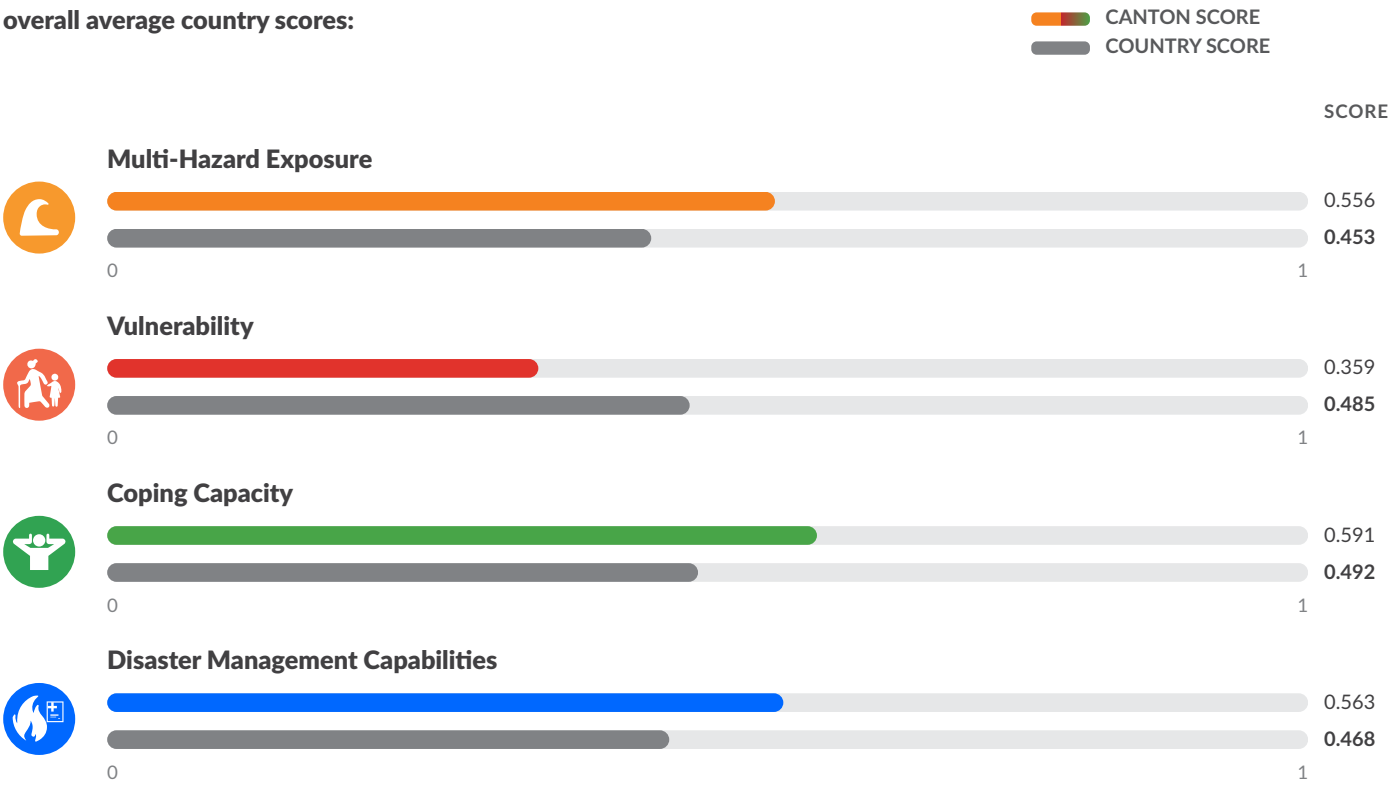


MULTI-HAZARD RISK (MHR)

RANKED
165 / 221
CANTONS ASSESSED
SCORE: 0.440

Piñas's score and ranking are due to High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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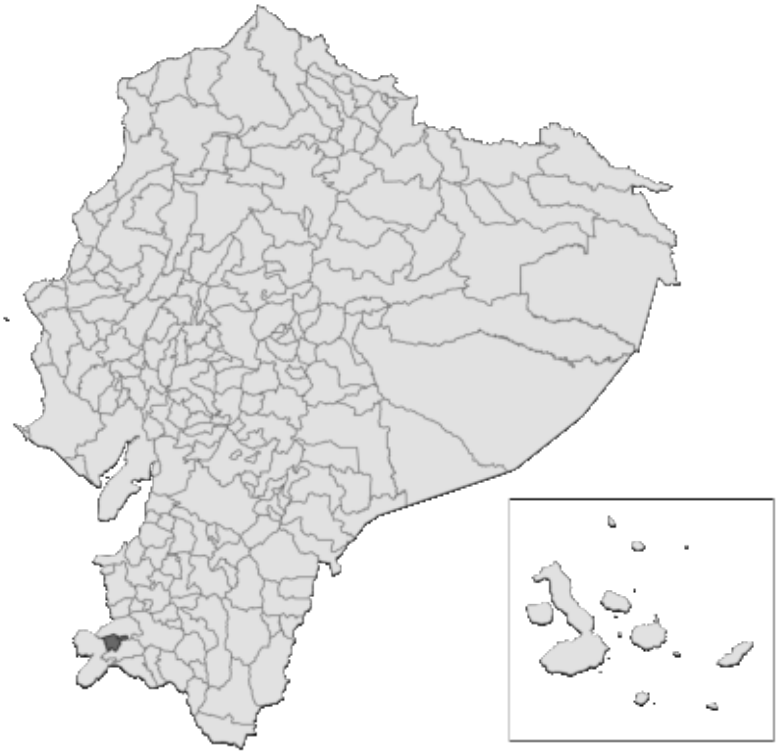
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ECUADOR

PINDAL

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.528 • RANK: 75/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.547 • RANK: 61/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.410 • RANK: 178/221 CANTONS ASSESSED

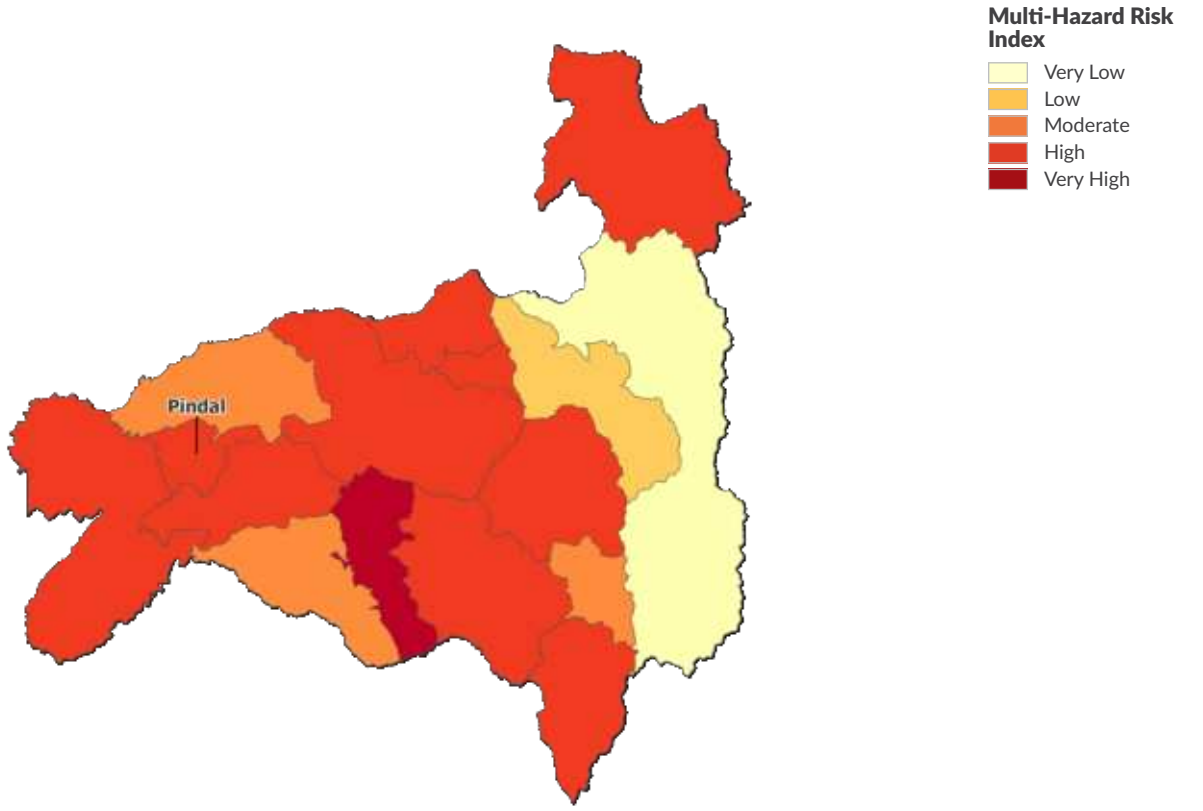
Coping Capacity (CC) - Very Low
SCORE: 0.382 • RANK: 180/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.340 • RANK: 160/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.394 • RANK: 161/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

PINDAL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590	Chaguarpamba	0.524
Espíndola	0.548	Olmedo	0.521
Saraguro	0.548	Celica	0.520
Zapotillo	0.546	Quilanga	0.494
Gonzanamá	0.544	Puyango	0.493
Calvas	0.536	Macará	0.492
Paltas	0.532	Catamayo	0.467
Pindal	**0.528**	Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 160 / 221 CANTONS ASSESSED
SCORE: 0.340



MHE
0.340

Raw MHE
0.324

Relative MHE
0.357

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
90%
- **8,644** people exposed
- **5,930** structures exposed (90%)

Critical Infrastructure Exposed: 93%

Earthquake
100%
- **9,653** people exposed
- **6,587** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **57** people exposed
- **76** structures exposed (1%)

Critical Infrastructure Exposed: 3%

Landslide
64%
- **6,191** people exposed
- **4,057** structures exposed (62%)

Critical Infrastructure Exposed: 43%

Mosquito-Borne Disease
97%
- **9,406** people exposed
- **6,401** structures exposed (97%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
26%
- **2,507** people exposed
- **1,692** structures exposed (26%)

Critical Infrastructure Exposed: 12%

VULNERABILITY (V)

RANK: 61 / 221 CANTONS ASSESSED **SCORE: 0.547**

Vulnerability in Pindal is primarily driven by Clean Water Access Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.572

- **8.9** Average Years of Schooling
- **57.2%** Population (age 24 and over) with General Basic Education Schooling
- **6.4%** Population (age 24 and over) with No Schooling
- **4.4%** Adult Illiteracy Rate
- **56%** Households with No Internet Access
- **79.2%** Households with No Access to Television
- **83.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.685

- **75.6%** Homes with Access to Public Water Source
- **26.2%** Homes Connected to the Public Sewage System
- **62%** Homes without Piped Water
- **8.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.528

- **60.8** Age Dependency Ratio
- **8.7%** Unemployment Rate
- **72.4%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.777

- **11.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.564

- **0.6** Female to Male Labor Ratio (distance from parity)
- **27.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **80%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.371

- **7.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.372

- **10.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.479

39
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

70
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.565

17.2%
Homes with Exterior Walls in Poor Condition

4.1%
Homes with Inadequate Materials Used in Outer Walls

18.4%
Homes with Roofs in Poor Condition

88.6%
Households with No Access to Vehicle for Private Use

13%
Household Overcrowding

Population Pressures

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.556

51.5
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

25.3
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.497

0.1
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 180 / 221 CANTONS ASSESSED **SCORE: 0.382**

Pindal exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.371

53.4%
Labor Force Participation

32,928
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.344

0%
Protected Area (% of land area)

-690
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.284

81.8%
Voter Participation

39.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.505

Communications Capacity

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.548

5.8%
Household Access to Fixed Phones

89.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.598

97%
Homes Served by the Public Electricity Network

75.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.453

12.5
Nurses and Midwives per 10,000 persons

16.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.423

37.9
Average Distance to Airport (km)

77.7
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 161 / 221 CANTONS ASSESSED **SCORE: 0.394**

Pindal exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.300

2.5	3.7%	0	94.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.487

14.3	5.4	4.9	5.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 178 / 221 CANTONS ASSESSED
SCORE: 0.410

Pindal's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Mass Care Support

Clean Water Access Vulnerability

Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

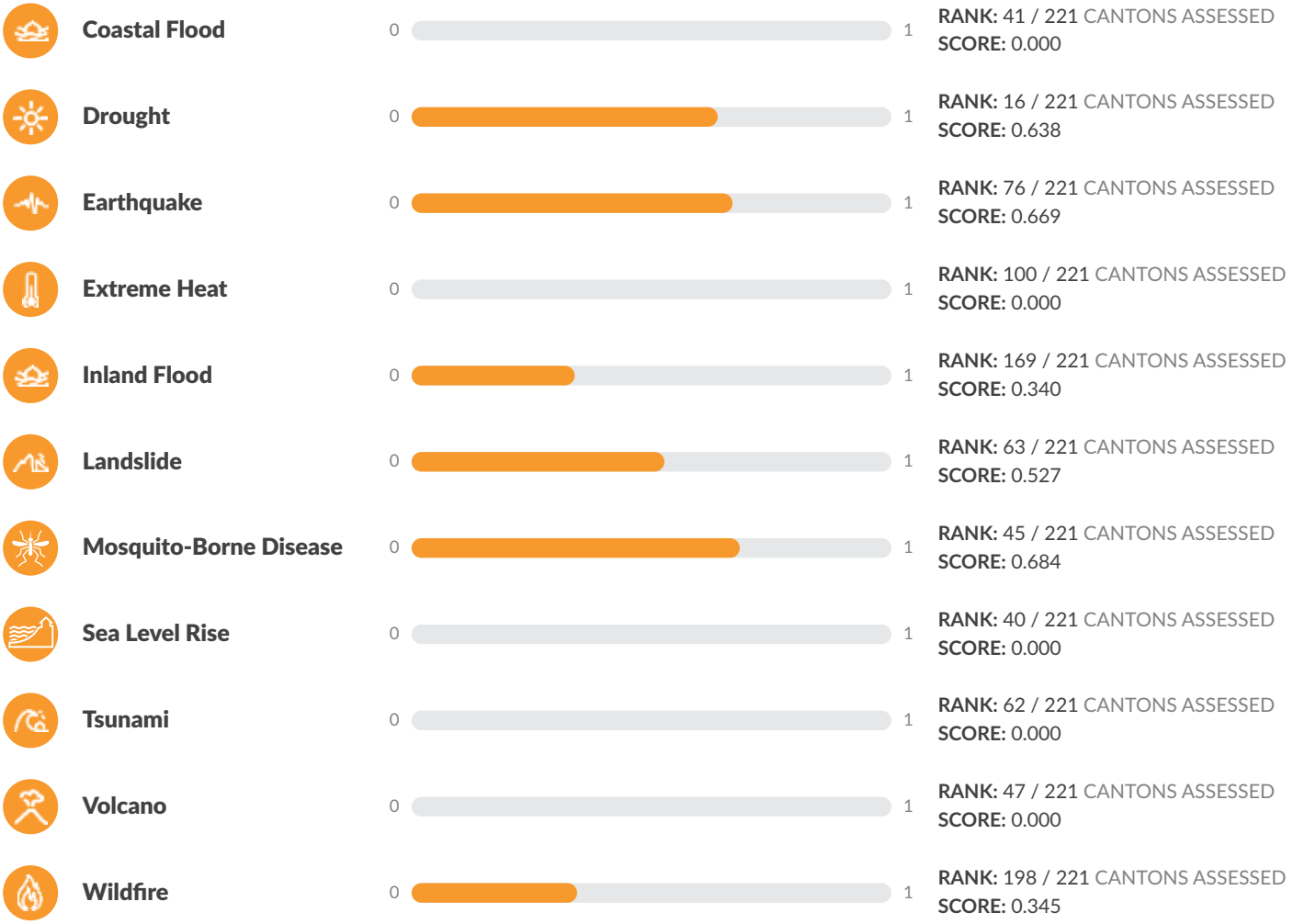
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)

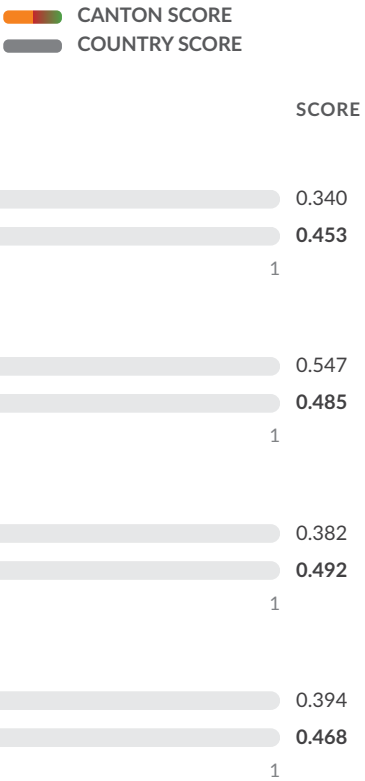


MULTI-HAZARD RISK (MHR)

RANKED
75 / 221
CANTONS ASSESSED
SCORE: 0.528

Pindal's score and ranking are due to Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PLAYAS

NDPBA SUBNATIONAL PROFILE

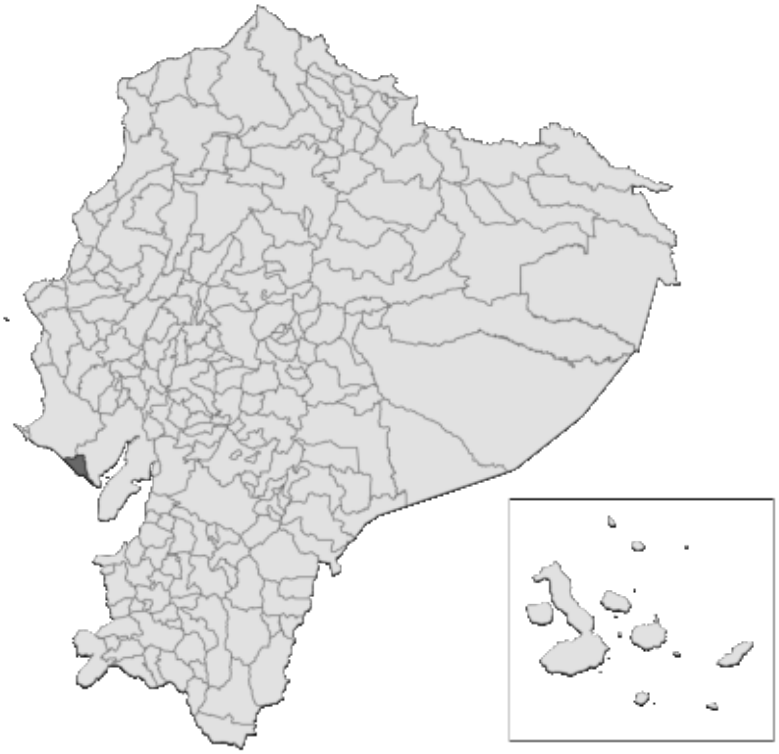
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PLAYAS

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.497 • RANK: 109/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.477 • RANK: 124/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.549 • RANK: 61/221 CANTONS ASSESSED

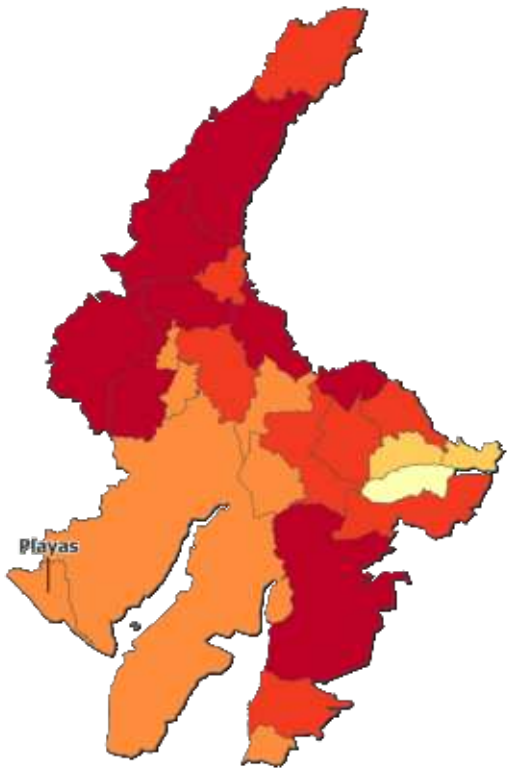
Coping Capacity (CC) - High
SCORE: 0.559 • RANK: 63/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.633 • RANK: 35/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.565 • RANK: 48/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

PLAYAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617	San Jacinto De Yaguachi	0.561	Durán	0.502
Colimes	0.611	Palestina	0.554	**Playas**	**0.497**
Pedro Carbo	0.611	El Triunfo	0.543	Samborondón	0.484
Alfredo Baquerizo Moreno (Juján)	0.590	Balao	0.539	Guayaquil	0.483
Naranjal	0.590	Daule	0.537	General Antonio Elizalde	0.453
Balzar	0.576	Simón Bolívar	0.536	Naranjito	0.449
Santa Lucía	0.575	Milagro	0.524	Coronel Marcelino Maridueña	0.428
Isidro Ayora	0.569	Lomas De Sargentillo	0.519		
El Empalme	0.562	Nobol	0.517		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 35 / 221 CANTONS ASSESSED
SCORE: 0.633



MHE
0.633

Raw MHE
0.657

Relative MHE
0.608

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **1,114** people exposed
- **1,004** structures exposed (3%)

Critical Infrastructure Exposed: <1%

Drought
100%
- **50,478** people exposed
- **30,674** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **50,478** people exposed
- **30,674** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **50,478** people exposed
- **30,674** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
3%
- **1,263** people exposed
- **976** structures exposed (3%)

Critical Infrastructure Exposed: 9%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
43%
- **21,561** people exposed
- **13,623** structures exposed (44%)

Critical Infrastructure Exposed: 23%

Sea Level Rise
<1%
- **298** people exposed
- **154** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
82%
- **41,292** people exposed
- **26,170** structures exposed (85%)

Critical Infrastructure Exposed: 88%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
31%
- **15,656** people exposed
- **9,226** structures exposed (30%)

Critical Infrastructure Exposed: 22%

VULNERABILITY (V)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.477**

Vulnerability in Playas is primarily driven by Population Pressures and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.425

- **10.4** Average Years of Schooling
- **44.4%** Population (age 24 and over) with General Basic Education Schooling
- **3.3%** Population (age 24 and over) with No Schooling
- **2.9%** Adult Illiteracy Rate
- **51.2%** Households with No Internet Access
- **77.6%** Households with No Access to Television
- **76.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.435

- **88.2%** Homes with Access to Public Water Source
- **50.2%** Homes Connected to the Public Sewage System
- **20.9%** Homes without Piped Water
- **6.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.477

- **57.9** Age Dependency Ratio
- **16.2%** Unemployment Rate
- **48.1%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.029

- **0.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.524

- **0.5** Female to Male Labor Ratio (distance from parity)
- **58.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **52.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **60.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.525

- **8.5%** Prevalence of Disability (among persons age 5 and over)
- **4.9** Perinatal Mortality Rate (per 1,000 births)
- **11.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.559

- **46.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **17.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.6** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.324

33 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**8** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**19** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**18** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.528

10.3% Homes with Exterior Walls in Poor Condition	**11.3%** Homes with Inadequate Materials Used in Outer Walls	**13%** Homes with Roofs in Poor Condition	**86.6%** Households with No Access to Vehicle for Private Use	**14.4%** Household Overcrowding

Population Pressures

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.677

217.7 Population Density (persons per sq km)	**2.9%** Average Annual Population Change (2010-2022)	**26.2** Net Migration Rate (per 1,000 persons)	**0.29** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.300

0.2 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 63 / 221 CANTONS ASSESSED **SCORE: 0.559**

Playas exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.523

57.7%
Labor Force Participation

109,231
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.381

0.4%
Protected Area (% of land area)

-837.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.724

88.4%
Voter Participation

95.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.489

Communications Capacity

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.575

8.9%
Household Access to Fixed Phones

87.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.469

95.1%
Homes Served by the Public Electricity Network

65.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.232

5.1
Nurses and Midwives per 10,000 persons

8.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.680

4.3
Average Distance to Airport (km)

54.3
Average Distance to Sea or River Port (km)

2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 48 / 221 CANTONS ASSESSED **SCORE: 0.565**

Playas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.429

2.7	2.2%	1.2	74.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.701

3.4	3.8	3.1	2.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 61 / 221 CANTONS ASSESSED
SCORE: 0.549

Playas's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Healthcare Capacity


Population Pressures


Mass Care Support


Energy Capacity

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Mass Care Support

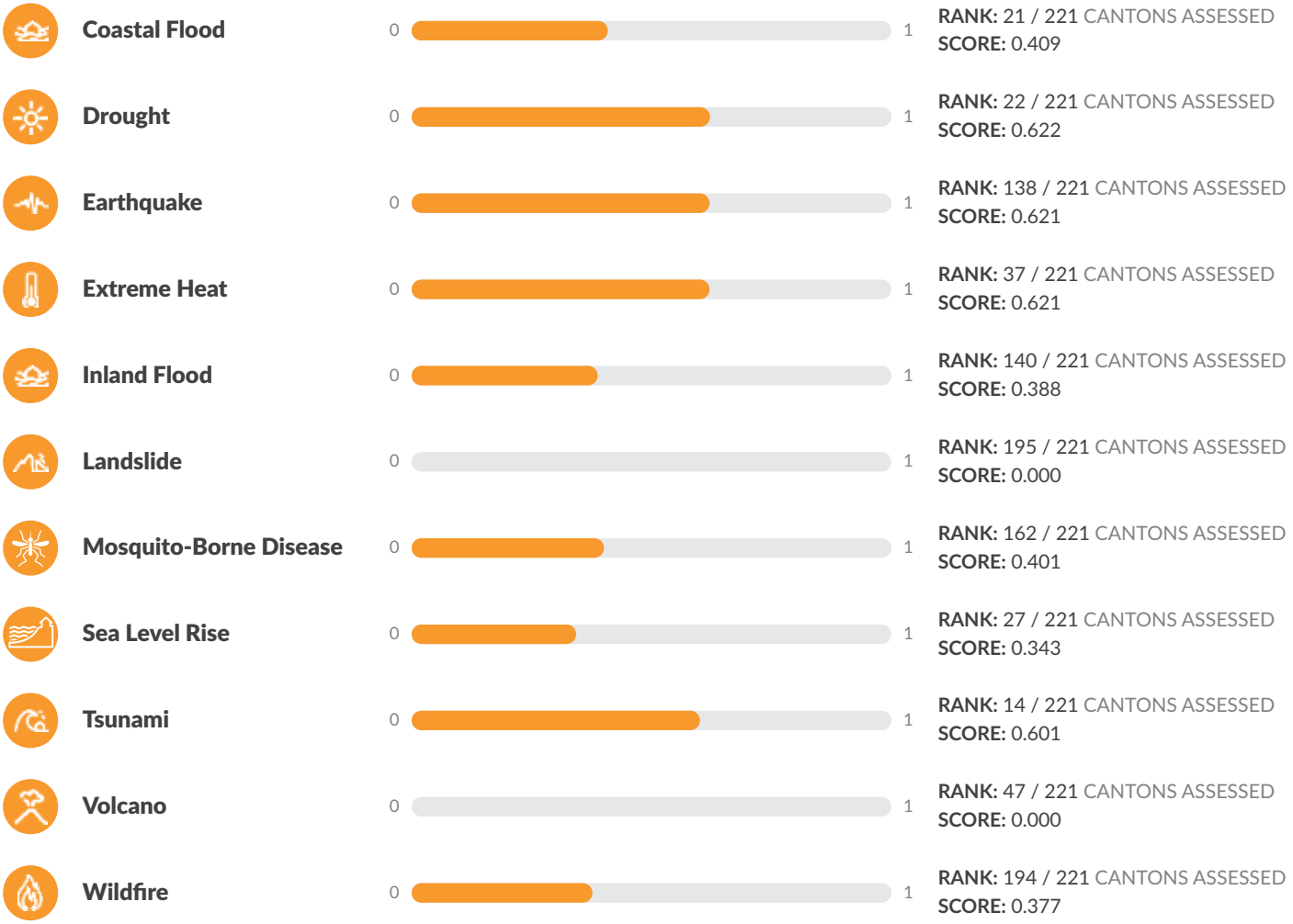
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

HAZARD-SPECIFIC RISK (HSR)

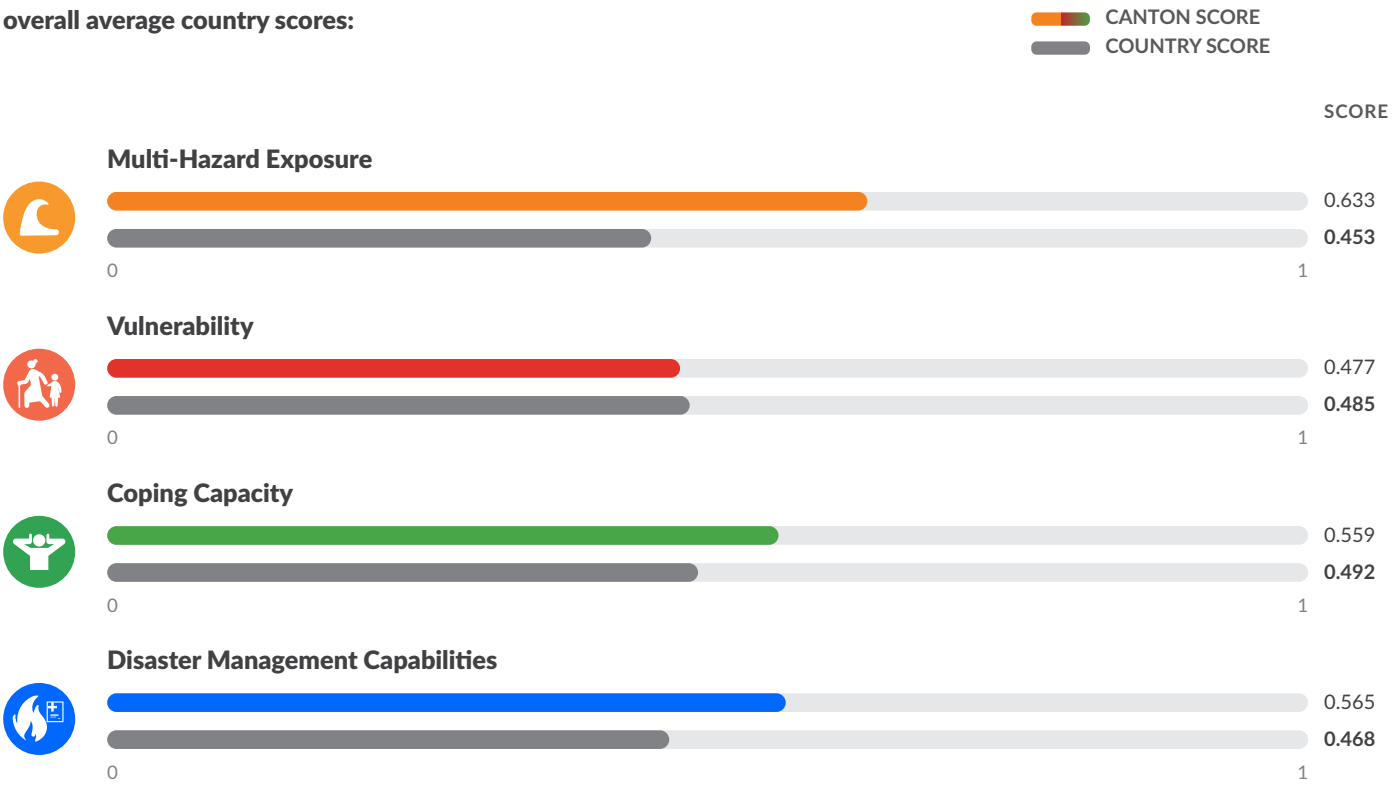


MULTI-HAZARD RISK (MHR)

RANKED
109 / 221
CANTONS ASSESSED
SCORE: 0.497

Playas's score and ranking are due to Very High Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PORTOVELO

NDPBA SUBNATIONAL PROFILE

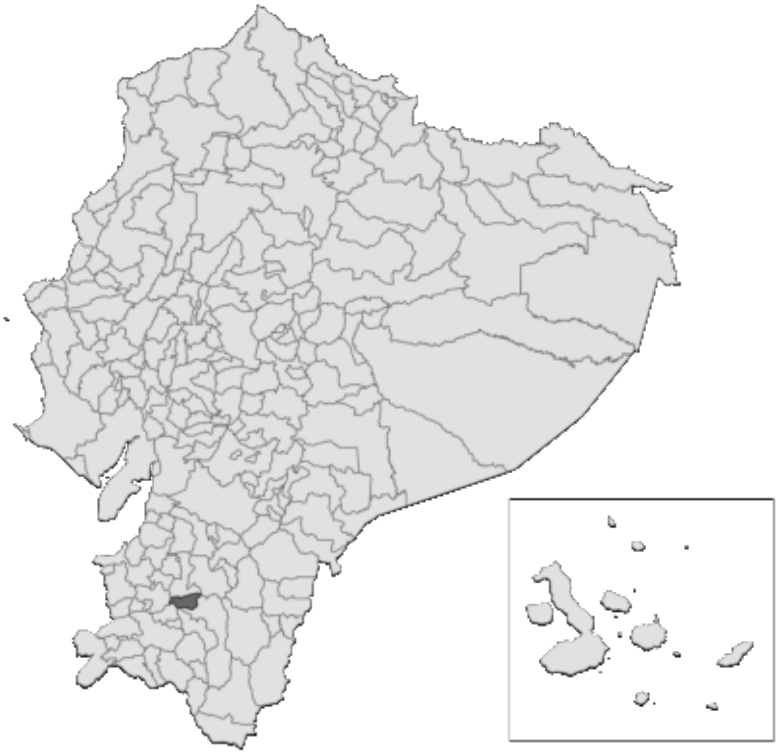
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PORTOVELO

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.424 • RANK: 184/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.418 • RANK: 172/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.573 • RANK: 46/221 CANTONS ASSESSED

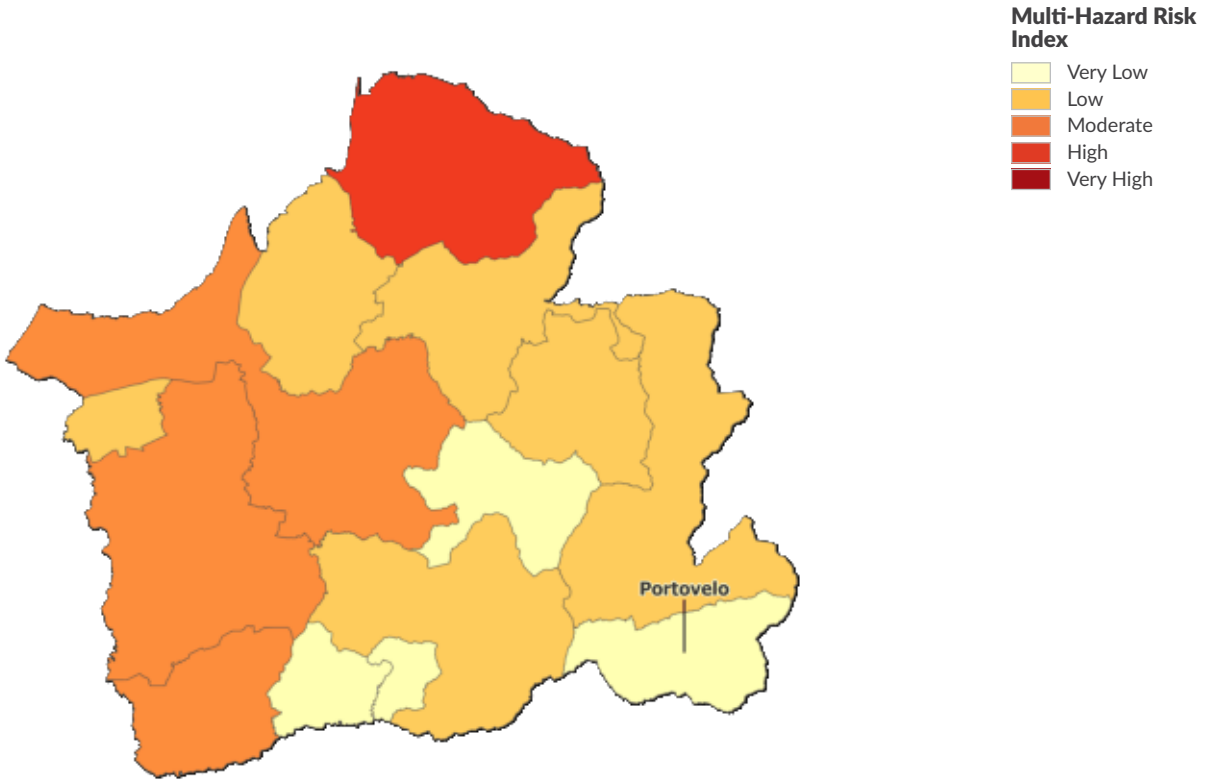
Coping Capacity (CC) - High
SCORE: 0.565 • RANK: 57/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.416 • RANK: 126/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.572 • RANK: 46/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

PORTOVELO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	0.435
Portovelo	**0.424**
Balsas	0.420
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 126 / 221 CANTONS ASSESSED
SCORE: 0.416



MHE
0.416

Raw MHE
0.365

Relative MHE
0.468

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
50%
6,638 people exposed
2,095 structures exposed (38%)
Critical Infrastructure Exposed: 7%

Earthquake
100%
13,251 people exposed
5,552 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
4%
474 people exposed
211 structures exposed (4%)
Critical Infrastructure Exposed: 4%

Landslide
95%
12,632 people exposed
5,218 structures exposed (94%)
Critical Infrastructure Exposed: 95%

Mosquito-Borne Disease
97%
12,916 people exposed
5,234 structures exposed (94%)
Critical Infrastructure Exposed: 92%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
13,251 people exposed
5,552 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 172 / 221 CANTONS ASSESSED **SCORE: 0.418**

Vulnerability in Portovelo is primarily driven by Disaster Impacts and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.325

- **10.5** Average Years of Schooling
- **43.9%** Population (age 24 and over) with General Basic Education Schooling
- **2.8%** Population (age 24 and over) with No Schooling
- **2.3%** Adult Illiteracy Rate
- **35.3%** Households with No Internet Access
- **61.8%** Households with No Access to Television
- **70.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.263

- **89.4%** Homes with Access to Public Water Source
- **77.5%** Homes Connected to the Public Sewage System
- **12.6%** Homes without Piped Water
- **3.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.370

- **54** Age Dependency Ratio
- **11.1%** Unemployment Rate
- **31.2%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.440

- **3.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.531

- **0.5** Female to Male Labor Ratio (distance from parity)
- **51.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **85.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **44.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.487

- **8.1%** Prevalence of Disability (among persons age 5 and over)
- **5** Perinatal Mortality Rate (per 1,000 births)
- **6.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.421

- **13.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **30** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.608

55
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

41
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

139
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.348

8.9%
Homes with Exterior Walls in Poor Condition

0.9%
Homes with Inadequate Materials Used in Outer Walls

11.5%
Homes with Roofs in Poor Condition

79.8%
Households with No Access to Vehicle for Private Use

6.9%
Household Overcrowding

Population Pressures

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.454

47.7
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

23.6
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.563

0.3
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 57 / 221 CANTONS ASSESSED **SCORE: 0.565**

Portovelo exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.578

59.8%
Labor Force Participation

143,593
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.305

0%
Protected Area (% of land area)

-3,199.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.557

83.4%
Voter Participation

89.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.646

Communications Capacity

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.735

12.9%
Household Access to Fixed Phones

92.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.838

99.1%
Homes Served by the Public Electricity Network

87%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.585

15.5
Nurses and Midwives per 10,000 persons

29.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.425

38.8
Average Distance to Airport (km)

57.3
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 46 / 221 CANTONS ASSESSED **SCORE: 0.572**

Portovelo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.450

1.2	6.6%	0	52.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.694

5.3	4.2	1.6	3.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 46 / 221 CANTONS ASSESSED
SCORE: 0.573

Portovelo's score and ranking are due to Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Disaster Impacts

Mass Care Support

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

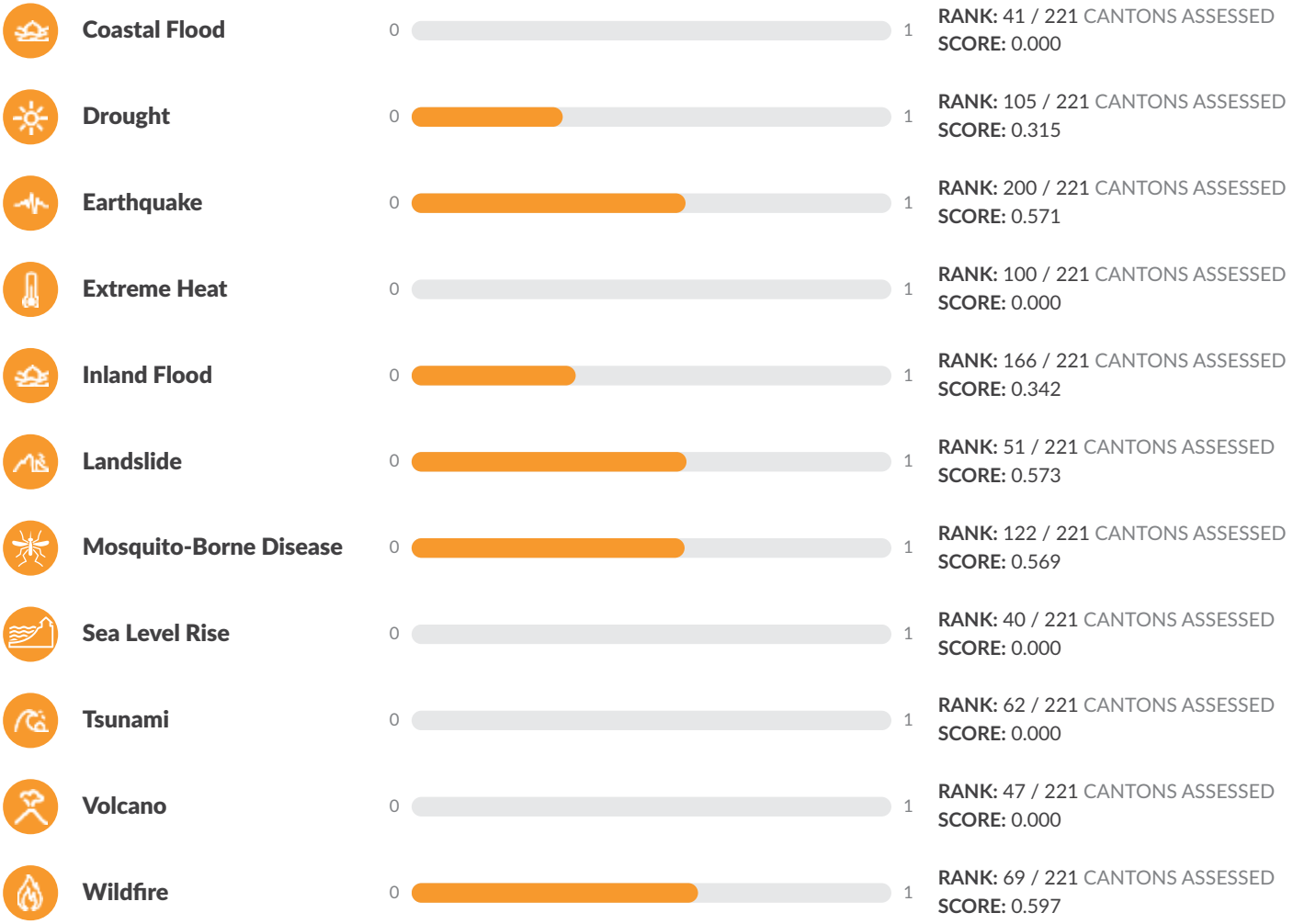
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

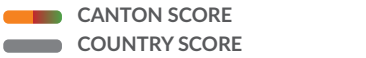


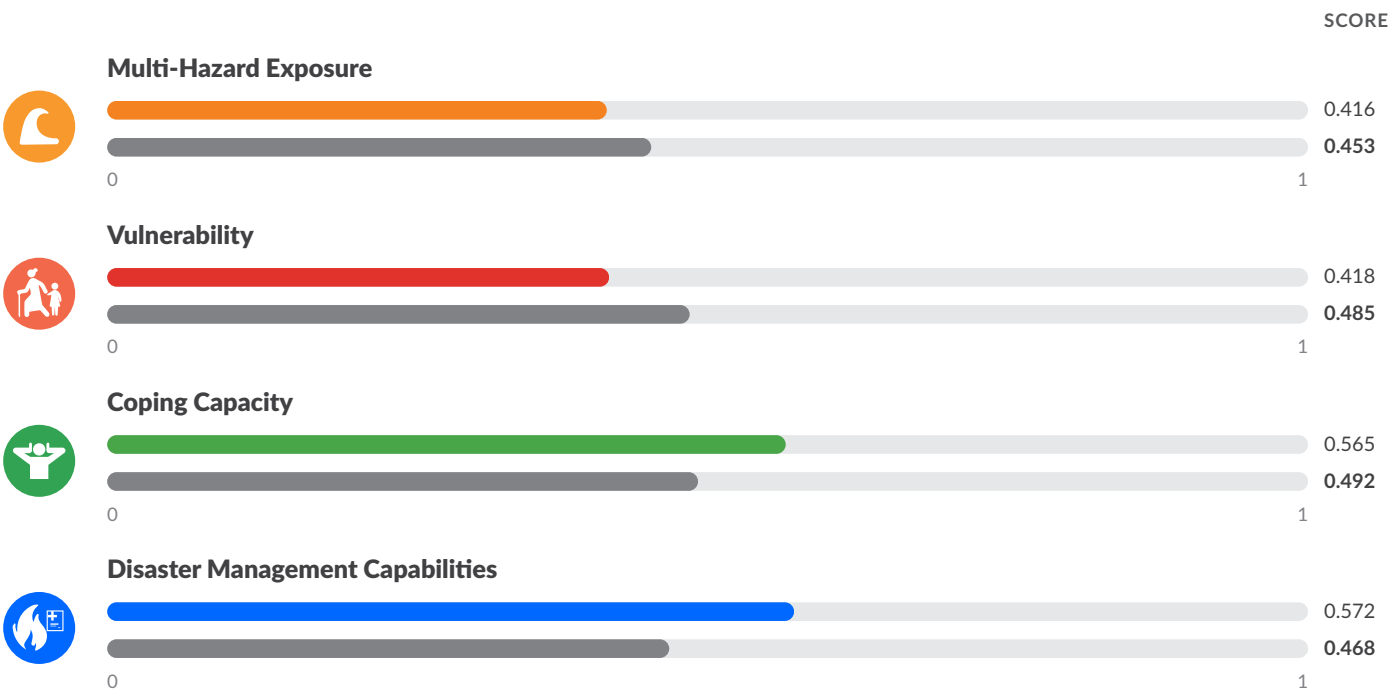
MULTI-HAZARD RISK (MHR)

RANKED
184 / 221
CANTONS ASSESSED
SCORE: 0.424

Portovelo's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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NDPBA SUBNATIONAL PROFILE

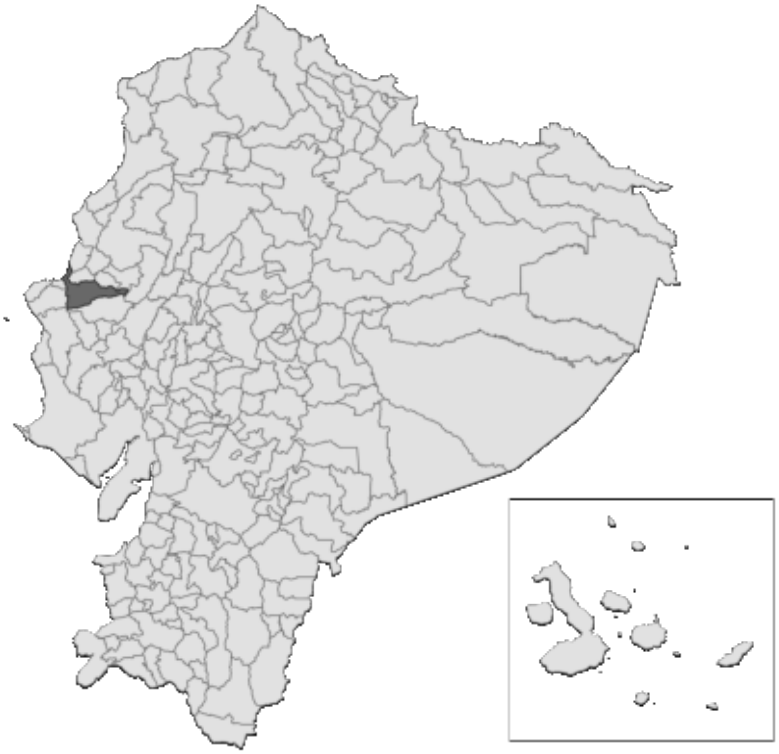
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PORTOVIEJO

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.498 • RANK: 108/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.459 • RANK: 140/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.607 • RANK: 24/221 CANTONS ASSESSED

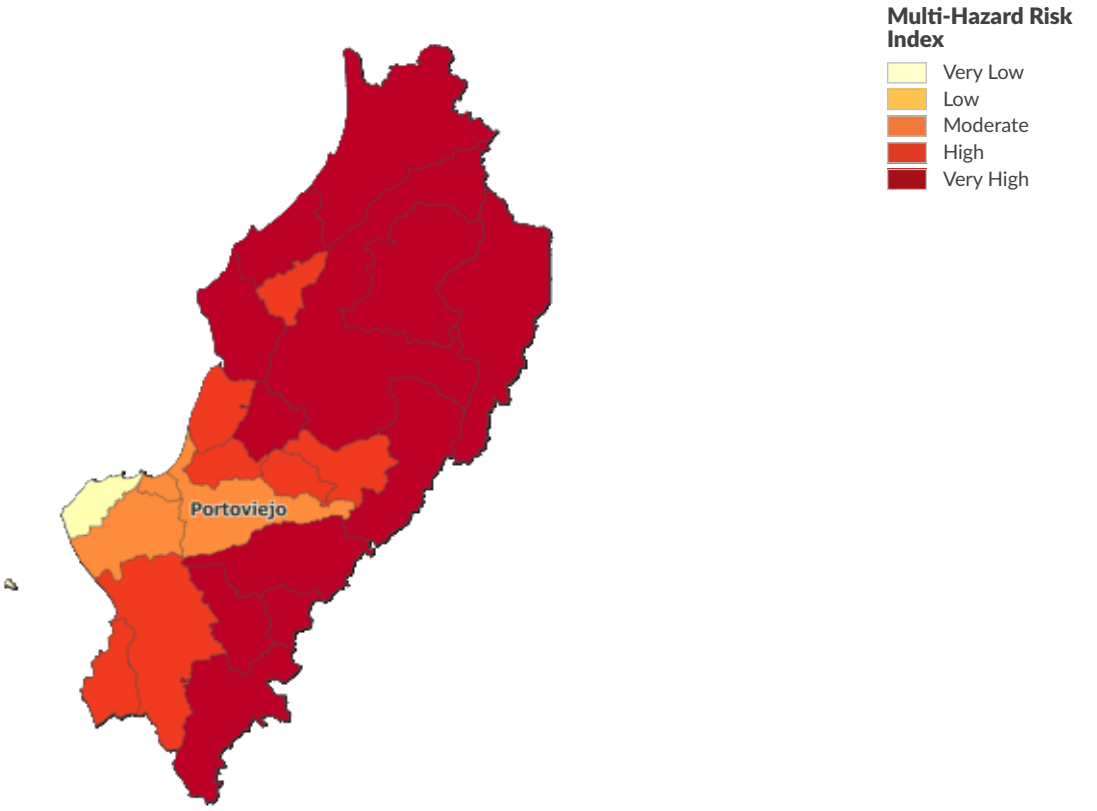
Coping Capacity (CC) - Very High
SCORE: 0.647 • RANK: 21/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.813 • RANK: 8/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.632 • RANK: 21/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

PORTOVIEJO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	**Portoviejo**	**0.498**
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 8 / 221 CANTONS ASSESSED
SCORE: 0.813



MHE
0.813

Raw MHE
0.961

Relative MHE
0.664

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **1,019** people exposed
- **704** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
96%
- **312,410** people exposed
- **122,682** structures exposed (94%)

Critical Infrastructure Exposed: 91%

Earthquake
100%
- **325,986** people exposed
- **130,246** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **325,623** people exposed
- **130,137** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
35%
- **112,957** people exposed
- **42,864** structures exposed (33%)

Critical Infrastructure Exposed: 23%

Landslide
12%
- **39,821** people exposed
- **20,016** structures exposed (15%)

Critical Infrastructure Exposed: 17%

Mosquito-Borne Disease
79%
- **257,151** people exposed
- **107,055** structures exposed (82%)

Critical Infrastructure Exposed: 93%

Sea Level Rise
<1%
- **317** people exposed
- **148** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
5%
- **15,158** people exposed
- **9,247** structures exposed (7%)

Critical Infrastructure Exposed: 4%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
26%
- **84,282** people exposed
- **39,917** structures exposed (31%)

Critical Infrastructure Exposed: 33%

VULNERABILITY (V)

RANK: 140 / 221 CANTONS ASSESSED **SCORE: 0.459**

Vulnerability in Portoviejo is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.342

- **11.9** Average Years of Schooling
- **32.9%** Population (age 24 and over) with General Basic Education Schooling
- **4.4%** Population (age 24 and over) with No Schooling
- **3.8%** Adult Illiteracy Rate
- **41.8%** Households with No Internet Access
- **75.7%** Households with No Access to Television
- **63.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.425

- **77.1%** Homes with Access to Public Water Source
- **61.6%** Homes Connected to the Public Sewage System
- **29.6%** Homes without Piped Water
- **3.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.406

- **49.1** Age Dependency Ratio
- **18.2%** Unemployment Rate
- **43.2%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.496

- **4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.389

- **0.4** Female to Male Labor Ratio (distance from parity)
- **37.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **31.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **44.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.476

- **8.4%** Prevalence of Disability (among persons age 5 and over)
- **3.6** Perinatal Mortality Rate (per 1,000 births)
- **7.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.436

- **8.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **17.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.516

96
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

19
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

34
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.455

15.2%
Homes with Exterior Walls in Poor Condition

14.7%
Homes with Inadequate Materials Used in Outer Walls

15.5%
Homes with Roofs in Poor Condition

73.2%
Households with No Access to Vehicle for Private Use

5.6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.530

337.6
Population Density (persons per sq km)

1.1%
Average Annual Population Change (2010-2022)

17.7
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.641

0.9
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 21 / 221 CANTONS ASSESSED **SCORE: 0.647**

Portoviejo exhibits weaker Coping Capacity in the areas of Governance and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.739

60.3%
Labor Force Participation

1,201,674
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.194

0%
Protected Area (% of land area)

-10,895.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.649

85.2%
Voter Participation

94.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.704

Communications Capacity

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.690

17.9%
Household Access to Fixed Phones

88.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.688

98.3%
Homes Served by the Public Electricity Network

78.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.740

27.2
Nurses and Midwives per 10,000 persons

40.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.698

10.3
Average Distance to Airport (km)

36.3
Average Distance to Sea or River Port (km)

3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 21 / 221 CANTONS ASSESSED **SCORE: 0.632**

Portoviejo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.622

1.8	1.4%	2.8	24.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.643

7.3	4.2	1.9	4.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 24 / 221 CANTONS ASSESSED
SCORE: 0.607

Portoviejo's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Population Pressures

Vulnerable Health Status

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

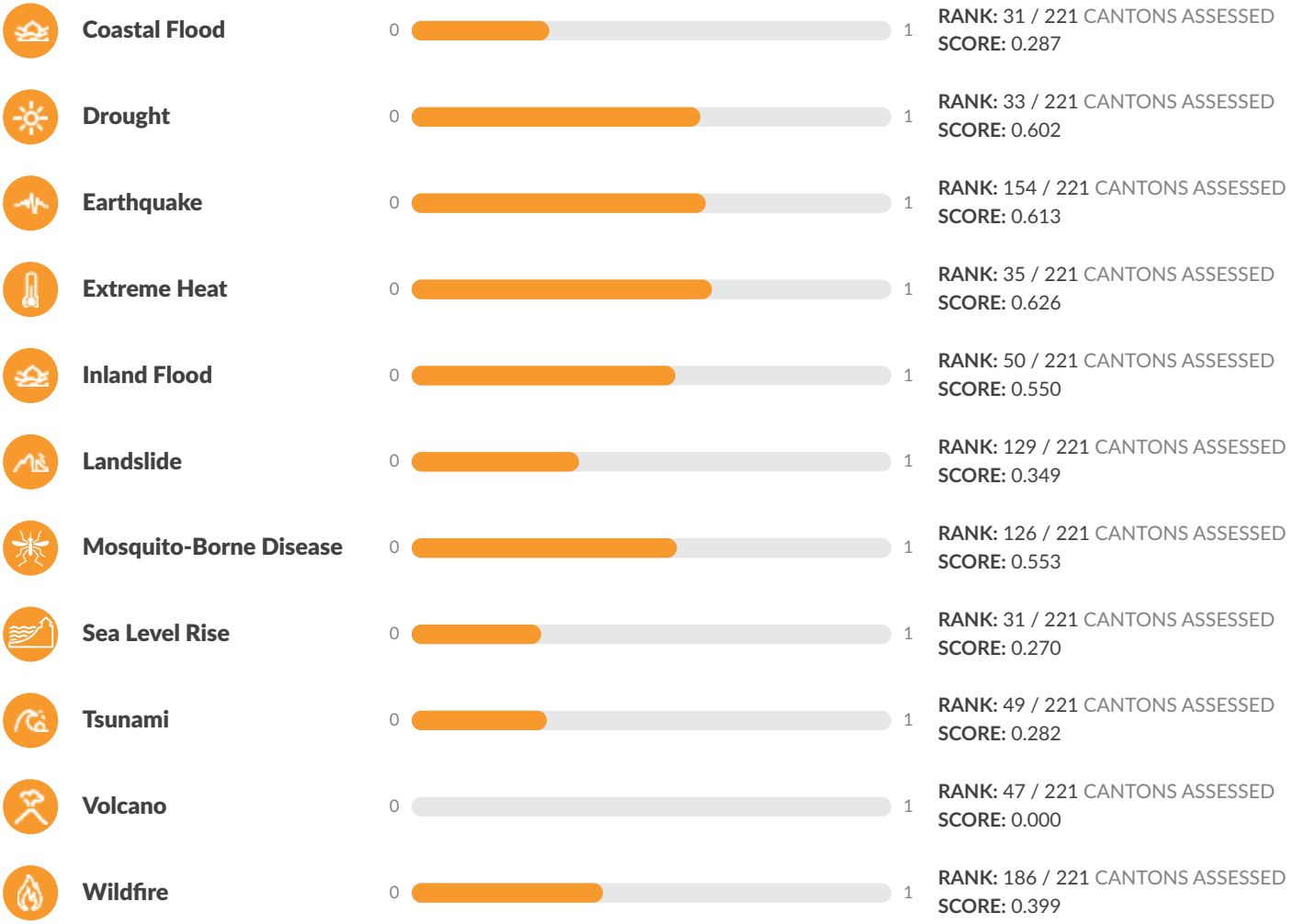
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

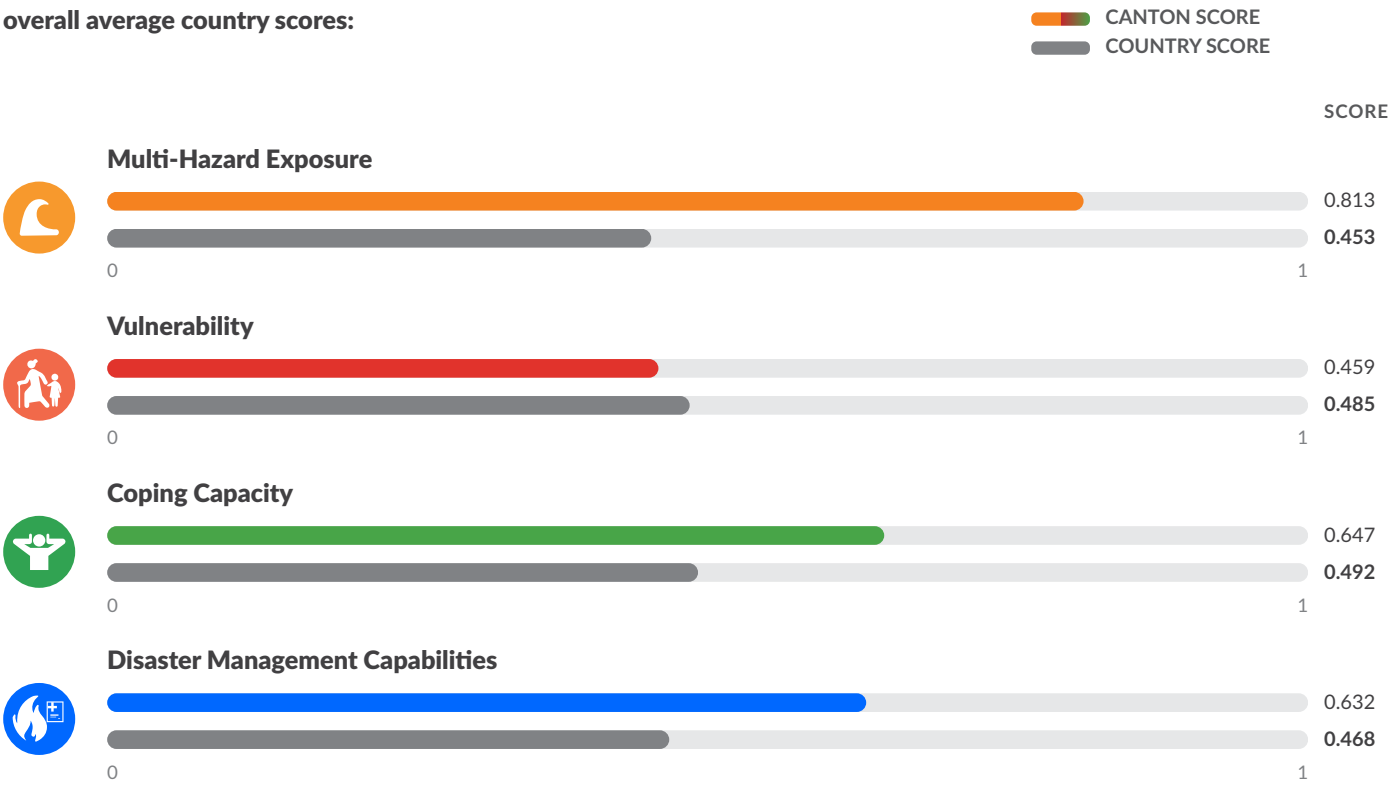


MULTI-HAZARD RISK (MHR)

RANKED
108 / 221
CANTONS ASSESSED
SCORE: 0.498

Portoviejo's score and ranking are due to Very High Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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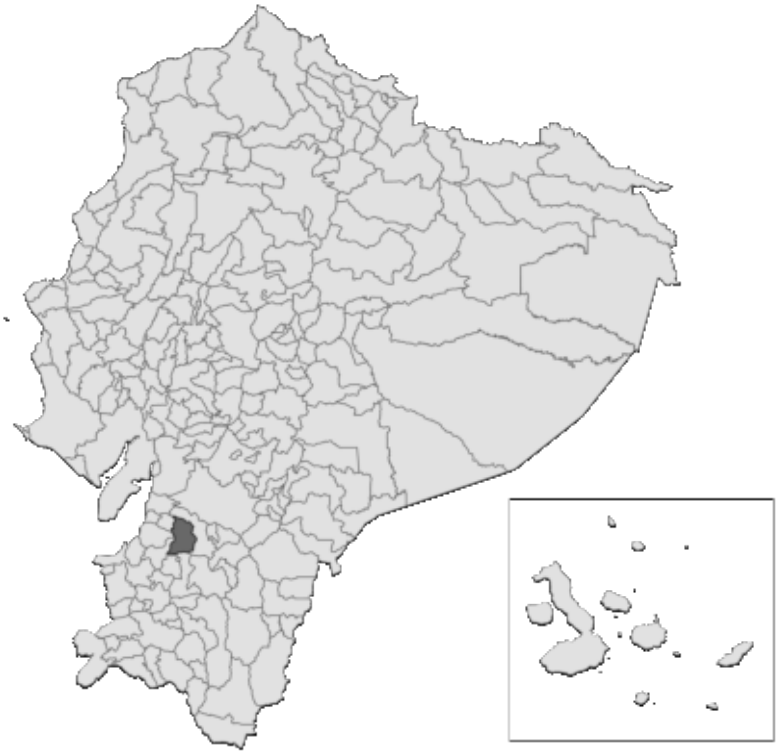
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PUCARÁ

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.539 • RANK: 62/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.558 • RANK: 48/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.379 • RANK: 199/221 CANTONS ASSESSED

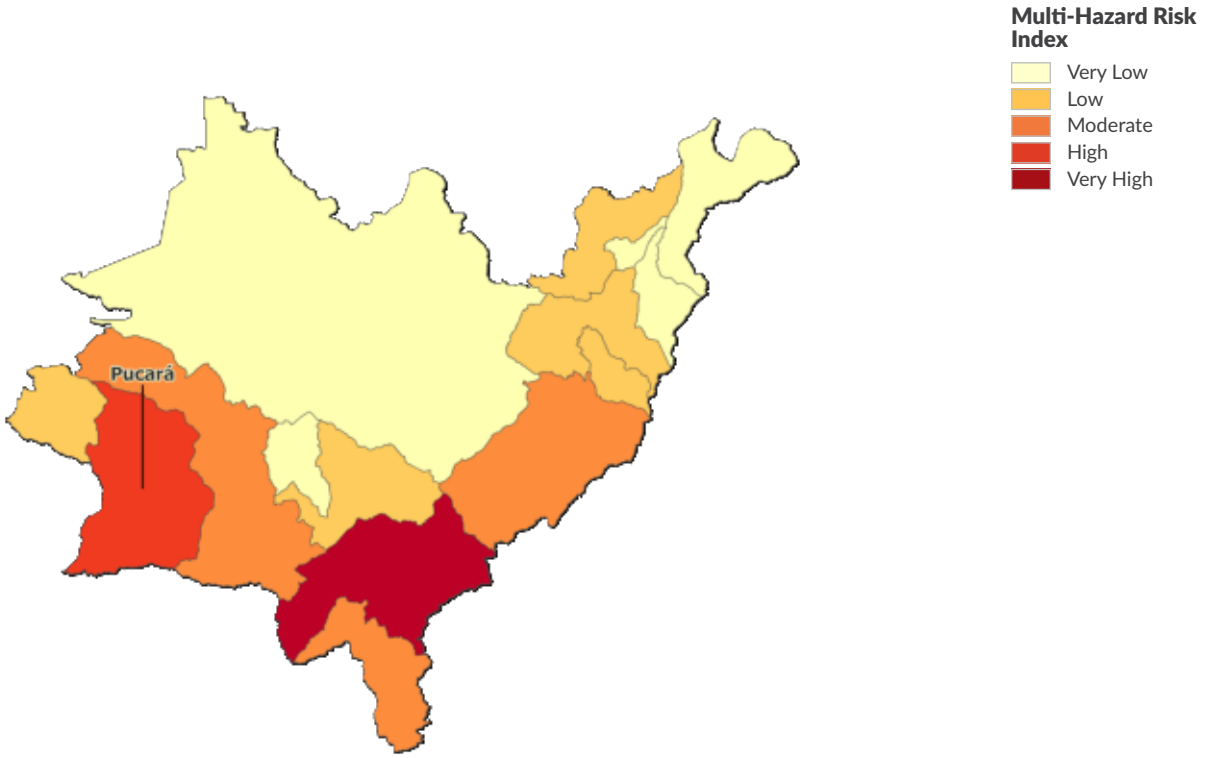
Coping Capacity (CC) - Very Low
SCORE: 0.332 • RANK: 210/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.293 • RANK: 178/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.365 • RANK: 183/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

PUCARÁ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	**0.539**
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 178 / 221 CANTONS ASSESSED
SCORE: 0.293



MHE
0.293

Raw MHE
0.343

Relative MHE
0.243

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
7%
1,013 people exposed
722 structures exposed (8%)
Critical Infrastructure Exposed: 2%

Earthquake
100%
13,552 people exposed
8,738 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
46 people exposed
32 structures exposed (<1%)
Critical Infrastructure Exposed: 2%

Landslide
90%
12,141 people exposed
7,916 structures exposed (91%)
Critical Infrastructure Exposed: 89%

Mosquito-Borne Disease
39%
5,245 people exposed
3,448 structures exposed (39%)
Critical Infrastructure Exposed: 56%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
70%
9,469 people exposed
6,092 structures exposed (70%)
Critical Infrastructure Exposed: 80%

VULNERABILITY (V)

RANK: 48 / 221 CANTONS ASSESSED **SCORE: 0.558**

Vulnerability in Pucará is primarily driven by Information Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.744

- **6.7** Average Years of Schooling
- **61.8%** Population (age 24 and over) with General Basic Education Schooling
- **13.7%** Population (age 24 and over) with No Schooling
- **12.1%** Adult Illiteracy Rate
- **45%** Households with No Internet Access
- **90.5%** Households with No Access to Television
- **87.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.628

- **78.4%** Homes with Access to Public Water Source
- **25.4%** Homes Connected to the Public Sewage System
- **40.2%** Homes without Piped Water
- **8.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.634

- **68.1** Age Dependency Ratio
- **18.1%** Unemployment Rate
- **64.5%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.455

- **3.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.431

- **0.6** Female to Male Labor Ratio (distance from parity)
- **20.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **50%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **33.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.509

- **12.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **17.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.223

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.566

84	24	29	44
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.687

23.5%	1.2%	34.8%	91.7%	13.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.361

15.2	-0.3	-2.2	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.489

0.2	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 210 / 221 CANTONS ASSESSED **SCORE: 0.332**

Pucará exhibits weaker Coping Capacity in the areas of Economic Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.229

43.6%
Labor Force Participation

28,450
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.262

0%
Protected Area (% of land area)

-6,108
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.335

74.7%
Voter Participation

77.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.454

Communications Capacity

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.448

5.6%
Household Access to Fixed Phones

83.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.558

94.8%
Homes Served by the Public Electricity Network

77.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.333

8.3
Nurses and Midwives per 10,000 persons

11.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.477

28
Average Distance to Airport (km)

53.5
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 183 / 221 CANTONS ASSESSED **SCORE: 0.365**

Pucará exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.302

7.5	5.5%	0	48.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.428

22.6	9.3	4.1	5.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 199 / 221 CANTONS ASSESSED
SCORE: 0.379

Pucará's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Information Access Vulnerability

Mass Care Support

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

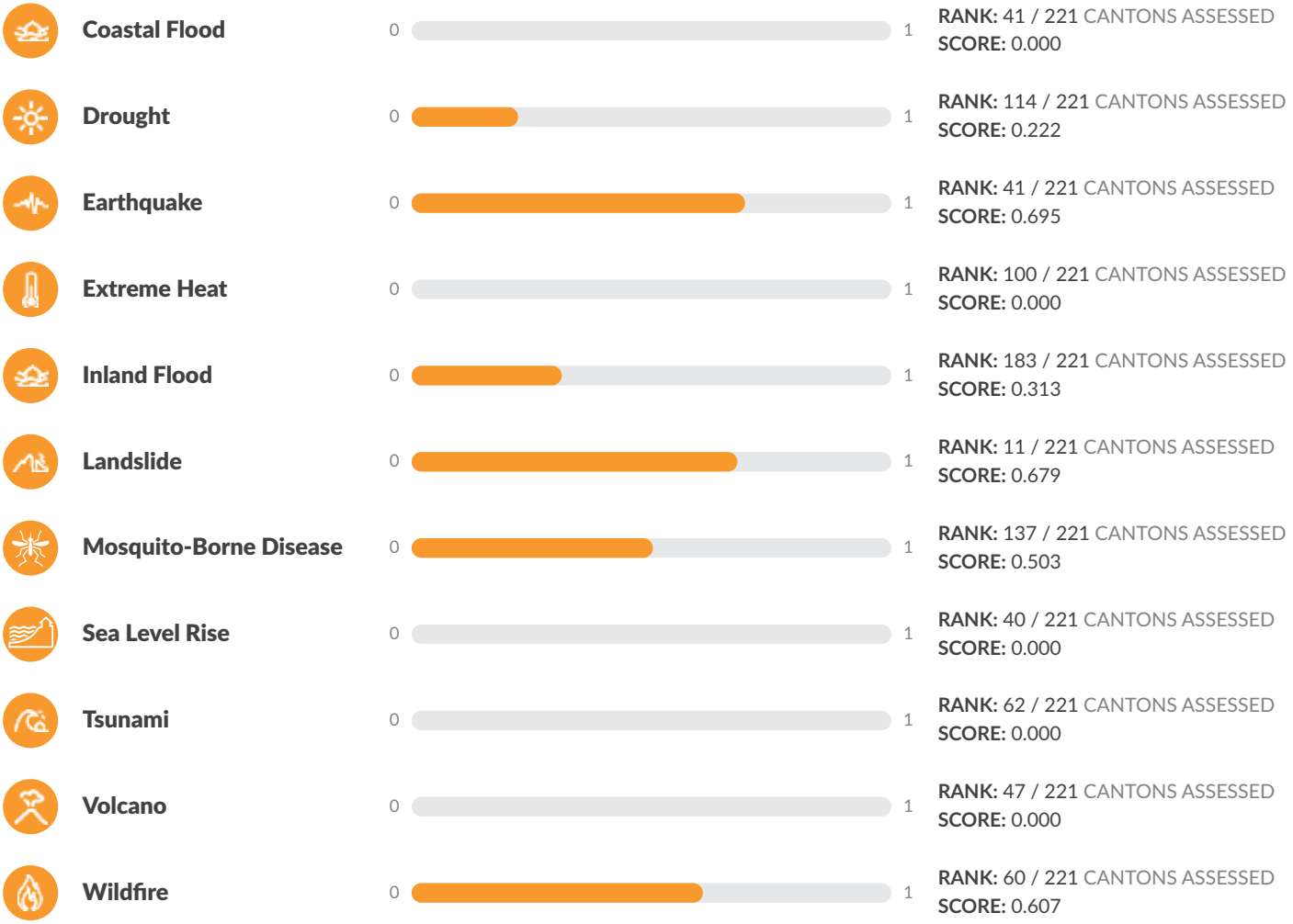
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

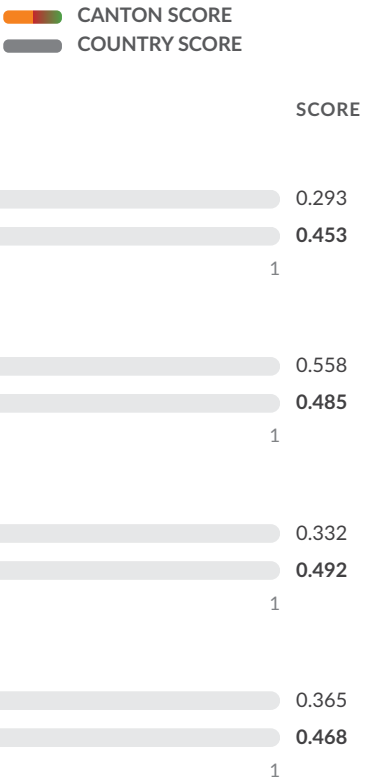


MULTI-HAZARD RISK (MHR)

RANKED
62 / 221
CANTONS ASSESSED
SCORE: 0.539

Pucará's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.530 • RANK: 74/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.485 • RANK: 110/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.575 • RANK: 52/221 CANTONS ASSESSED

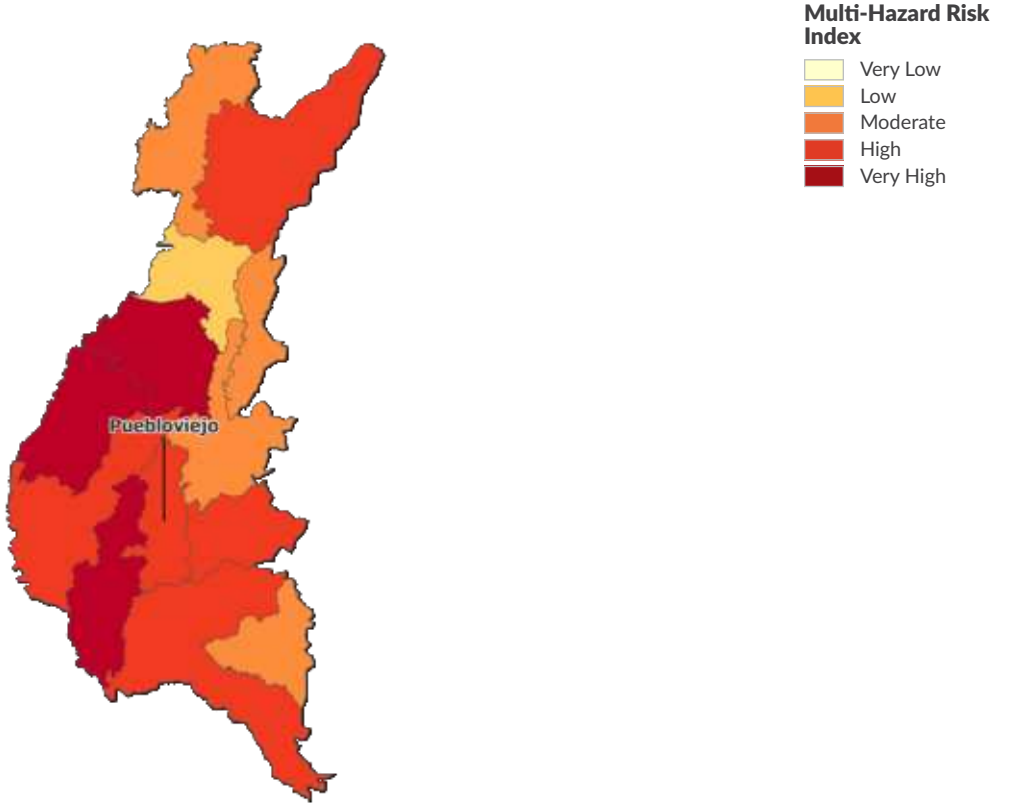
Vulnerability (V) - High
SCORE: 0.554 • RANK: 52/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.550 • RANK: 71/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.458 • RANK: 110/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

PUEBLOVIEJO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	**0.530**
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 52 / 221 CANTONS ASSESSED
SCORE: 0.575



MHE
0.575

Raw MHE
0.562

Relative MHE
0.589

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
42,036 people exposed
13,545 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
99%
41,743 people exposed
13,482 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
51%
21,409 people exposed
5,123 structures exposed (38%)
Critical Infrastructure Exposed: 36%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
42,036 people exposed
13,531 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
83%
34,837 people exposed
10,440 structures exposed (77%)
Critical Infrastructure Exposed: 79%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
33%
13,954 people exposed
4,652 structures exposed (34%)
Critical Infrastructure Exposed: 49%

VULNERABILITY (V)

RANK: 52 / 221 CANTONS ASSESSED **SCORE: 0.554**

Vulnerability in Puebloviejo is primarily driven by Marginalization and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.575

- **9.2** Average Years of Schooling
- **49.1%** Population (age 24 and over) with General Basic Education Schooling
- **7.2%** Population (age 24 and over) with No Schooling
- **6%** Adult Illiteracy Rate
- **65.7%** Households with No Internet Access
- **73.3%** Households with No Access to Television
- **89.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.632

- **63.7%** Homes with Access to Public Water Source
- **26.1%** Homes Connected to the Public Sewage System
- **43.5%** Homes without Piped Water
- **5.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.486

- **59** Age Dependency Ratio
- **11.8%** Unemployment Rate
- **63.8%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.703

- **8.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.712

- **0.6** Female to Male Labor Ratio (distance from parity)
- **61.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **84.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **67.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.532

- **8%** Prevalence of Disability (among persons age 5 and over)
- **12.5** Perinatal Mortality Rate (per 1,000 births)
- **8.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.383

- **29.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.493

23	21	28	67
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.645

18.3%	11.5%	21.1%	93.1%	12.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.532

122.6	1%	16.7	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.292

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 71 / 221 CANTONS ASSESSED **SCORE: 0.550**

Puebloviejo exhibits weaker Coping Capacity in the areas of Communications Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.493

51.6%
Labor Force Participation

252,600
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.765

55.6%
Protected Area (% of land area)

-1,882.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.599

90.7%
Voter Participation

73.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.487

Communications Capacity

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.346

2.9%
Household Access to Fixed Phones

82.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.426

94.7%
Homes Served by the Public Electricity Network

60.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.450

5.1
Nurses and Midwives per 10,000 persons

32.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.727

6.5
Average Distance to Airport (km)

11.6
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 110 / 221 CANTONS ASSESSED **SCORE: 0.458**

Puebloviejo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.361

3.1	1.6%	0.5	61.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.555

10.1	3.3	3.1	7.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 110 / 221 CANTONS ASSESSED
SCORE: 0.485

Puebloviejo's score and ranking are due to High Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Marginalization



Communications Capacity



Housing and Transportation Vulnerability



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.



Housing and Transportation Vulnerability

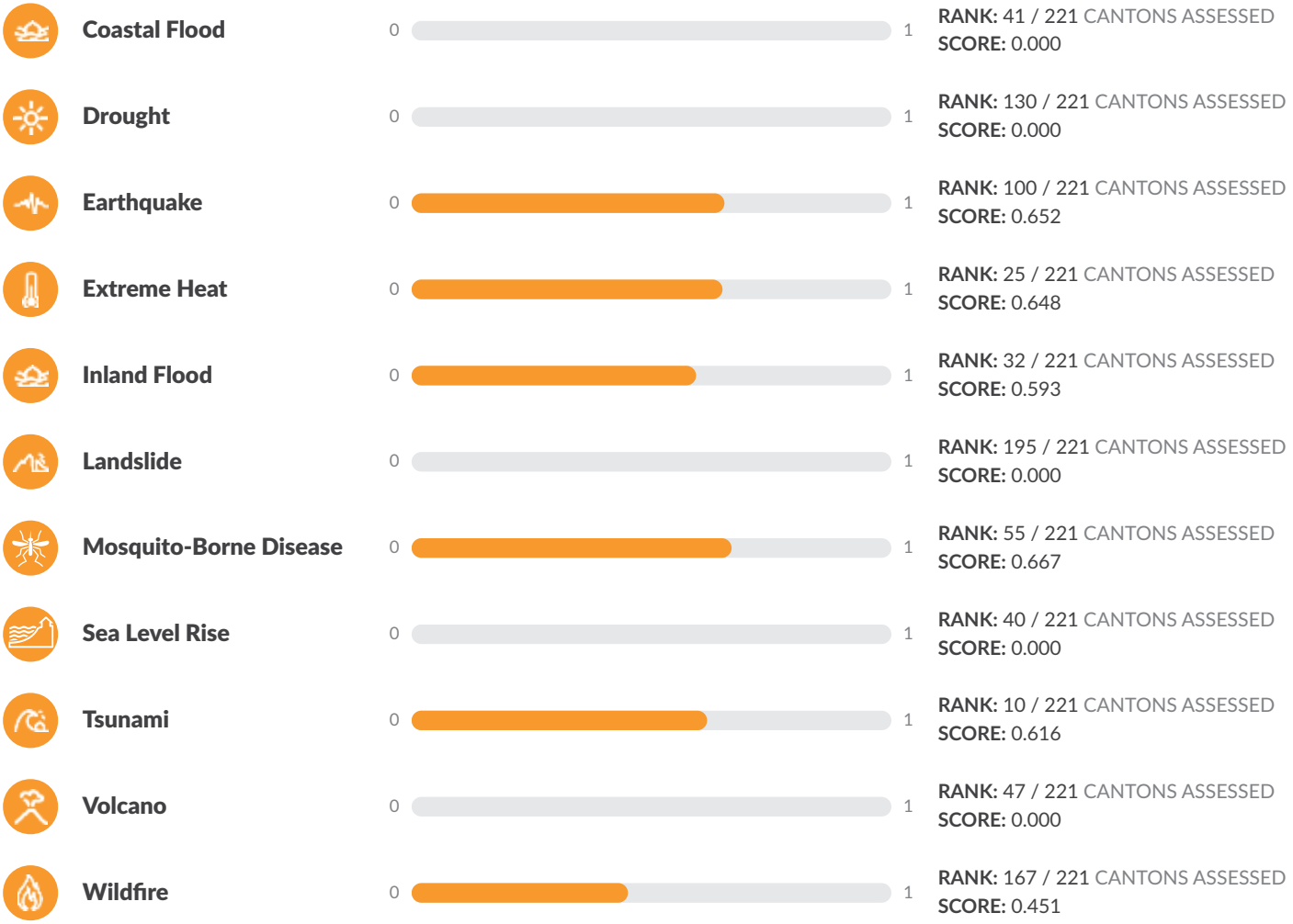
Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

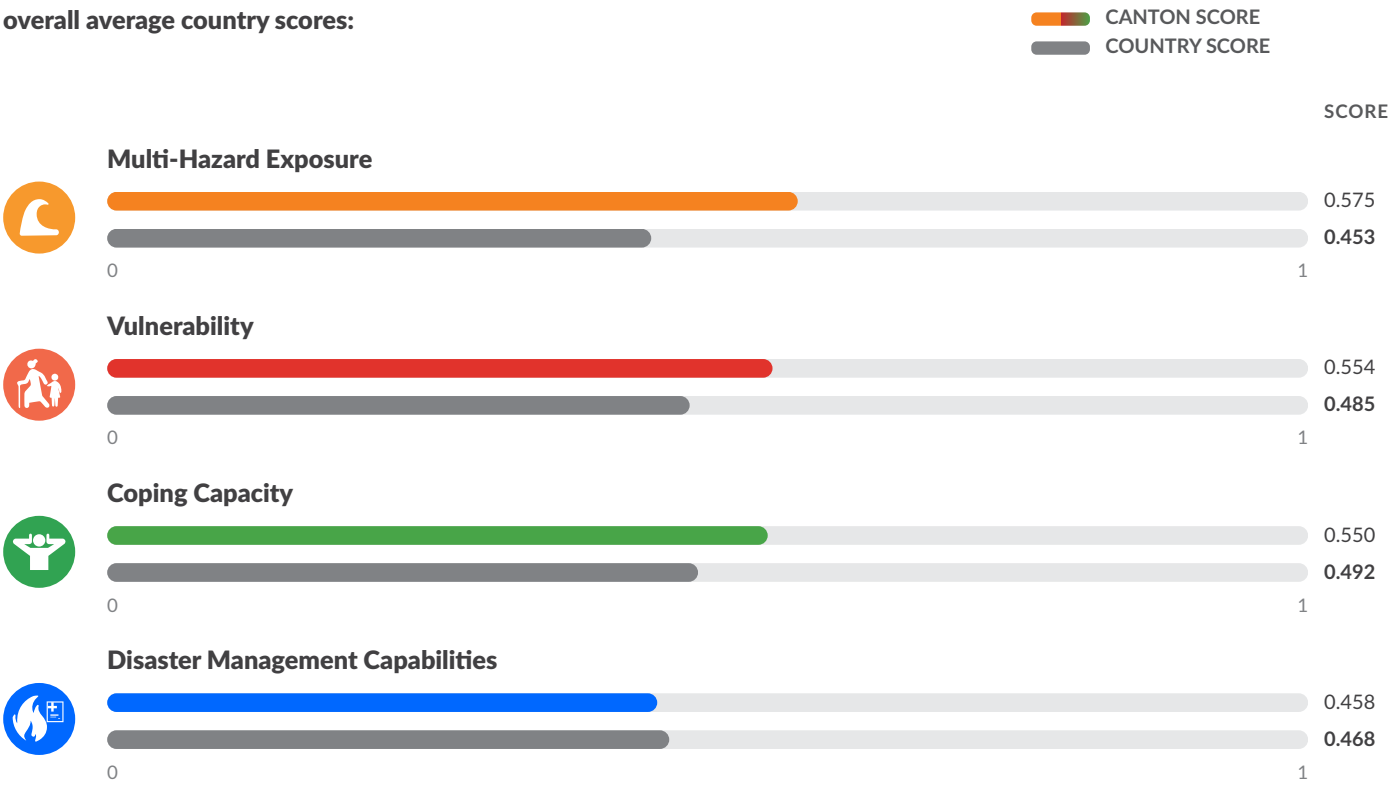


MULTI-HAZARD RISK (MHR)

RANKED
74 / 221
CANTONS ASSESSED
SCORE: 0.530

Puebloviejo's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PUERTO LÓPEZ

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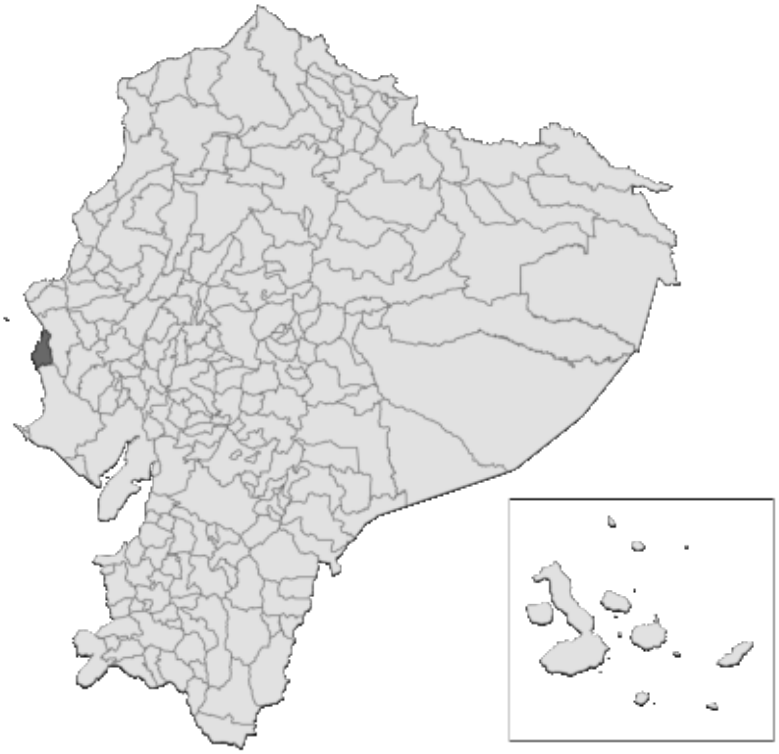
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PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.544 • RANK: 58/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.549 • RANK: 57/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.484 • RANK: 112/221 CANTONS ASSESSED

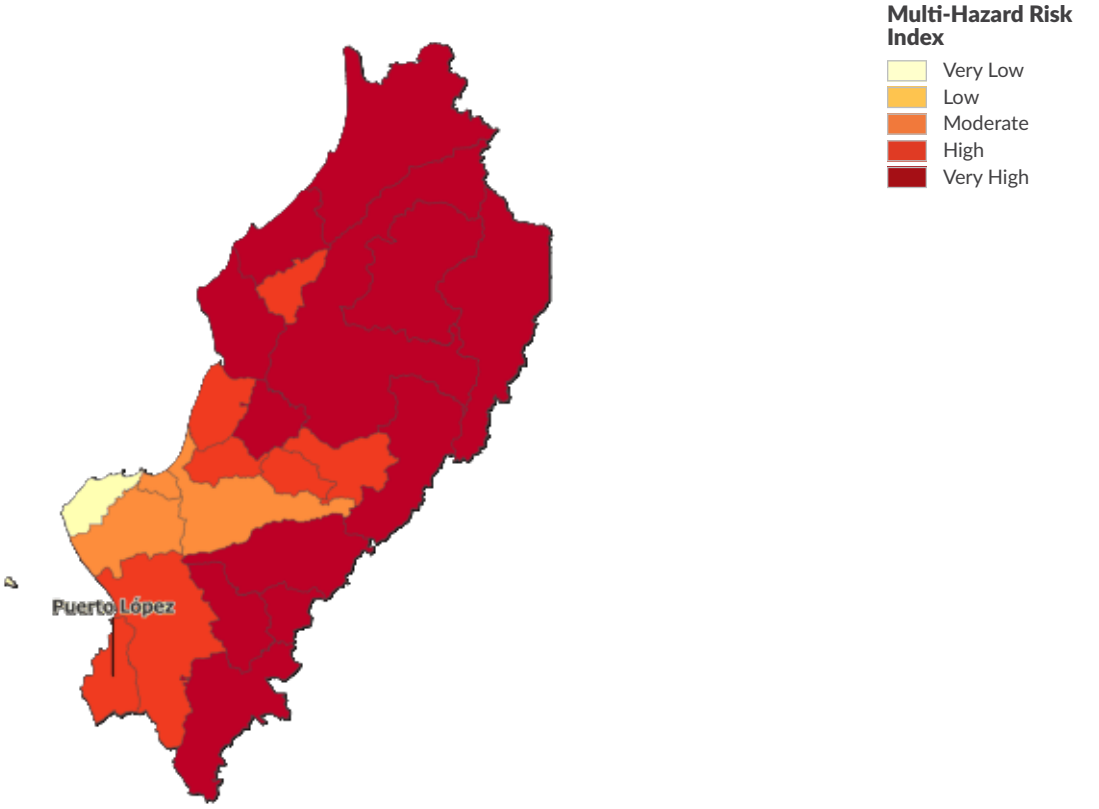
Coping Capacity (CC) - High
SCORE: 0.531 • RANK: 79/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.630 • RANK: 38/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.472 • RANK: 98/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

PUERTO LÓPEZ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	**Puerto López**	**0.544**		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 38 / 221 CANTONS ASSESSED
SCORE: 0.630



MHE
0.630

Raw MHE
0.511

Relative MHE
0.748

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **201** people exposed
- **342** structures exposed (3%)
- **Critical Infrastructure Exposed:** <1%

Drought
100%
- **23,920** people exposed
- **9,930** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **23,920** people exposed
- **9,930** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
94%
- **22,440** people exposed
- **9,077** structures exposed (91%)
- **Critical Infrastructure Exposed:** 84%

Inland Flood
16%
- **3,809** people exposed
- **1,525** structures exposed (15%)
- **Critical Infrastructure Exposed:** 14%

Landslide
22%
- **5,375** people exposed
- **2,341** structures exposed (24%)
- **Critical Infrastructure Exposed:** 30%

Mosquito-Borne Disease
78%
- **18,743** people exposed
- **7,629** structures exposed (77%)
- **Critical Infrastructure Exposed:** 79%

Sea Level Rise
<1%
- **163** people exposed
- **192** structures exposed (2%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
60%
- **14,297** people exposed
- **6,066** structures exposed (61%)
- **Critical Infrastructure Exposed:** 57%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
63%
- **15,108** people exposed
- **6,682** structures exposed (67%)
- **Critical Infrastructure Exposed:** 76%

VULNERABILITY (V)

RANK: 57 / 221 CANTONS ASSESSED **SCORE: 0.549**

Vulnerability in Puerto López is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.514

- **9.4** Average Years of Schooling
- **44.9%** Population (age 24 and over) with General Basic Education Schooling
- **7.3%** Population (age 24 and over) with No Schooling
- **7%** Adult Illiteracy Rate
- **57.9%** Households with No Internet Access
- **60.4%** Households with No Access to Television
- **87.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.785

- **73.5%** Homes with Access to Public Water Source
- **4.9%** Homes Connected to the Public Sewage System
- **62%** Homes without Piped Water
- **11.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.526

- **55.5** Age Dependency Ratio
- **17.6%** Unemployment Rate
- **73%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.360

- **2.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.674

- **0.6** Female to Male Labor Ratio (distance from parity)
- **44.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **81.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **76.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.499

- **7.7%** Prevalence of Disability (among persons age 5 and over)
- **2.9** Perinatal Mortality Rate (per 1,000 births)
- **10.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.555

- **17.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **7.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **8.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.433

29	16	38	15
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.605

17%	11.3%	19.7%	91.8%	10.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.531

59.7	2%	14	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.292

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 79 / 221 CANTONS ASSESSED **SCORE: 0.531**

Puerto López exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.382

53.1%
Labor Force Participation

40,485
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.686

59.7%
Protected Area (% of land area)

-7,667.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.790

92.4%
Voter Participation

92.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.368

Communications Capacity

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.390

2.5%
Household Access to Fixed Phones

87.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.422

96.1%
Homes Served by the Public Electricity Network

53.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.235

5.9
Nurses and Midwives per 10,000 persons

8.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.424

33.2
Average Distance to Airport (km)

66.5
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 98 / 221 CANTONS ASSESSED **SCORE: 0.472**

Puerto López exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.453

1.3	9.1%	0	56.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.490

27.9	6.1	2.2	6.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 112 / 221 CANTONS ASSESSED
SCORE: 0.484

Puerto López's score and ranking are due to High Vulnerability combined with High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Healthcare Capacity

Marginalization

Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

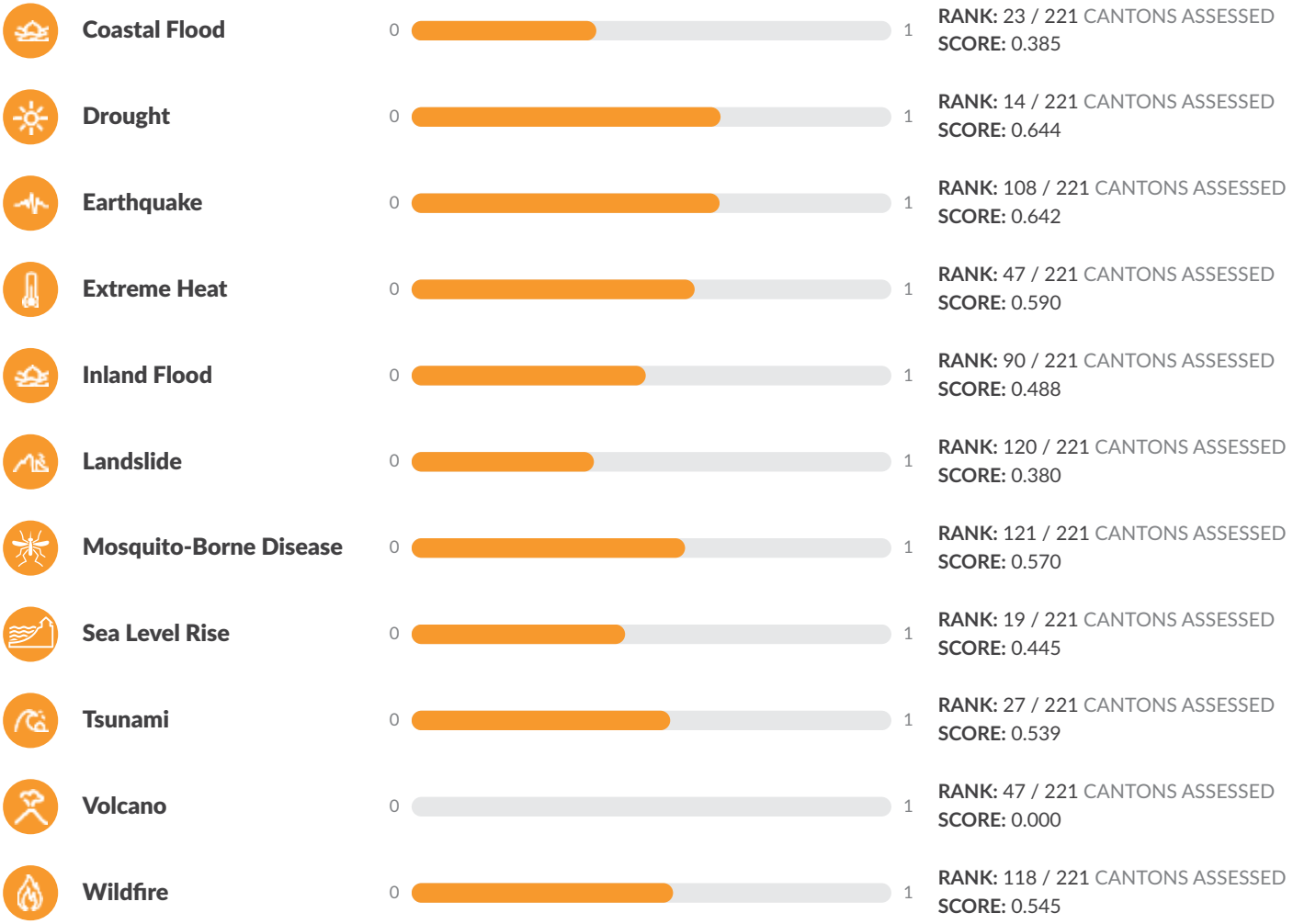
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)

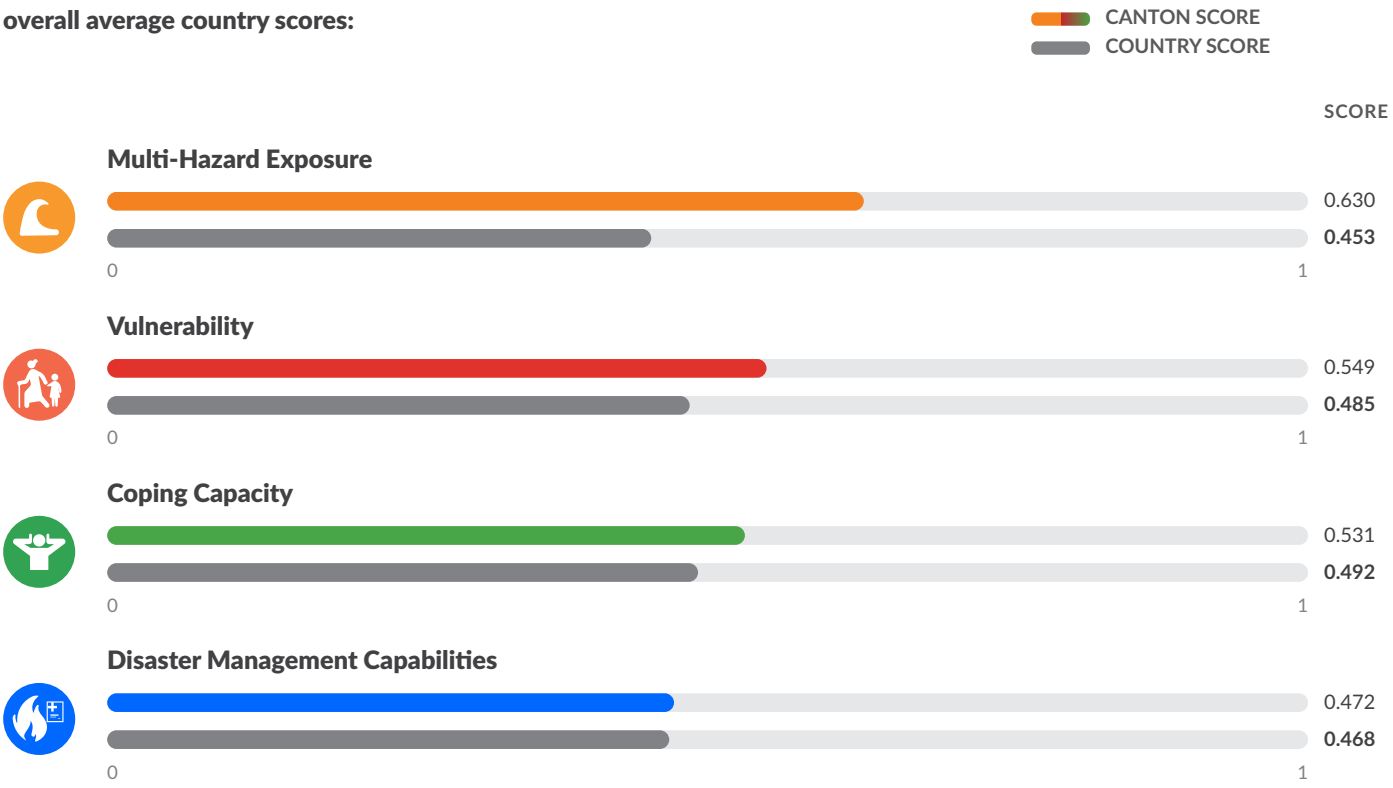


MULTI-HAZARD RISK (MHR)

RANKED
58 / 221
CANTONS ASSESSED
SCORE: 0.544

Puerto López's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PUERTO QUITO

NDPBA SUBNATIONAL PROFILE

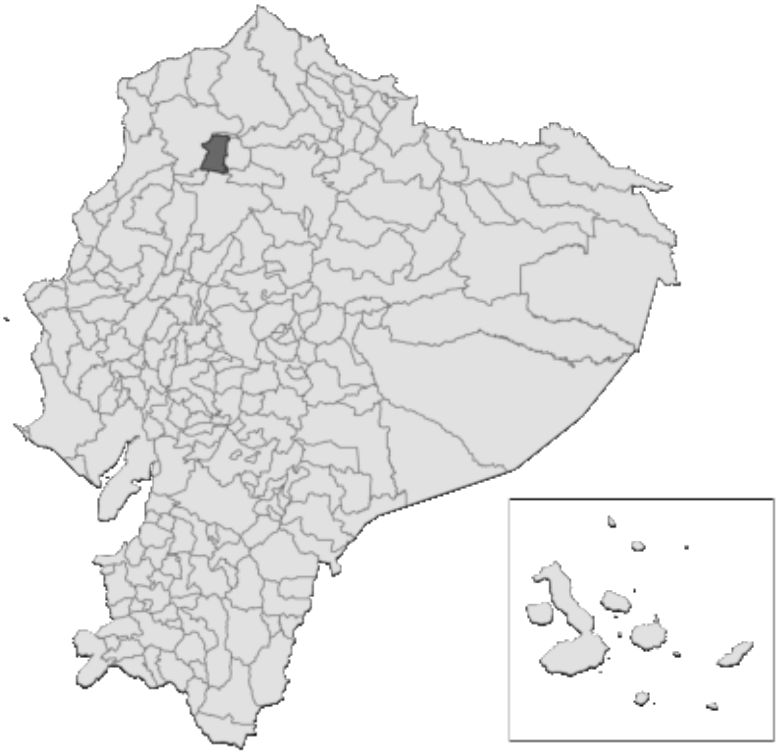
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PUERTO QUITO

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.504 • RANK: 98/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.447 • RANK: 148/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.355 • RANK: 148/221 CANTONS ASSESSED

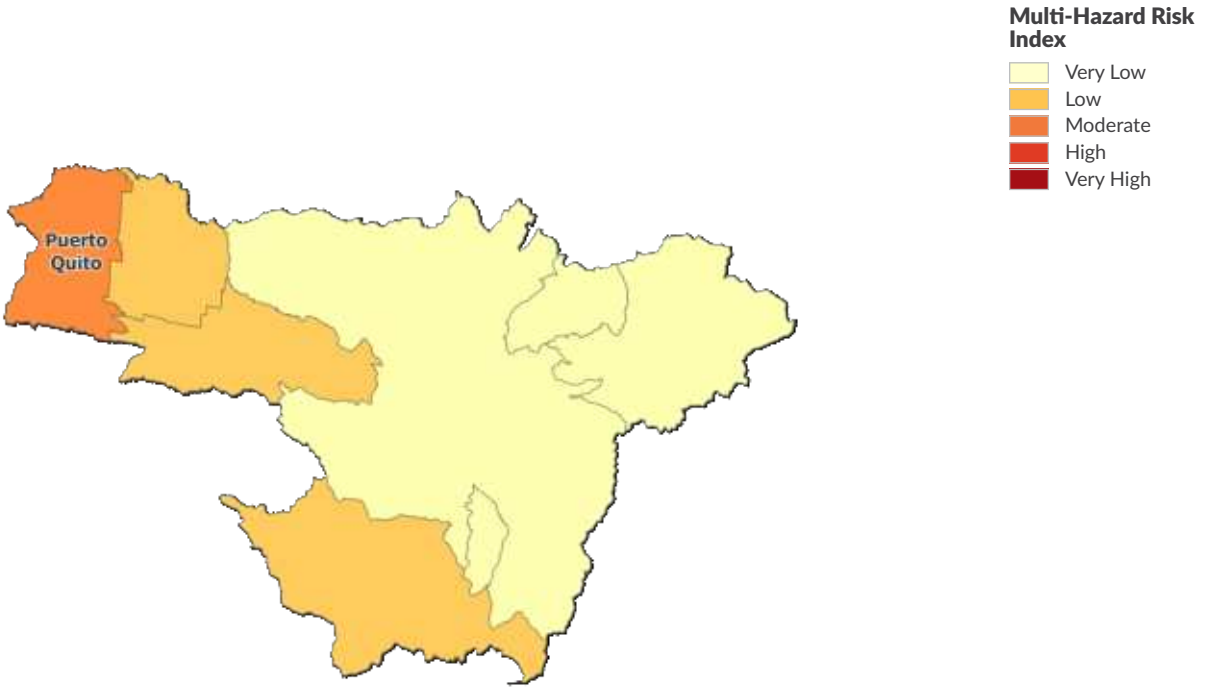
Vulnerability (V) - Moderate
SCORE: 0.484 • RANK: 115/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.441 • RANK: 152/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.384 • RANK: 166/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

PUERTO QUITO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	**0.504**
San Miguel De Los Bancos	0.463
Pedro Vicente Maldonado	0.449
Mejía	0.442
Cayambe	0.412
Distrito Metropolitano De Quito	0.393
Pedro Moncayo	0.381
Rumiñahui	0.313

MULTI-HAZARD EXPOSURE (MHE)

RANK: 148 / 221 CANTONS ASSESSED
SCORE: 0.355



MHE
0.355

Raw MHE
0.484

Relative MHE
0.227

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
28,178 people exposed
18,143 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
39%
11,029 people exposed
7,230 structures exposed (40%)
Critical Infrastructure Exposed: 21%

Landslide
9%
2,480 people exposed
1,674 structures exposed (9%)
Critical Infrastructure Exposed: 7%

Mosquito-Borne Disease
100%
28,178 people exposed
18,143 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
3%
790 people exposed
495 structures exposed (3%)
Critical Infrastructure Exposed: 3%

Wildfire
64%
18,095 people exposed
11,591 structures exposed (64%)
Critical Infrastructure Exposed: 63%

VULNERABILITY (V)

RANK: 115 / 221 CANTONS ASSESSED **SCORE: 0.484**

Vulnerability in Puerto Quito is primarily driven by Marginalization and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.537

- **9.1** Average Years of Schooling
- **51.4%** Population (age 24 and over) with General Basic Education Schooling
- **6.9%** Population (age 24 and over) with No Schooling
- **5.4%** Adult Illiteracy Rate
- **46.5%** Households with No Internet Access
- **77.6%** Households with No Access to Television
- **84.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.578

- **50.2%** Homes with Access to Public Water Source
- **22.9%** Homes Connected to the Public Sewage System
- **32.5%** Homes without Piped Water
- **2.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.543

- **58.5** Age Dependency Ratio
- **14.1%** Unemployment Rate
- **67.1%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.817

- **13.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.650

- **0.5** Female to Male Labor Ratio (distance from parity)
- **51.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **86.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **69.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.318

- **6.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.362

- **13.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.353

53	4	22	22
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.463

15.1%	1.7%	18.1%	87.7%	6.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.492

36	1.8%	9.7	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.236

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 152 / 221 CANTONS ASSESSED **SCORE: 0.441**

Puerto Quito exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.469

57.7%
Labor Force Participation

51,797
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.271

0%
Protected Area (% of land area)

-5,505.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.421

84.9%
Voter Participation

62.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.489

Communications Capacity

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.466

3.8%
Household Access to Fixed Phones

88.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.593

96.7%
Homes Served by the Public Electricity Network

75.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.420

12
Nurses and Midwives per 10,000 persons

14
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.479

16.5
Average Distance to Airport (km)

92.7
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 166 / 221 CANTONS ASSESSED **SCORE: 0.384**

Puerto Quito exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.365

2.8	17.9%	0	103.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.404

23.2	7.1	3.7	10
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 148 / 221 CANTONS ASSESSED
SCORE: 0.447

Puerto Quito's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Marginalization


Mass Care Support


Emergency Services


Healthcare Capacity

KEY FACTORS INFLUENCING RESILIENCE



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Emergency Services

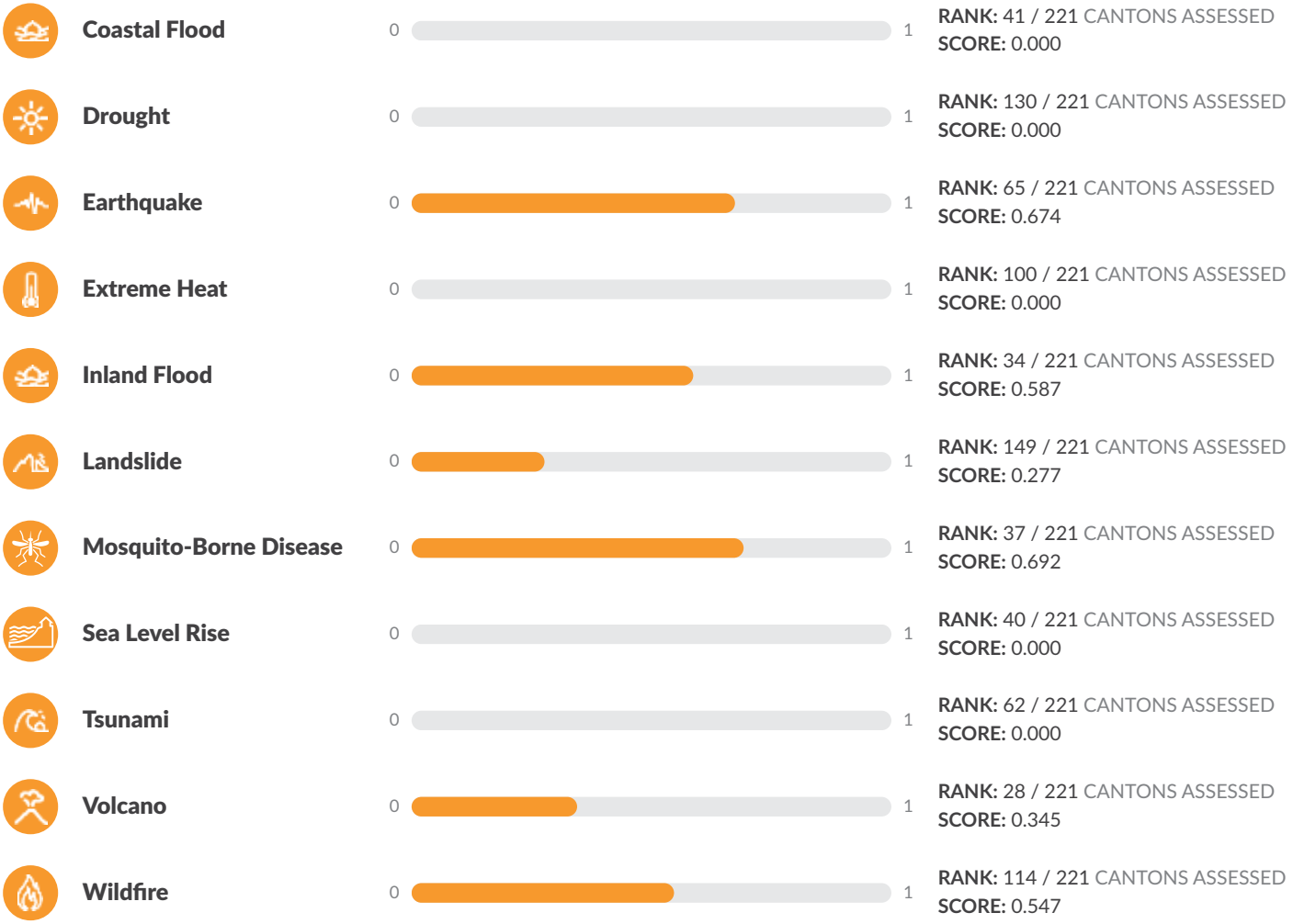
Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
98 / 221
CANTONS ASSESSED
SCORE: 0.504

Puerto Quito's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE

SCORE

Multi-Hazard Exposure

0.355
0.453

0 1

Vulnerability

0.484
0.485

0 1

Coping Capacity

0.441
0.492

0 1

Disaster Management Capabilities

0.384
0.468

0 1

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NDPBA SUBNATIONAL PROFILE

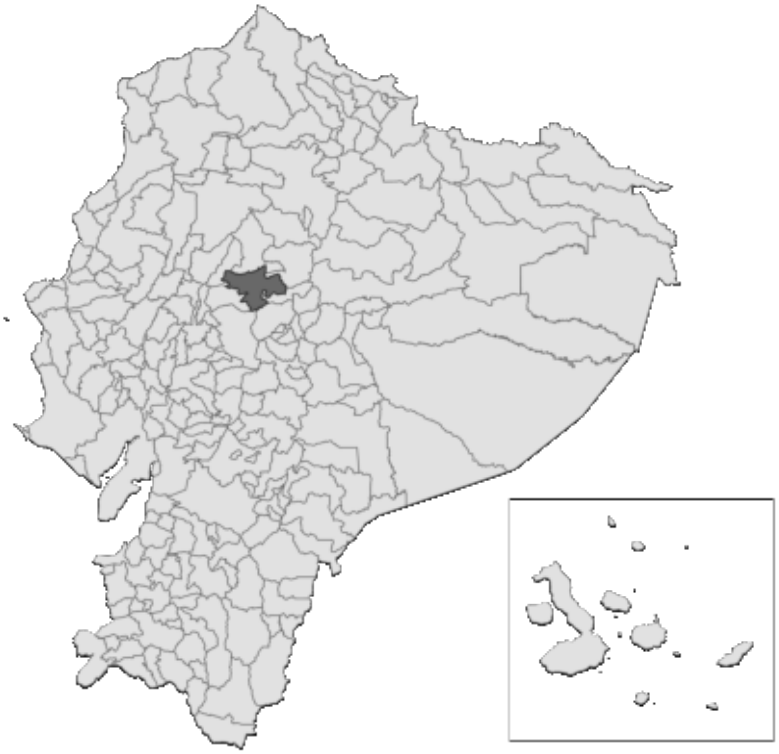
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PUJILÍ

PROVINCE: COTOPAXI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.541 • RANK: 61/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.540 • RANK: 67/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.464 • RANK: 137/221 CANTONS ASSESSED

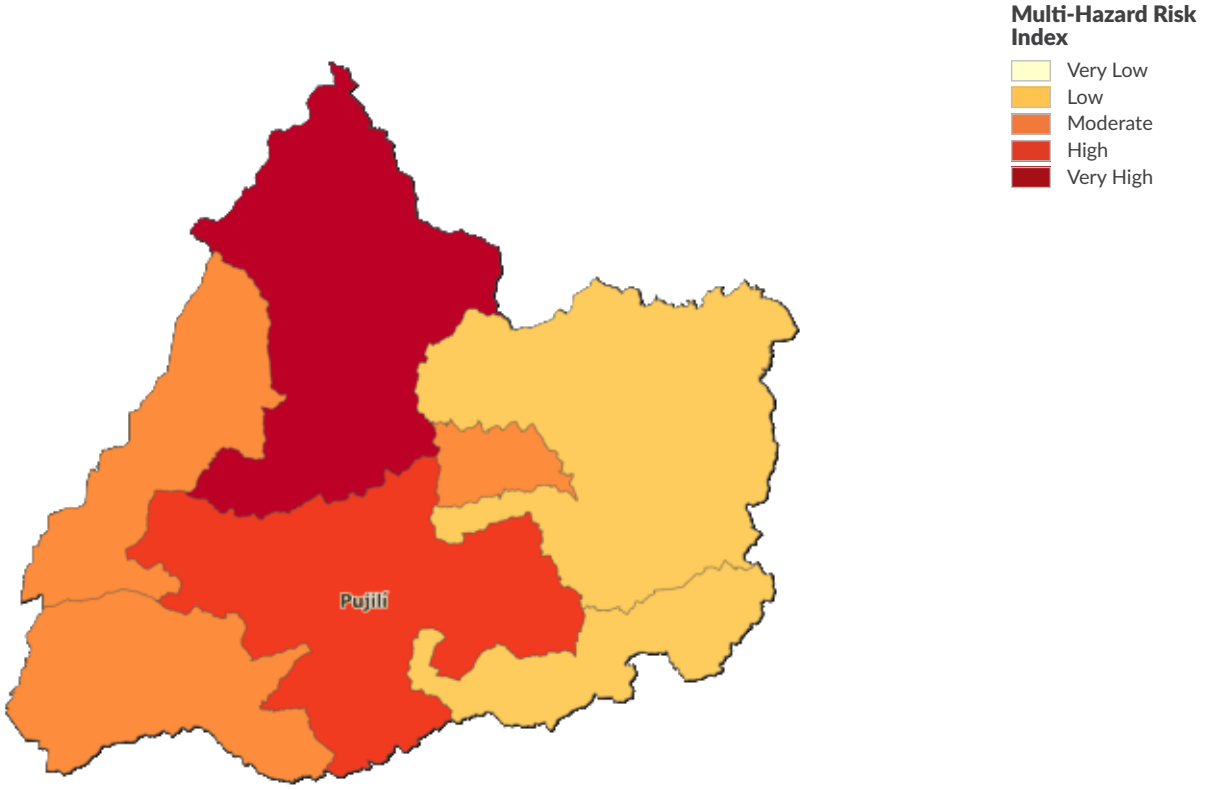
Coping Capacity (CC) - Low
SCORE: 0.443 • RANK: 147/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.555 • RANK: 61/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.488 • RANK: 87/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN COTOPAXI PROVINCE

PUJILÍ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sigchos	0.585	La Maná	0.475
Pujilí	**0.541**	Salcedo	0.460
Saquisilí	0.490	Latacunga	0.440
Pangua	0.486		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 61 / 221 CANTONS ASSESSED
SCORE: 0.555



MHE
0.555

Raw MHE
0.729

Relative MHE
0.382

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
70%
- **56,635** people exposed
- **47,206** structures exposed (70%)

Critical Infrastructure Exposed: 55%

Earthquake
100%
- **81,422** people exposed
- **67,484** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
4%
- **3,592** people exposed
- **1,878** structures exposed (3%)

Critical Infrastructure Exposed: 3%

Landslide
60%
- **48,653** people exposed
- **40,709** structures exposed (60%)

Critical Infrastructure Exposed: 70%

Mosquito-Borne Disease
6%
- **5,208** people exposed
- **3,710** structures exposed (5%)

Critical Infrastructure Exposed: 2%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
28%
- **22,409** people exposed
- **13,985** structures exposed (21%)

Critical Infrastructure Exposed: 18%

Wildfire
98%
- **79,784** people exposed
- **66,440** structures exposed (98%)

Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 67 / 221 CANTONS ASSESSED **SCORE: 0.540**

Vulnerability in Pujilí is primarily driven by Economic Constraints and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.632

- **8.6** Average Years of Schooling
- **36.9%** Population (age 24 and over) with General Basic Education Schooling
- **18.8%** Population (age 24 and over) with No Schooling
- **15%** Adult Illiteracy Rate
- **62.6%** Households with No Internet Access
- **88.6%** Households with No Access to Television
- **77.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.623

- **81.9%** Homes with Access to Public Water Source
- **36.3%** Homes Connected to the Public Sewage System
- **53.7%** Homes without Piped Water
- **8.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.633

- **59.9** Age Dependency Ratio
- **21.2%** Unemployment Rate
- **64.5%** Poverty Rate (based on UBN)
- **1.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.450

- **3.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.423

- **0.3** Female to Male Labor Ratio (distance from parity)
- **40.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **80.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **37.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.546

- **11.7%** Prevalence of Disability (among persons age 5 and over)
- **8.4** Perinatal Mortality Rate (per 1,000 births)
- **11.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.239

- **0.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.422

38	10	32	25
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.479

17%	0.4%	21%	82.4%	9.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.407

50.4	-0.2	-2.7	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.591

0.4	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 147 / 221 CANTONS ASSESSED **SCORE: 0.443**

Pujilí exhibits weaker Coping Capacity in the areas of Governance and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.445

52.2%
Labor Force Participation

115,234
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.610

15.8%
Protected Area (% of land area)

-3,375.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.371

82.5%
Voter Participation

61%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.459

Communications Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.501

12.3%
Household Access to Fixed Phones

77%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.448

94.4%
Homes Served by the Public Electricity Network

64.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.417

10.7
Nurses and Midwives per 10,000 persons

15.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.471

18.7
Average Distance to Airport (km)

94.5
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 87 / 221 CANTONS ASSESSED **SCORE: 0.488**

Pujilí exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.446

3.1	8.2%	0.8	75.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.531

5.7	9.9	3.7	4.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 137 / 221 CANTONS ASSESSED
SCORE: 0.464

Pujilí's score and ranking are due to High Vulnerability combined with Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Economic Constraints



Information Access Vulnerability



Governance



Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.



Governance

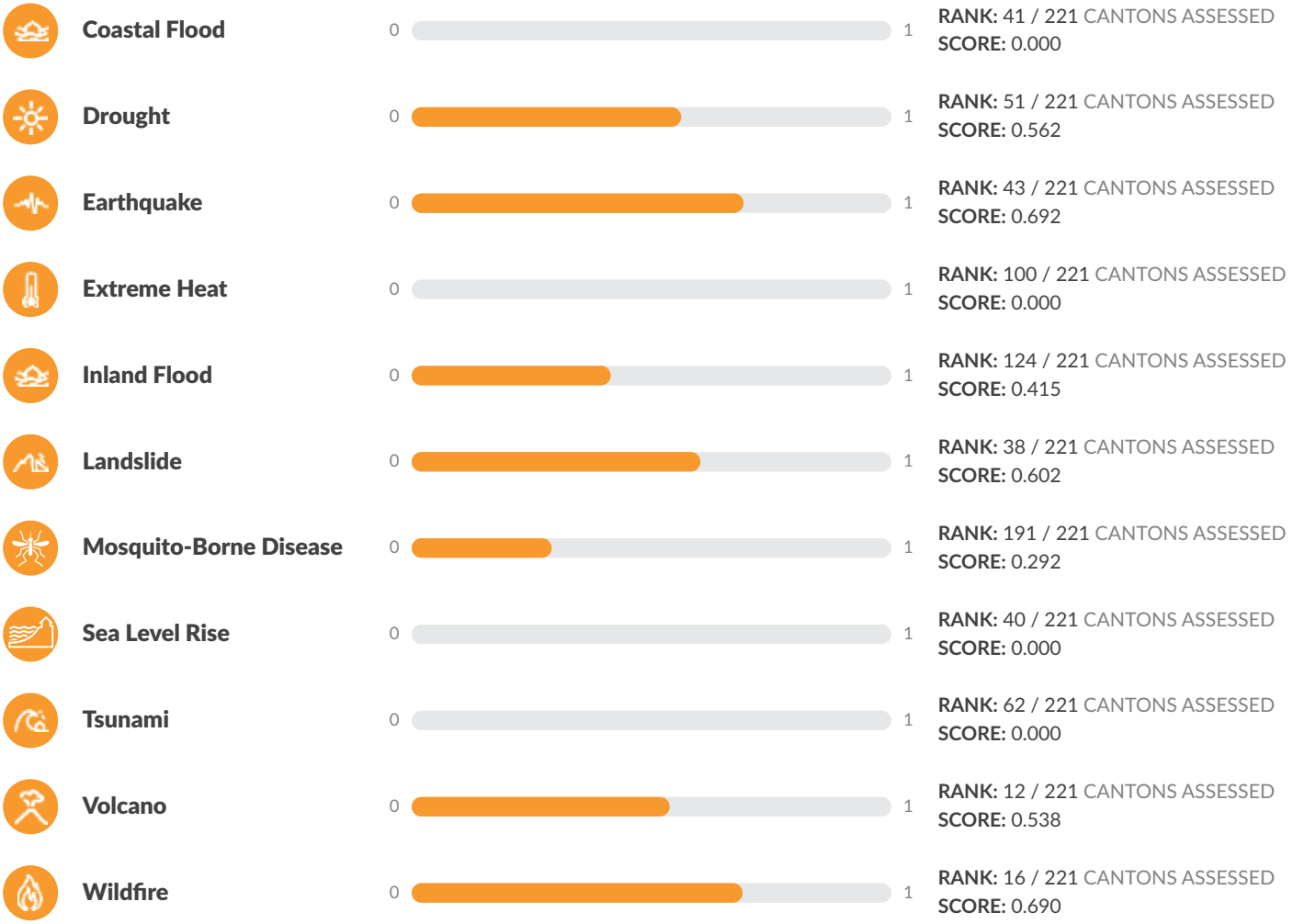
The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

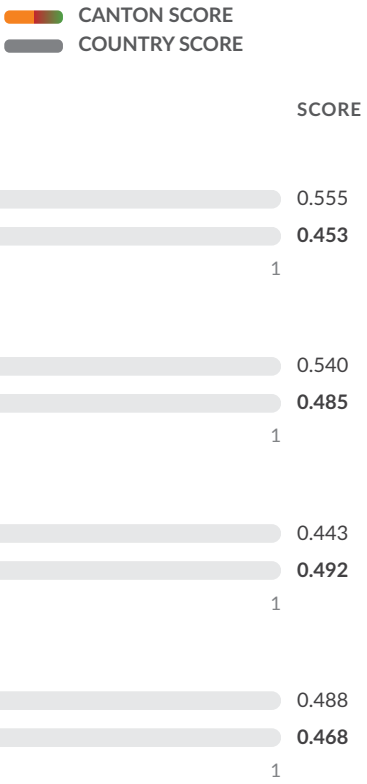


MULTI-HAZARD RISK (MHR)

RANKED
61 / 221
CANTONS ASSESSED
SCORE: 0.541

Pujilí's score and ranking are due to High Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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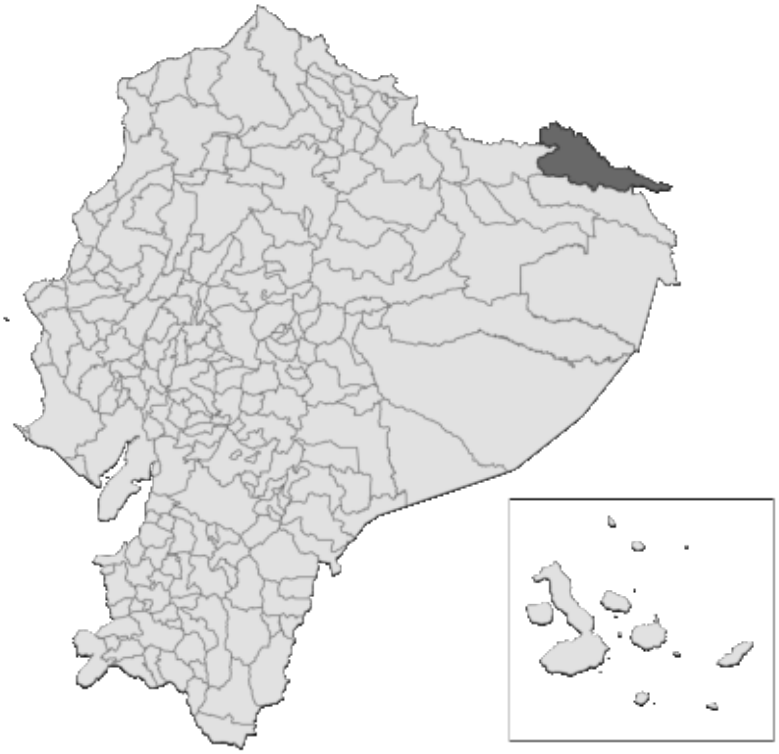
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PUTUMAYO

PROVINCE: SUCUMBÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.567 • RANK: 42/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.374 • RANK: 201/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.391 • RANK: 133/221 CANTONS ASSESSED

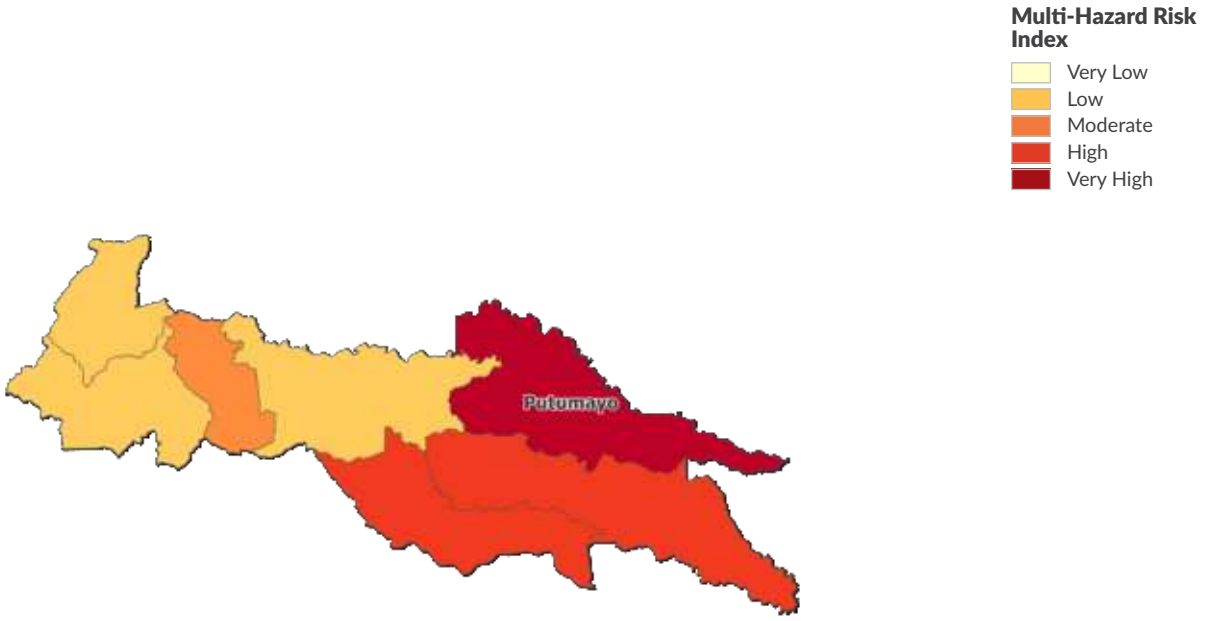
Vulnerability (V) - High
SCORE: 0.532 • RANK: 71/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.467 • RANK: 128/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.188 • RANK: 218/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SUCUMBÍOS PROVINCE

PUTUMAYO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Putumayo	**0.567**
Cuyabeno	0.539
Shushufindi	0.531
Cascales	0.485
Gonzalo Pizarro	0.468
Lago Agrio	0.461
Sucumbíos	0.445

MULTI-HAZARD EXPOSURE (MHE)

RANK: 133 / 221 CANTONS ASSESSED
SCORE: 0.391



MHE
0.391

Raw MHE
0.379

Relative MHE
0.402

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
11,994 people exposed
9,114 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
96%
11,530 people exposed
8,863 structures exposed (97%)
Critical Infrastructure Exposed: 99%

Inland Flood
25%
3,005 people exposed
2,473 structures exposed (27%)
Critical Infrastructure Exposed: 15%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
11,994 people exposed
9,108 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
66%
7,918 people exposed
5,826 structures exposed (64%)
Critical Infrastructure Exposed: 61%

VULNERABILITY (V)

RANK: 71 / 221 CANTONS ASSESSED **SCORE: 0.532**

Vulnerability in Putumayo is primarily driven by Clean Water Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.534

- **9.2** Average Years of Schooling
- **43.4%** Population (age 24 and over) with General Basic Education Schooling
- **8.2%** Population (age 24 and over) with No Schooling
- **5.1%** Adult Illiteracy Rate
- **67%** Households with No Internet Access
- **70.5%** Households with No Access to Television
- **84.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.753

- **38.3%** Homes with Access to Public Water Source
- **19.1%** Homes Connected to the Public Sewage System
- **71.6%** Homes without Piped Water
- **5.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.711

- **60.3** Age Dependency Ratio
- **23.7%** Unemployment Rate
- **80.6%** Poverty Rate (based on UBN)
- **2.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.633

- **6.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.643

- **0.5** Female to Male Labor Ratio (distance from parity)
- **49.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **88.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **72.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.315

- **7.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.339

- **18** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.295

32	14	22	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.537

16.8%	0.7%	20.9%	92.5%	10%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.525

2.5	-0.7	123.5	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.223

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 128 / 221 CANTONS ASSESSED **SCORE: 0.467**

Putumayo exhibits weaker Coping Capacity in the areas of Communications Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.514

53.5%
Labor Force Participation

232,011
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.702

29%
Protected Area (% of land area)

-1,488.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.342

76.7%
Voter Participation

73.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.467

Communications Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.311

4.1%
Household Access to Fixed Phones

72.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.373

80%
Homes Served by the Public Electricity Network

76.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.757

36.6
Nurses and Midwives per 10,000 persons

31
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.428

42.4
Average Distance to Airport (km)

15.8
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 218 / 221 CANTONS ASSESSED **SCORE: 0.188**

Putumayo exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.275

10.3	15.1%	0	86.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.101

68.9	27	13.6	12.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 201 / 221 CANTONS ASSESSED
SCORE: 0.374

Putumayo's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Emergency Services



Clean Water Access Vulnerability



Mass Care Support



Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Mass Care Support

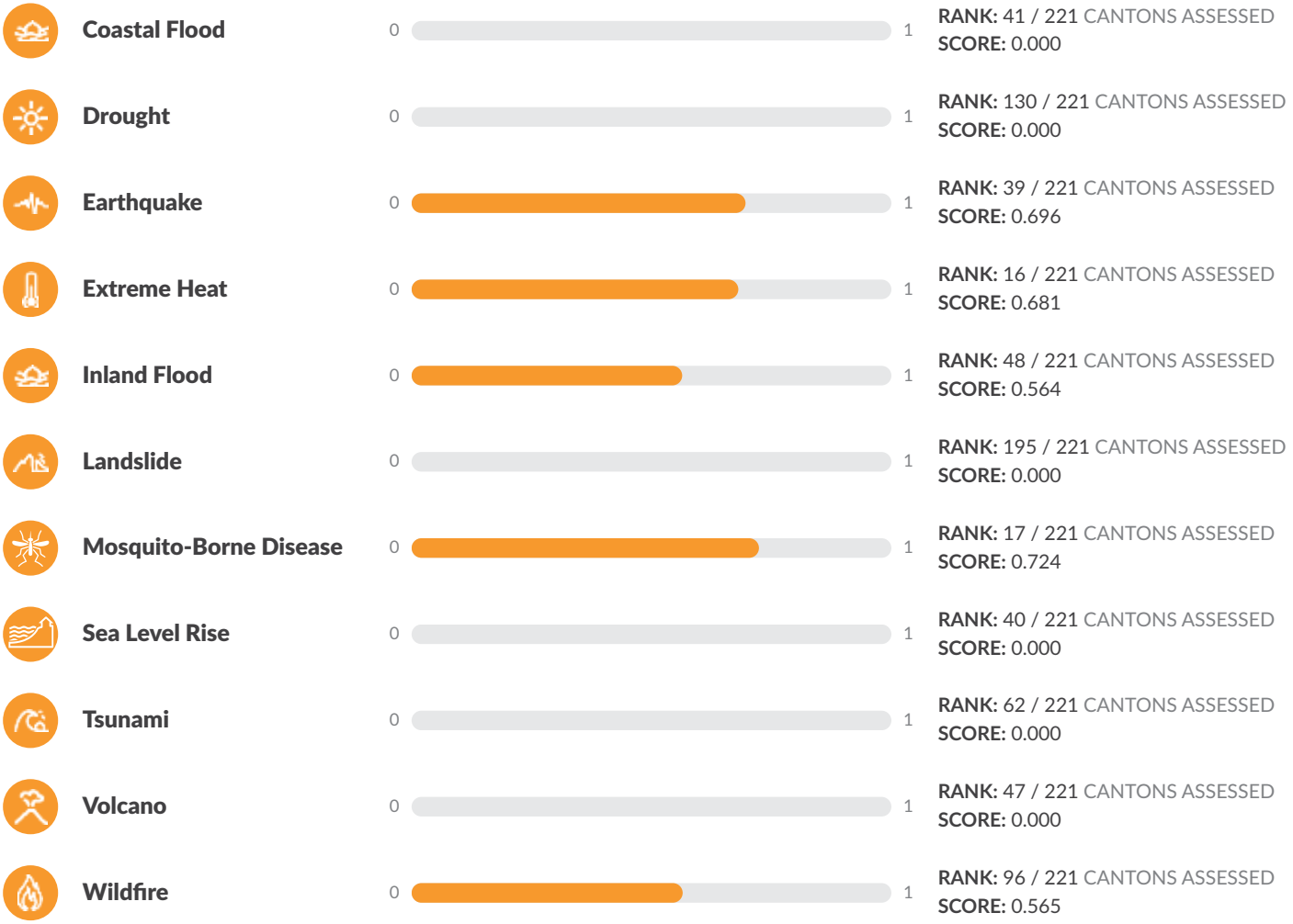
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

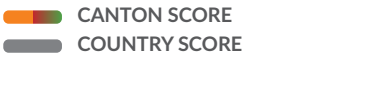


MULTI-HAZARD RISK (MHR)

RANKED
42 / 221
CANTONS ASSESSED
SCORE: 0.567

Putumayo's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

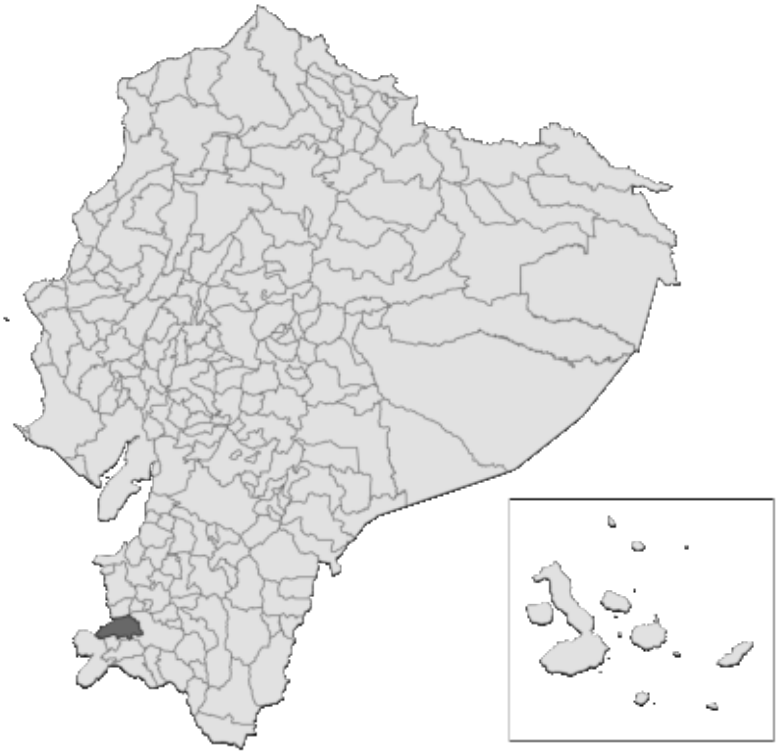
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PUYANGO

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.493 • RANK: 112/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.496 • RANK: 97/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.459 • RANK: 102/221 CANTONS ASSESSED

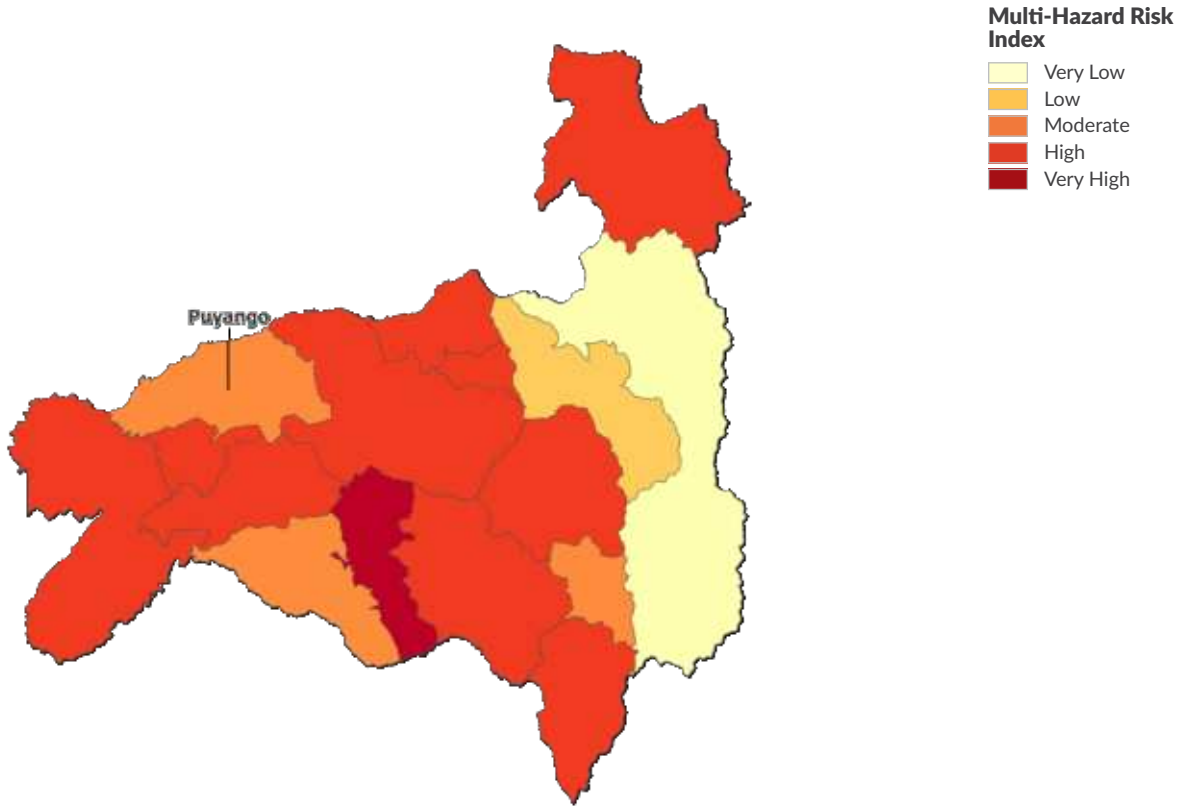
Vulnerability (V) - Low
SCORE: 0.431 • RANK: 160/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.443 • RANK: 147/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.475 • RANK: 93/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

PUYANGO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	**0.493**
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 102 / 221 CANTONS ASSESSED
SCORE: 0.459



MHE
0.459

Raw MHE
0.448

Relative MHE
0.471

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
57%
- **9,949** people exposed
- **6,634** structures exposed (57%)

Critical Infrastructure Exposed: 66%

Earthquake
100%
- **17,358** people exposed
- **11,632** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **122** people exposed
- **97** structures exposed (<1%)

Critical Infrastructure Exposed: 1%

Landslide
86%
- **14,942** people exposed
- **10,118** structures exposed (87%)

Critical Infrastructure Exposed: 92%

Mosquito-Borne Disease
91%
- **15,747** people exposed
- **10,588** structures exposed (91%)

Critical Infrastructure Exposed: 93%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
78%
- **13,526** people exposed
- **9,037** structures exposed (78%)

Critical Infrastructure Exposed: 84%

VULNERABILITY (V)

RANK: 160 / 221 CANTONS ASSESSED **SCORE: 0.431**

Vulnerability in Puyango is primarily driven by Clean Water Access Vulnerability and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.491

- **9.5** Average Years of Schooling
- **56.2%** Population (age 24 and over) with General Basic Education Schooling
- **3.8%** Population (age 24 and over) with No Schooling
- **3%** Adult Illiteracy Rate
- **47%** Households with No Internet Access
- **80.9%** Households with No Access to Television
- **76.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.514

- **79.3%** Homes with Access to Public Water Source
- **46.1%** Homes Connected to the Public Sewage System
- **28.6%** Homes without Piped Water
- **6.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.477

- **58** Age Dependency Ratio
- **13.6%** Unemployment Rate
- **47%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.616

- **6.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.405

- **0.4** Female to Male Labor Ratio (distance from parity)
- **40.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **21.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **46.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.352

- **9.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.256

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **5.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.511

118 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**11** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**25** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**39** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.376

9.2% Homes with Exterior Walls in Poor Condition	**0.8%** Homes with Inadequate Materials Used in Outer Walls	**12.1%** Homes with Roofs in Poor Condition	**84.8%** Households with No Access to Vehicle for Private Use	**7.5%** Household Overcrowding

Population Pressures

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.346

25.5 Population Density (persons per sq km)	**0.3%** Average Annual Population Change (2010-2022)	**6.8** Net Migration Rate (per 1,000 persons)	**0.26** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.459

0.2 Hazard Susceptibility (recent events 2015-2025)	**0.1** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 147 / 221 CANTONS ASSESSED **SCORE: 0.443**

Puyango exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.415

55.2%
Labor Force Participation

41,169
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.264

0%
Protected Area (% of land area)

-5,932.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.376

79.2%
Voter Participation

72.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.598

Communications Capacity

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.697

16.9%
Household Access to Fixed Phones

89.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.752

97.8%
Homes Served by the Public Electricity Network

86.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.545

13.5
Nurses and Midwives per 10,000 persons

26.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.396

45
Average Distance to Airport (km)

65.8
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 93 / 221 CANTONS ASSESSED **SCORE: 0.475**

Puyango exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.443

2.9	6.8%	0.9	82.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.508

8.3	7.5	3.2	7.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 97 / 221 CANTONS ASSESSED
SCORE: 0.496

Puyango's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Governance



Transportation Capacity



Economic Capacity



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Economic Capacity

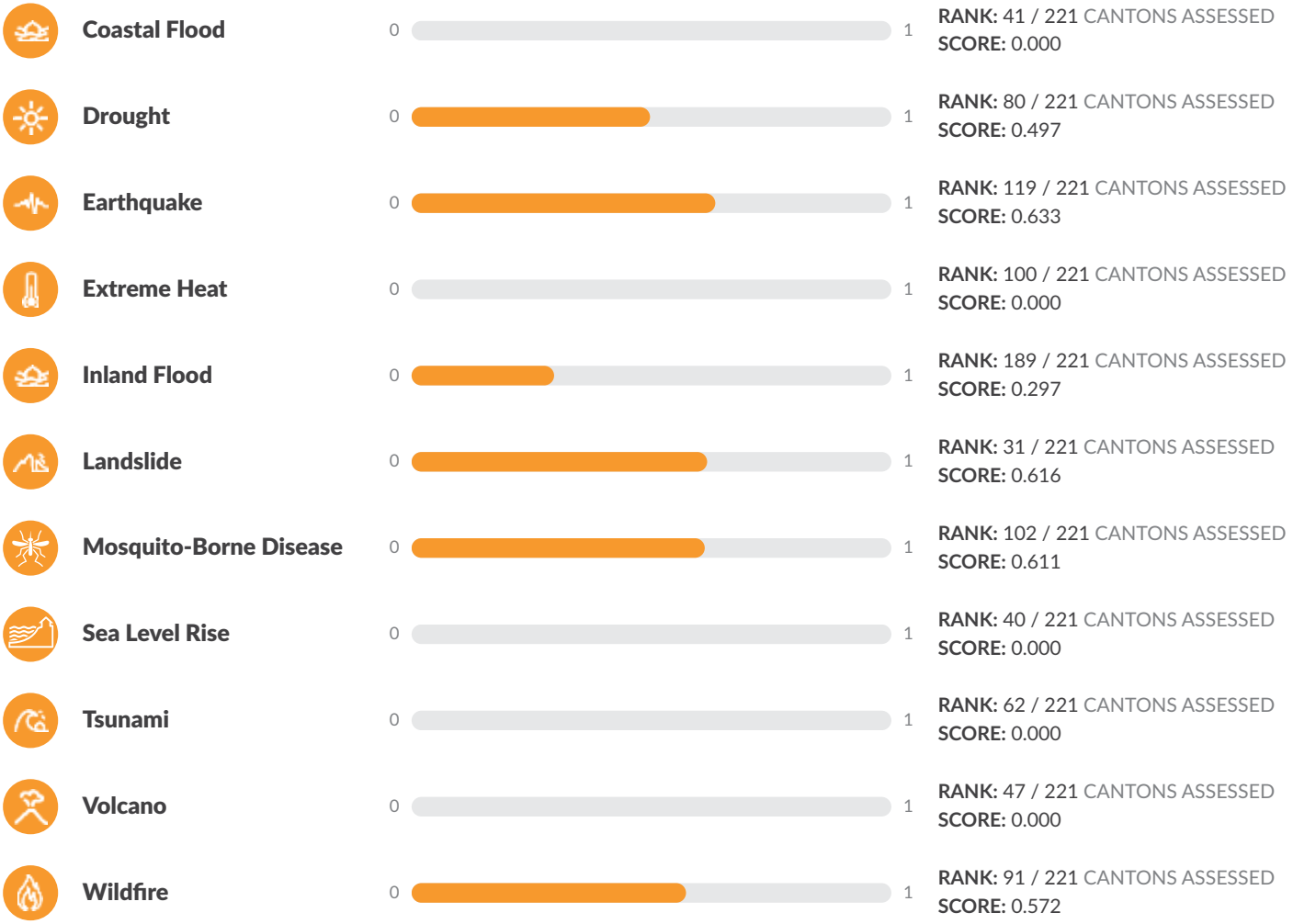
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

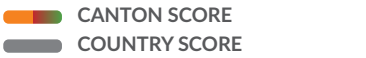


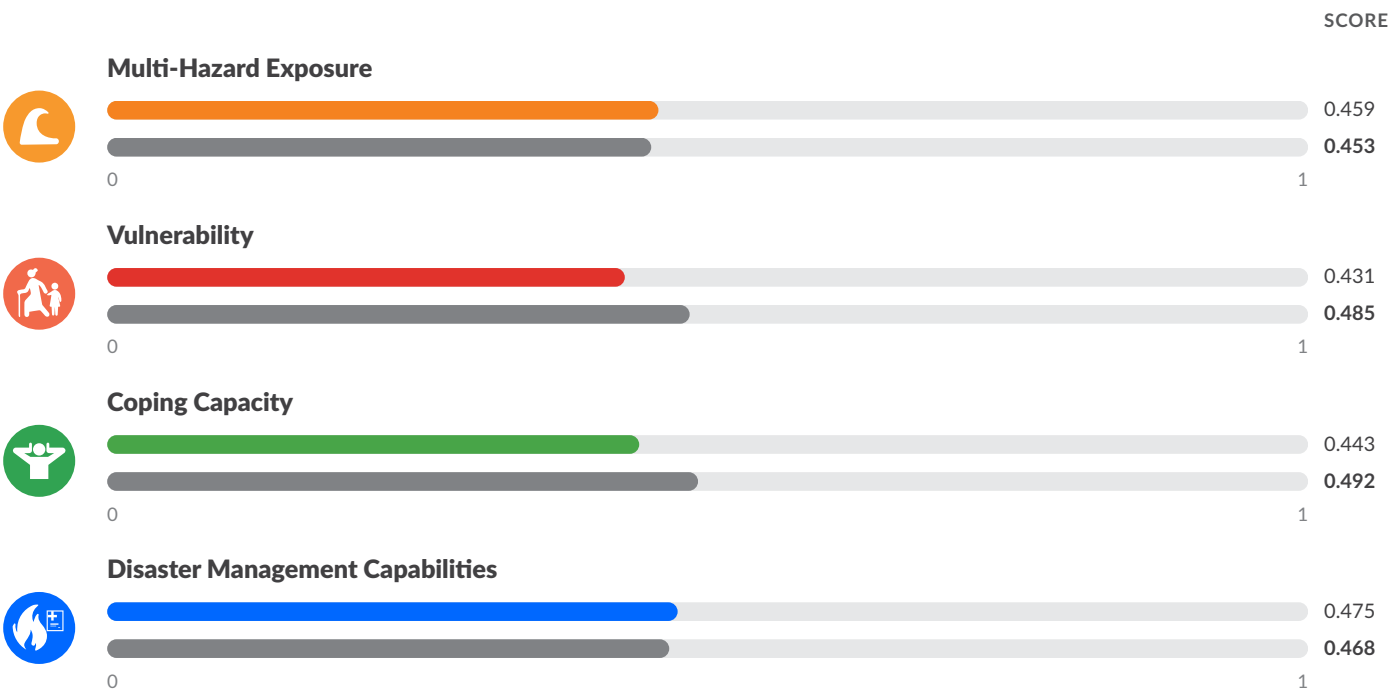
MULTI-HAZARD RISK (MHR)

RANKED
112 / 221
CANTONS ASSESSED
SCORE: 0.493

Puyango's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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QUERO

PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.454 • RANK: 148/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.500 • RANK: 96/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.317 • RANK: 170/221 CANTONS ASSESSED

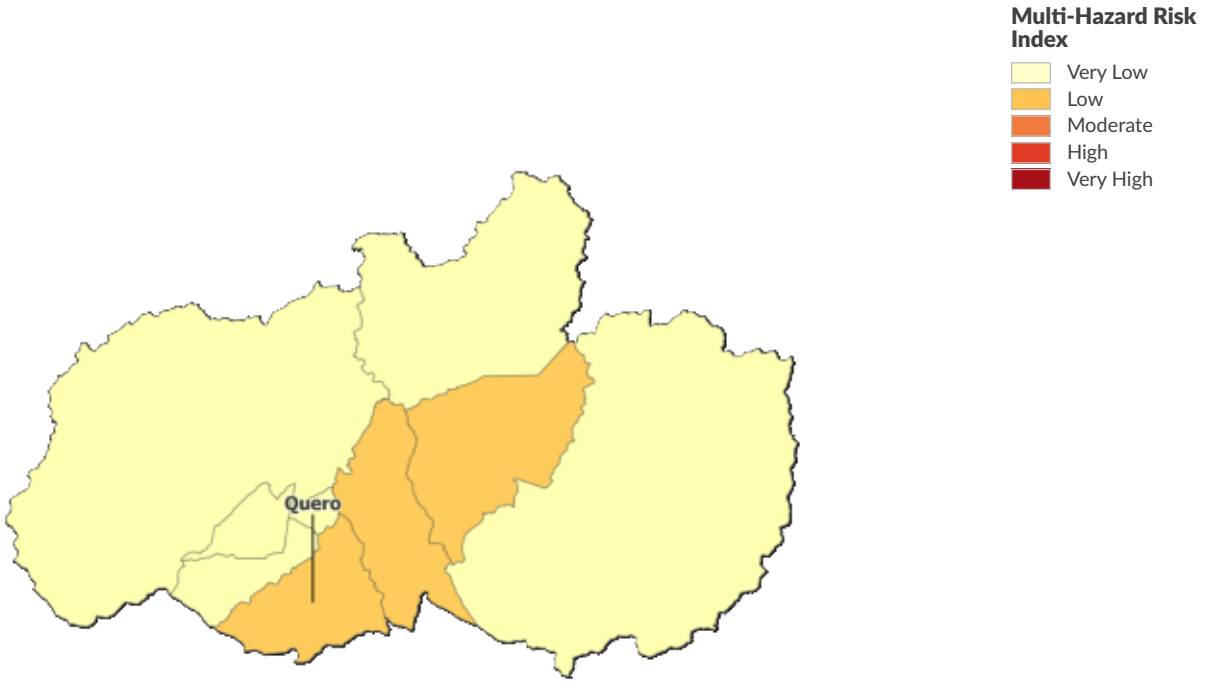
Vulnerability (V) - Low
SCORE: 0.414 • RANK: 177/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.465 • RANK: 131/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.448 • RANK: 124/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

QUERO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	**0.454**
San Pedro De Pelileo	0.436
Patate	0.431
Santiago De Píllaro	0.410
Ambato	0.409
Mocha	0.379
Baños De Agua Santa	0.364
Tisaleo	0.361
Cevallos	0.340

MULTI-HAZARD EXPOSURE (MHE)

RANK: 170 / 221 CANTONS ASSESSED
SCORE: 0.317



MHE
0.317

Raw MHE
0.449

Relative MHE
0.185

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
6%
- **1,329** people exposed
- **1,079** structures exposed (6%)

Critical Infrastructure Exposed: <1%

Earthquake
100%
- **22,074** people exposed
- **19,040** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
2%
- **527** people exposed
- **455** structures exposed (2%)

Critical Infrastructure Exposed: 4%

Landslide
48%
- **10,604** people exposed
- **9,573** structures exposed (50%)

Critical Infrastructure Exposed: 41%

Mosquito-Borne Disease
8%
- **1,871** people exposed
- **1,996** structures exposed (10%)

Critical Infrastructure Exposed: 38%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
23%
- **5,006** people exposed
- **4,090** structures exposed (21%)

Critical Infrastructure Exposed: 24%

Wildfire
99%
- **21,869** people exposed
- **18,885** structures exposed (99%)

Critical Infrastructure Exposed: 98%

VULNERABILITY (V)

RANK: 177 / 221 CANTONS ASSESSED **SCORE: 0.414**

Vulnerability in Quero is primarily driven by Information Access Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.675

- **8.6** Average Years of Schooling
- **61%** Population (age 24 and over) with General Basic Education Schooling
- **6.3%** Population (age 24 and over) with No Schooling
- **6.3%** Adult Illiteracy Rate
- **55.6%** Households with No Internet Access
- **95.2%** Households with No Access to Television
- **82.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.488

- **95.8%** Homes with Access to Public Water Source
- **42%** Homes Connected to the Public Sewage System
- **46.1%** Homes without Piped Water
- **7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.385

- **54.6** Age Dependency Ratio
- **6.5%** Unemployment Rate
- **54.2%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.224

- **1.1%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.384

- **0.3** Female to Male Labor Ratio (distance from parity)
- **43.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **70.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **27%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.391

- **10.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.343

- **1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.445

54	5	50	20
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.373

13.2%	1.2%	20.6%	65.3%	4.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.343

112.8	0%	-1.1	0.25
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.308

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 131 / 221 CANTONS ASSESSED **SCORE: 0.465**

Quero exhibits weaker Coping Capacity in the areas of Governance and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.556

64%
Labor Force Participation

37,834
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.328

0%
Protected Area (% of land area)

-1,705.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.333

85.9%
Voter Participation

31.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.551

Communications Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.530

8.7%
Household Access to Fixed Phones

85%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.682

96.9%
Homes Served by the Public Electricity Network

84%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.487

14.7
Nurses and Midwives per 10,000 persons

17.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.506

22.3
Average Distance to Airport (km)

97.3
Average Distance to Sea or River Port (km)

2.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.448**

Quero exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.312

3.5	0.6%	0	30.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.585

12.2	4.5	2.7	3.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 96 / 221 CANTONS ASSESSED
SCORE: 0.500

Quero's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Information Access Vulnerability

Governance

Healthcare Capacity

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

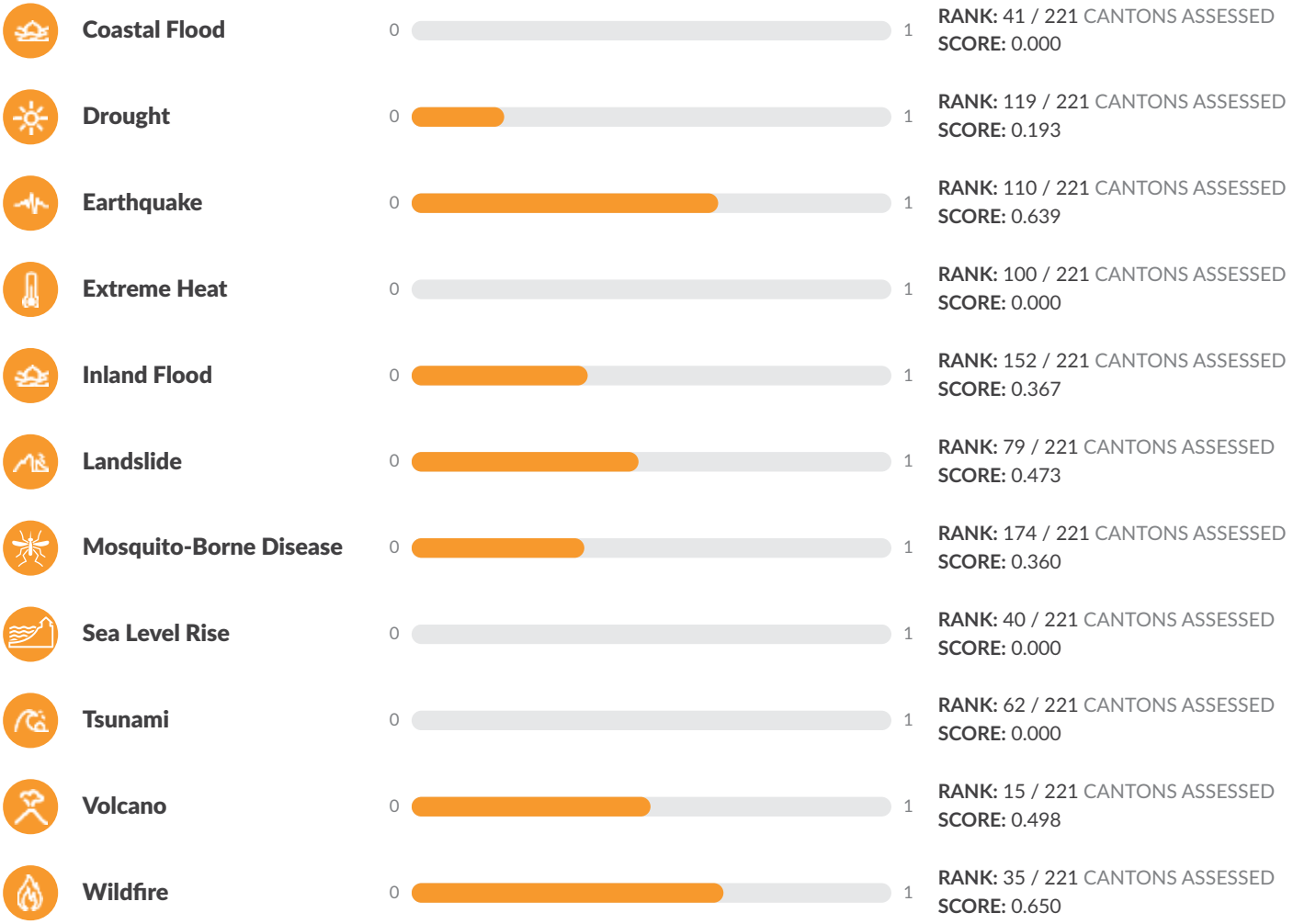
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)



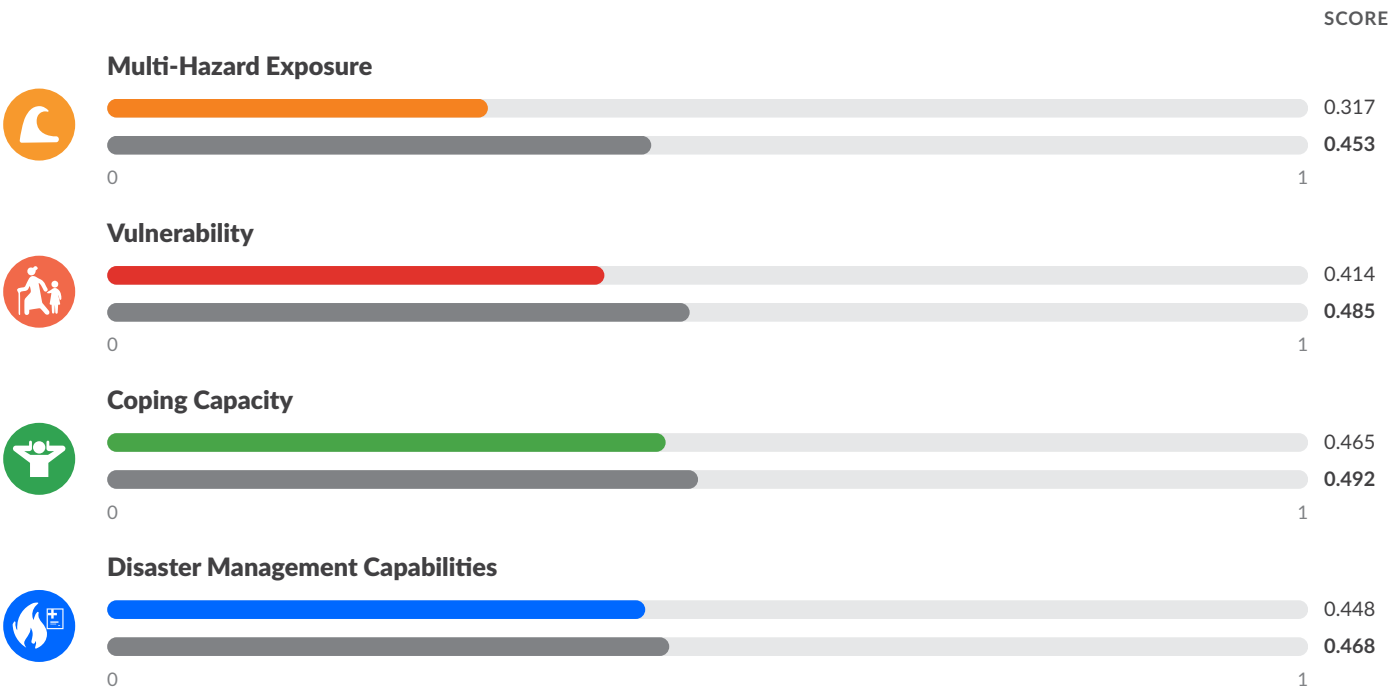
MULTI-HAZARD RISK (MHR)

RANKED
148 / 221
CANTONS ASSESSED
SCORE: 0.454

Quero's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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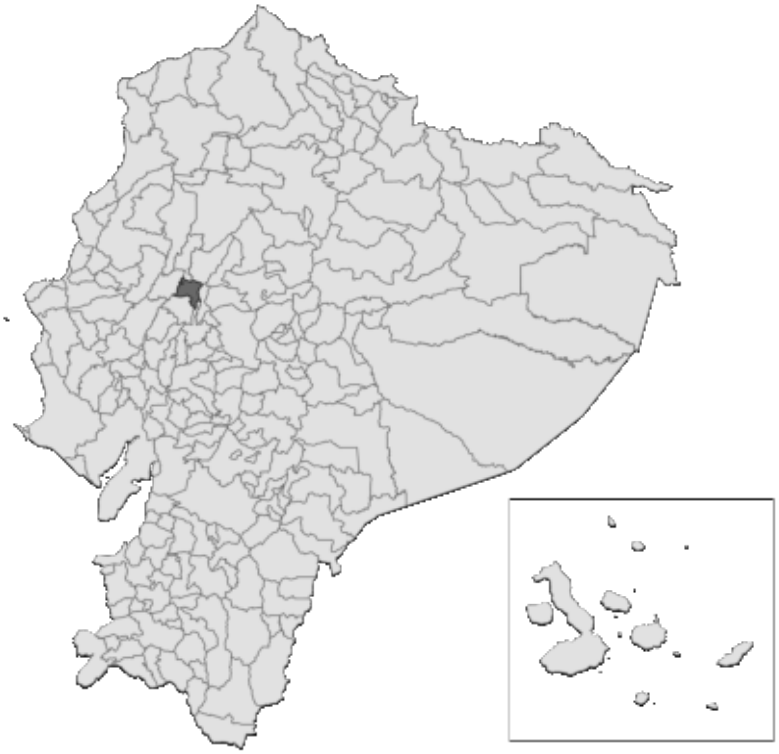
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QUEVEDO

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.459 • RANK: 144/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.489 • RANK: 108/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.581 • RANK: 42/221 CANTONS ASSESSED

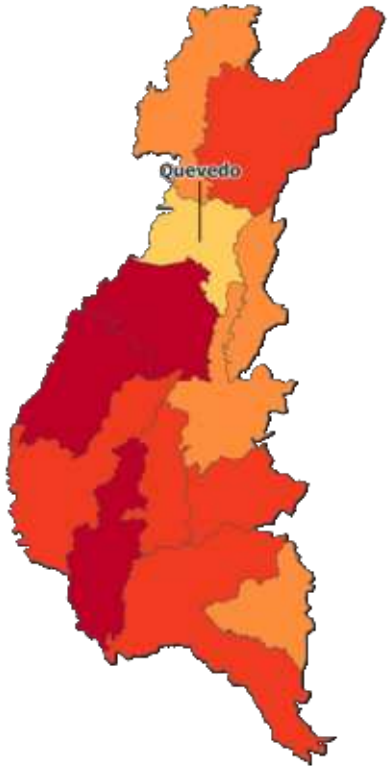
Coping Capacity (CC) - Very High
SCORE: 0.603 • RANK: 35/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.580 • RANK: 50/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.629 • RANK: 22/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

QUEVEDO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	**0.459**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 50 / 221 CANTONS ASSESSED
SCORE: 0.580



MHE
0.580

Raw MHE
0.795

Relative MHE
0.365

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
214,567 people exposed
57,684 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
214,151 people exposed
57,484 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
4%
8,850 people exposed
1,952 structures exposed (3%)
Critical Infrastructure Exposed: 11%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
214,567 people exposed
57,684 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
39%
83,563 people exposed
24,938 structures exposed (43%)
Critical Infrastructure Exposed: 47%

VULNERABILITY (V)

RANK: 108 / 221 CANTONS ASSESSED **SCORE: 0.489**

Vulnerability in Quevedo is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.402

- **11.3** Average Years of Schooling
- **37.2%** Population (age 24 and over) with General Basic Education Schooling
- **4.2%** Population (age 24 and over) with No Schooling
- **3.4%** Adult Illiteracy Rate
- **47.9%** Households with No Internet Access
- **80.6%** Households with No Access to Television
- **74.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.526

- **75.6%** Homes with Access to Public Water Source
- **23.8%** Homes Connected to the Public Sewage System
- **29.6%** Homes without Piped Water
- **3.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.471

- **55.5** Age Dependency Ratio
- **18.4%** Unemployment Rate
- **50.8%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.830

- **13.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.505

- **0.5** Female to Male Labor Ratio (distance from parity)
- **51.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **48.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **56.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.489

- **6.5%** Prevalence of Disability (among persons age 5 and over)
- **5.1** Perinatal Mortality Rate (per 1,000 births)
- **8.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.497

- **22.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **18.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.546

43
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

50
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

44
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.488

13.9%
Homes with Exterior Walls in Poor Condition

4.8%
Homes with Inadequate Materials Used in Outer Walls

16.7%
Homes with Roofs in Poor Condition

85%
Households with No Access to Vehicle for Private Use

8.6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.579

543.8
Population Density (persons per sq km)

1.4%
Average Annual Population Change (2010-2022)

14.1
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.394

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 35 / 221 CANTONS ASSESSED **SCORE: 0.603**

Quevedo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.629

55%
Labor Force Participation

844,131
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.312

0%
Protected Area (% of land area)

-2,763.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.636

84.8%
Voter Participation

94%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.640

Communications Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.583

9.1%
Household Access to Fixed Phones

88.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.641

98%
Homes Served by the Public Electricity Network

75.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.548

18.1
Nurses and Midwives per 10,000 persons

20.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.786

4.9
Average Distance to Airport (km)

24.8
Average Distance to Sea or River Port (km)

3.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 22 / 221 CANTONS ASSESSED **SCORE: 0.629**

Quevedo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.445

2	0.7%	1.8	82.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.814

3	2.7	1.3	2.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 42 / 221 CANTONS ASSESSED
SCORE: 0.581

Quevedo's score and ranking are due to Moderate Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Mass Care Support

Clean Water Access Vulnerability

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

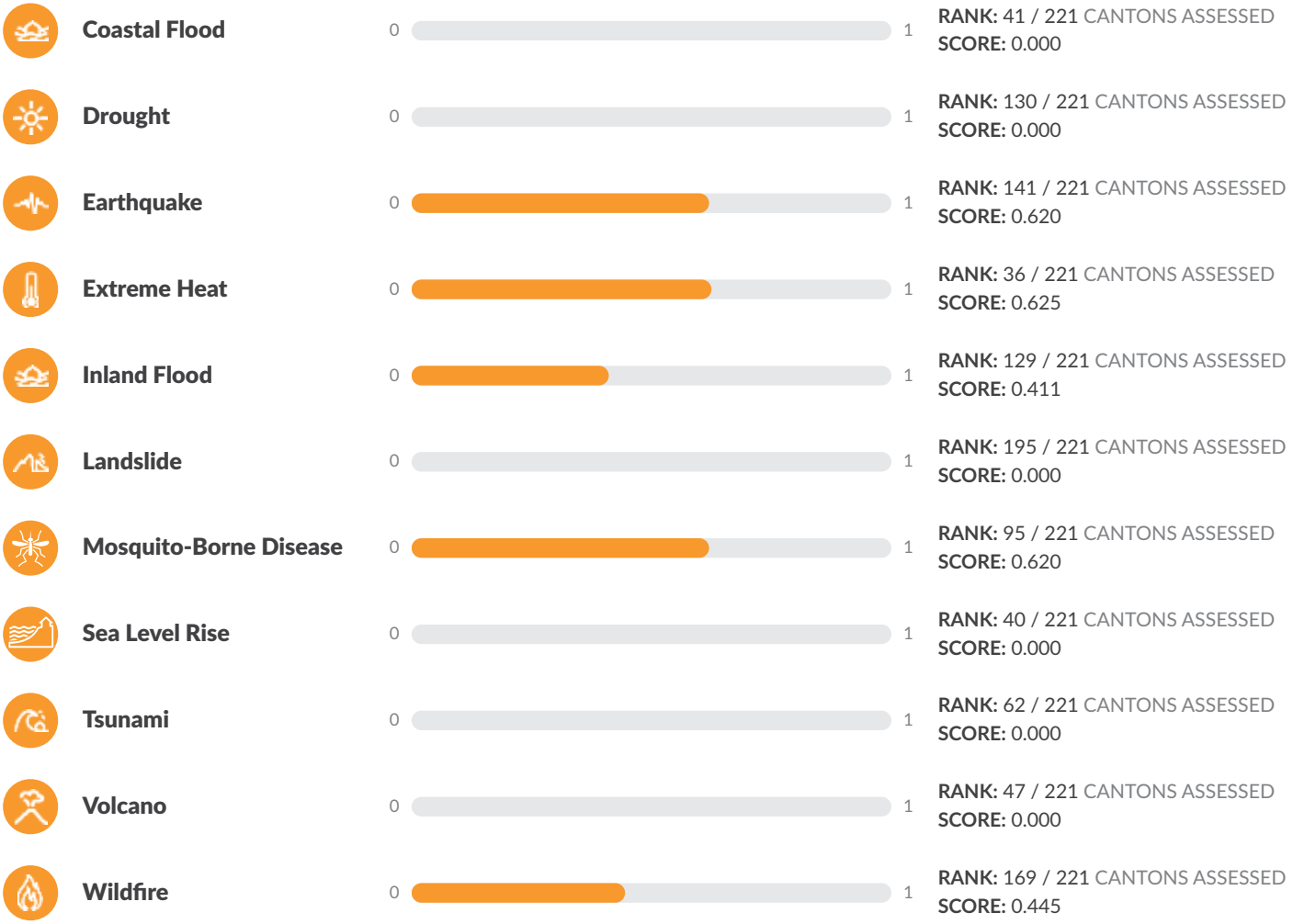
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

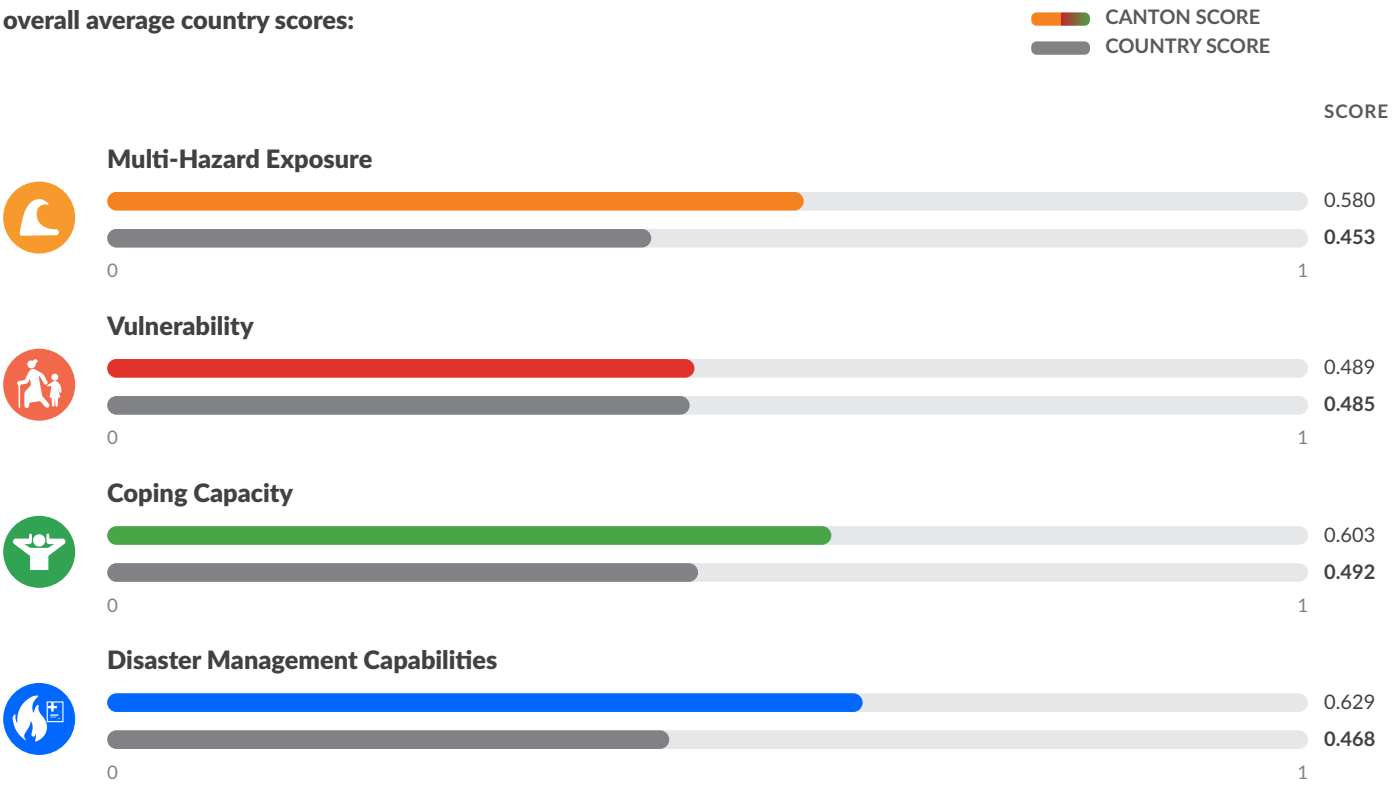


MULTI-HAZARD RISK (MHR)

RANKED
144 / 221
CANTONS ASSESSED
SCORE: 0.459

Quevedo's score and ranking are due to High Multi-Hazard Exposure combined with Moderate Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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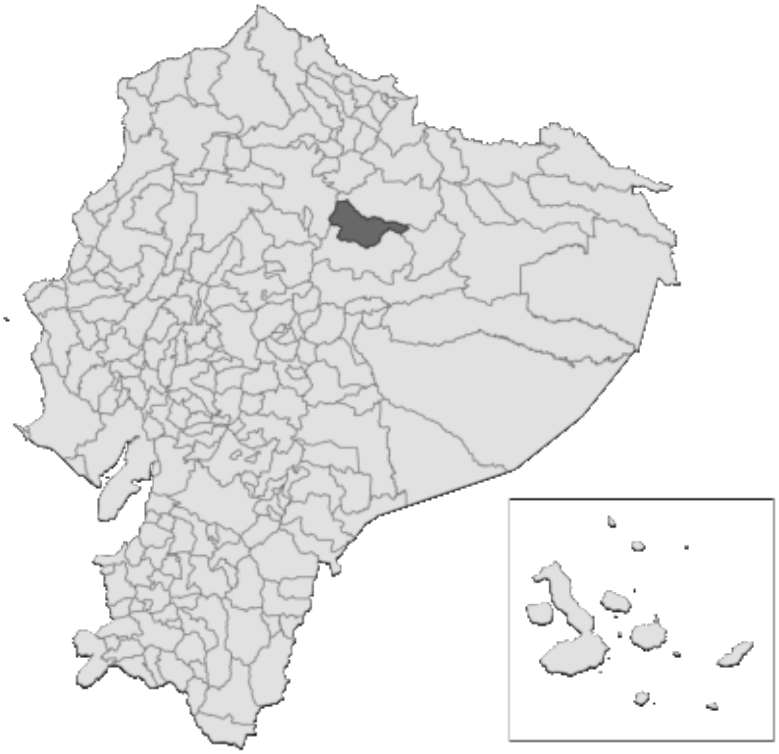
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QUIJOS

PROVINCE: NAPO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.363 • RANK: 215/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.624 • RANK: 18/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.323 • RANK: 169/221 CANTONS ASSESSED

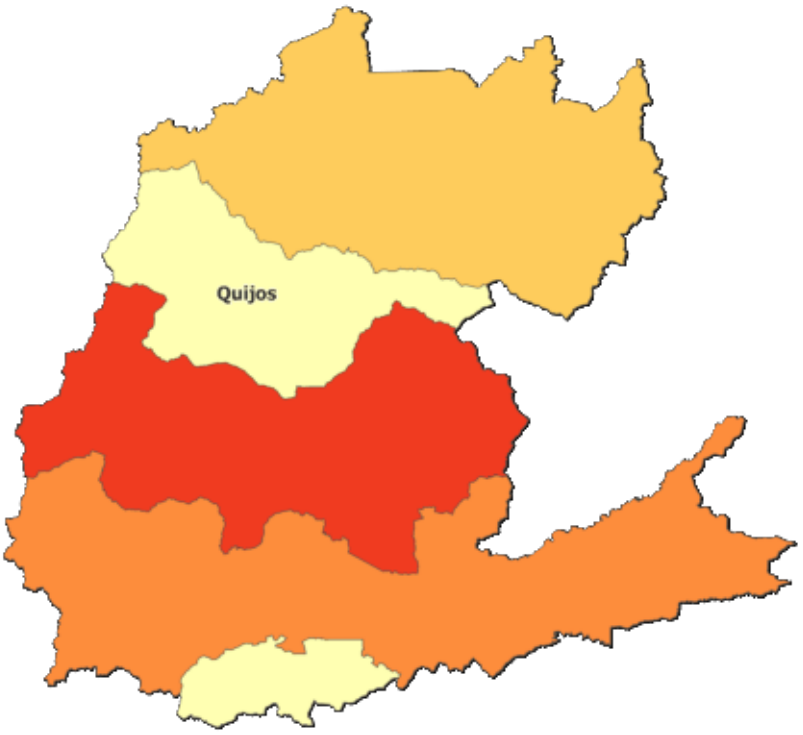
Vulnerability (V) - Very Low
SCORE: 0.378 • RANK: 198/221 CANTONS ASSESSED

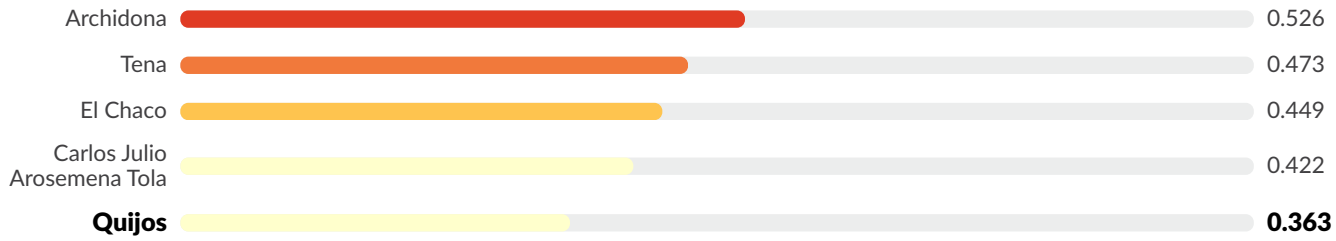
Coping Capacity (CC) - Very High
SCORE: 0.710 • RANK: 5/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.541 • RANK: 63/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN NAPO PROVINCE

QUIJOS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 169 / 221 CANTONS ASSESSED
SCORE: 0.323



MHE
0.323

Raw MHE
0.288

Relative MHE
0.358

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
10,512 people exposed
5,339 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
11%
1,195 people exposed
827 structures exposed (15%)
Critical Infrastructure Exposed: 14%

Landslide
79%
8,288 people exposed
3,892 structures exposed (73%)
Critical Infrastructure Exposed: 92%

Mosquito-Borne Disease
35%
3,685 people exposed
1,503 structures exposed (28%)
Critical Infrastructure Exposed: 60%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
17%
1,771 people exposed
693 structures exposed (13%)
Critical Infrastructure Exposed: 13%

Wildfire
93%
9,765 people exposed
5,284 structures exposed (99%)
Critical Infrastructure Exposed: 87%

VULNERABILITY (V)

RANK: 198 / 221 CANTONS ASSESSED **SCORE: 0.378**

Vulnerability in Quijos is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.246

- **11.6** Average Years of Schooling
- **35.1%** Population (age 24 and over) with General Basic Education Schooling
- **3.5%** Population (age 24 and over) with No Schooling
- **2.6%** Adult Illiteracy Rate
- **28.7%** Households with No Internet Access
- **57%** Households with No Access to Television
- **56%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.371

- **79.6%** Homes with Access to Public Water Source
- **73.6%** Homes Connected to the Public Sewage System
- **17.1%** Homes without Piped Water
- **5.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.455

- **49** Age Dependency Ratio
- **12.7%** Unemployment Rate
- **39.8%** Poverty Rate (based on UBN)
- **2.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.158

- **0.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.352

- **0.2** Female to Male Labor Ratio (distance from parity)
- **34.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **61%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **52.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.387

- **6.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.421

- **20.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **42.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.497

27
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

19
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

22
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

102
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.283

8.2%
Homes with Exterior Walls in Poor Condition

0.4%
Homes with Inadequate Materials Used in Outer Walls

11.9%
Homes with Roofs in Poor Condition

73.2%
Households with No Access to Vehicle for Private Use

4.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.334

4.1
Population Density (persons per sq km)

0.7%
Average Annual Population Change (2010-2022)

19
Net Migration Rate (per 1,000 persons)

0.25
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.631

0.4
Hazard Susceptibility (recent events 2015-2025)

0.4
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 5 / 221 CANTONS ASSESSED **SCORE: 0.710**

Quijos exhibits weaker Coping Capacity in the areas of Transportation Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.621

67.7%
Labor Force Participation

32,560
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.711

75.4%
Protected Area (% of land area)

-7,715.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.750

88.1%
Voter Participation

96.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.756

Communications Capacity

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.863

22.2%
Household Access to Fixed Phones

94.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.882

99.2%
Homes Served by the Public Electricity Network

88.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 1.000

54.1
Nurses and Midwives per 10,000 persons

77.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.282

57.7
Average Distance to Airport (km)

73.3
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 63 / 221 CANTONS ASSESSED **SCORE: 0.541**

Quijos exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.615

2.9	13.6%	4.8	90.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.466

10.8	10.4	4	5.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 18 / 221 CANTONS ASSESSED
SCORE: 0.624

Quijos's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Disaster Impacts

Emergency Services

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

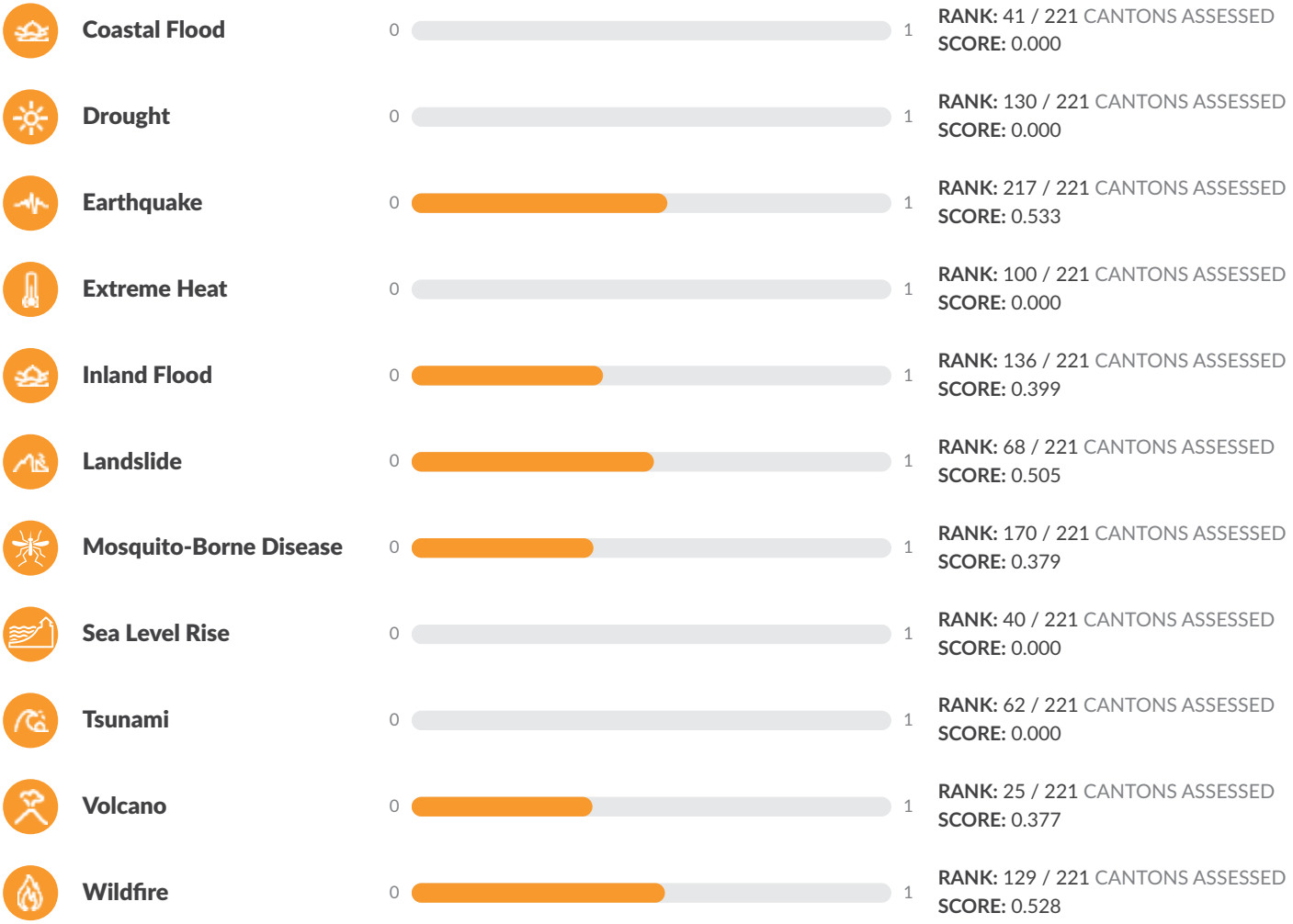
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
215 / 221
CANTONS ASSESSED
SCORE: 0.363

Quijos's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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QUILANGA

NDPBA SUBNATIONAL PROFILE

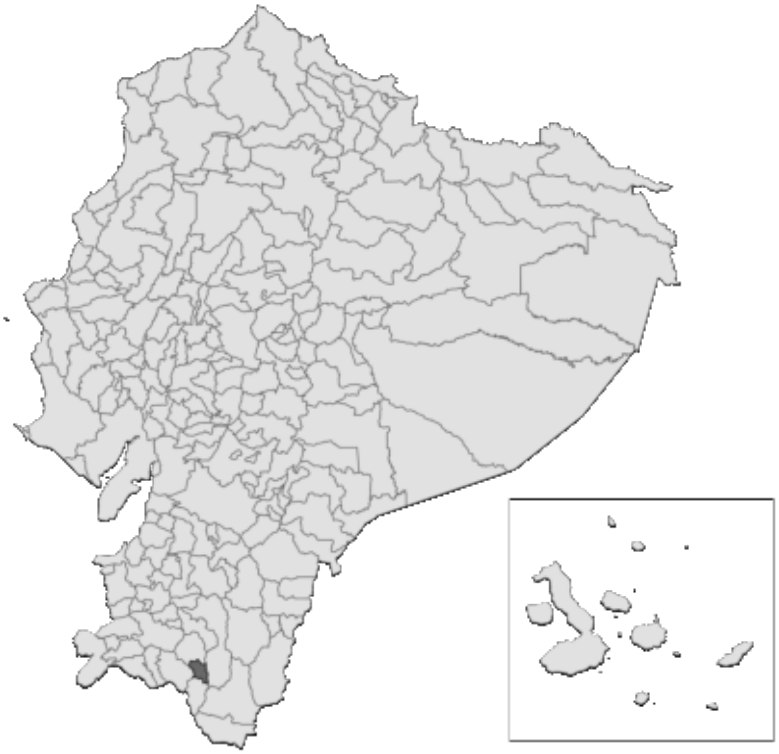
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QUILANGA

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.494 • RANK: 111/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.423 • RANK: 170/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.243 • RANK: 197/221 CANTONS ASSESSED

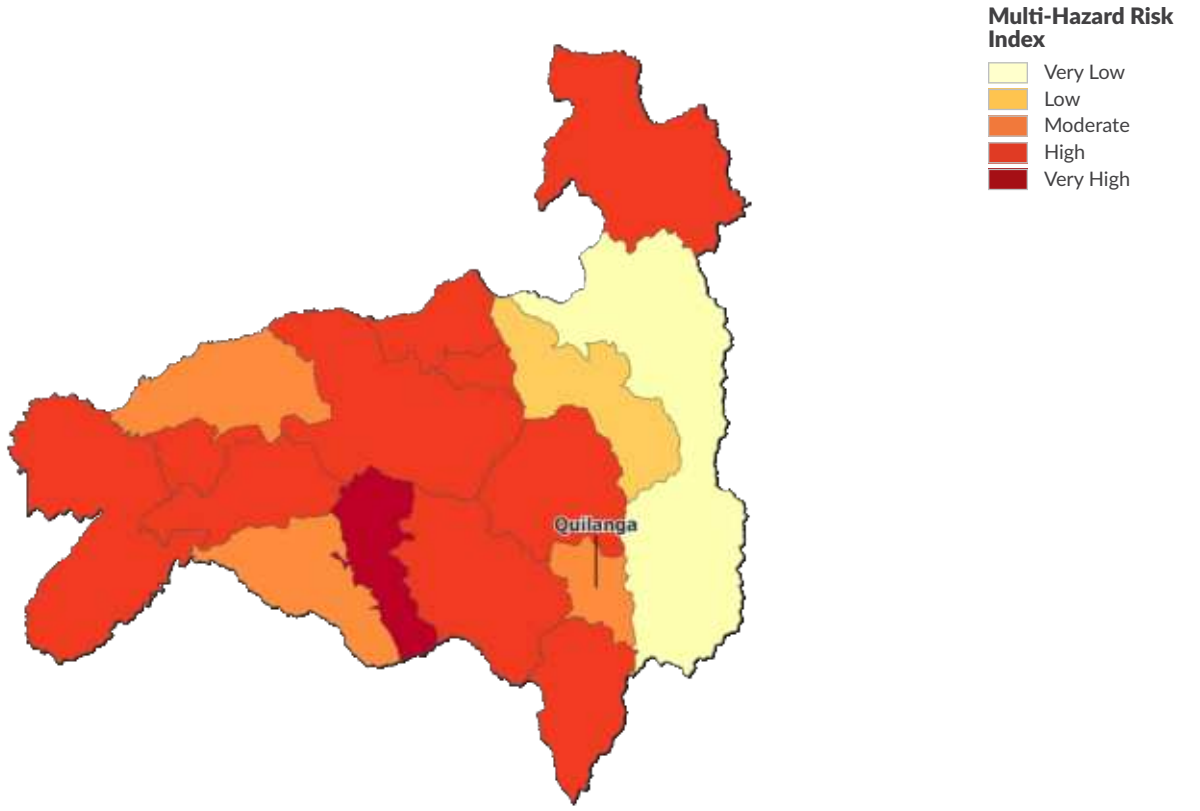
Vulnerability (V) - High
SCORE: 0.519 • RANK: 80/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.323 • RANK: 212/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.464 • RANK: 104/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

QUILANGA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	**0.494**
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 197 / 221 CANTONS ASSESSED
SCORE: 0.243



MHE
0.243

Raw MHE
0.185

Relative MHE
0.301

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
29%
- **1,385** people exposed
- **834** structures exposed (27%)

Critical Infrastructure Exposed: 7%

Earthquake
100%
- **4,853** people exposed
- **3,094** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
2%
- **104** people exposed
- **94** structures exposed (3%)

Critical Infrastructure Exposed: 12%

Landslide
90%
- **4,353** people exposed
- **2,765** structures exposed (89%)

Critical Infrastructure Exposed: 99%

Mosquito-Borne Disease
47%
- **2,264** people exposed
- **1,516** structures exposed (49%)

Critical Infrastructure Exposed: 46%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
98%
- **4,750** people exposed
- **3,035** structures exposed (98%)

Critical Infrastructure Exposed: 86%

VULNERABILITY (V)

RANK: 80 / 221 CANTONS ASSESSED **SCORE: 0.519**

Vulnerability in Quilanga is primarily driven by Economic Constraints and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.620

- **8.7** Average Years of Schooling
- **61.8%** Population (age 24 and over) with General Basic Education Schooling
- **4.8%** Population (age 24 and over) with No Schooling
- **5.2%** Adult Illiteracy Rate
- **64%** Households with No Internet Access
- **81.9%** Households with No Access to Television
- **85%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.539

- **90.3%** Homes with Access to Public Water Source
- **37.2%** Homes Connected to the Public Sewage System
- **50.4%** Homes without Piped Water
- **6.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.646

- **70.4** Age Dependency Ratio
- **23%** Unemployment Rate
- **64.6%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.613

- **6.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.366

- **0.5** Female to Male Labor Ratio (distance from parity)
- **21.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **0%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **75%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.572

- **18.5%** Prevalence of Disability (among persons age 5 and over)
- **69** Perinatal Mortality Rate (per 1,000 births)
- **0%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.174

- **5.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.703

119
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

11
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

97
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

57
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.585

24.6%
Homes with Exterior Walls in Poor Condition

1.3%
Homes with Inadequate Materials Used in Outer Walls

30.3%
Homes with Roofs in Poor Condition

88.4%
Households with No Access to Vehicle for Private Use

6.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.289

16.8
Population Density (persons per sq km)

-0.8
Average Annual Population Change (2010-2022)

4.3
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.518

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 212 / 221 CANTONS ASSESSED **SCORE: 0.323**

Quilanga exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.235

50.8%
Labor Force Participation

8,289
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.316

0%
Protected Area (% of land area)

-2,483.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.250

74.6%
Voter Participation

59.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.488

Communications Capacity

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.625

13.5%
Household Access to Fixed Phones

87.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.488

95.3%
Homes Served by the Public Electricity Network

67.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.454

7.6
Nurses and Midwives per 10,000 persons

25.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.385

37.3
Average Distance to Airport (km)

88.5
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 104 / 221 CANTONS ASSESSED **SCORE: 0.464**

Quilanga exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.459

2.5	17.6%	0	43.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.468

16.1	11.3	2.9	5.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 170 / 221 CANTONS ASSESSED
SCORE: 0.423

Quilanga's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Economic Constraints

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

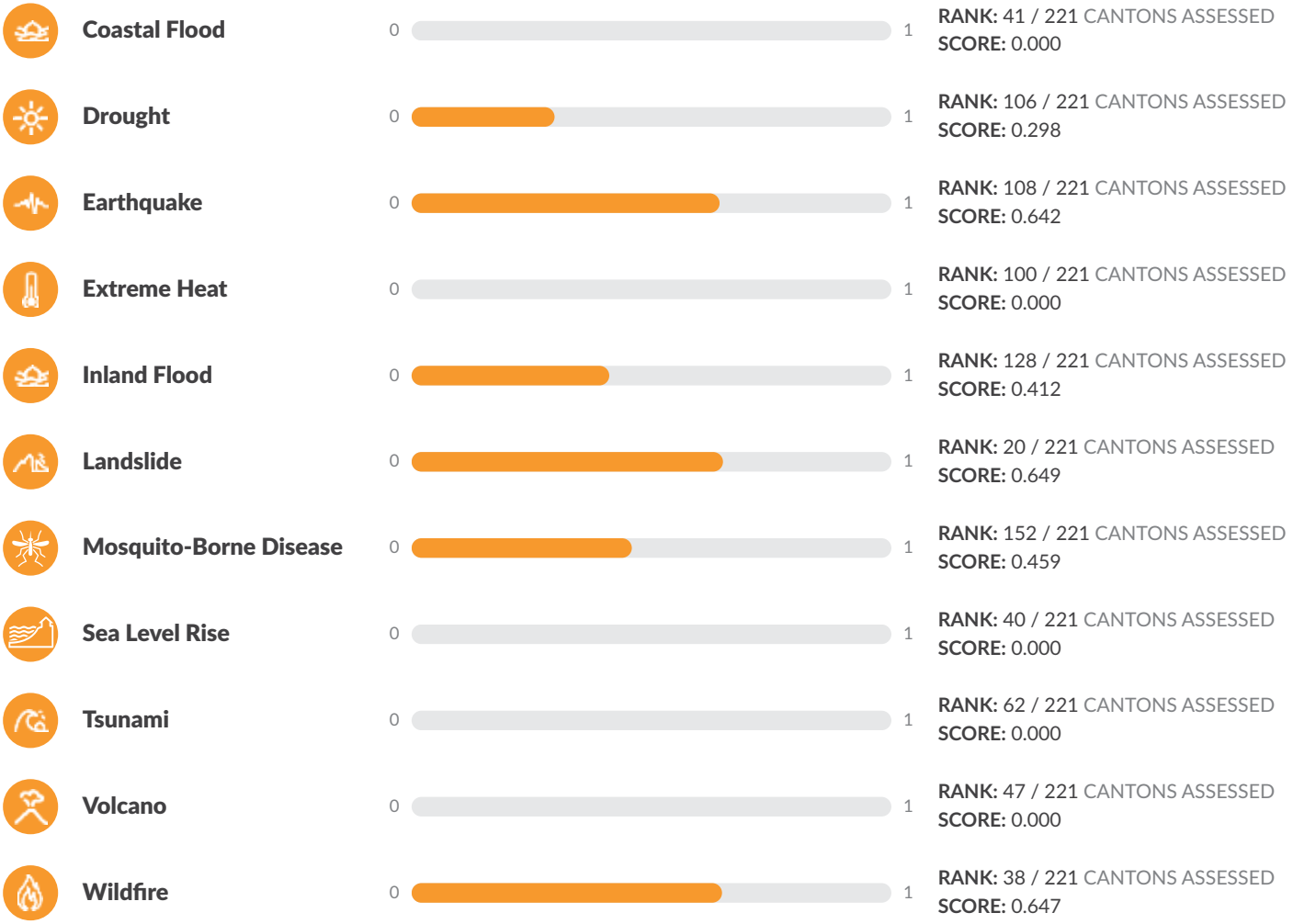
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
111 / 221
CANTONS ASSESSED
SCORE: 0.494

Quilanga's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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QUININDÉ

PROVINCE: ESMERALDAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.568 • RANK: 41/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.544 • RANK: 63/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.398 • RANK: 186/221 CANTONS ASSESSED

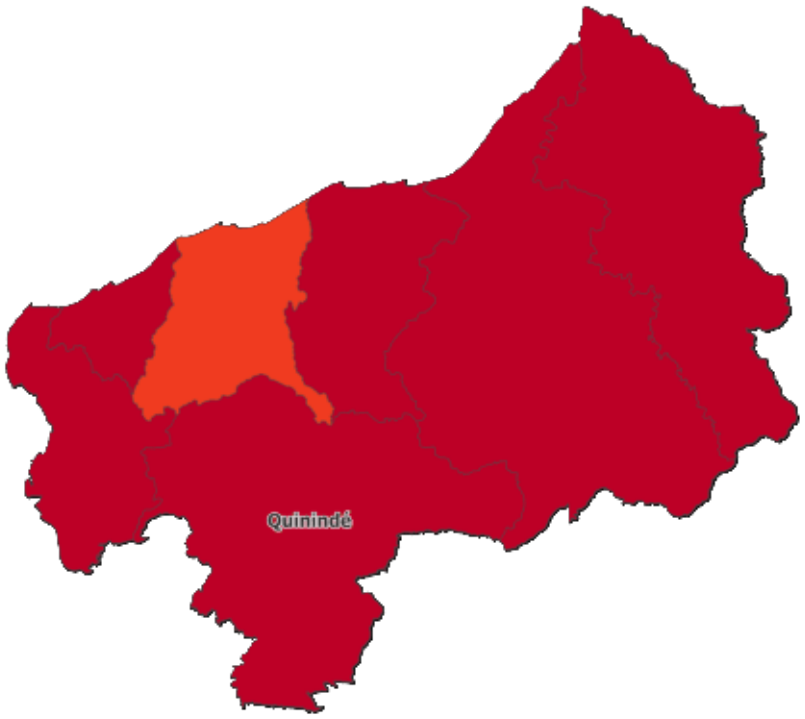
Coping Capacity (CC) - Low
SCORE: 0.445 • RANK: 146/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.463 • RANK: 100/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.292 • RANK: 209/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ESMERALDAS PROVINCE

QUININDÉ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Rioverde	0.636
Eloy Alfaro	0.631
Muisne	0.614
Atacames	0.585
San Lorenzo	0.572
Quinindé	**0.568**
Esmeraldas	0.523

MULTI-HAZARD EXPOSURE (MHE)

RANK: 100 / 221 CANTONS ASSESSED
SCORE: 0.463



MHE
0.463

Raw MHE
0.740

Relative MHE
0.186

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
152,455 people exposed
68,802 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
8%
12,099 people exposed
5,432 structures exposed (8%)
Critical Infrastructure Exposed: 9%

Landslide
7%
11,145 people exposed
6,680 structures exposed (10%)
Critical Infrastructure Exposed: 8%

Mosquito-Borne Disease
100%
152,287 people exposed
68,731 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
<1%
869 people exposed
272 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Wildfire
60%
92,010 people exposed
44,306 structures exposed (64%)
Critical Infrastructure Exposed: 46%

VULNERABILITY (V)

RANK: 63 / 221 CANTONS ASSESSED **SCORE: 0.544**

Vulnerability in Quinindé is primarily driven by Marginalization and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.582

- **9.2** Average Years of Schooling
- **48.2%** Population (age 24 and over) with General Basic Education Schooling
- **8%** Population (age 24 and over) with No Schooling
- **6.3%** Adult Illiteracy Rate
- **63.9%** Households with No Internet Access
- **79.2%** Households with No Access to Television
- **87.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.690

- **44.5%** Homes with Access to Public Water Source
- **17.9%** Homes Connected to the Public Sewage System
- **55.5%** Homes without Piped Water
- **4.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.605

- **60.8** Age Dependency Ratio
- **20.1%** Unemployment Rate
- **71.4%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.784

- **11.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.713

- **0.6** Female to Male Labor Ratio (distance from parity)
- **62.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **95.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **61.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.396

- **7%** Prevalence of Disability (among persons age 5 and over)
- **2** Perinatal Mortality Rate (per 1,000 births)
- **7.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.465

- **54.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **22.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.326

20	12	24	10
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.532

16.3%	3.8%	18%	91.9%	8.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.443

35	0.3%	6.3	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.353

0.3	0.1	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 146 / 221 CANTONS ASSESSED **SCORE: 0.445**

Quinindé exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.541

53.3%
Labor Force Participation

348,887
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.258

7.6%
Protected Area (% of land area)

-24,625.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.444

85.3%
Voter Participation

66.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.412

Communications Capacity

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.281

4.2%
Household Access to Fixed Phones

66.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.507

94.1%
Homes Served by the Public Electricity Network

73.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.411

12.8
Nurses and Midwives per 10,000 persons

12.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.451

20.1
Average Distance to Airport (km)

73.9
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 209 / 221 CANTONS ASSESSED **SCORE: 0.292**

Quinindé exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.263

7.7	1.4%	0.5	78.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.322

20.1	10	5.1	15.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 186 / 221 CANTONS ASSESSED
SCORE: 0.398

Quinindé's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Communications Capacity

Marginalization

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

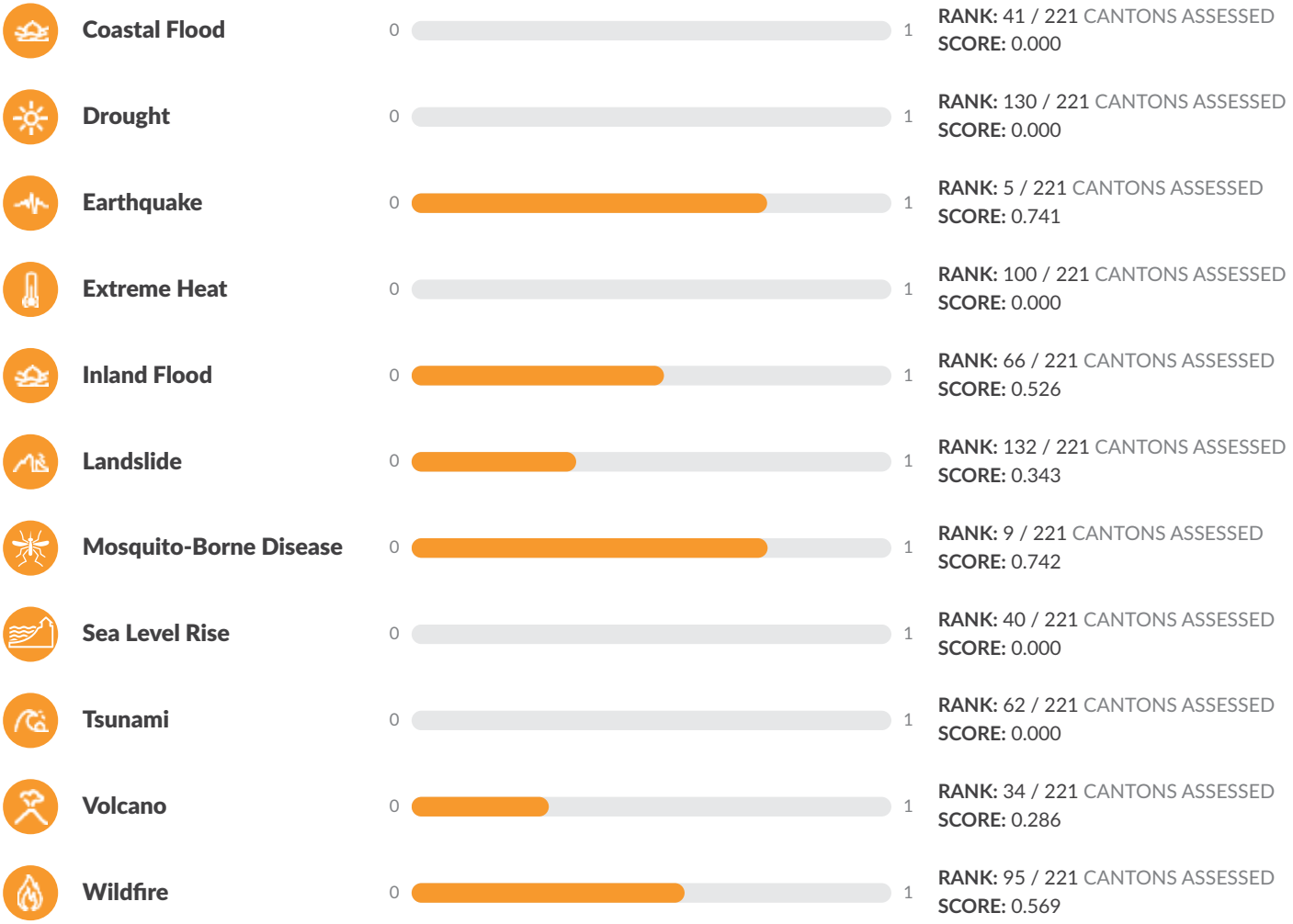
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

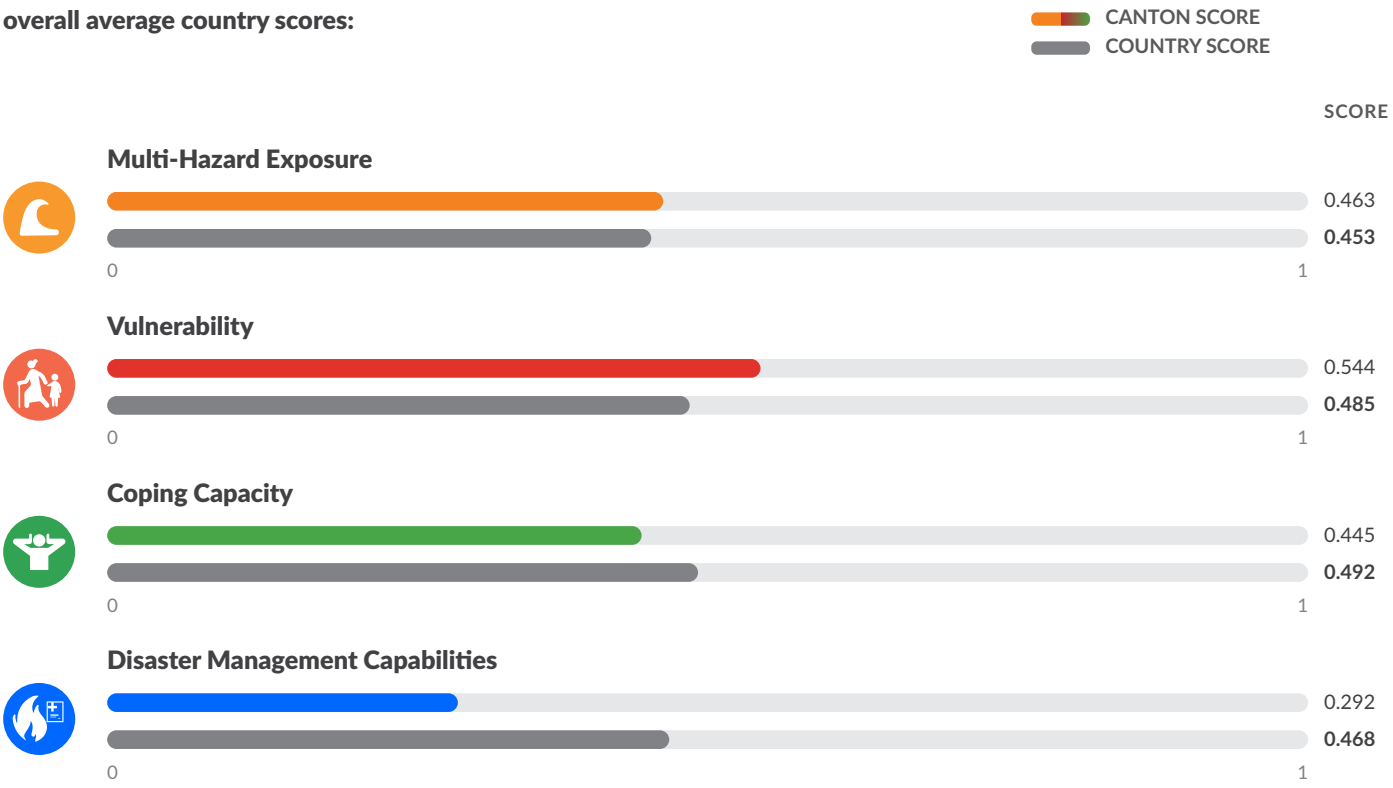


MULTI-HAZARD RISK (MHR)

RANKED
41 / 221
CANTONS ASSESSED
SCORE: 0.568

Quinindé's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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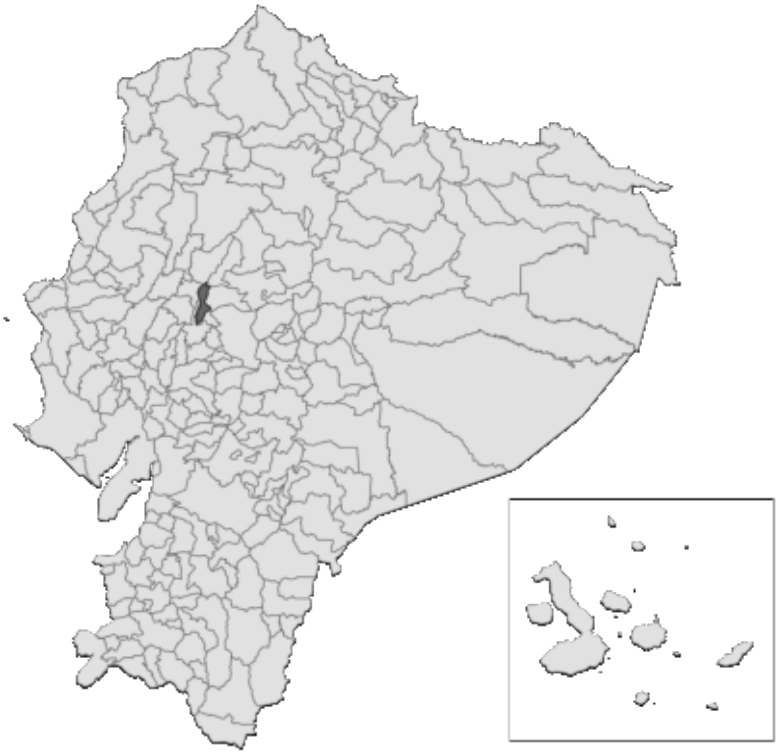
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QUINSALOMA

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.500 • RANK: 105/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.430 • RANK: 164/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.292 • RANK: 179/221 CANTONS ASSESSED

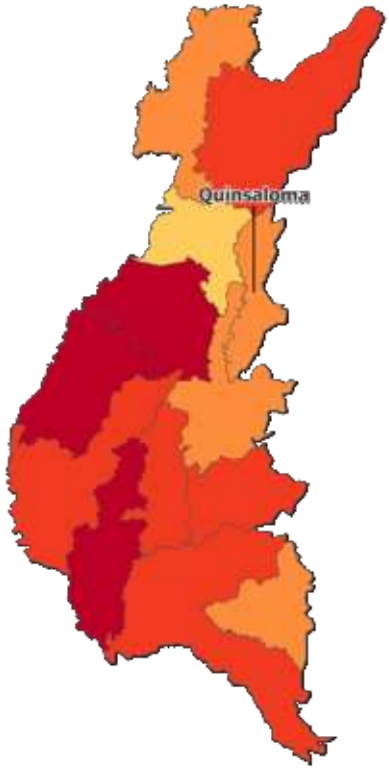
Vulnerability (V) - High
SCORE: 0.549 • RANK: 57/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.477 • RANK: 119/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.362 • RANK: 185/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

QUINSALOMA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	**0.500**
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 179 / 221 CANTONS ASSESSED
SCORE: 0.292



MHE
0.292

Raw MHE
0.390

Relative MHE
0.193

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
20,257 people exposed
10,175 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
10%
2,036 people exposed
1,255 structures exposed (12%)
Critical Infrastructure Exposed: 24%

Inland Flood
35%
7,048 people exposed
3,937 structures exposed (39%)
Critical Infrastructure Exposed: 53%

Landslide
<1%
5 people exposed
9 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
100%
20,257 people exposed
10,175 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
52%
10,465 people exposed
5,138 structures exposed (50%)
Critical Infrastructure Exposed: 48%

VULNERABILITY (V)

RANK: 57 / 221 CANTONS ASSESSED **SCORE: 0.549**

Vulnerability in Quinsaloma is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.629

- **8.9** Average Years of Schooling
- **53.1%** Population (age 24 and over) with General Basic Education Schooling
- **7.8%** Population (age 24 and over) with No Schooling
- **6.6%** Adult Illiteracy Rate
- **59.2%** Households with No Internet Access
- **86.5%** Households with No Access to Television
- **89.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.682

- **39.5%** Homes with Access to Public Water Source
- **23.5%** Homes Connected to the Public Sewage System
- **58.8%** Homes without Piped Water
- **3.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.516

- **56.4** Age Dependency Ratio
- **11.5%** Unemployment Rate
- **72.9%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.804

- **12.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.660

- **0.6** Female to Male Labor Ratio (distance from parity)
- **38.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **72%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **80.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.420

- **6.4%** Prevalence of Disability (among persons age 5 and over)
- **4.9** Perinatal Mortality Rate (per 1,000 births)
- **7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.397

- **32.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **14.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.388

22	14	29	18
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.523

15.6%	7.9%	18.1%	89.1%	7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.485

67.4	1.5%	3.5	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.435

0.2	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 119 / 221 CANTONS ASSESSED **SCORE: 0.477**

Quinsaloma exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.497

53.9%
Labor Force Participation

168,279
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.298

0%
Protected Area (% of land area)

-3,662
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.539

89.1%
Voter Participation

69.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.457

Communications Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.334

3.9%
Household Access to Fixed Phones

76.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.567

96.9%
Homes Served by the Public Electricity Network

71.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.330

7.7
Nurses and Midwives per 10,000 persons

11.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.595

14.1
Average Distance to Airport (km)

39.6
Average Distance to Sea or River Port (km)

1.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 185 / 221 CANTONS ASSESSED **SCORE: 0.362**

Quinsaloma exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.299

5.3	4.8%	0	62.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.424

20	6.3	4.1	9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 164 / 221 CANTONS ASSESSED
SCORE: 0.430

Quinsaloma's score and ranking are due to High Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Clean Water Access Vulnerability

Healthcare Capacity

Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

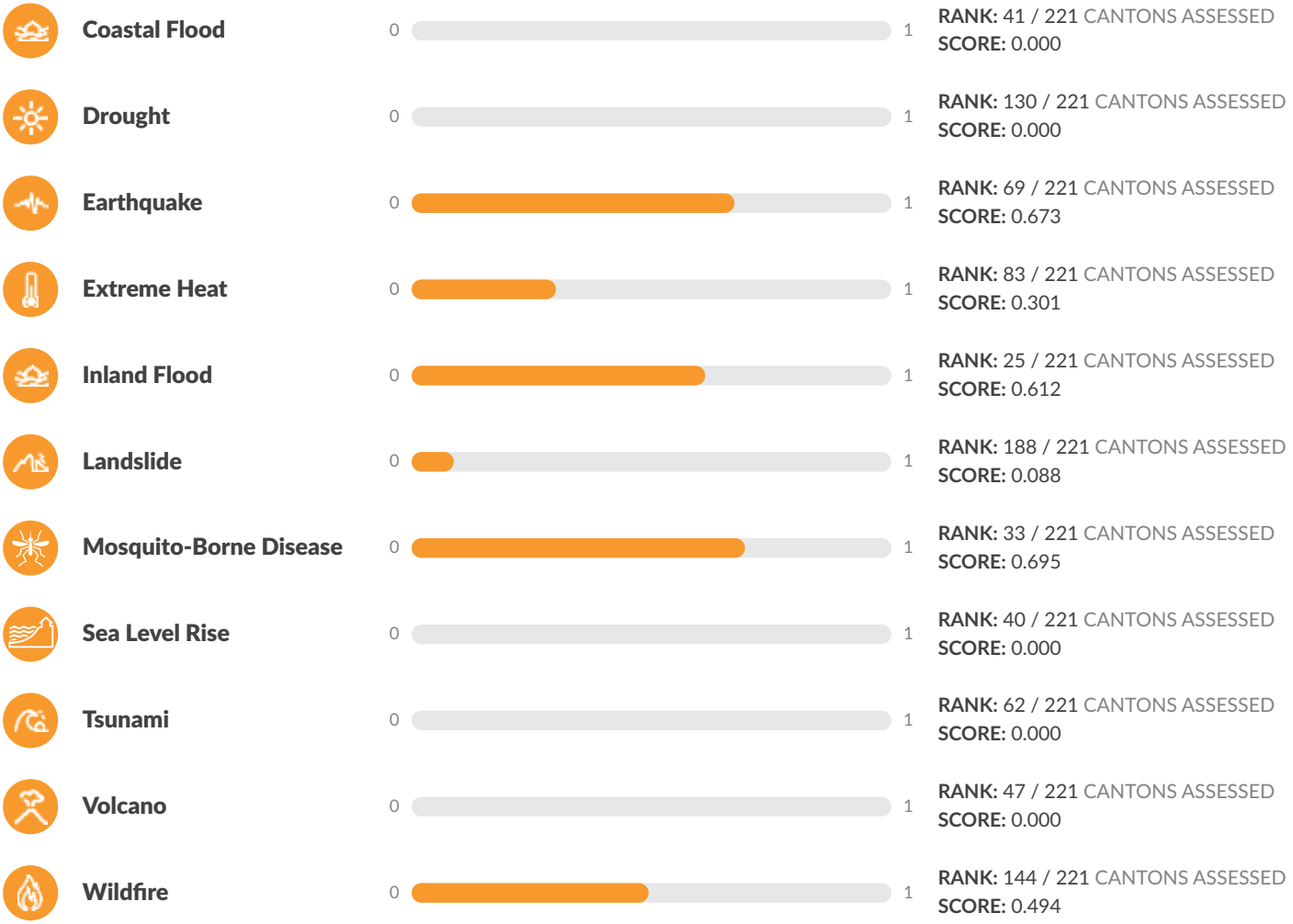
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
105 / 221
CANTONS ASSESSED
SCORE: 0.500

Quinsaloma's score and ranking are due to Very Low Multi-Hazard Exposure combined with High Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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RIOBAMBA

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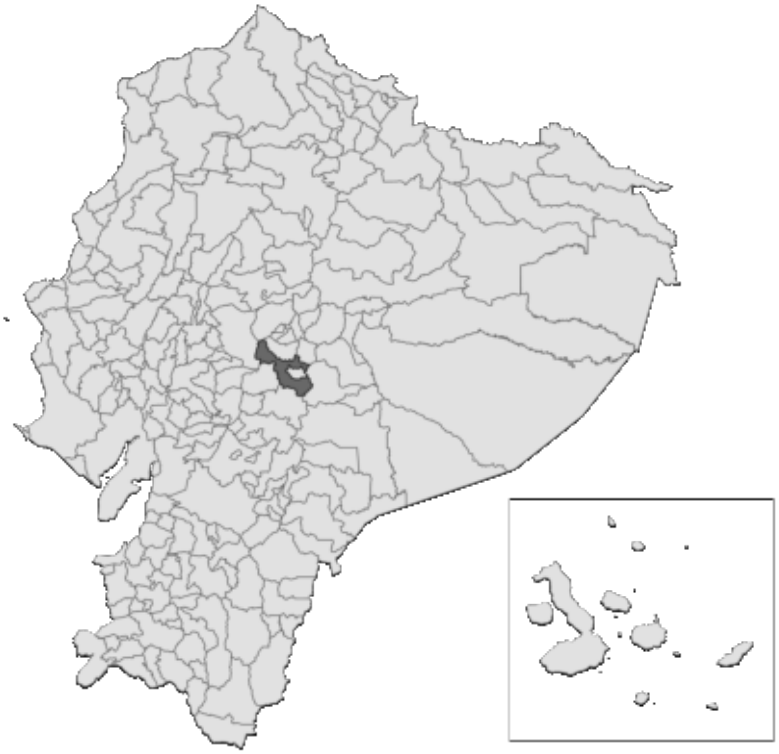
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RIOBAMBA

PROVINCE: CHIMBORAZO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.442 • RANK: 161/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.629 • RANK: 16/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.654 • RANK: 28/221 CANTONS ASSESSED

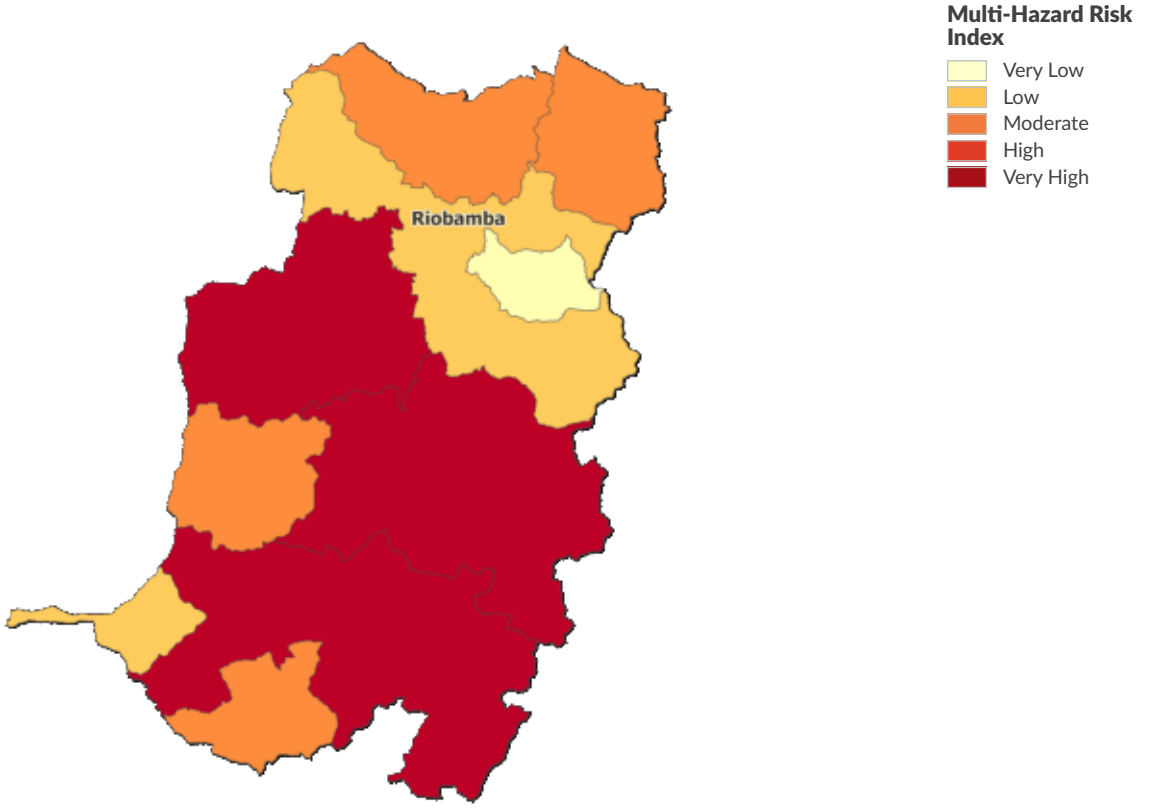
Vulnerability (V) - Very Low
SCORE: 0.359 • RANK: 206/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.642 • RANK: 22/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.604 • RANK: 28/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CHIMBORAZO PROVINCE

RIOBAMBA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Guamote	0.606
Alausí	0.590
Colta	0.571
Guano	0.512
Penipe	0.500
Pallatanga	0.487
Chunchi	0.483
Cumandá	0.442
Riobamba	**0.442**
Chambo	0.412

MULTI-HAZARD EXPOSURE (MHE)

RANK: 28 / 221 CANTONS ASSESSED
SCORE: 0.654



MHE
0.654

Raw MHE
0.895

Relative MHE
0.413

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
94%
245,302 people exposed
127,260 structures exposed (91%)
Critical Infrastructure Exposed: 82%

Earthquake
100%
260,375 people exposed
140,037 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
5%
11,725 people exposed
3,656 structures exposed (3%)
Critical Infrastructure Exposed: 4%

Landslide
24%
62,201 people exposed
50,339 structures exposed (36%)
Critical Infrastructure Exposed: 30%

Mosquito-Borne Disease
10%
26,577 people exposed
10,451 structures exposed (7%)
Critical Infrastructure Exposed: 16%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
15%
38,040 people exposed
18,786 structures exposed (13%)
Critical Infrastructure Exposed: 12%

Wildfire
97%
252,926 people exposed
135,842 structures exposed (97%)
Critical Infrastructure Exposed: 98%

VULNERABILITY (V)

RANK: 206 / 221 CANTONS ASSESSED **SCORE: 0.359**

Vulnerability in Riobamba is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.296

- **12.4** Average Years of Schooling
- **26.9%** Population (age 24 and over) with General Basic Education Schooling
- **5.6%** Population (age 24 and over) with No Schooling
- **4.7%** Adult Illiteracy Rate
- **31.8%** Households with No Internet Access
- **78%** Households with No Access to Television
- **45.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.257

- **94.8%** Homes with Access to Public Water Source
- **80.4%** Homes Connected to the Public Sewage System
- **17.4%** Homes without Piped Water
- **3.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.342

- **48.9** Age Dependency Ratio
- **10.9%** Unemployment Rate
- **25.3%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.405

- **2.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.225

- **0.2** Female to Male Labor Ratio (distance from parity)
- **26.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **54.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **19.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.498

- **6.6%** Prevalence of Disability (among persons age 5 and over)
- **5.5** Perinatal Mortality Rate (per 1,000 births)
- **11.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.329

- **0.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.535

44
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

21
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

46
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

27
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.156

4.2%
Homes with Exterior Walls in Poor Condition

0.1%
Homes with Inadequate Materials Used in Outer Walls

5.6%
Homes with Roofs in Poor Condition

65.6%
Households with No Access to Vehicle for Private Use

3.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.524

261.2
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

14
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.566

0.7
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 22 / 221 CANTONS ASSESSED **SCORE: 0.642**

Riobamba exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.753

62%
Labor Force Participation

961,246
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.495

6.4%
Protected Area (% of land area)

-5,044.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.520

81.6%
Voter Participation

88.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.701

Communications Capacity

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.806

31.5%
Household Access to Fixed Phones

90.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.769

98.9%
Homes Served by the Public Electricity Network

82.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.629

19.5
Nurses and Midwives per 10,000 persons

30.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 59/221 CANTONS ASSESSED
SCORE: 0.600

8
Average Distance to Airport (km)

91.7
Average Distance to Sea or River Port (km)

2.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 28 / 221 CANTONS ASSESSED **SCORE: 0.604**

Riobamba exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.554

3.8	0.3%	2.3	7.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.654

5	5	2.2	3.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 16 / 221 CANTONS ASSESSED
SCORE: 0.629

Riobamba's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Population Pressures

Vulnerable Health Status

Governance

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

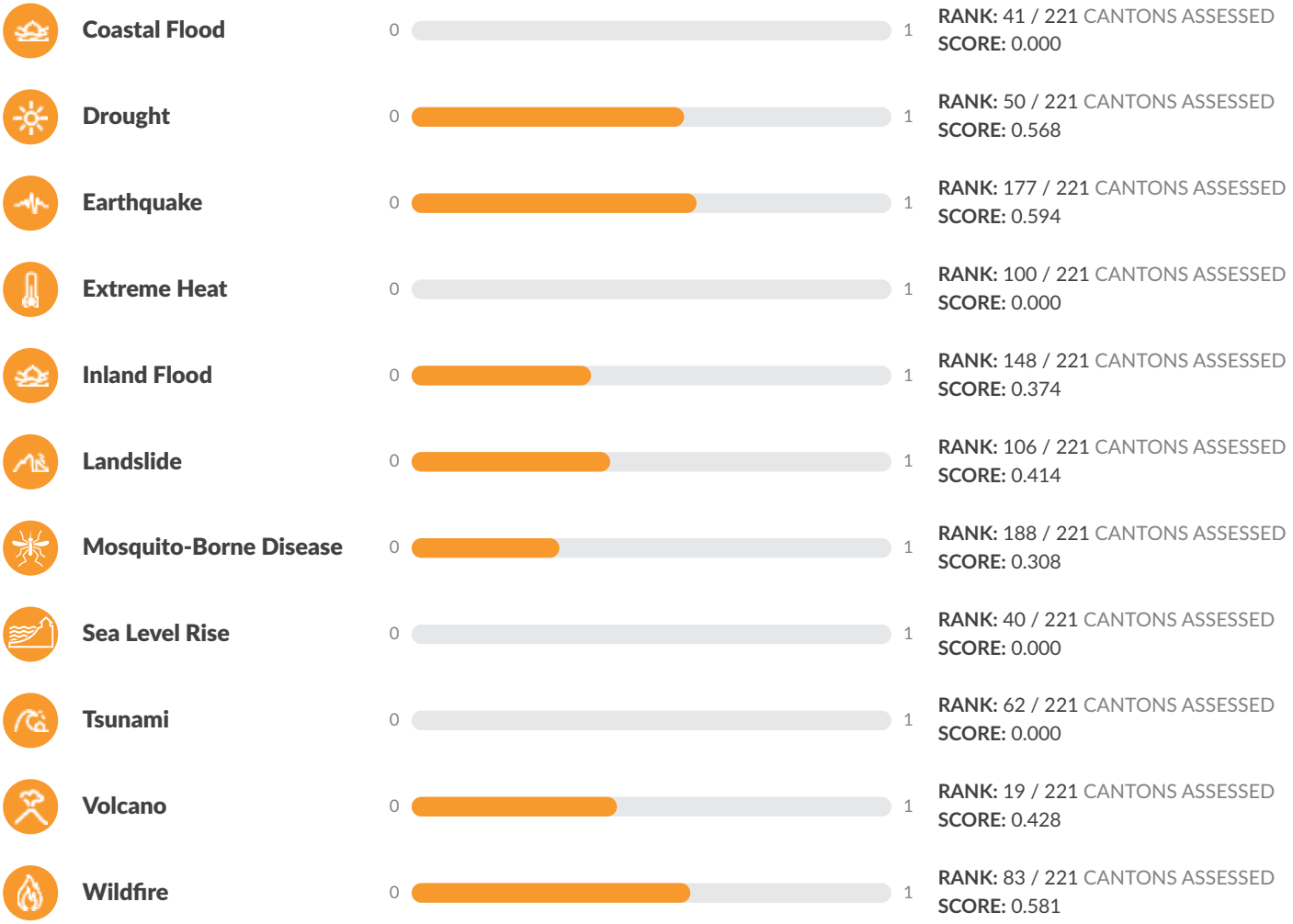
Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

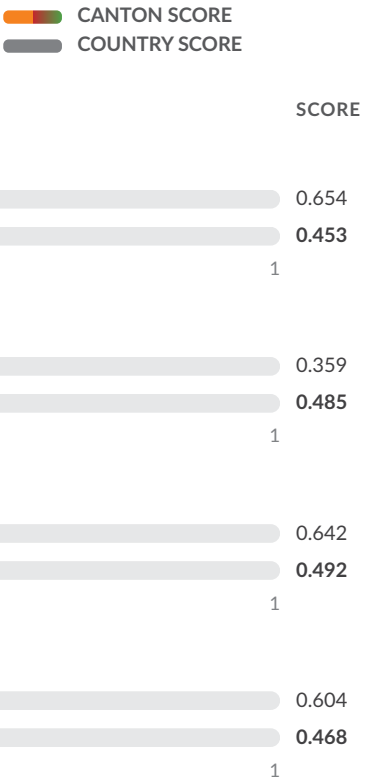


MULTI-HAZARD RISK (MHR)

RANKED
161 / 221
CANTONS ASSESSED
SCORE: 0.442

Riobamba's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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RIOVERDE

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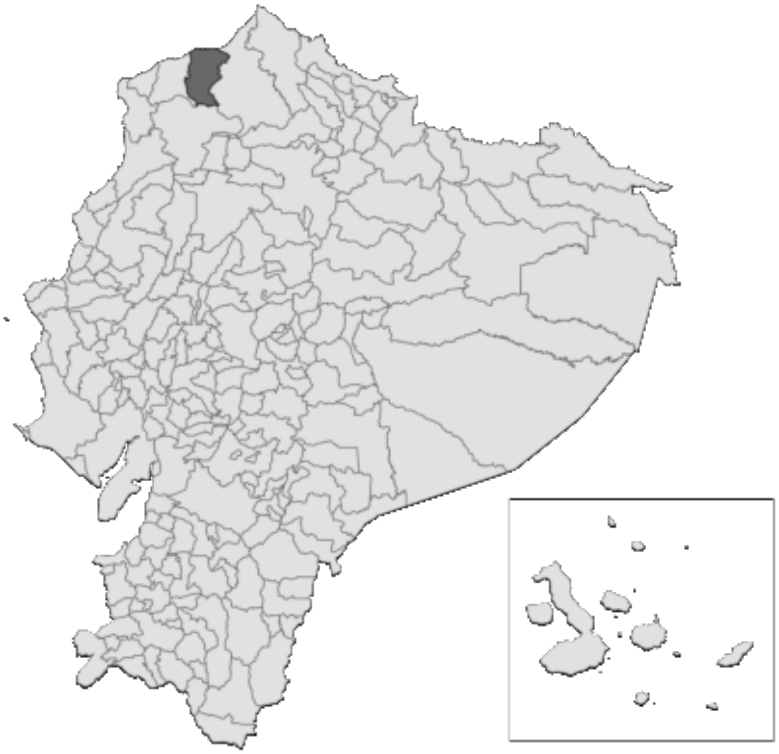
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ECUADOR

RIOVERDE

PROVINCE: ESMERALDAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.636 • RANK: 3/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.638 • RANK: 5/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.342 • RANK: 214/221 CANTONS ASSESSED

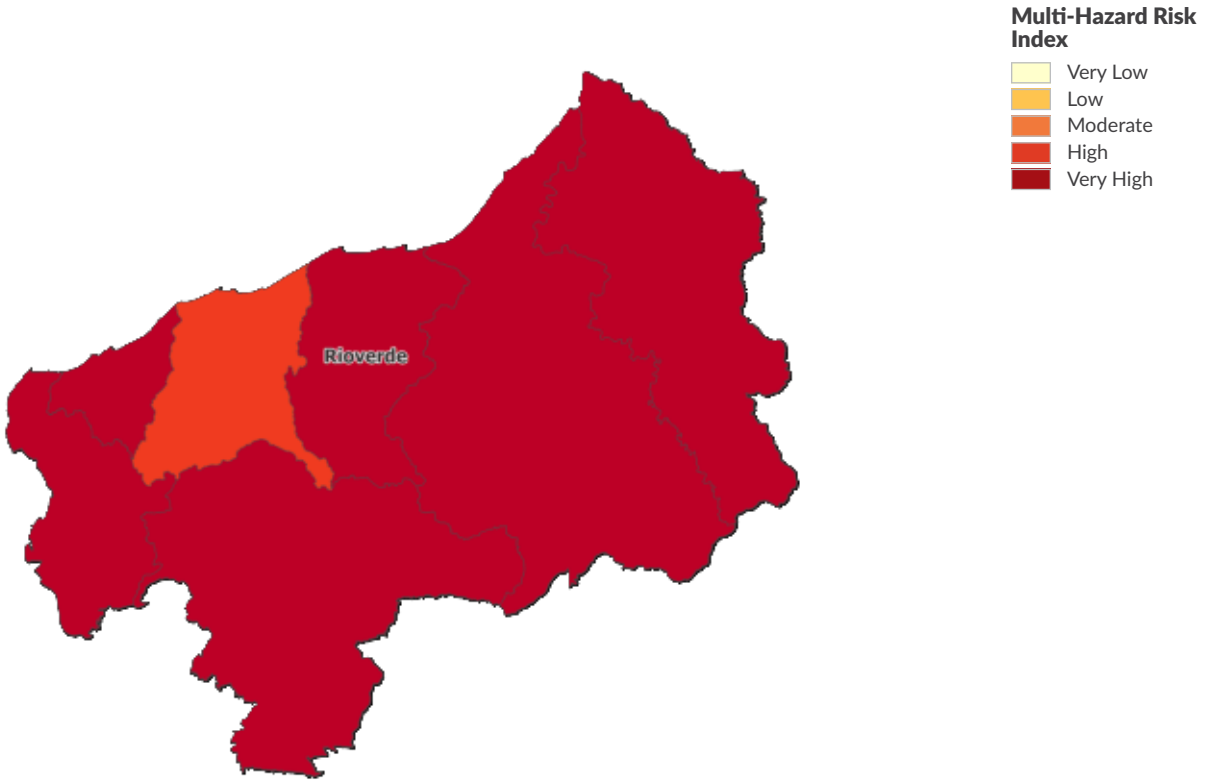
Coping Capacity (CC) - Very Low
SCORE: 0.363 • RANK: 193/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.569 • RANK: 54/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.300 • RANK: 207/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ESMERALDAS PROVINCE

RIOVERDE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Rioverde	**0.636**
Eloy Alfaro	0.631
Muisne	0.614
Atacames	0.585
San Lorenzo	0.572
Quinindé	0.568
Esmeraldas	0.523

MULTI-HAZARD EXPOSURE (MHE)

RANK: 54 / 221 CANTONS ASSESSED
SCORE: 0.569



MHE
0.569

Raw MHE
0.571

Relative MHE
0.567

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
3%
- **1,145** people exposed
- **650** structures exposed (3%)
- **Critical Infrastructure Exposed:** 1%

Drought
36%
- **12,267** people exposed
- **5,956** structures exposed (32%)
- **Critical Infrastructure Exposed:** 47%

Earthquake
100%
- **34,192** people exposed
- **18,583** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
52%
- **17,816** people exposed
- **8,499** structures exposed (46%)
- **Critical Infrastructure Exposed:** 66%

Inland Flood
26%
- **8,923** people exposed
- **4,673** structures exposed (25%)
- **Critical Infrastructure Exposed:** 30%

Landslide
12%
- **3,944** people exposed
- **2,391** structures exposed (13%)
- **Critical Infrastructure Exposed:** 8%

Mosquito-Borne Disease
99%
- **33,951** people exposed
- **18,397** structures exposed (99%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
<1%
- **188** people exposed
- **177** structures exposed (<1%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
31%
- **10,709** people exposed
- **5,947** structures exposed (32%)
- **Critical Infrastructure Exposed:** 42%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
97%
- **33,028** people exposed
- **18,164** structures exposed (98%)
- **Critical Infrastructure Exposed:** 99%

VULNERABILITY (V)

RANK: 5 / 221 CANTONS ASSESSED **SCORE: 0.638**

Vulnerability in Rioverde is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.701

- **8.2** Average Years of Schooling
- **56.7%** Population (age 24 and over) with General Basic Education Schooling
- **8.5%** Population (age 24 and over) with No Schooling
- **7.7%** Adult Illiteracy Rate
- **79.6%** Households with No Internet Access
- **77.8%** Households with No Access to Television
- **94%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.845

- **39.8%** Homes with Access to Public Water Source
- **3.7%** Homes Connected to the Public Sewage System
- **88%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.734

- **69.2** Age Dependency Ratio
- **24.7%** Unemployment Rate
- **92%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.800

- **12.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.828

- **0.6** Female to Male Labor Ratio (distance from parity)
- **60.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **99.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **91.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.392

- **9.3%** Prevalence of Disability (among persons age 5 and over)
- **1.9** Perinatal Mortality Rate (per 1,000 births)
- **5.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.238

- **8.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **5.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.479

41	10	49	27
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.677

23.4%	4.7%	25.1%	97%	10.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.513

21.7	1.6%	7.7	0.33
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.384

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 193 / 221 CANTONS ASSESSED **SCORE: 0.363**

Rioverde exhibits weaker Coping Capacity in the areas of Communications Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.359

50.9%
Labor Force Participation

45,588
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.302

0%
Protected Area (% of land area)

-3,389.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.342

81.6%
Voter Participation

57.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.408

Communications Capacity

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.285

4.6%
Household Access to Fixed Phones

64.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.330

88.4%
Homes Served by the Public Electricity Network

60.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.563

21.3
Nurses and Midwives per 10,000 persons

18.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.453

33.8
Average Distance to Airport (km)

36.3
Average Distance to Sea or River Port (km)

0.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 207 / 221 CANTONS ASSESSED **SCORE: 0.300**

Rioverde exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.364

7.3	11.4%	0	36.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.237

32.1	16	6.6	14.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 214 / 221 CANTONS ASSESSED
SCORE: 0.342

Rioverde's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Marginalization

Emergency Services

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

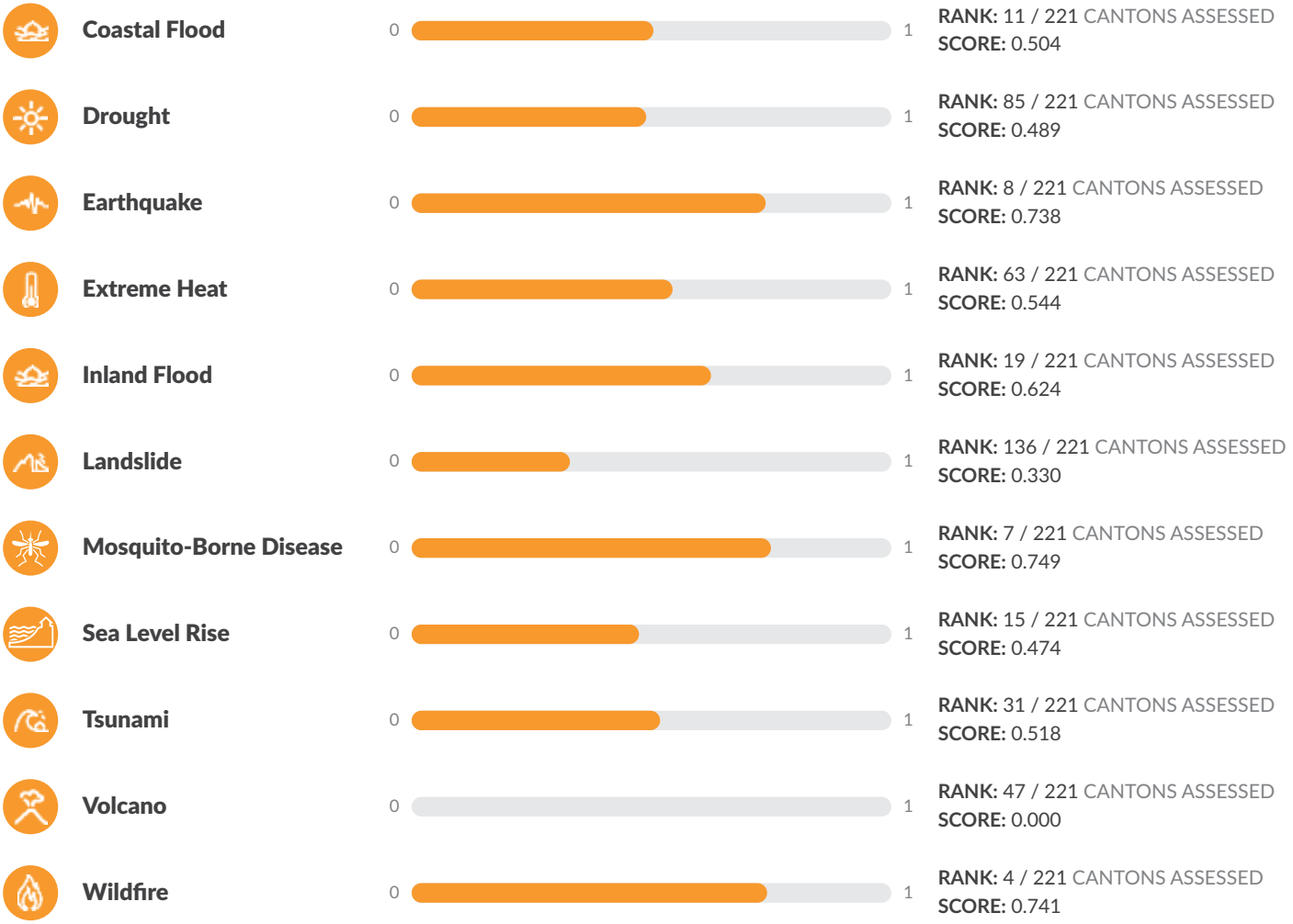
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

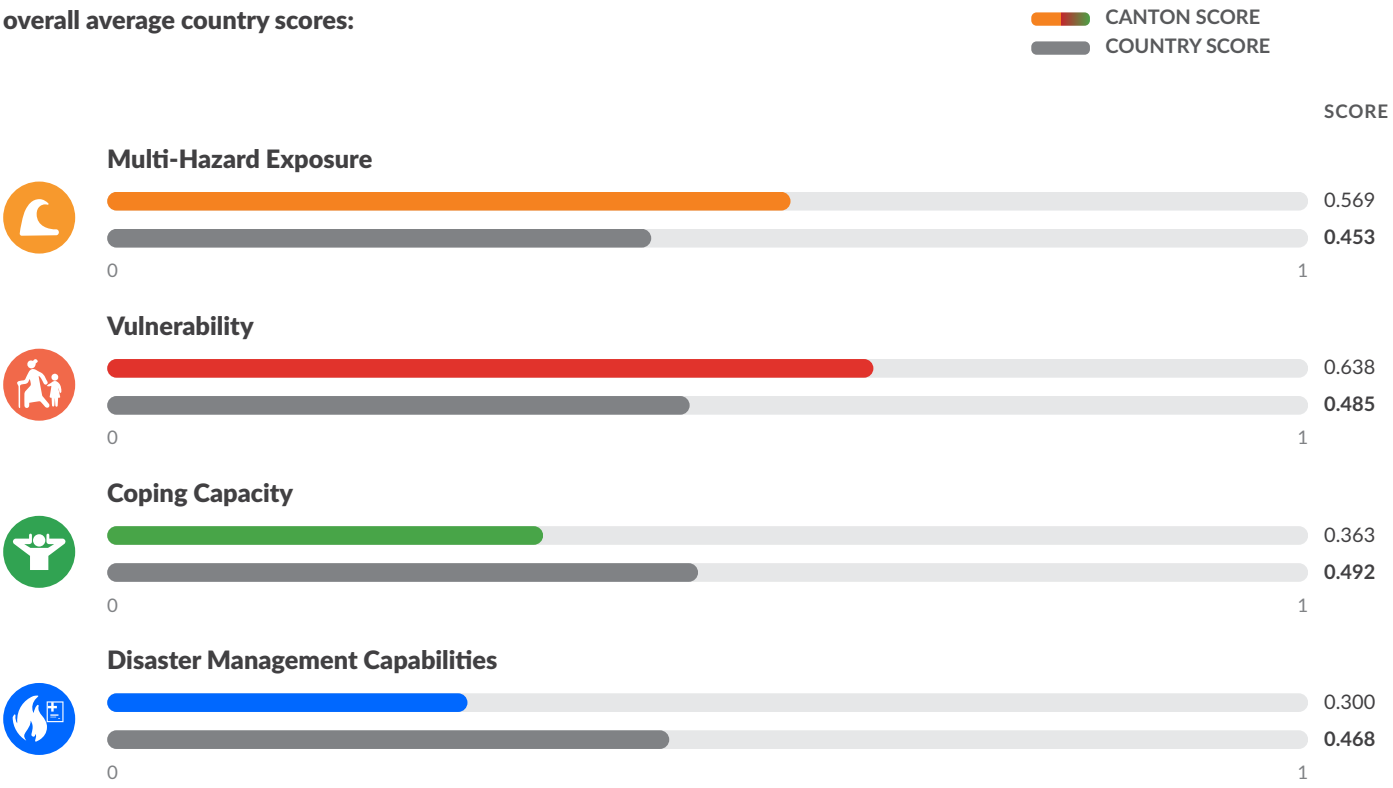


MULTI-HAZARD RISK (MHR)

RANKED
3 / 221
CANTONS ASSESSED
SCORE: 0.636

Rioverde's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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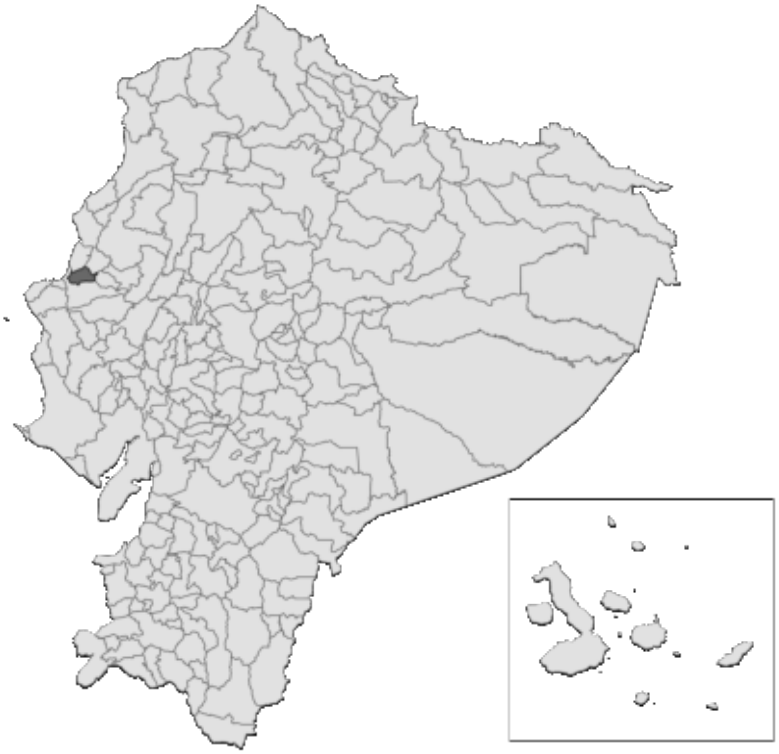
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ROCAFUERTE

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.527 • RANK: 76/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.514 • RANK: 82/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.507 • RANK: 89/221 CANTONS ASSESSED

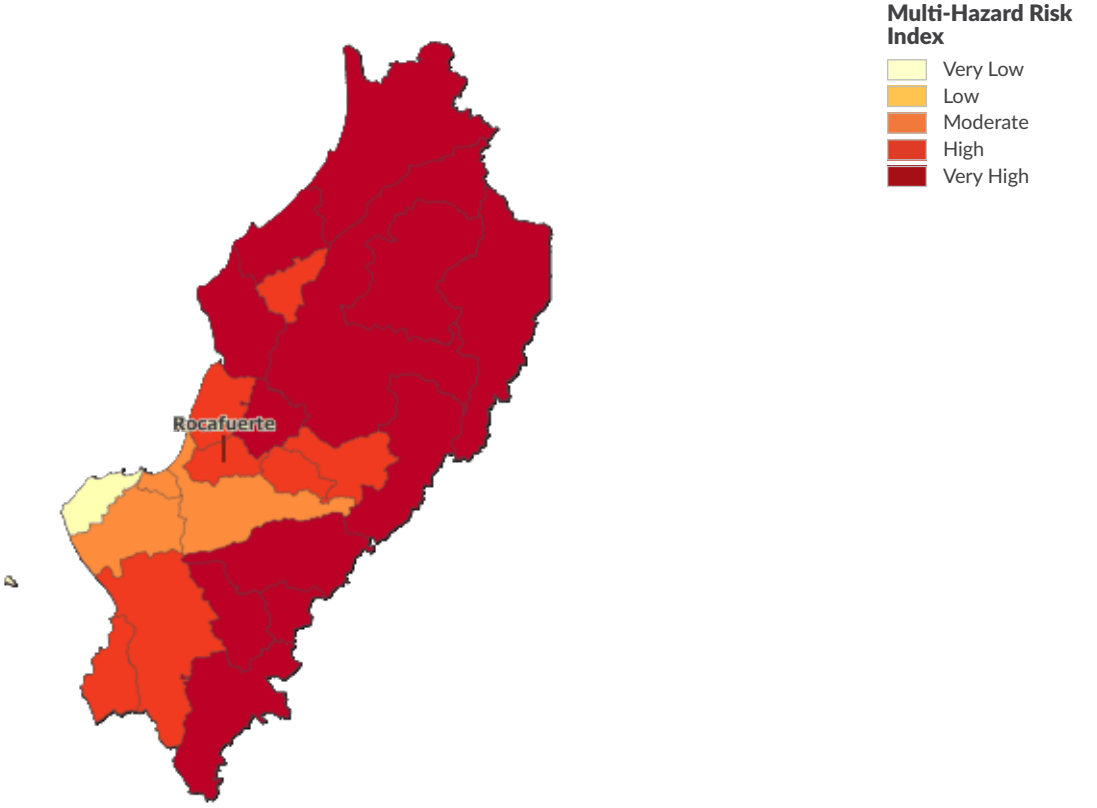
Coping Capacity (CC) - High
SCORE: 0.536 • RANK: 75/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.630 • RANK: 38/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.499 • RANK: 84/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

ROCAFUERTE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	**Rocafuerte**	**0.527**
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 38 / 221 CANTONS ASSESSED
SCORE: 0.630



MHE
0.630

Raw MHE
0.626

Relative MHE
0.634

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
100%
- **43,675** people exposed
- **23,740** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **43,675** people exposed
- **23,740** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **43,672** people exposed
- **23,735** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
45%
- **19,642** people exposed
- **8,907** structures exposed (38%)

Critical Infrastructure Exposed: 39%

Landslide
7%
- **3,085** people exposed
- **1,524** structures exposed (6%)

Critical Infrastructure Exposed: 4%

Mosquito-Borne Disease
62%
- **27,015** people exposed
- **15,183** structures exposed (64%)

Critical Infrastructure Exposed: 82%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
19%
- **8,361** people exposed
- **5,493** structures exposed (23%)

Critical Infrastructure Exposed: 30%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
46%
- **20,034** people exposed
- **10,578** structures exposed (45%)

Critical Infrastructure Exposed: 57%

VULNERABILITY (V)

RANK: 82 / 221 CANTONS ASSESSED **SCORE: 0.514**

Vulnerability in Rocafuerte is primarily driven by Disaster Impacts and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.499

- **10** Average Years of Schooling
- **48%** Population (age 24 and over) with General Basic Education Schooling
- **5.3%** Population (age 24 and over) with No Schooling
- **4.9%** Adult Illiteracy Rate
- **49.4%** Households with No Internet Access
- **84.3%** Households with No Access to Television
- **76.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.549

- **80.4%** Homes with Access to Public Water Source
- **23.1%** Homes Connected to the Public Sewage System
- **39%** Homes without Piped Water
- **3.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.420

- **52.2** Age Dependency Ratio
- **11.1%** Unemployment Rate
- **51.8%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.488

- **3.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.497

- **0.5** Female to Male Labor Ratio (distance from parity)
- **38.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **42.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **53.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.465

- **8.8%** Prevalence of Disability (among persons age 5 and over)
- **2** Perinatal Mortality Rate (per 1,000 births)
- **8.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.432

- **47** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.529

88	20	27	33
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.536

17.9%	26%	16%	80.1%	6.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.500

153.3	2%	8.1	0.27
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.653

0.6	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 75 / 221 CANTONS ASSESSED **SCORE: 0.536**

Rocafuerte exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.490

58.3%
Labor Force Participation

60,261
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.337

0%
Protected Area (% of land area)

-1,146.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.607

87.3%
Voter Participation

86.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.576

Communications Capacity

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.599

8.3%
Household Access to Fixed Phones

89.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.639

98.2%
Homes Served by the Public Electricity Network

73.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.362

9.1
Nurses and Midwives per 10,000 persons

12.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.705

14.6
Average Distance to Airport (km)

32.1
Average Distance to Sea or River Port (km)

3.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 84 / 221 CANTONS ASSESSED **SCORE: 0.499**

Rocafuerte exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.465

2.7	4.8%	0.4	27
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.533

5.6	8.1	4	5.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 89 / 221 CANTONS ASSESSED
SCORE: 0.507

Rocafuerte's score and ranking are due to High Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Healthcare Capacity

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

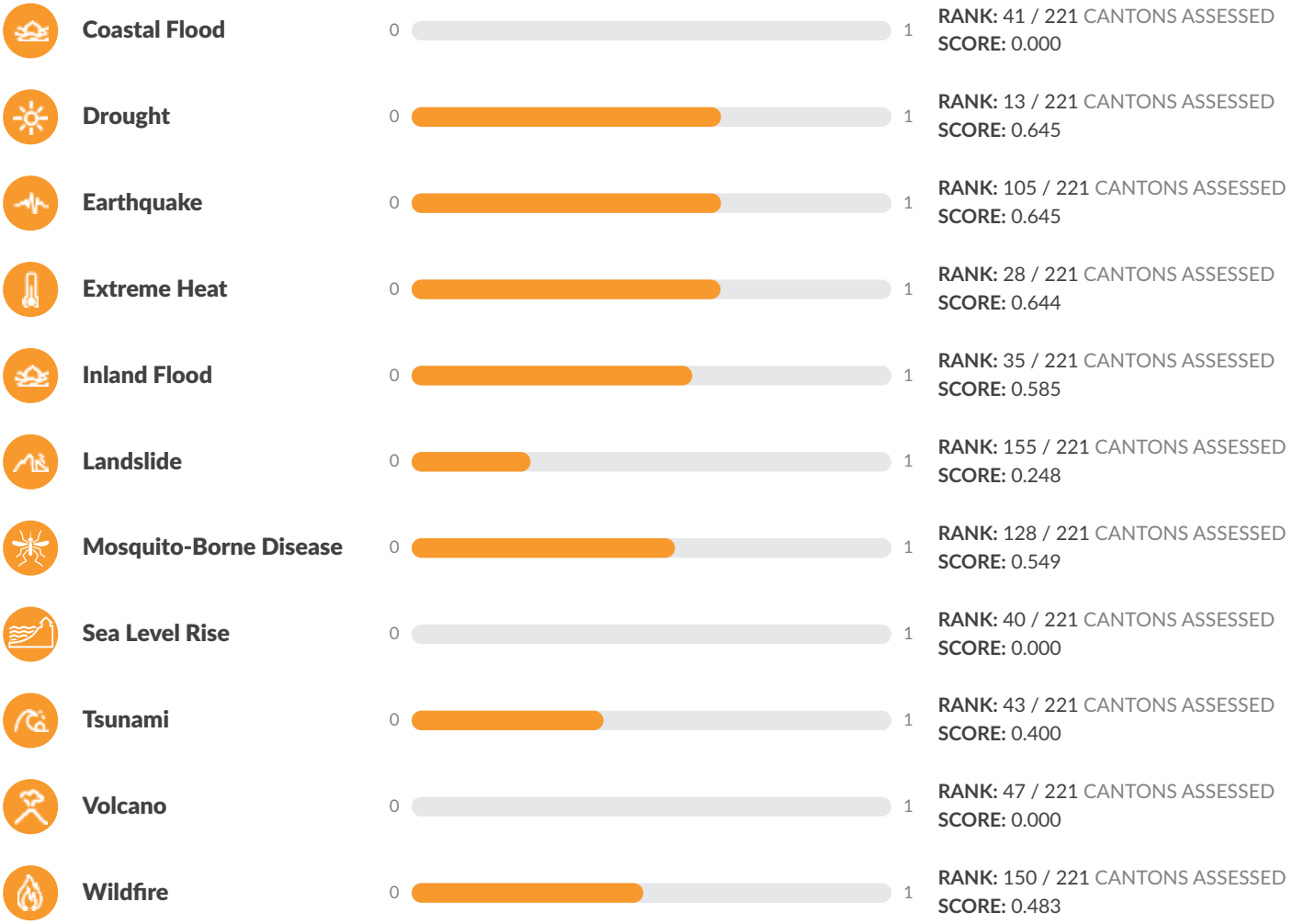
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

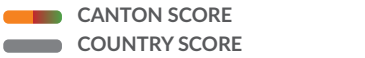


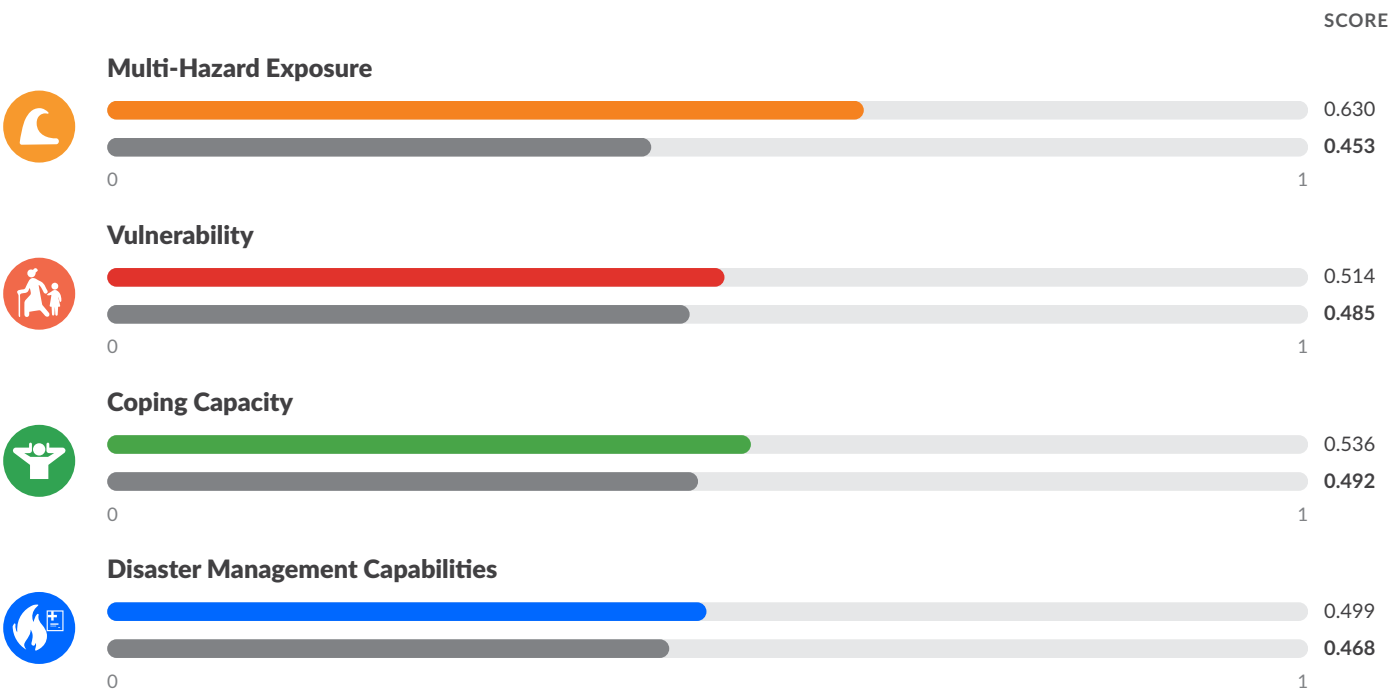
MULTI-HAZARD RISK (MHR)

RANKED
76 / 221
CANTONS ASSESSED
SCORE: 0.527

Rocafuerte's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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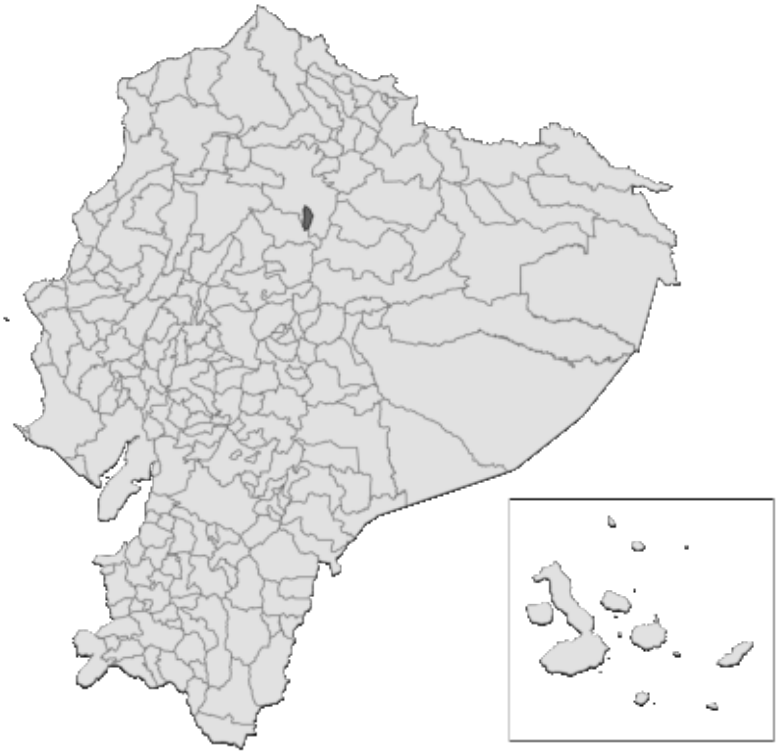
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RUMIÑAHUI

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.313 • RANK: 221/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.255 • RANK: 219/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.728 • RANK: 1/221 CANTONS ASSESSED

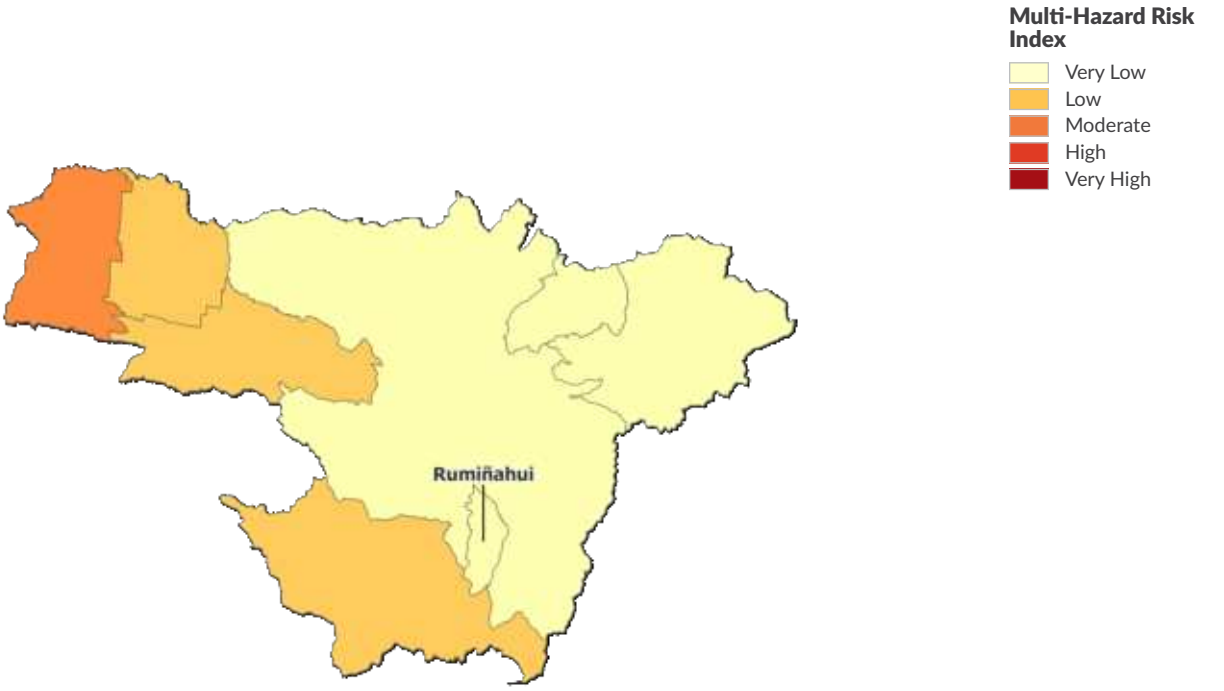
Coping Capacity (CC) - Very High
SCORE: 0.757 • RANK: 1/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.433 • RANK: 115/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.681 • RANK: 9/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

RUMIÑAHUI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	0.504
San Miguel De Los Bancos	0.463
Pedro Vicente Maldonado	0.449
Mejía	0.442
Cayambe	0.412
Distrito Metropolitano De Quito	0.393
Pedro Moncayo	0.381
Rumiñahui	**0.313**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 115 / 221 CANTONS ASSESSED
SCORE: 0.433



MHE
0.433

Raw MHE
0.679

Relative MHE
0.188

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
107,463 people exposed
53,448 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
844 people exposed
429 structures exposed (<1%)
Critical Infrastructure Exposed: 1%

Landslide
19%
20,423 people exposed
10,122 structures exposed (19%)
Critical Infrastructure Exposed: 34%

Mosquito-Borne Disease
40%
42,982 people exposed
21,619 structures exposed (40%)
Critical Infrastructure Exposed: 59%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
15%
15,743 people exposed
7,452 structures exposed (14%)
Critical Infrastructure Exposed: 26%

Wildfire
96%
102,813 people exposed
51,062 structures exposed (96%)
Critical Infrastructure Exposed: 98%

VULNERABILITY (V)

RANK: 219 / 221 CANTONS ASSESSED **SCORE: 0.255**

Vulnerability in Rumiñahui is primarily driven by Population Pressures and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.066

- **13.9** Average Years of Schooling
- **21.1%** Population (age 24 and over) with General Basic Education Schooling
- **1.5%** Population (age 24 and over) with No Schooling
- **1.2%** Adult Illiteracy Rate
- **18.9%** Households with No Internet Access
- **62.7%** Households with No Access to Television
- **29.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.040

- **99.1%** Homes with Access to Public Water Source
- **95.9%** Homes Connected to the Public Sewage System
- **4.1%** Homes without Piped Water
- **1.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.196

- **44** Age Dependency Ratio
- **10%** Unemployment Rate
- **11.4%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.738

- **10%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.175

- **0.2** Female to Male Labor Ratio (distance from parity)
- **26.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **34.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **15.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.384

- **4.2%** Prevalence of Disability (among persons age 5 and over)
- **4.3** Perinatal Mortality Rate (per 1,000 births)
- **10.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.312

- **0.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.379

48
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

9
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.060

1.8%
Homes with Exterior Walls in Poor Condition

0.1%
Homes with Inadequate Materials Used in Outer Walls

2.5%
Homes with Roofs in Poor Condition

50.6%
Households with No Access to Vehicle for Private Use

2.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.609

796.7
Population Density (persons per sq km)

1.9%
Average Annual Population Change (2010-2022)

35.7
Net Migration Rate (per 1,000 persons)

0.23
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.433

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 1 / 221 CANTONS ASSESSED **SCORE: 0.757**

Rumiñahui exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.865

66.9%
Labor Force Participation

1,213,454
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.344

0%
Protected Area (% of land area)

-765.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.800

86.8%
Voter Participation

99.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.744

Communications Capacity

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.954

49.9%
Household Access to Fixed Phones

93.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.899

99.7%
Homes Served by the Public Electricity Network

87%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.507

12.3
Nurses and Midwives per 10,000 persons

22.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.615

11.7
Average Distance to Airport (km)

116
Average Distance to Sea or River Port (km)

6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 9 / 221 CANTONS ASSESSED **SCORE: 0.681**

Rumiñahui exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.513

1	10%	0.6	85.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.850

2.6	2.8	1	2.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 1 / 221 CANTONS ASSESSED
SCORE: 0.728

Rumiñahui's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures **Healthcare Capacity** **Mass Care Support** **Disaster Impacts**

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

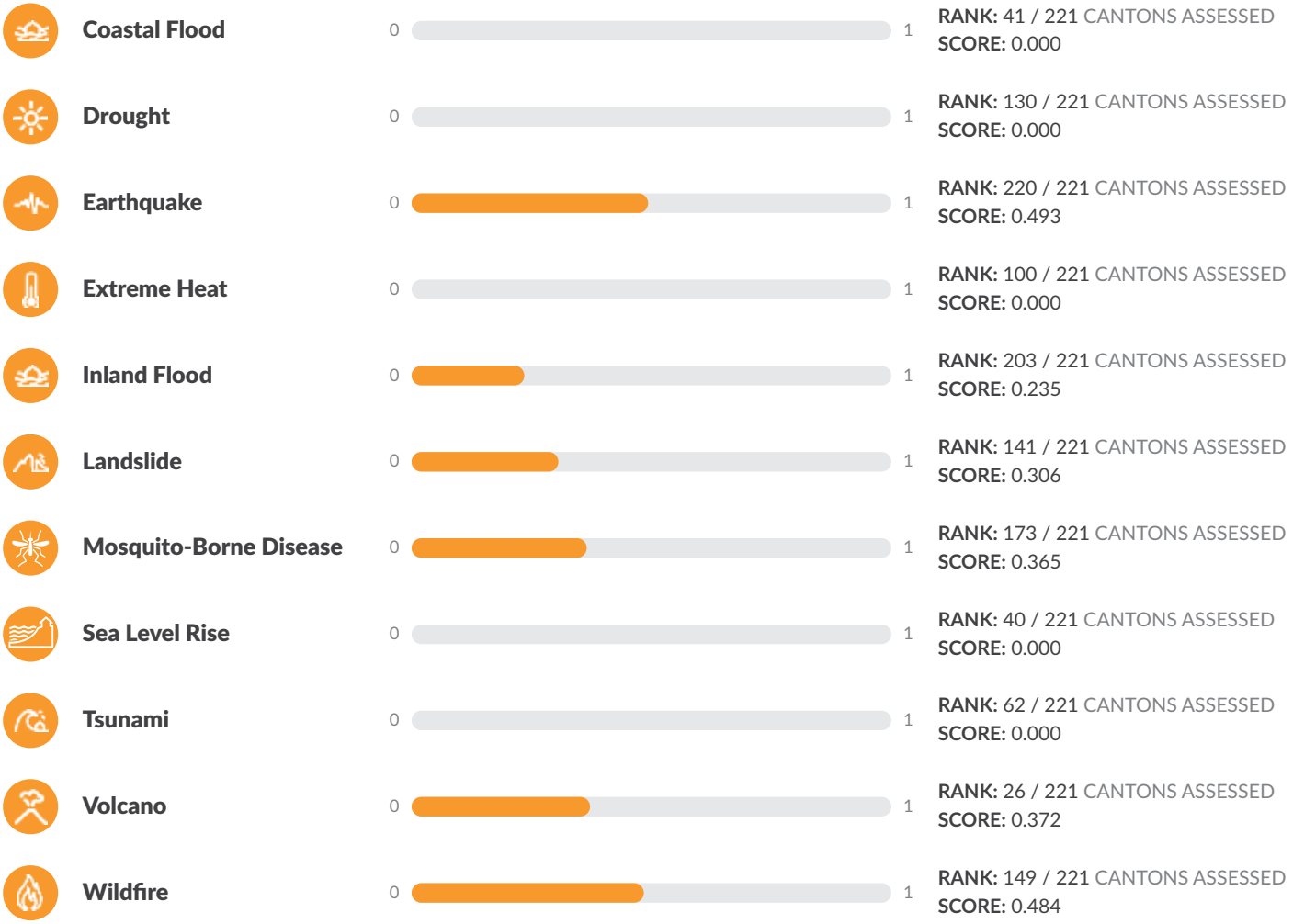
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
221 / 221
CANTONS ASSESSED
SCORE: 0.313

Rumiñahui's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: COTOPAXI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.460 • RANK: 143/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.417 • RANK: 174/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.545 • RANK: 65/221 CANTONS ASSESSED

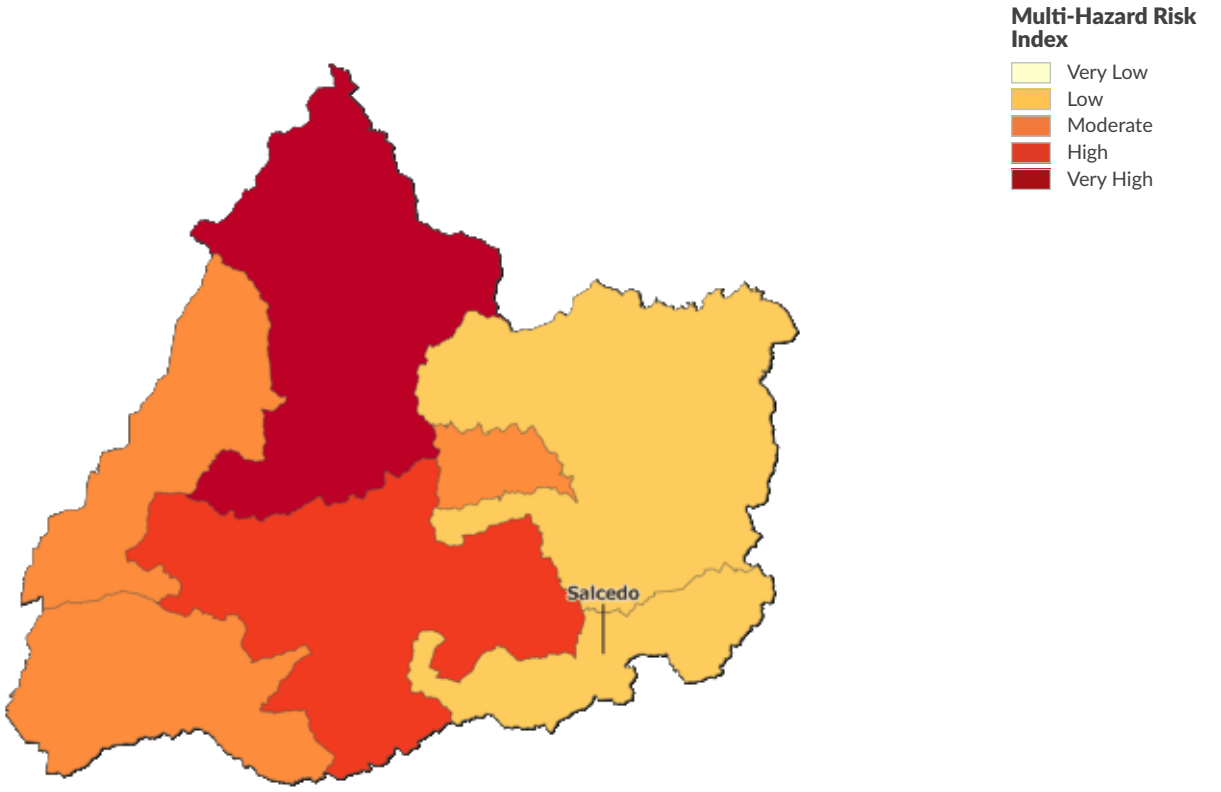
Coping Capacity (CC) - High
SCORE: 0.535 • RANK: 76/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.475 • RANK: 89/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.517 • RANK: 75/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN COTOPAXI PROVINCE

SALCEDO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sigchos	0.585
Pujilí	0.541
Saquisilí	0.490
Pangua	0.486
La Maná	0.475
Salcedo	**0.460**
Latacunga	0.440

MULTI-HAZARD EXPOSURE (MHE)

RANK: 89 / 221 CANTONS ASSESSED
SCORE: 0.475



MHE
0.475

Raw MHE
0.675

Relative MHE
0.276

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
76%
- **52,439** people exposed
- **45,295** structures exposed (79%)

Critical Infrastructure Exposed: 74%

Earthquake
100%
- **69,117** people exposed
- **57,101** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
2%
- **1,371** people exposed
- **1,193** structures exposed (2%)

Critical Infrastructure Exposed: 5%

Landslide
25%
- **16,939** people exposed
- **15,071** structures exposed (26%)

Critical Infrastructure Exposed: 25%

Mosquito-Borne Disease
5%
- **3,594** people exposed
- **2,442** structures exposed (4%)

Critical Infrastructure Exposed: <1%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
9%
- **6,241** people exposed
- **6,149** structures exposed (11%)

Critical Infrastructure Exposed: 22%

Wildfire
99%
- **68,490** people exposed
- **56,724** structures exposed (99%)

Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 174 / 221 CANTONS ASSESSED **SCORE: 0.417**

Vulnerability in Salcedo is primarily driven by Information Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.508

- **9.7** Average Years of Schooling
- **47%** Population (age 24 and over) with General Basic Education Schooling
- **7.6%** Population (age 24 and over) with No Schooling
- **7.1%** Adult Illiteracy Rate
- **46%** Households with No Internet Access
- **84.1%** Households with No Access to Television
- **68.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.436

- **91.5%** Homes with Access to Public Water Source
- **54.9%** Homes Connected to the Public Sewage System
- **38.1%** Homes without Piped Water
- **5.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.468

- **52.8** Age Dependency Ratio
- **12.2%** Unemployment Rate
- **48.8%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.632

- **6.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.372

- **0.3** Female to Male Labor Ratio (distance from parity)
- **28** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **81.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **41.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.469

- **8.8%** Prevalence of Disability (among persons age 5 and over)
- **4** Perinatal Mortality Rate (per 1,000 births)
- **12.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.218

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **20.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.377

45
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

9
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

20
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.282

8.2%
Homes with Exterior Walls in Poor Condition

0.2%
Homes with Inadequate Materials Used in Outer Walls

12.1%
Homes with Roofs in Poor Condition

72.2%
Households with No Access to Vehicle for Private Use

5.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.464

144.1
Population Density (persons per sq km)

1.3%
Average Annual Population Change (2010-2022)

7.9
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.304

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 76 / 221 CANTONS ASSESSED **SCORE: 0.535**

Salcedo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.594

60.5%
Labor Force Participation

153,493
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.608

10.4%
Protected Area (% of land area)

-740.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.442

84.3%
Voter Participation

69.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.544

Communications Capacity

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.628

16.7%
Household Access to Fixed Phones

85.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.676

97.5%
Homes Served by the Public Electricity Network

81.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.351

7.1
Nurses and Midwives per 10,000 persons

14.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.521

15.5
Average Distance to Airport (km)

101.5
Average Distance to Sea or River Port (km)

2.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 75 / 221 CANTONS ASSESSED **SCORE: 0.517**

Salcedo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.382

2.6	2.9%	0.5	70.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.652

5.4	5.8	2.3	3.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 65 / 221 CANTONS ASSESSED
SCORE: 0.545

Salcedo's score and ranking are due to Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Governance

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

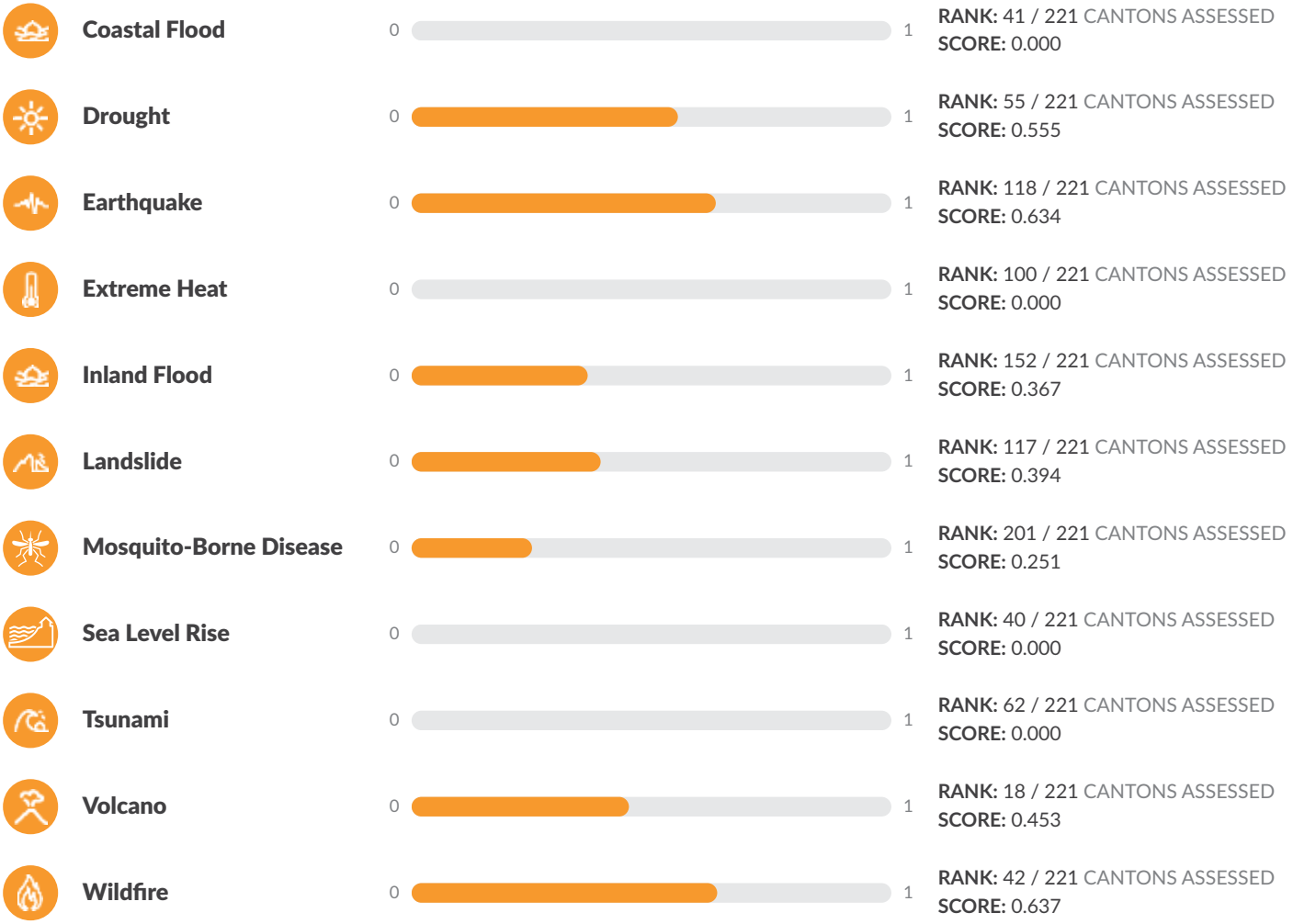
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

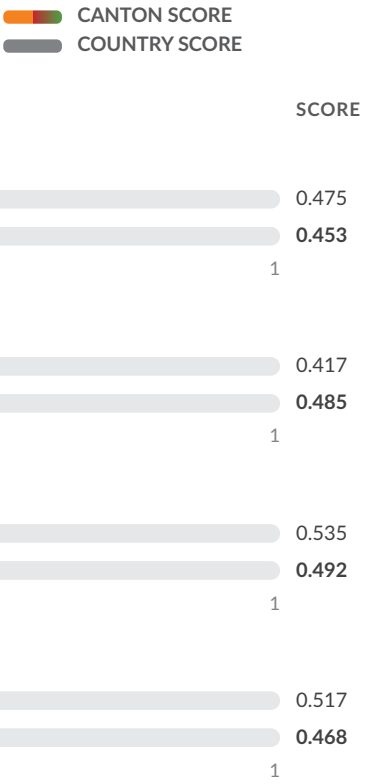


MULTI-HAZARD RISK (MHR)

RANKED
143 / 221
CANTONS ASSESSED
SCORE: 0.460

Salcedo's score and ranking are due to High Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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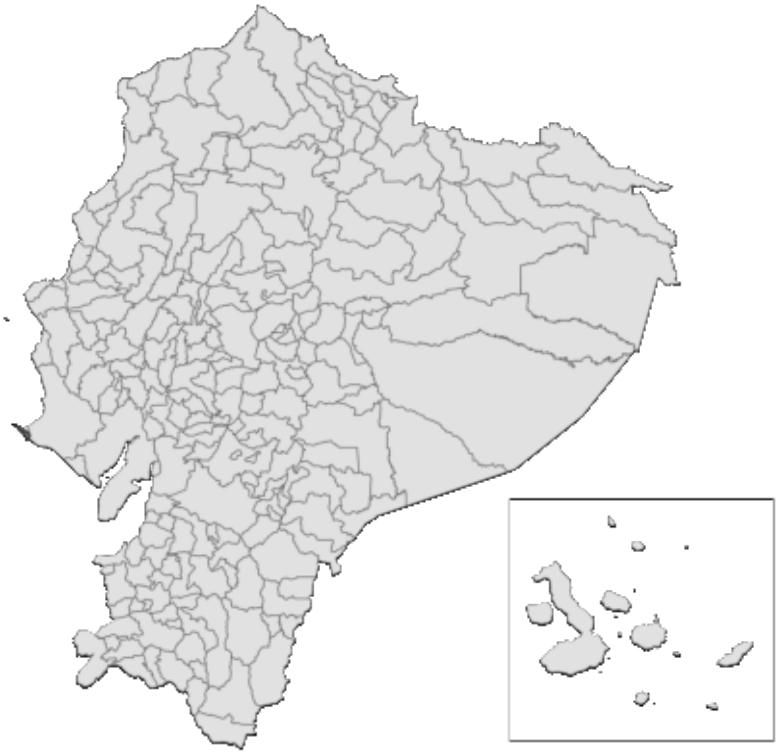
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SALINAS

PROVINCE: SANTA ELENA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.427 • RANK: 179/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.477 • RANK: 124/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.621 • RANK: 20/221 CANTONS ASSESSED

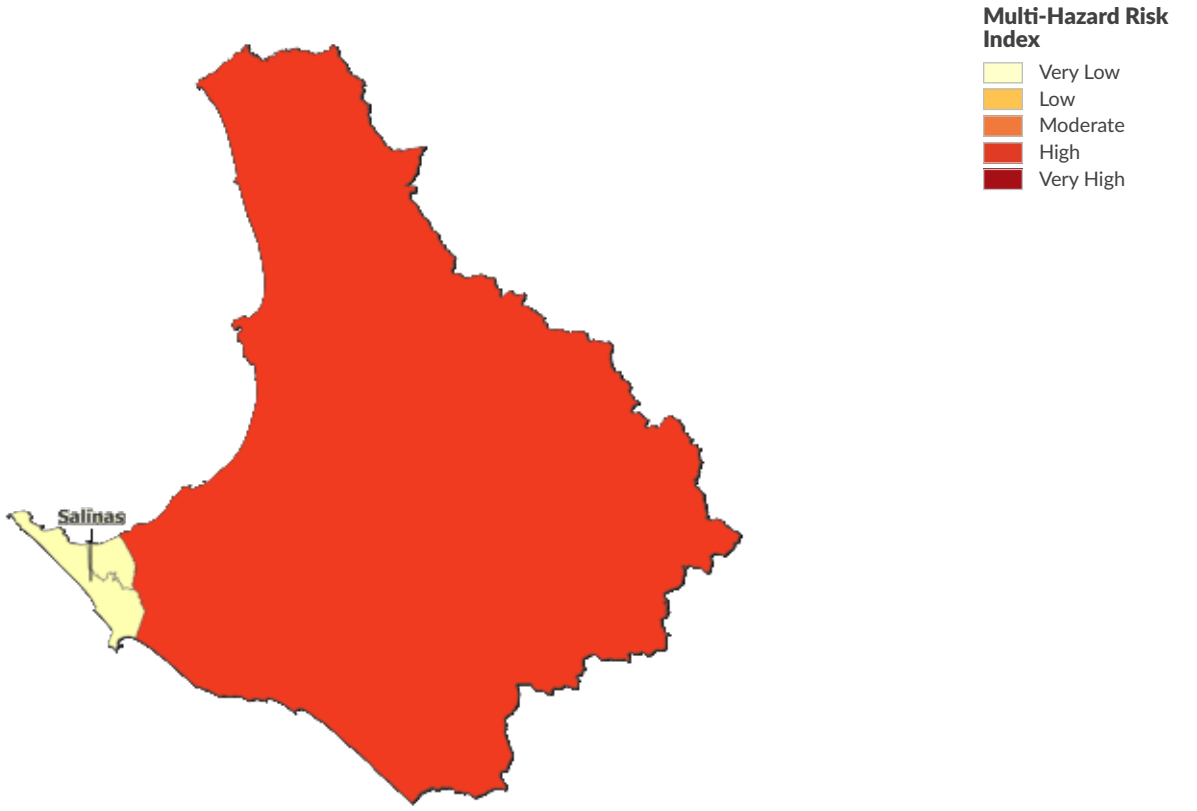
Coping Capacity (CC) - Very High
SCORE: 0.629 • RANK: 27/221 CANTONS ASSESSED

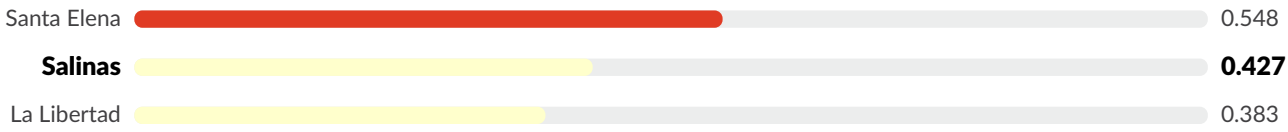
Multi-Hazard Exposure (MHE) - High
SCORE: 0.574 • RANK: 53/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.712 • RANK: 6/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SANTA ELENA PROVINCE

SALINAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 53 / 221 CANTONS ASSESSED
SCORE: 0.574



MHE
0.574

Raw MHE
0.688

Relative MHE
0.459

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
1%
- **1,270** people exposed
- **751** structures exposed (2%)

Critical Infrastructure Exposed: 9%

Drought
100%
- **90,322** people exposed
- **36,284** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **90,322** people exposed
- **36,284** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
18%
- **15,872** people exposed
- **4,899** structures exposed (14%)

Critical Infrastructure Exposed: 8%

Inland Flood
2%
- **2,003** people exposed
- **1,275** structures exposed (4%)

Critical Infrastructure Exposed: 19%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
69%
- **62,270** people exposed
- **25,483** structures exposed (70%)

Critical Infrastructure Exposed: 83%

Sea Level Rise
<1%
- **431** people exposed
- **217** structures exposed (<1%)

Critical Infrastructure Exposed: 9%

Tsunami
85%
- **76,625** people exposed
- **32,081** structures exposed (88%)

Critical Infrastructure Exposed: 80%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
<1%
- **161** people exposed
- **40** structures exposed (<1%)

Critical Infrastructure Exposed: 1%

VULNERABILITY (V)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.477**

Vulnerability in Salinas is primarily driven by Population Pressures and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.387

- **11** Average Years of Schooling
- **41.6%** Population (age 24 and over) with General Basic Education Schooling
- **2.9%** Population (age 24 and over) with No Schooling
- **2.6%** Adult Illiteracy Rate
- **48%** Households with No Internet Access
- **79.8%** Households with No Access to Television
- **72.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.406

- **93.7%** Homes with Access to Public Water Source
- **72.7%** Homes Connected to the Public Sewage System
- **14.4%** Homes without Piped Water
- **13.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.456

- **55.6** Age Dependency Ratio
- **21.6%** Unemployment Rate
- **43.5%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 1.000

- **54.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.475

- **0.5** Female to Male Labor Ratio (distance from parity)
- **42.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **48.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **46.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.403

- **7.4%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.451

- **20.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **23.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.440

25	12	28	52
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.581

14.8%	15%	17.4%	82.8%	14.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.715

1,280.6	2%	30.1	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.306

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 27 / 221 CANTONS ASSESSED **SCORE: 0.629**

Salinas exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.537

54.7%
Labor Force Participation

251,141
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.516

3.4%
Protected Area (% of land area)

3.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.798

87.9%
Voter Participation

99%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.591

Communications Capacity

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.524

11%
Household Access to Fixed Phones

81.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.512

97.1%
Homes Served by the Public Electricity Network

62.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.372

7.6
Nurses and Midwives per 10,000 persons

15.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.956

6.6
Average Distance to Airport (km)

4.5
Average Distance to Sea or River Port (km)

8.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 6 / 221 CANTONS ASSESSED **SCORE: 0.712**

Salinas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.487

0.9	3.7%	1.1	112.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.936

1.8	1.5	1.4	1.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 20 / 221 CANTONS ASSESSED
SCORE: 0.621

Salinas's score and ranking are due to Moderate Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Healthcare Capacity

Housing and Transportation Vulnerability

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

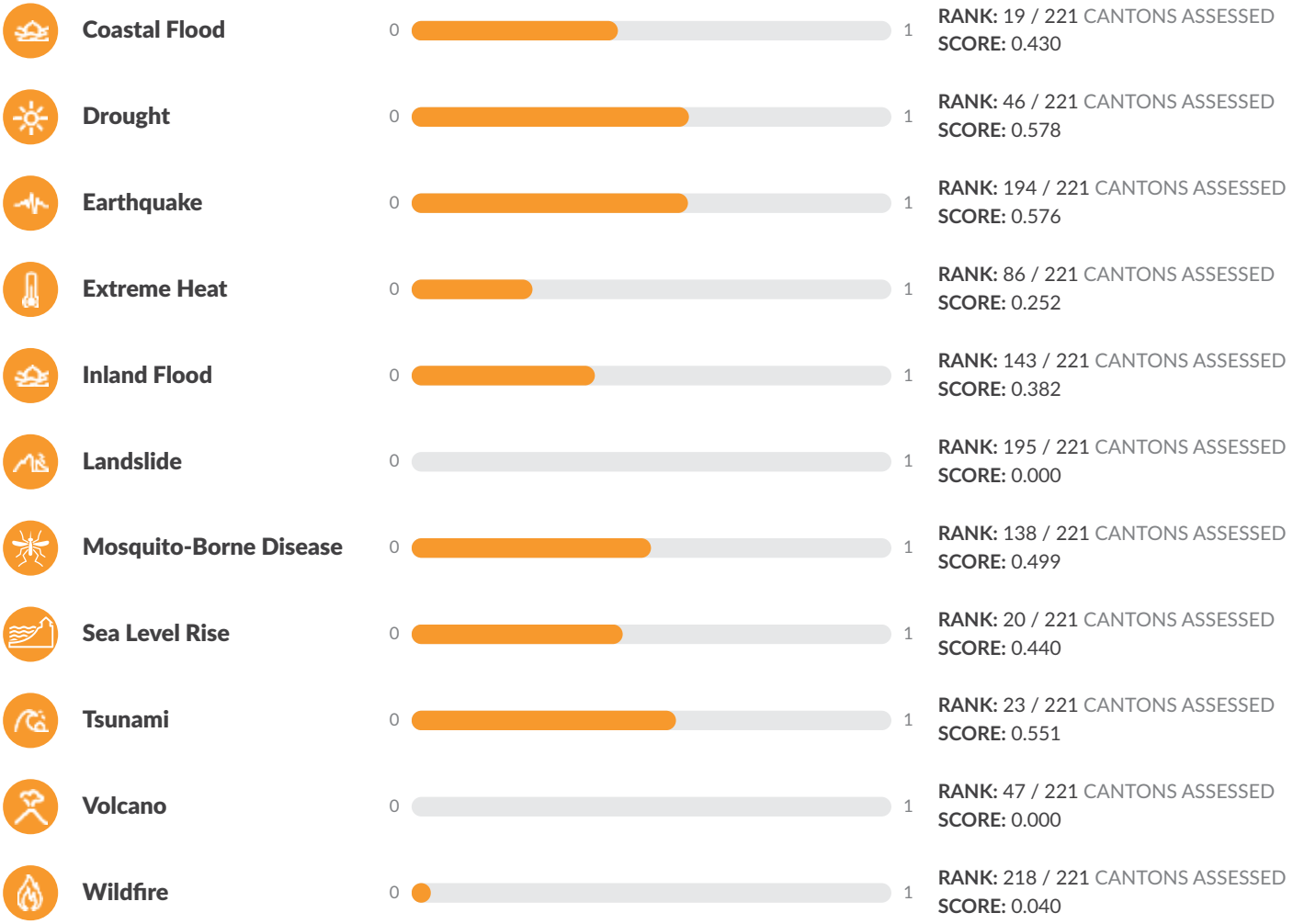
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

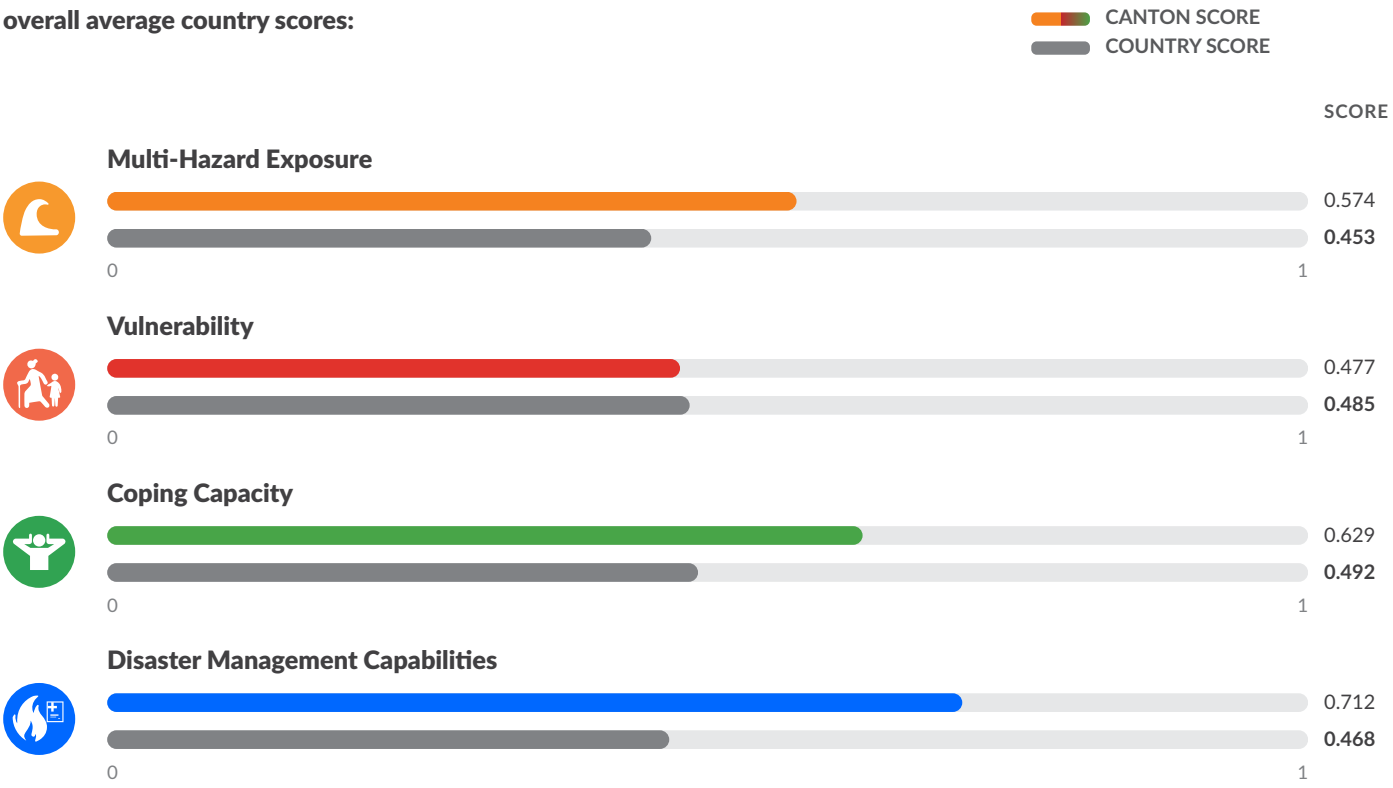


MULTI-HAZARD RISK (MHR)

RANKED
179 / 221
CANTONS ASSESSED
SCORE: 0.427

Salinas's score and ranking are due to High Multi-Hazard Exposure combined with Moderate Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

SALITRE

NDPBA SUBNATIONAL PROFILE

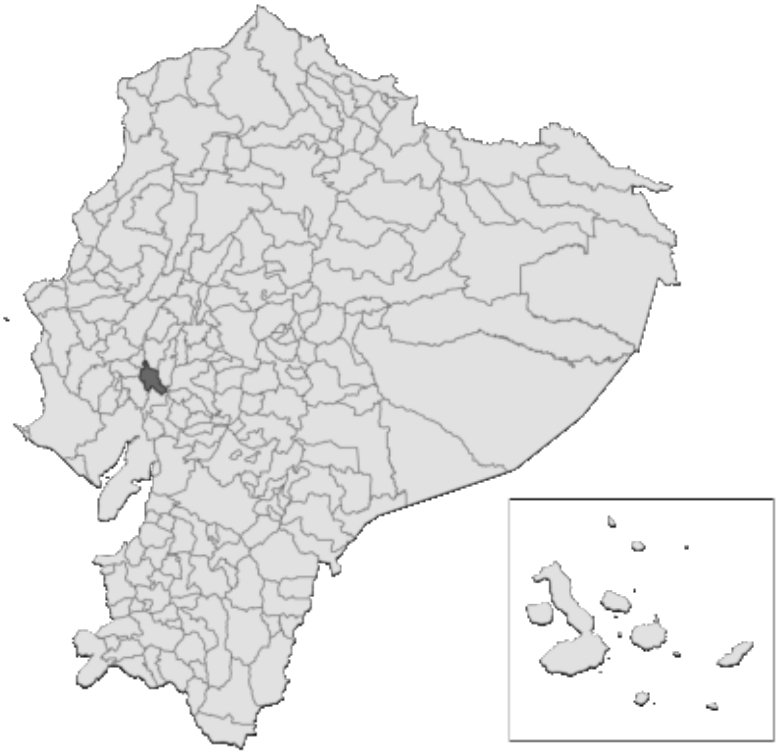
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SALITRE

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.617 • RANK: 12/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.604 • RANK: 15/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.427 • RANK: 166/221 CANTONS ASSESSED

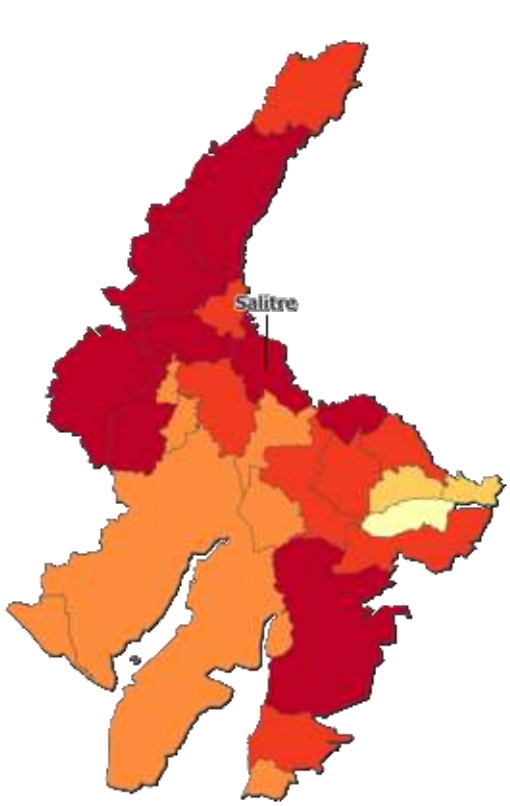
Coping Capacity (CC) - Low
SCORE: 0.411 • RANK: 167/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.747 • RANK: 15/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.474 • RANK: 95/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

SALITRE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	**0.617**
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 15 / 221 CANTONS ASSESSED
SCORE: 0.747



MHE
0.747

Raw MHE
0.705

Relative MHE
0.789

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **26** people exposed
- **25** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
8%
- **5,576** people exposed
- **1,767** structures exposed (7%)

Critical Infrastructure Exposed: 8%

Earthquake
100%
- **69,604** people exposed
- **26,531** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **69,604** people exposed
- **26,531** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
69%
- **48,367** people exposed
- **17,712** structures exposed (67%)

Critical Infrastructure Exposed: 56%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
99%
- **68,620** people exposed
- **26,197** structures exposed (99%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **3** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
100%
- **69,397** people exposed
- **26,491** structures exposed (100%)

Critical Infrastructure Exposed: 92%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
75%
- **52,100** people exposed
- **19,364** structures exposed (73%)

Critical Infrastructure Exposed: 41%

VULNERABILITY (V)

RANK: 15 / 221 CANTONS ASSESSED **SCORE: 0.604**

Vulnerability in Salitre is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.763

- **8.2** Average Years of Schooling
- **58%** Population (age 24 and over) with General Basic Education Schooling
- **9.2%** Population (age 24 and over) with No Schooling
- **8.2%** Adult Illiteracy Rate
- **72%** Households with No Internet Access
- **95%** Households with No Access to Television
- **92.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.814

- **32.7%** Homes with Access to Public Water Source
- **1.1%** Homes Connected to the Public Sewage System
- **83.1%** Homes without Piped Water
- **4.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.617

- **60.2** Age Dependency Ratio
- **17.5%** Unemployment Rate
- **88.9%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.749

- **10.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.671

- **0.7** Female to Male Labor Ratio (distance from parity)
- **51.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **40%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **87.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.512

- **9.2%** Prevalence of Disability (among persons age 5 and over)
- **3.6** Perinatal Mortality Rate (per 1,000 births)
- **10%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.466

- **6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **46.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.465

42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

13
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.774

24.5%
Homes with Exterior Walls in Poor Condition

20.3%
Homes with Inadequate Materials Used in Outer Walls

28%
Homes with Roofs in Poor Condition

96%
Households with No Access to Vehicle for Private Use

13.9%
Household Overcrowding

Population Pressures

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.457

155.3
Population Density (persons per sq km)

0.5%
Average Annual Population Change (2010-2022)

2.9
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.201

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 167 / 221 CANTONS ASSESSED **SCORE: 0.411**

Salitre exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.391

49.3%
Labor Force Participation

95,811
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.342

0%
Protected Area (% of land area)

-806.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.451

90.9%
Voter Participation

33.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.412

Communications Capacity

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.210

2.2%
Household Access to Fixed Phones

71.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.490

96.5%
Homes Served by the Public Electricity Network

62.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.310

8.7
Nurses and Midwives per 10,000 persons

9.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.638

18.9
Average Distance to Airport (km)

20
Average Distance to Sea or River Port (km)

1.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 95 / 221 CANTONS ASSESSED **SCORE: 0.474**

Salitre exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.370

3.3	0.7%	0.5	39.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.578

7.3	3.9	2.9	6.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 166 / 221 CANTONS ASSESSED
SCORE: 0.427

Salitre's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Communications Capacity

Housing and Transportation Vulnerability

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

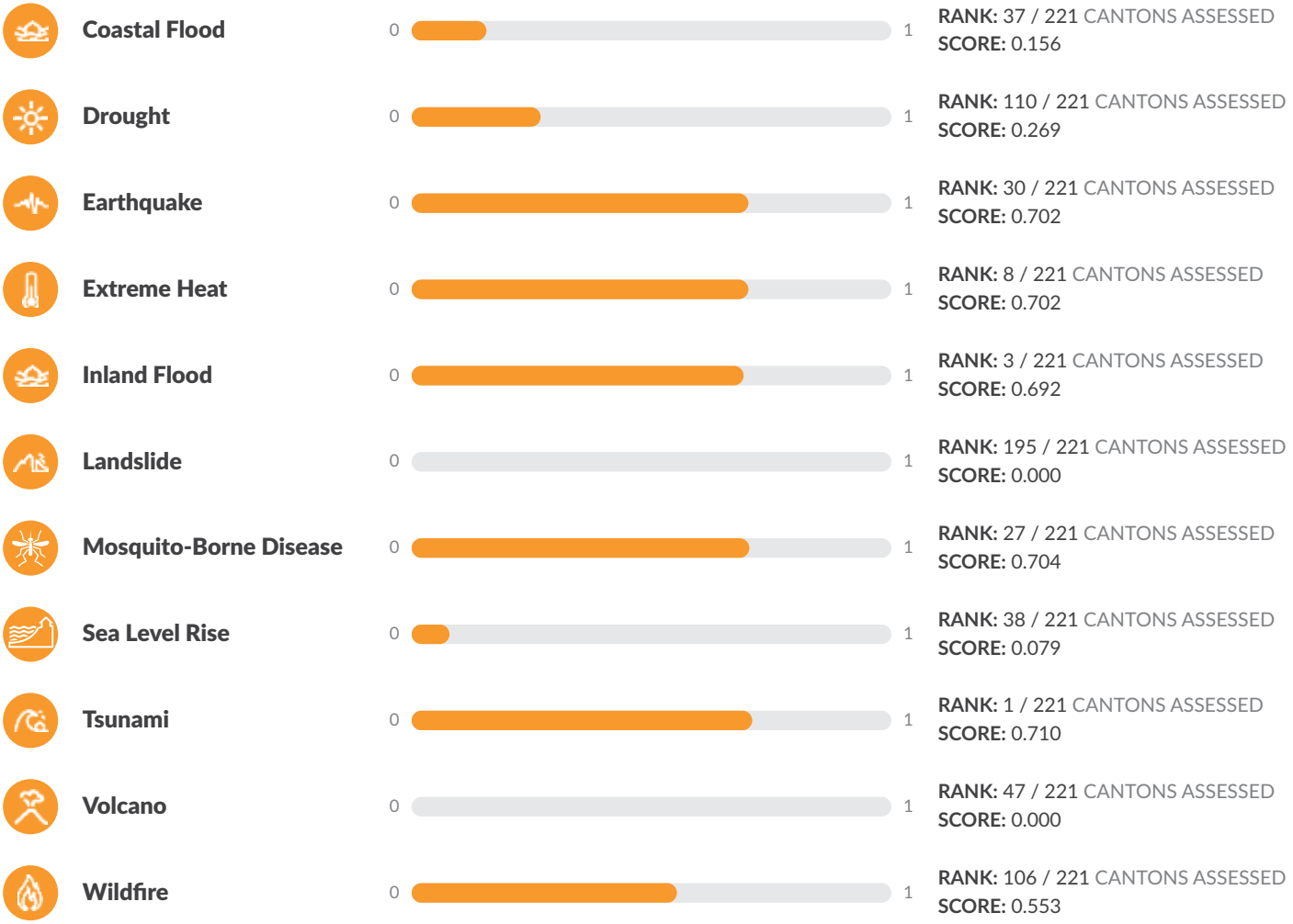
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

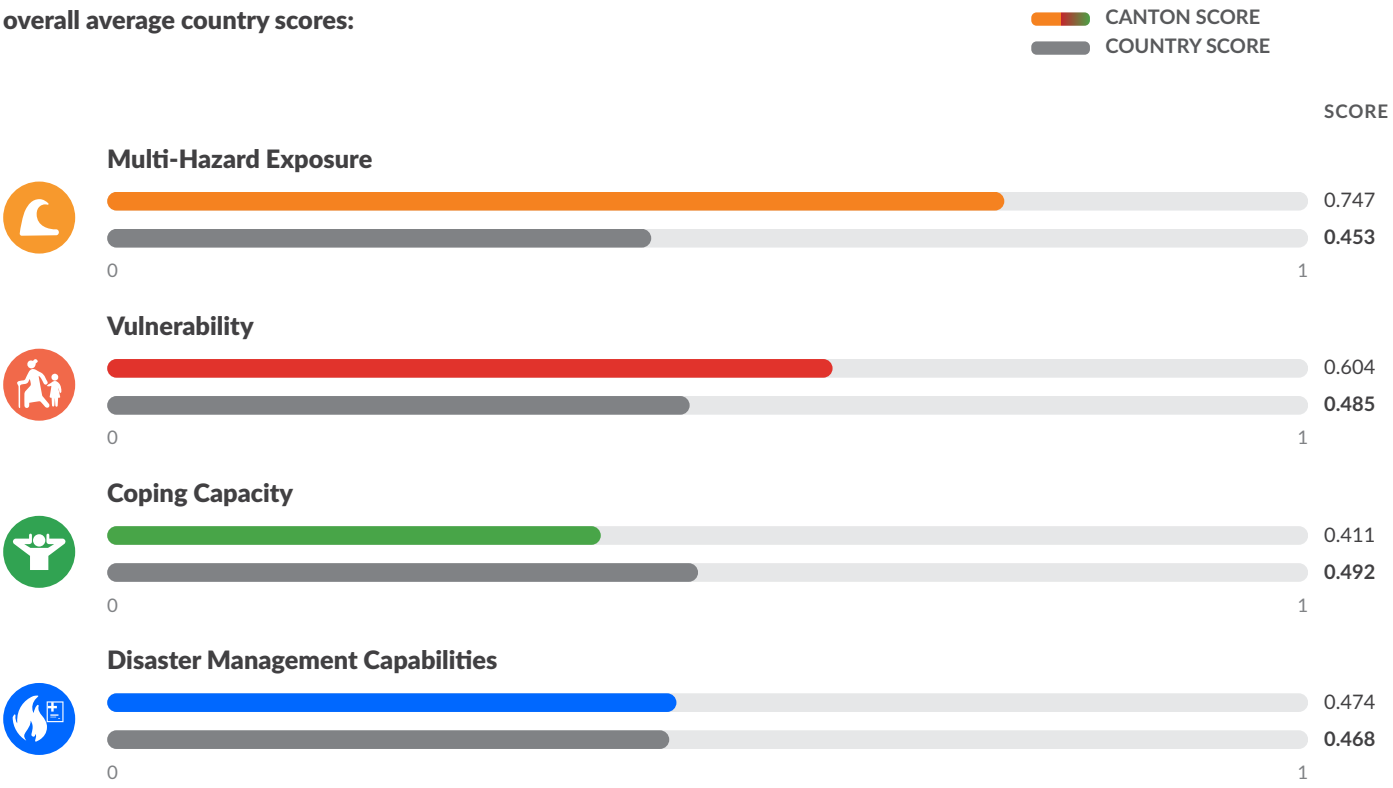


MULTI-HAZARD RISK (MHR)

RANKED
12 / 221
CANTONS ASSESSED
SCORE: 0.617

Salitre's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.484 • RANK: 120/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.348 • RANK: 212/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.622 • RANK: 19/221 CANTONS ASSESSED

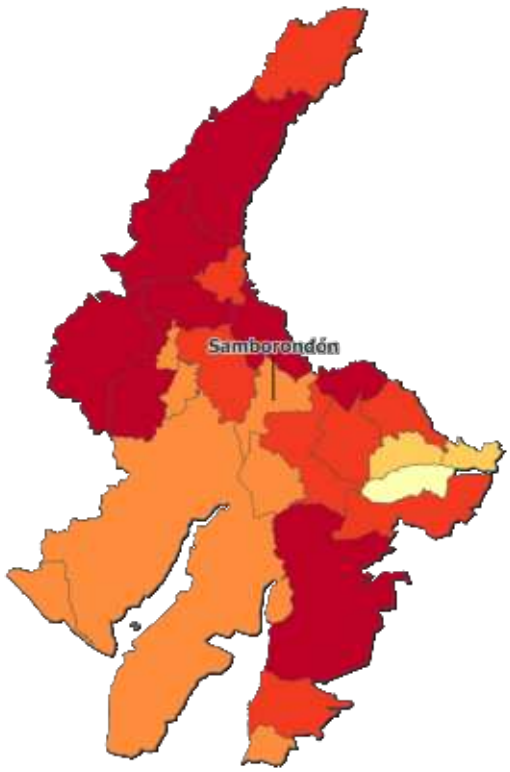
Coping Capacity (CC) - Very High
SCORE: 0.653 • RANK: 18/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.800 • RANK: 10/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.561 • RANK: 53/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

SAMBORONDÓN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	**0.484**
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 10 / 221 CANTONS ASSESSED
SCORE: 0.800



MHE
0.800

Raw MHE
0.726

Relative MHE
0.875

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **1,542** people exposed
- **804** structures exposed (2%)
- **Critical Infrastructure Exposed:** 1%

Drought
89%
- **63,168** people exposed
- **29,878** structures exposed (88%)
- **Critical Infrastructure Exposed:** 85%

Earthquake
100%
- **71,250** people exposed
- **33,822** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
100%
- **71,250** people exposed
- **33,822** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Inland Flood
43%
- **30,751** people exposed
- **13,629** structures exposed (40%)
- **Critical Infrastructure Exposed:** 44%

Landslide
<1%
- **505** people exposed
- **202** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 4%

Mosquito-Borne Disease
100%
- **71,250** people exposed
- **33,822** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
<1%
- **368** people exposed
- **192** structures exposed (<1%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
100%
- **71,028** people exposed
- **33,759** structures exposed (100%)
- **Critical Infrastructure Exposed:** 93%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
5%
- **3,240** people exposed
- **1,203** structures exposed (4%)
- **Critical Infrastructure Exposed:** 6%

VULNERABILITY (V)

RANK: 212 / 221 CANTONS ASSESSED **SCORE: 0.348**

Vulnerability in Samborondón is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.159

- **13** Average Years of Schooling
- **31.5%** Population (age 24 and over) with General Basic Education Schooling
- **2.9%** Population (age 24 and over) with No Schooling
- **2.2%** Adult Illiteracy Rate
- **27.4%** Households with No Internet Access
- **45.6%** Households with No Access to Television
- **40.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.259

- **88.1%** Homes with Access to Public Water Source
- **79.2%** Homes Connected to the Public Sewage System
- **17.5%** Homes without Piped Water
- **2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.342

- **49.8** Age Dependency Ratio
- **10.1%** Unemployment Rate
- **32.1%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.786

- **11.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.350

- **0.3** Female to Male Labor Ratio (distance from parity)
- **31.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **4.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **29.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **36.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.376

- **4.1%** Prevalence of Disability (among persons age 5 and over)
- **4.2** Perinatal Mortality Rate (per 1,000 births)
- **8.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.345

- **2.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **59.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.436

49
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

4
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

39
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

37
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.248

6.4%
Homes with Exterior Walls in Poor Condition

4.9%
Homes with Inadequate Materials Used in Outer Walls

7.5%
Homes with Roofs in Poor Condition

44.5%
Households with No Access to Vehicle for Private Use

5.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.630

286.5
Population Density (persons per sq km)

3.2%
Average Annual Population Change (2010-2022)

30
Net Migration Rate (per 1,000 persons)

0.23
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.352

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 18 / 221 CANTONS ASSESSED **SCORE: 0.653**

Samborondón exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.764

60.5%
Labor Force Participation

1,615,911
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.349

0%
Protected Area (% of land area)

-351.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.628

86.4%
Voter Participation

90.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.668

Communications Capacity

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.792

34.9%
Household Access to Fixed Phones

89.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.724

98.1%
Homes Served by the Public Electricity Network

83.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.362

4.3
Nurses and Midwives per 10,000 persons

21.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.794

6.6
Average Distance to Airport (km)

11.5
Average Distance to Sea or River Port (km)

2.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 53 / 221 CANTONS ASSESSED **SCORE: 0.561**

Samborondón exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.464

3.8	1.6%	0.7	13.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.657

7.3	2.8	2.7	3.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 19 / 221 CANTONS ASSESSED
SCORE: 0.622

Samborondón's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Population Pressures



Mass Care Support



Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Mass Care Support

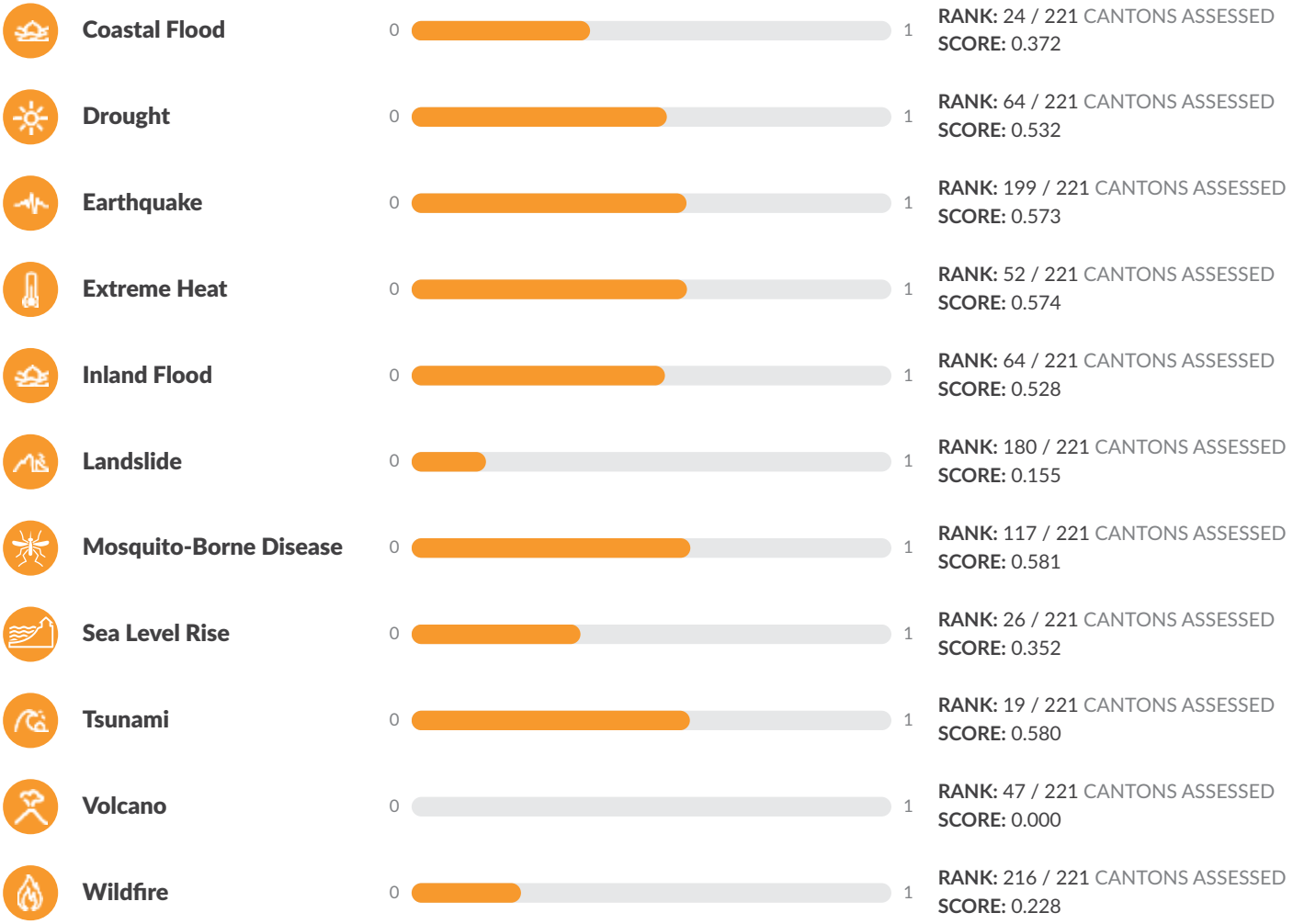
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
120 / 221
CANTONS ASSESSED
SCORE: 0.484

Samborondón's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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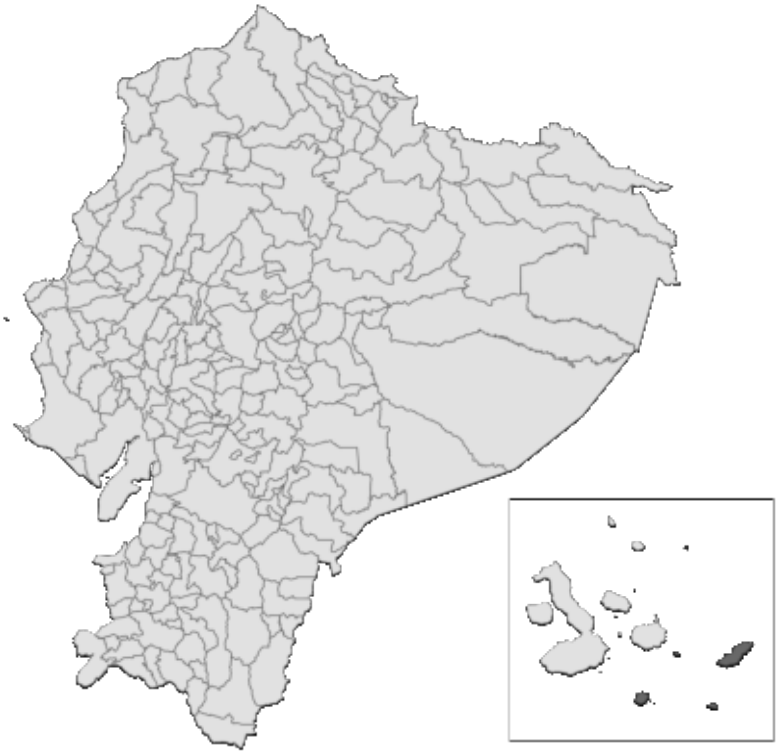
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SAN CRISTÓBAL

PROVINCE: GALÁPAGOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.325 • RANK: 220/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.682 • RANK: 4/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.344 • RANK: 157/221 CANTONS ASSESSED

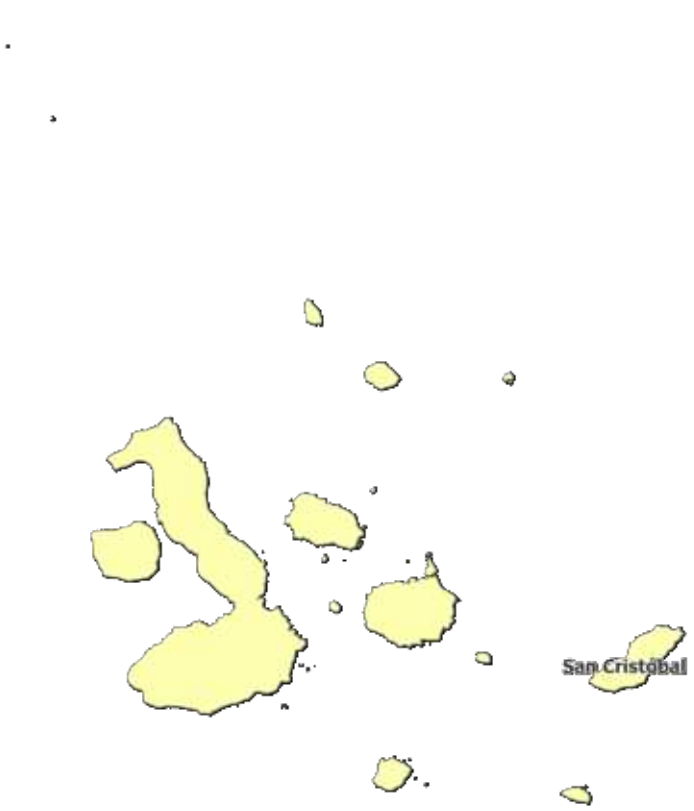
Vulnerability (V) - Very Low
SCORE: 0.231 • RANK: 221/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.680 • RANK: 12/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.596 • RANK: 31/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GALÁPAGOS PROVINCE

SAN CRISTÓBAL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Isabela	0.419
Santa Cruz	0.386
San Cristóbal	**0.325**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 157 / 221 CANTONS ASSESSED
SCORE: 0.344



MHE
0.344

Raw MHE
0.284

Relative MHE
0.404

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **37** people exposed
- **15** structures exposed (<1%)

Critical Infrastructure Exposed: 7%

Drought
19%
- **2,015** people exposed
- **633** structures exposed (13%)

Critical Infrastructure Exposed: 5%

Earthquake
100%
- **10,365** people exposed
- **4,939** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: <1%

Inland Flood
100%
- **10,317** people exposed
- **4,881** structures exposed (99%)

Critical Infrastructure Exposed: 96%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
100%
- **10,365** people exposed
- **4,938** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
- **0** people exposed
- **4** structures exposed (<1%)

Critical Infrastructure Exposed: 7%

Tsunami
29%
- **2,998** people exposed
- **968** structures exposed (20%)

Critical Infrastructure Exposed: 19%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

VULNERABILITY (V)

RANK: 221 / 221 CANTONS ASSESSED **SCORE: 0.231**

Vulnerability in San Cristóbal is primarily driven by Vulnerable Health Status and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.079

- **13.7** Average Years of Schooling
- **19.5%** Population (age 24 and over) with General Basic Education Schooling
- **0.8%** Population (age 24 and over) with No Schooling
- **0.4%** Adult Illiteracy Rate
- **40.5%** Households with No Internet Access
- **49.9%** Households with No Access to Television
- **43.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.123

- **96.1%** Homes with Access to Public Water Source
- **84.4%** Homes Connected to the Public Sewage System
- **10.2%** Homes without Piped Water
- **0.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.255

- **43.8** Age Dependency Ratio
- **8.4%** Unemployment Rate
- **21.2%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.320

- **1.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.186

- **0.2** Female to Male Labor Ratio (distance from parity)
- **19.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **35.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **27%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.362

- **4.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.401

- **15.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **4.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.594

25	28	45	78
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.240

2.2%	0.4%	3.1%	90.2%	5.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.291

9.8	1.2%	11.7	0.22
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.297

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 12 / 221 CANTONS ASSESSED **SCORE: 0.680**

San Cristóbal exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.699

75%
Labor Force Participation

63,616
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.750

97.7%
Protected Area (% of land area)

-6,915
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.484

75.1%
Voter Participation

94%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.834

Communications Capacity

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.954

54.4%
Household Access to Fixed Phones

93.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.842

99.8%
Homes Served by the Public Electricity Network

81.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.902

42.2
Nurses and Midwives per 10,000 persons

61.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.639

10.5
Average Distance to Airport (km)

9.7
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 31 / 221 CANTONS ASSESSED **SCORE: 0.596**

San Cristóbal exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.822

2.3	32%	3.6	13.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.369

9.5	9.8	10.3	7.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 4 / 221 CANTONS ASSESSED
SCORE: 0.682

San Cristóbal's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Emergency Services



Governance



Vulnerable Health Status



Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Vulnerable Health Status

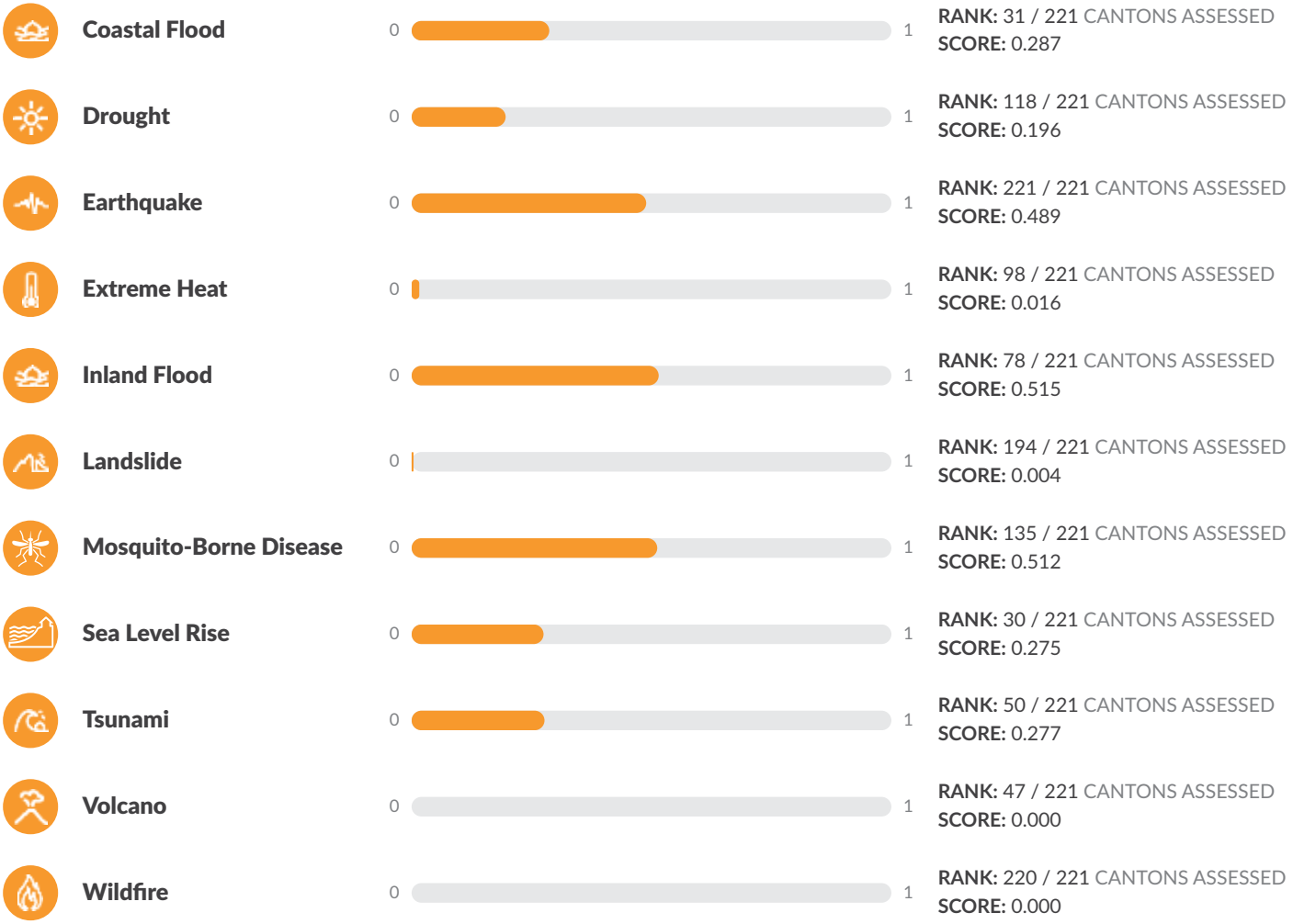
A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
220 / 221
CANTONS ASSESSED
SCORE: 0.325

San Cristóbal's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

SAN FERNANDO

NDPBA SUBNATIONAL PROFILE

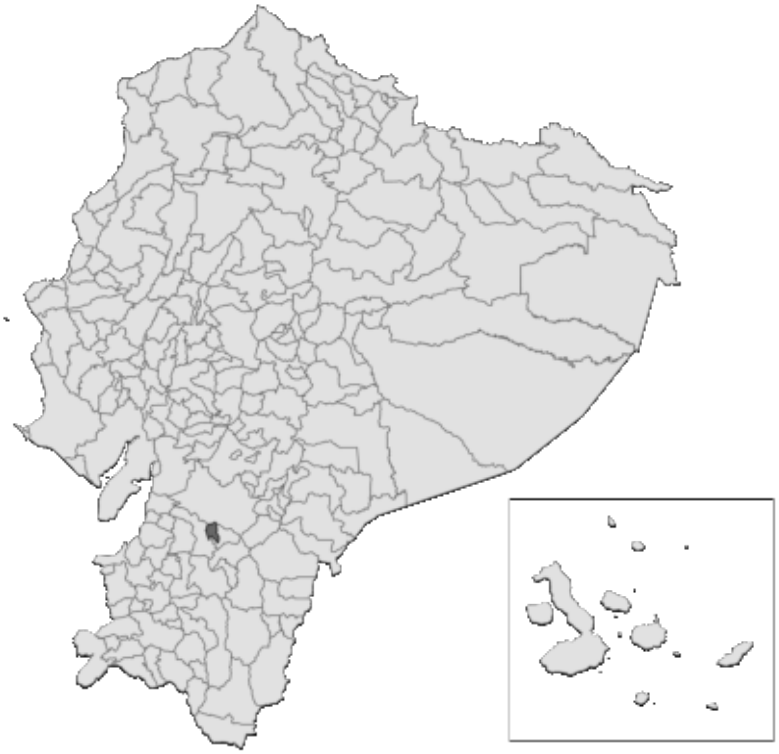
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SAN FERNANDO

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.394 • RANK: 202/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.329 • RANK: 214/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.557 • RANK: 55/221 CANTONS ASSESSED

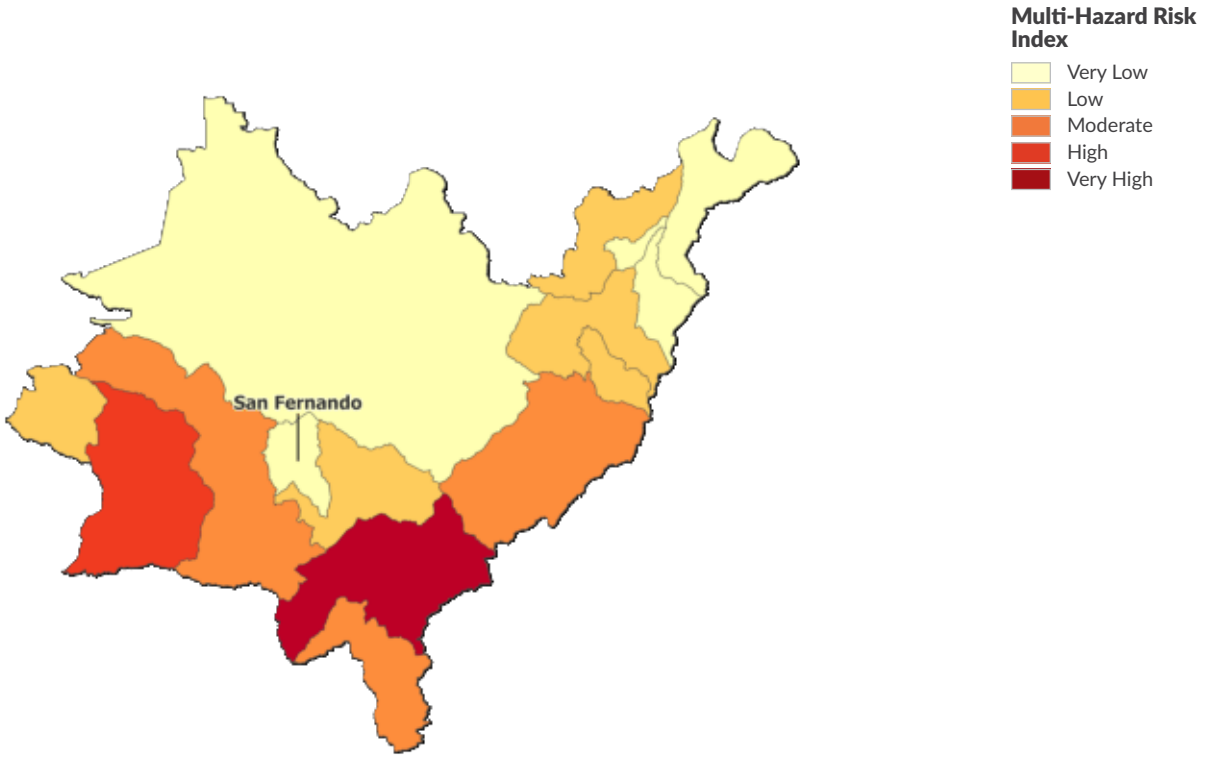
Coping Capacity (CC) - Low
SCORE: 0.420 • RANK: 161/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.249 • RANK: 193/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.580 • RANK: 41/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

SAN FERNANDO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	**0.394**
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 193 / 221 CANTONS ASSESSED
SCORE: 0.249



MHE
0.249

Raw MHE
0.204

Relative MHE
0.294

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
89%
- **4,308** people exposed
- **3,414** structures exposed (84%)

Critical Infrastructure Exposed: 82%

Earthquake
100%
- **4,819** people exposed
- **4,085** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
0%
- **0** people exposed
- **1** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
57%
- **2,760** people exposed
- **2,342** structures exposed (57%)

Critical Infrastructure Exposed: 52%

Mosquito-Borne Disease
18%
- **844** people exposed
- **621** structures exposed (15%)

Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
95%
- **4,599** people exposed
- **3,897** structures exposed (95%)

Critical Infrastructure Exposed: 86%

VULNERABILITY (V)

RANK: 214 / 221 CANTONS ASSESSED **SCORE: 0.329**

Vulnerability in San Fernando is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.476

- **8.9** Average Years of Schooling
- **60%** Population (age 24 and over) with General Basic Education Schooling
- **4.7%** Population (age 24 and over) with No Schooling
- **4.3%** Adult Illiteracy Rate
- **29.3%** Households with No Internet Access
- **74.6%** Households with No Access to Television
- **70.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.272

- **87.6%** Homes with Access to Public Water Source
- **66%** Homes Connected to the Public Sewage System
- **10.2%** Homes without Piped Water
- **2.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.401

- **67.2** Age Dependency Ratio
- **6.4%** Unemployment Rate
- **31.3%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.306

- **1.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.283

- **0.3** Female to Male Labor Ratio (distance from parity)
- **29.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **0.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **64.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **21.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.386

- **11.3%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **10.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.089

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **9.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.549

138	10	84	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.295

8%	0.6%	14.9%	78.3%	3.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.273

26.1	-0.5	-3.5	0.26
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.246

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 161 / 221 CANTONS ASSESSED **SCORE: 0.420**

San Fernando exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.295

56.6%
Labor Force Participation

5,849
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.378

0.4%
Protected Area (% of land area)

-653.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.376

76.7%
Voter Participation

79.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.602

Communications Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.767

54.2%
Household Access to Fixed Phones

82.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.848

99.3%
Homes Served by the Public Electricity Network

86.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.387

8
Nurses and Midwives per 10,000 persons

16.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.406

41.9
Average Distance to Airport (km)

84.4
Average Distance to Sea or River Port (km)

1.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 41 / 221 CANTONS ASSESSED **SCORE: 0.580**

San Fernando exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.440

1.5	5.9%	0	43.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.721

11.7	2.2	1.9	2.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 55 / 221 CANTONS ASSESSED
SCORE: 0.557

San Fernando's score and ranking are due to Very Low Vulnerability combined with Low Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Healthcare Capacity

Transportation Capacity

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

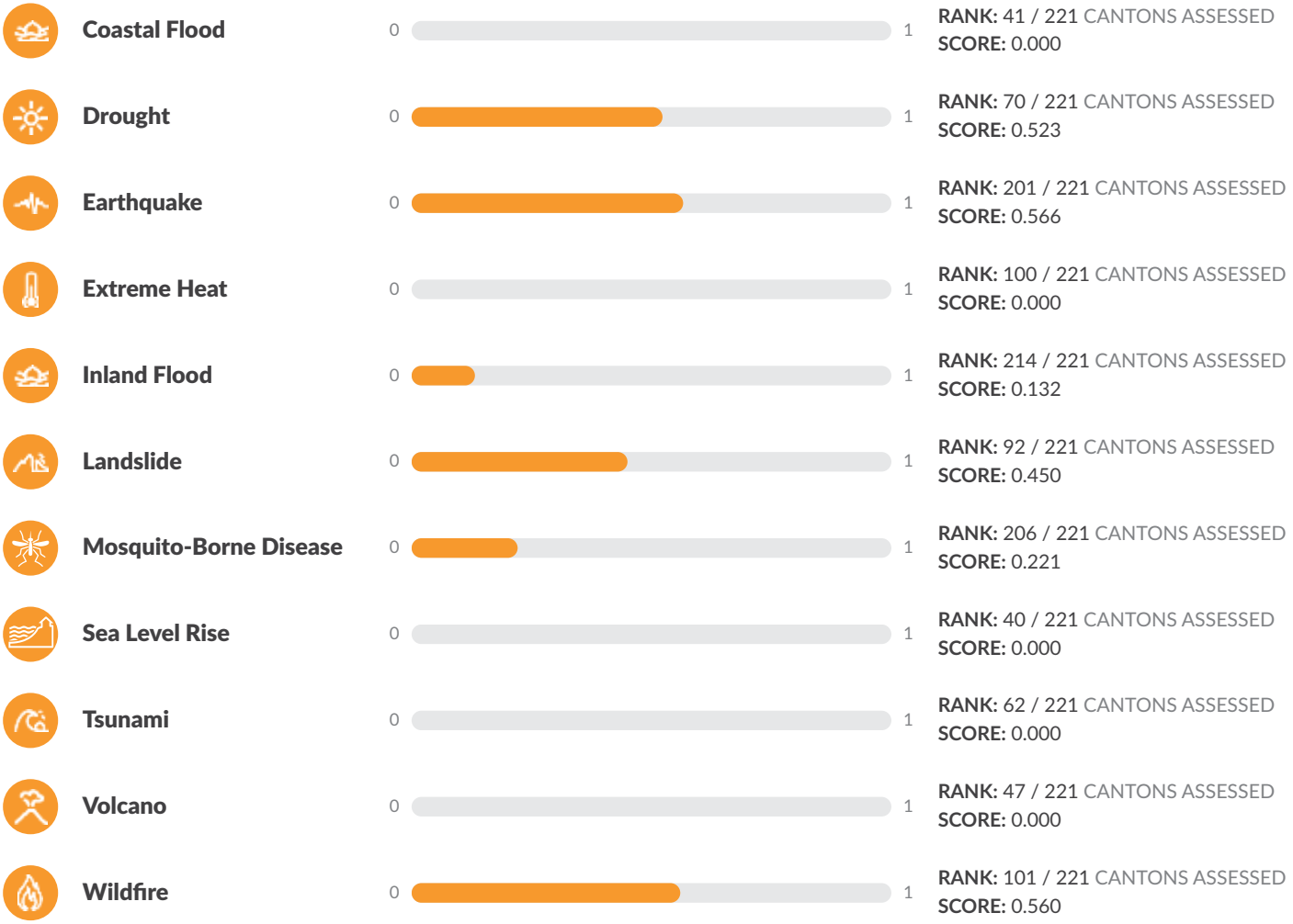
Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

HAZARD-SPECIFIC RISK (HSR)

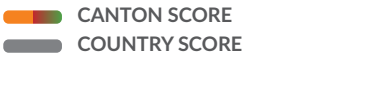


MULTI-HAZARD RISK (MHR)

RANKED
202 / 221
CANTONS ASSESSED
SCORE: 0.394

San Fernando's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, Low Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SAN JACINTO DE YAGUACHI

NDPBA SUBNATIONAL PROFILE

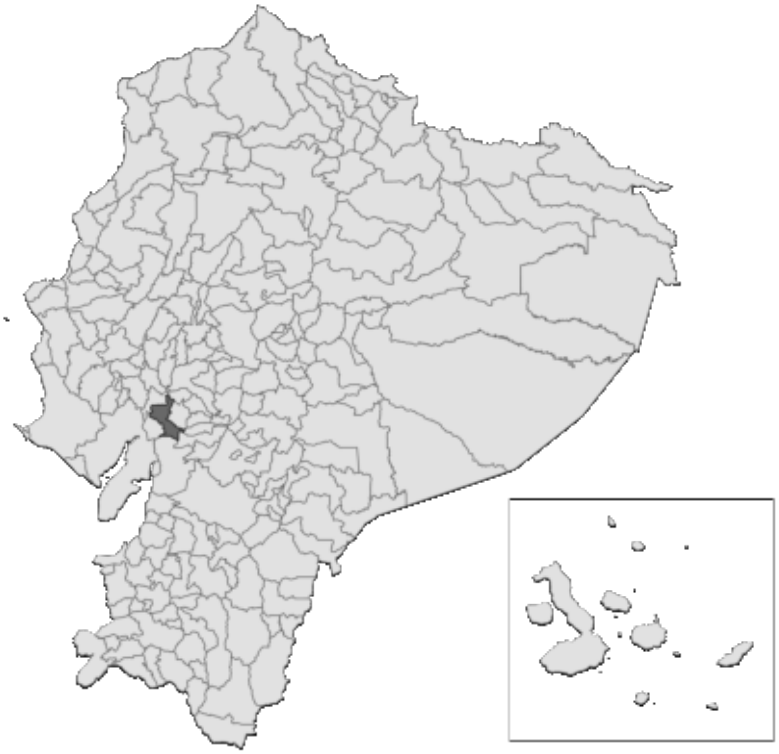
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ECUADOR

SAN JACINTO DE YAGUACHI

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.561 • RANK: 49/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.485 • RANK: 113/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.538 • RANK: 69/221 CANTONS ASSESSED

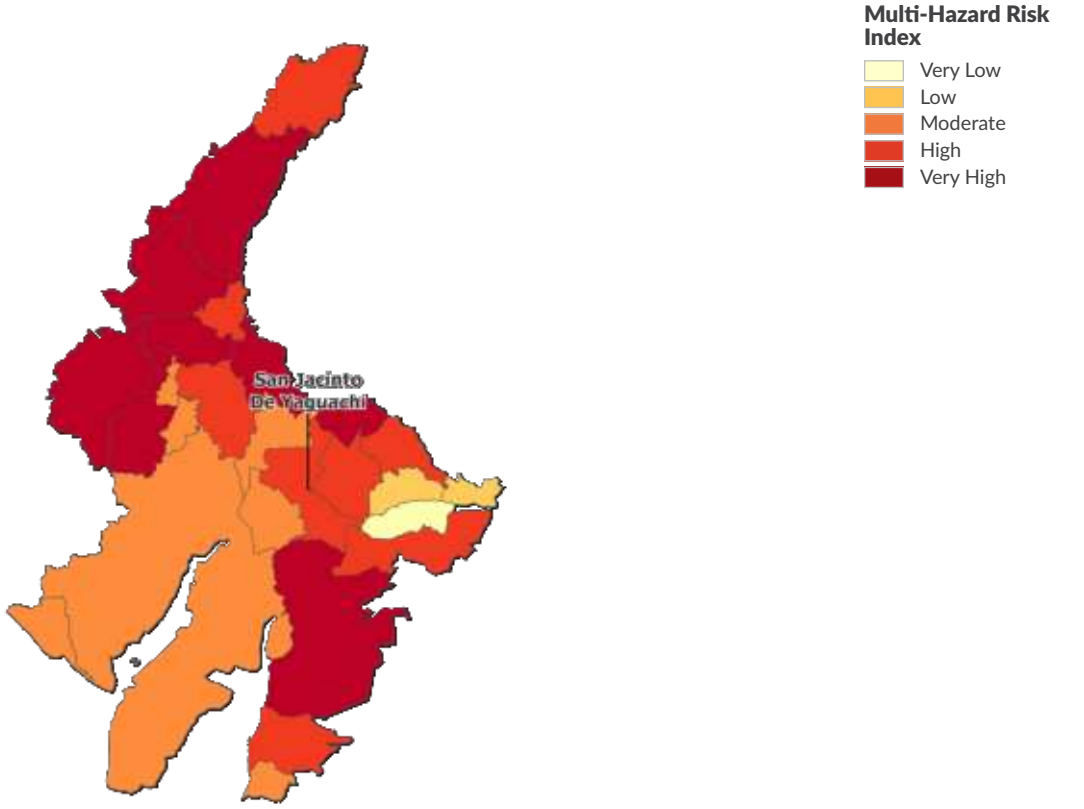
Coping Capacity (CC) - High
SCORE: 0.524 • RANK: 84/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.858 • RANK: 6/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.574 • RANK: 44/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

SAN JACINTO DE YAGUACHI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	**0.561**
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 221 CANTONS ASSESSED
SCORE: 0.858



MHE
0.858

Raw MHE
0.749

Relative MHE
0.967

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **83** people exposed
- **35** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
94%
- **69,987** people exposed
- **30,071** structures exposed (96%)

Critical Infrastructure Exposed: 94%

Earthquake
100%
- **74,110** people exposed
- **31,453** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **74,110** people exposed
- **31,453** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
79%
- **58,357** people exposed
- **24,986** structures exposed (79%)

Critical Infrastructure Exposed: 63%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
99%
- **73,299** people exposed
- **30,966** structures exposed (98%)

Critical Infrastructure Exposed: 100%

Sea Level Rise
<1%
- **8** people exposed
- **10** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
95%
- **70,302** people exposed
- **29,975** structures exposed (95%)

Critical Infrastructure Exposed: 89%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
49%
- **36,466** people exposed
- **16,713** structures exposed (53%)

Critical Infrastructure Exposed: 45%

VULNERABILITY (V)

RANK: 113 / 221 CANTONS ASSESSED **SCORE: 0.485**

Vulnerability in San Jacinto De Yaguachi is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.544

- **9.7** Average Years of Schooling
- **50.2%** Population (age 24 and over) with General Basic Education Schooling
- **5%** Population (age 24 and over) with No Schooling
- **4.2%** Adult Illiteracy Rate
- **54.1%** Households with No Internet Access
- **88.6%** Households with No Access to Television
- **83%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.570

- **70.6%** Homes with Access to Public Water Source
- **22.5%** Homes Connected to the Public Sewage System
- **31.8%** Homes without Piped Water
- **4.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.443

- **54.6** Age Dependency Ratio
- **13.7%** Unemployment Rate
- **58.1%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.649

- **7.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.536

- **0.5** Female to Male Labor Ratio (distance from parity)
- **43.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **50.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **53.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.475

- **6.6%** Prevalence of Disability (among persons age 5 and over)
- **3.4** Perinatal Mortality Rate (per 1,000 births)
- **8.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.569

- **9.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **4.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **42** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.488

18
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

19
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

87
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.544

12.2%
Homes with Exterior Walls in Poor Condition

13.2%
Homes with Inadequate Materials Used in Outer Walls

15%
Homes with Roofs in Poor Condition

91.7%
Households with No Access to Vehicle for Private Use

9.4%
Household Overcrowding

Population Pressures

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.537

137
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

9.9
Net Migration Rate (per 1,000 persons)

0.3
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.210

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 84 / 221 CANTONS ASSESSED **SCORE: 0.524**

San Jacinto De Yaguachi exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.575

54.1%
Labor Force Participation

485,907
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.324

0%
Protected Area (% of land area)

-1,952.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.578

89.4%
Voter Participation

75.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.486

Communications Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.373

4.6%
Household Access to Fixed Phones

78.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.572

97.1%
Homes Served by the Public Electricity Network

71.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.260

5.1
Nurses and Midwives per 10,000 persons

10.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.741

6.2
Average Distance to Airport (km)

20.6
Average Distance to Sea or River Port (km)

1.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 44 / 221 CANTONS ASSESSED **SCORE: 0.574**

San Jacinto De Yaguachi exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.500

3.2	2.5%	1	21.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.647

4.9	4	2.7	4.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 69 / 221 CANTONS ASSESSED
SCORE: 0.538

San Jacinto De Yaguachi's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Healthcare Capacity
- Communications Capacity
- Clean Water Access Vulnerability
- Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

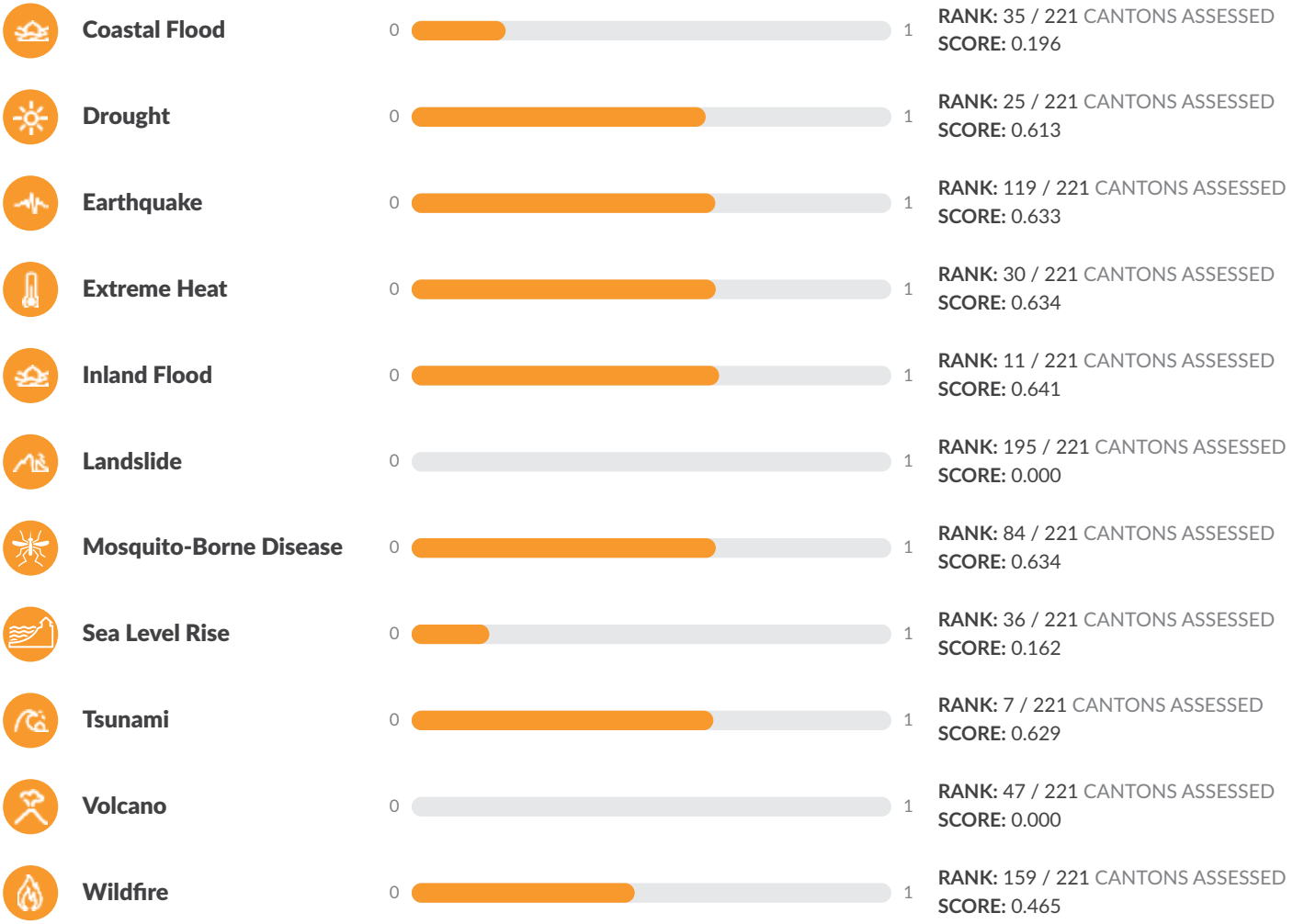
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

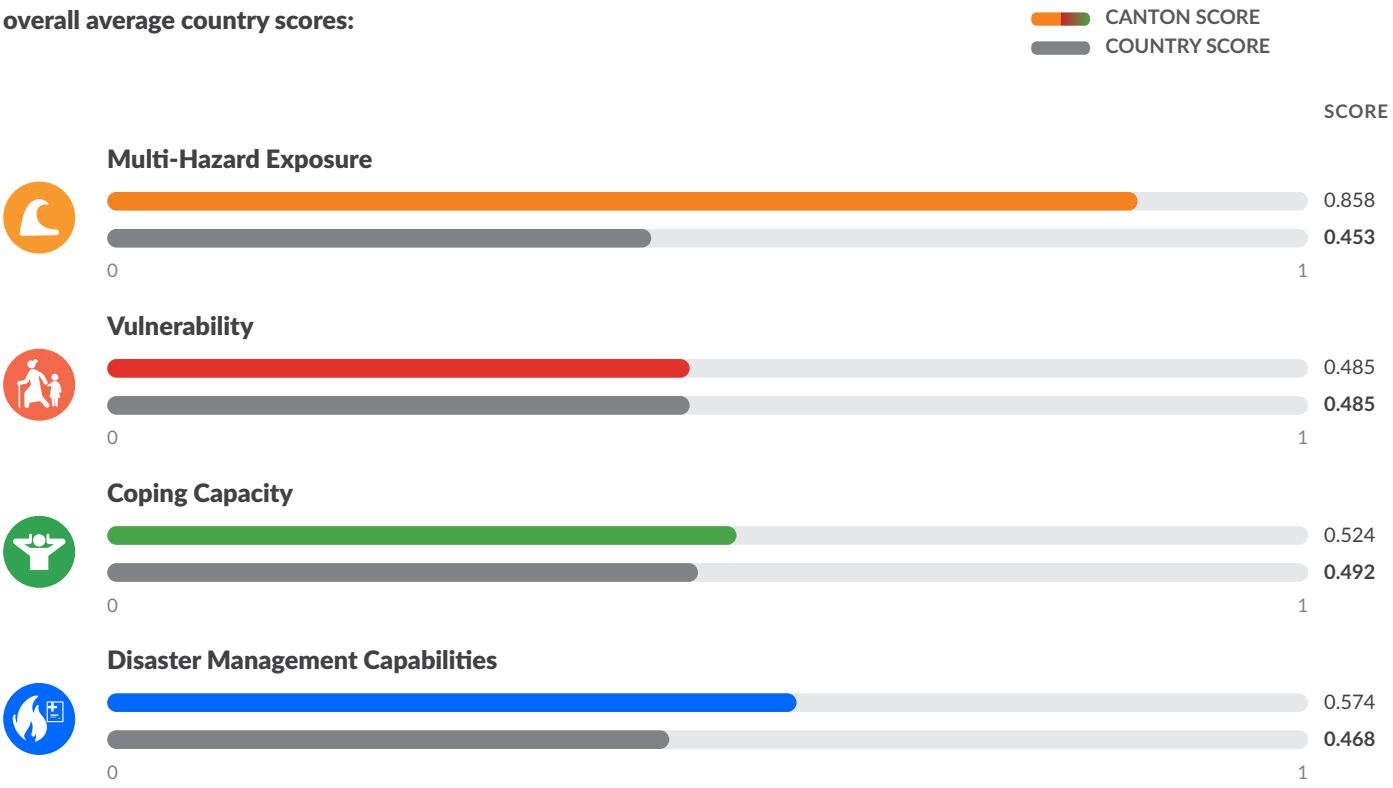


MULTI-HAZARD RISK (MHR)

RANKED
49 / 221
CANTONS ASSESSED
SCORE: 0.561

San Jacinto De Yaguachi's score and ranking are due to Very High Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

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NDPBA SUBNATIONAL PROFILE

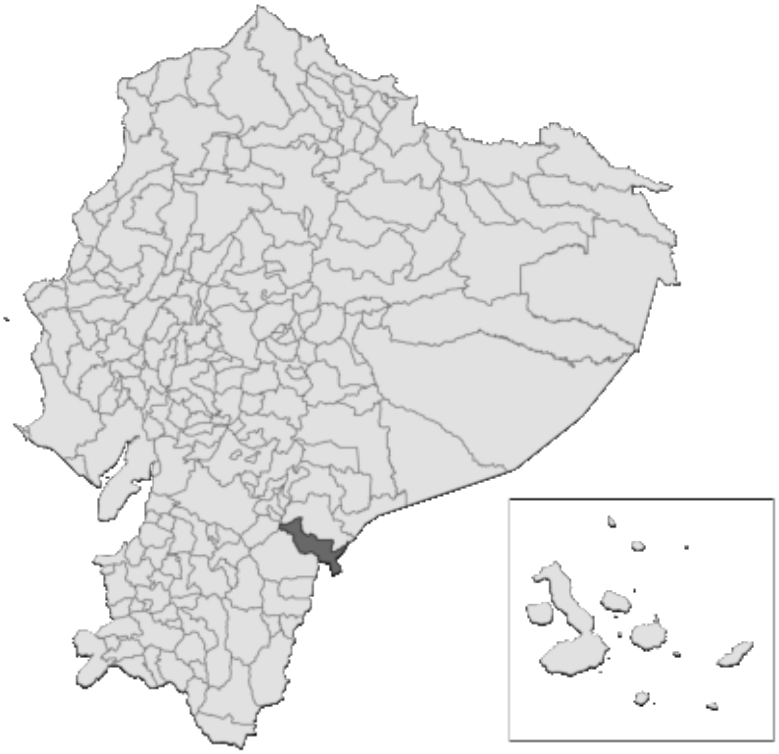
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ECUADOR

SAN JUAN BOSCO

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.474 • RANK: 128/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.446 • RANK: 152/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.236 • RANK: 200/221 CANTONS ASSESSED

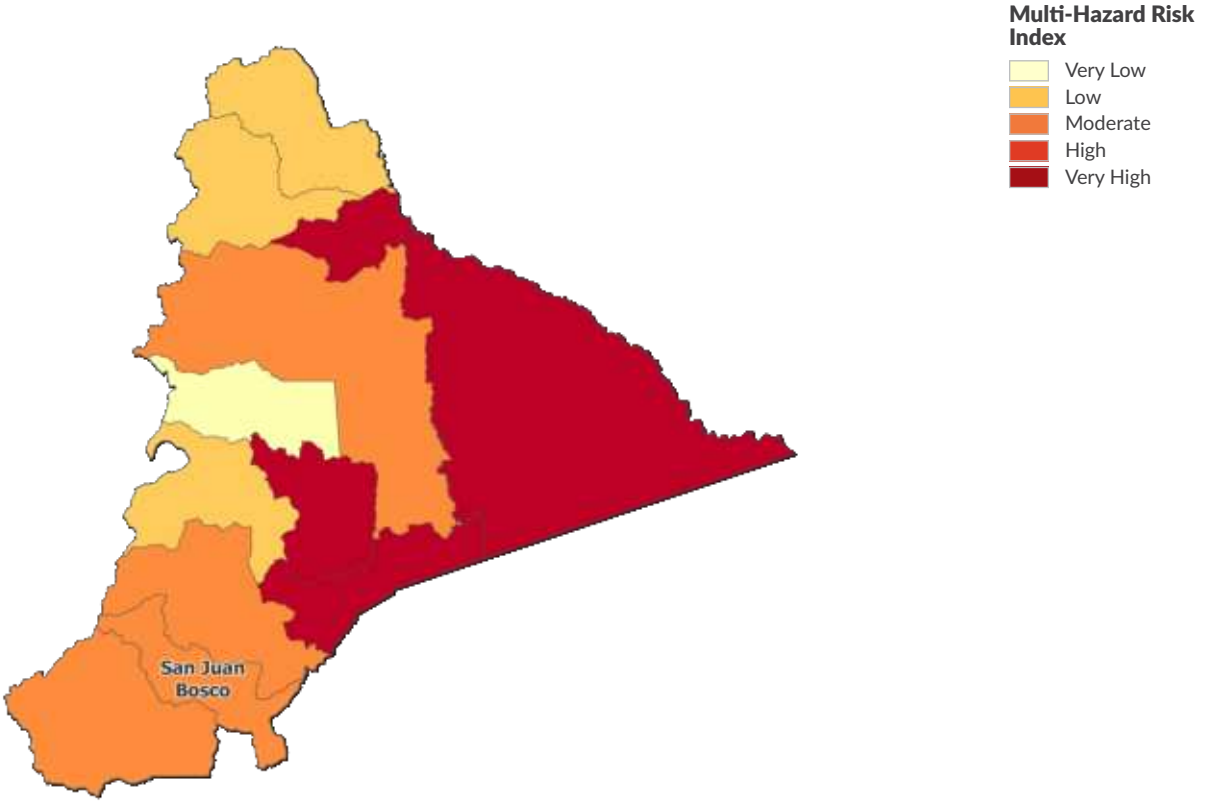
Vulnerability (V) - Low
SCORE: 0.446 • RANK: 149/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.369 • RANK: 188/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.417 • RANK: 148/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

SAN JUAN BOSCO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	**0.474**
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 200 / 221 CANTONS ASSESSED
SCORE: 0.236



MHE
0.236

Raw MHE
0.188

Relative MHE
0.284

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
5,155 people exposed
3,251 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
4%
210 people exposed
122 structures exposed (4%)
Critical Infrastructure Exposed: 6%

Landslide
71%
3,638 people exposed
2,401 structures exposed (74%)
Critical Infrastructure Exposed: 61%

Mosquito-Borne Disease
84%
4,337 people exposed
2,546 structures exposed (78%)
Critical Infrastructure Exposed: 90%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
95%
4,886 people exposed
3,157 structures exposed (97%)
Critical Infrastructure Exposed: 94%

VULNERABILITY (V)

RANK: 149 / 221 CANTONS ASSESSED **SCORE: 0.446**

Vulnerability in San Juan Bosco is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.498

- **9.6** Average Years of Schooling
- **51.3%** Population (age 24 and over) with General Basic Education Schooling
- **4.9%** Population (age 24 and over) with No Schooling
- **3.9%** Adult Illiteracy Rate
- **51%** Households with No Internet Access
- **79.6%** Households with No Access to Television
- **78.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.496

- **64.9%** Homes with Access to Public Water Source
- **58.8%** Homes Connected to the Public Sewage System
- **38.8%** Homes without Piped Water
- **3.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.631

- **71** Age Dependency Ratio
- **17.8%** Unemployment Rate
- **59.3%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.423

- **3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.584

- **0.3** Female to Male Labor Ratio (distance from parity)
- **58.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **89.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **57.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.167

- **5.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **2.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.250

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **92.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.190

36 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**8** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**8** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**0** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.393

10.2% Homes with Exterior Walls in Poor Condition	**0.3%** Homes with Inadequate Materials Used in Outer Walls	**12.2%** Homes with Roofs in Poor Condition	**85.2%** Households with No Access to Vehicle for Private Use	**9.5%** Household Overcrowding

Population Pressures

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.433

4 Population Density (persons per sq km)	**1%** Average Annual Population Change (2010-2022)	**2.1** Net Migration Rate (per 1,000 persons)	**0.35** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.372

0.2 Hazard Susceptibility (recent events 2015-2025)	**0.2** Disaster Loss Ratio (recent events 2015-2025)	**0** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 188 / 221 CANTONS ASSESSED **SCORE: 0.369**

San Juan Bosco exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.274

51%
Labor Force Participation

13,674
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.770

76.5%
Protected Area (% of land area)

-3,801.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.281

75.1%
Voter Participation

65.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.419

Communications Capacity

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.414

11.8%
Household Access to Fixed Phones

63.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.359

86.5%
Homes Served by the Public Electricity Network

68.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.574

20.6
Nurses and Midwives per 10,000 persons

20.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.330

29.8
Average Distance to Airport (km)

91.3
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 148 / 221 CANTONS ASSESSED **SCORE: 0.417**

San Juan Bosco exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.473

3.6	60.1%	0	60.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.360

21	8.6	6.4	8.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 152 / 221 CANTONS ASSESSED
SCORE: 0.446

San Juan Bosco's score and ranking are due to Low Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

- Economic Capacity
- Governance
- Transportation Capacity
- Energy Capacity

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

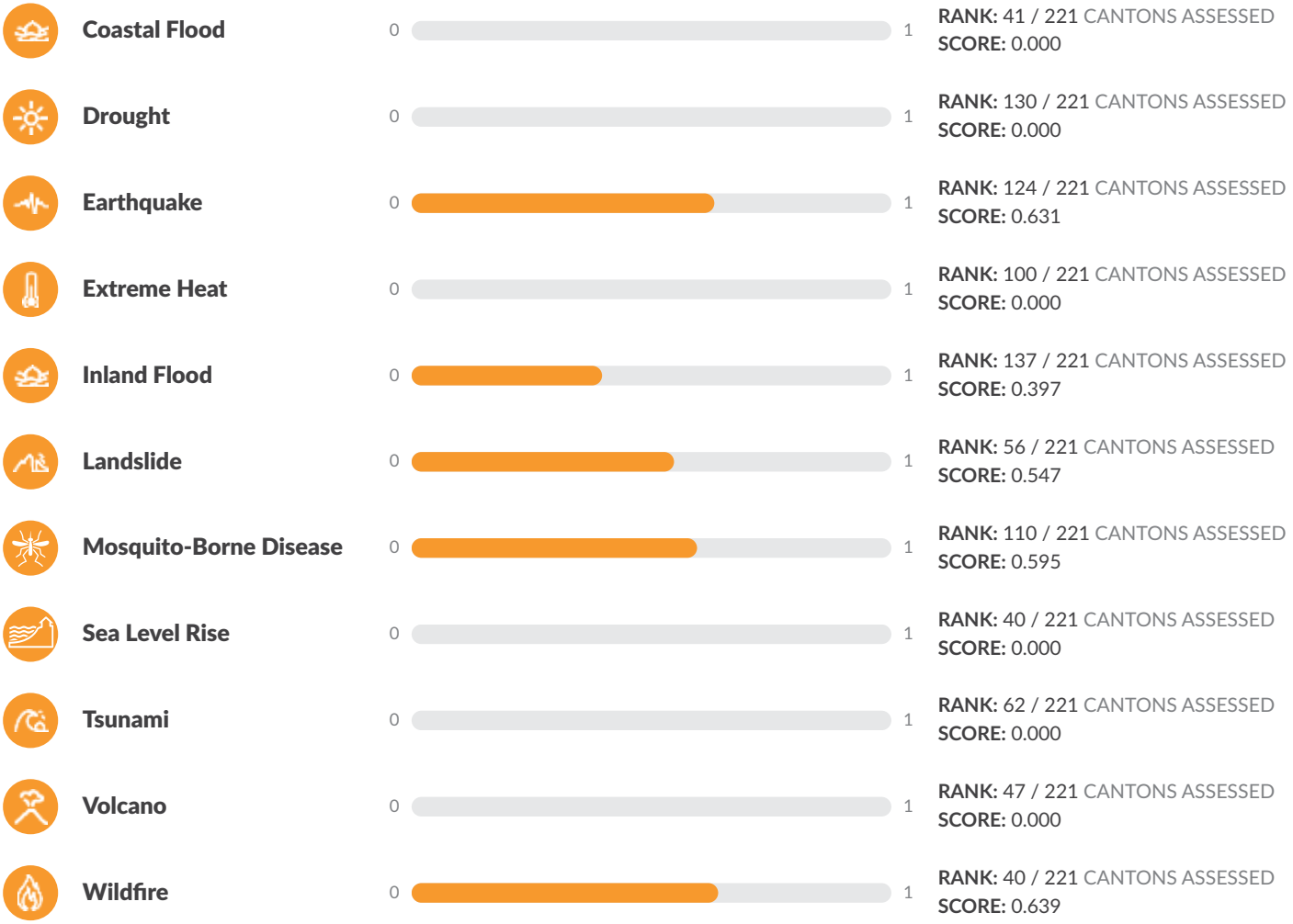
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
128 / 221
CANTONS ASSESSED
SCORE: 0.474

San Juan Bosco's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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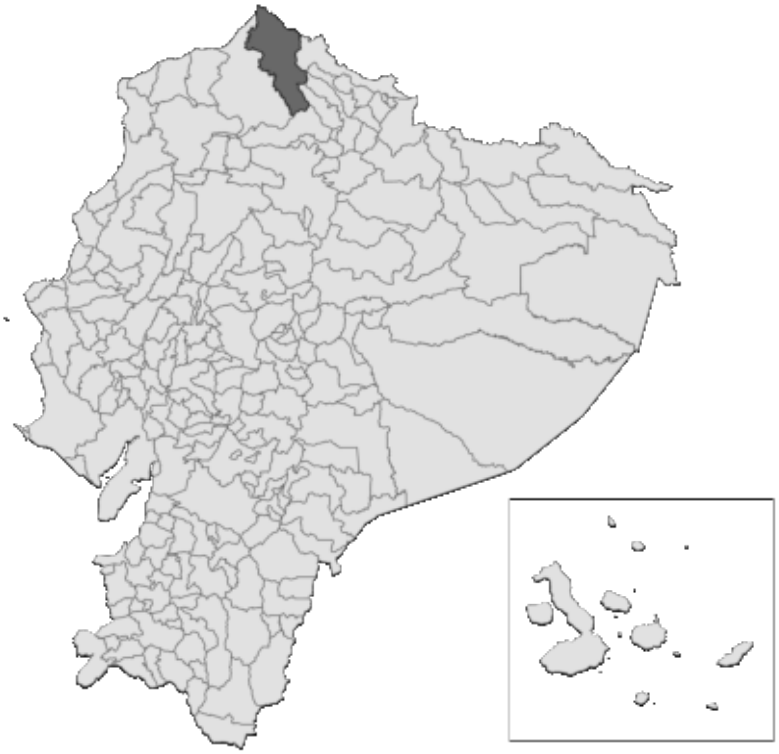
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SAN LORENZO

PROVINCE: ESMERALDAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.572 • RANK: 38/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.425 • RANK: 167/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.562 • RANK: 58/221 CANTONS ASSESSED

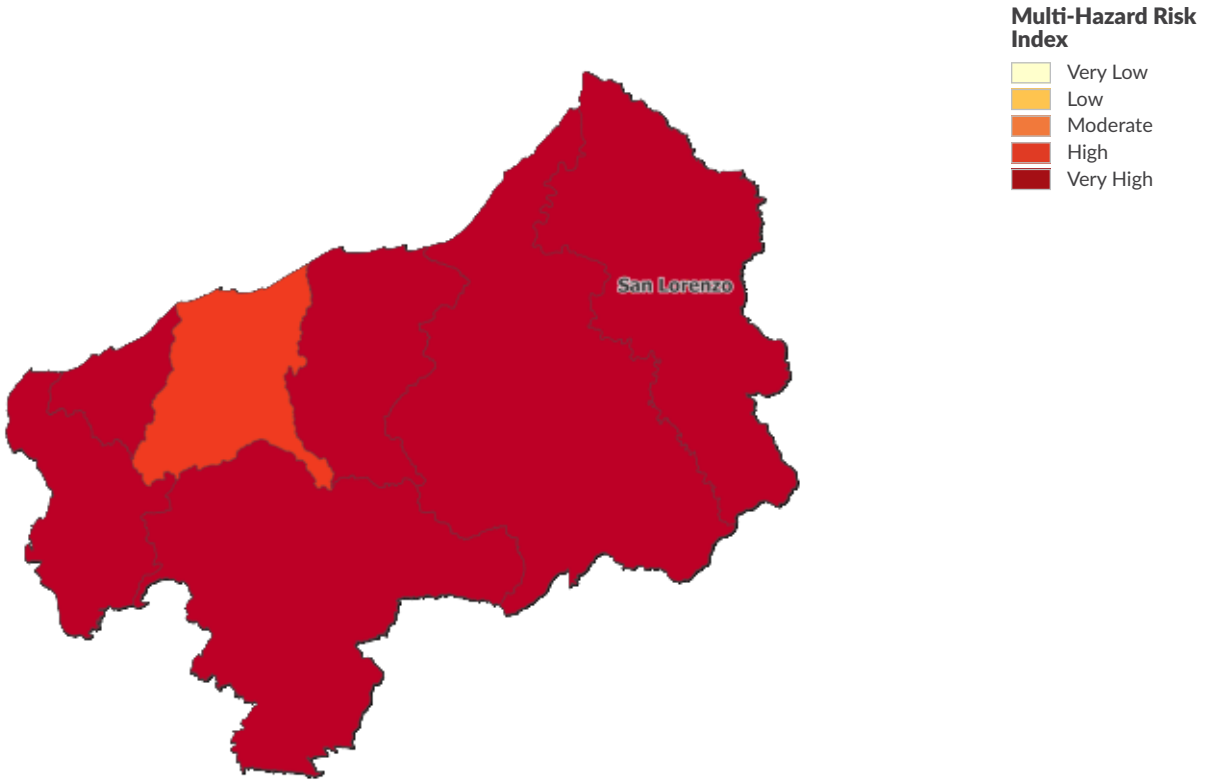
Vulnerability (V) - Very High
SCORE: 0.592 • RANK: 24/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.470 • RANK: 124/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.398 • RANK: 160/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ESMERALDAS PROVINCE

SAN LORENZO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Rioverde	0.636
Eloy Alfaro	0.631
Muisne	0.614
Atacames	0.585

San Lorenzo	**0.572**
Quinindé	0.568
Esmeraldas	0.523

MULTI-HAZARD EXPOSURE (MHE)

RANK: 58 / 221 CANTONS ASSESSED
SCORE: 0.562



MHE
0.562

Raw MHE
0.590

Relative MHE
0.534

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
8%
- **4,161** people exposed
- **1,573** structures exposed (10%)
- **Critical Infrastructure Exposed:** 6%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Earthquake
100%
- **53,585** people exposed
- **15,727** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
93%
- **49,857** people exposed
- **14,164** structures exposed (90%)
- **Critical Infrastructure Exposed:** 91%

Inland Flood
12%
- **6,335** people exposed
- **2,104** structures exposed (13%)
- **Critical Infrastructure Exposed:** 11%

Landslide
2%
- **1,312** people exposed
- **791** structures exposed (5%)
- **Critical Infrastructure Exposed:** 5%

Mosquito-Borne Disease
99%
- **53,010** people exposed
- **15,320** structures exposed (97%)
- **Critical Infrastructure Exposed:** 98%

Sea Level Rise
3%
- **1,652** people exposed
- **688** structures exposed (4%)
- **Critical Infrastructure Exposed:** 1%

Tsunami
54%
- **28,888** people exposed
- **7,493** structures exposed (48%)
- **Critical Infrastructure Exposed:** 42%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
66%
- **35,342** people exposed
- **10,580** structures exposed (67%)
- **Critical Infrastructure Exposed:** 59%

VULNERABILITY (V)

RANK: 24 / 221 CANTONS ASSESSED **SCORE: 0.592**

Vulnerability in San Lorenzo is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.567

- **9.2** Average Years of Schooling
- **38.3%** Population (age 24 and over) with General Basic Education Schooling
- **11.2%** Population (age 24 and over) with No Schooling
- **9.7%** Adult Illiteracy Rate
- **65.8%** Households with No Internet Access
- **71.1%** Households with No Access to Television
- **87.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.667

- **67.8%** Homes with Access to Public Water Source
- **37.2%** Homes Connected to the Public Sewage System
- **60.8%** Homes without Piped Water
- **8.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.648

- **68.9** Age Dependency Ratio
- **20.4%** Unemployment Rate
- **73.8%** Poverty Rate (based on UBN)
- **0.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.671

- **7.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.667

- **0.4** Female to Male Labor Ratio (distance from parity)
- **73.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **91.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **72.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.411

- **7.1%** Prevalence of Disability (among persons age 5 and over)
- **1.7** Perinatal Mortality Rate (per 1,000 births)
- **6.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.526

- **24.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **25.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.409

9	14	30	42
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.579

17.8%	0.5%	23.9%	95.4%	10.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.690

15.6	1.2%	65.9	0.35
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.496

0.4	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 124 / 221 CANTONS ASSESSED **SCORE: 0.470**

San Lorenzo exhibits weaker Coping Capacity in the areas of Communications Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.478

52.8%
Labor Force Participation

161,719
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.481

34.5%
Protected Area (% of land area)

-18,798.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.466

81.3%
Voter Participation

82.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.462

Communications Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.356

6.7%
Household Access to Fixed Phones

68.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.506

95.1%
Homes Served by the Public Electricity Network

70.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.575

23.4
Nurses and Midwives per 10,000 persons

18
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.410

13.9
Average Distance to Airport (km)

100.5
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 160 / 221 CANTONS ASSESSED **SCORE: 0.398**

San Lorenzo exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 119/221 CANTONS ASSESSED
SCORE: 0.414

5.5	7.1%	1.4	96.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.381

14.1	22.5	3.9	6.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 167 / 221 CANTONS ASSESSED
SCORE: 0.425

San Lorenzo's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Clean Water Access Vulnerability

Marginalization

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

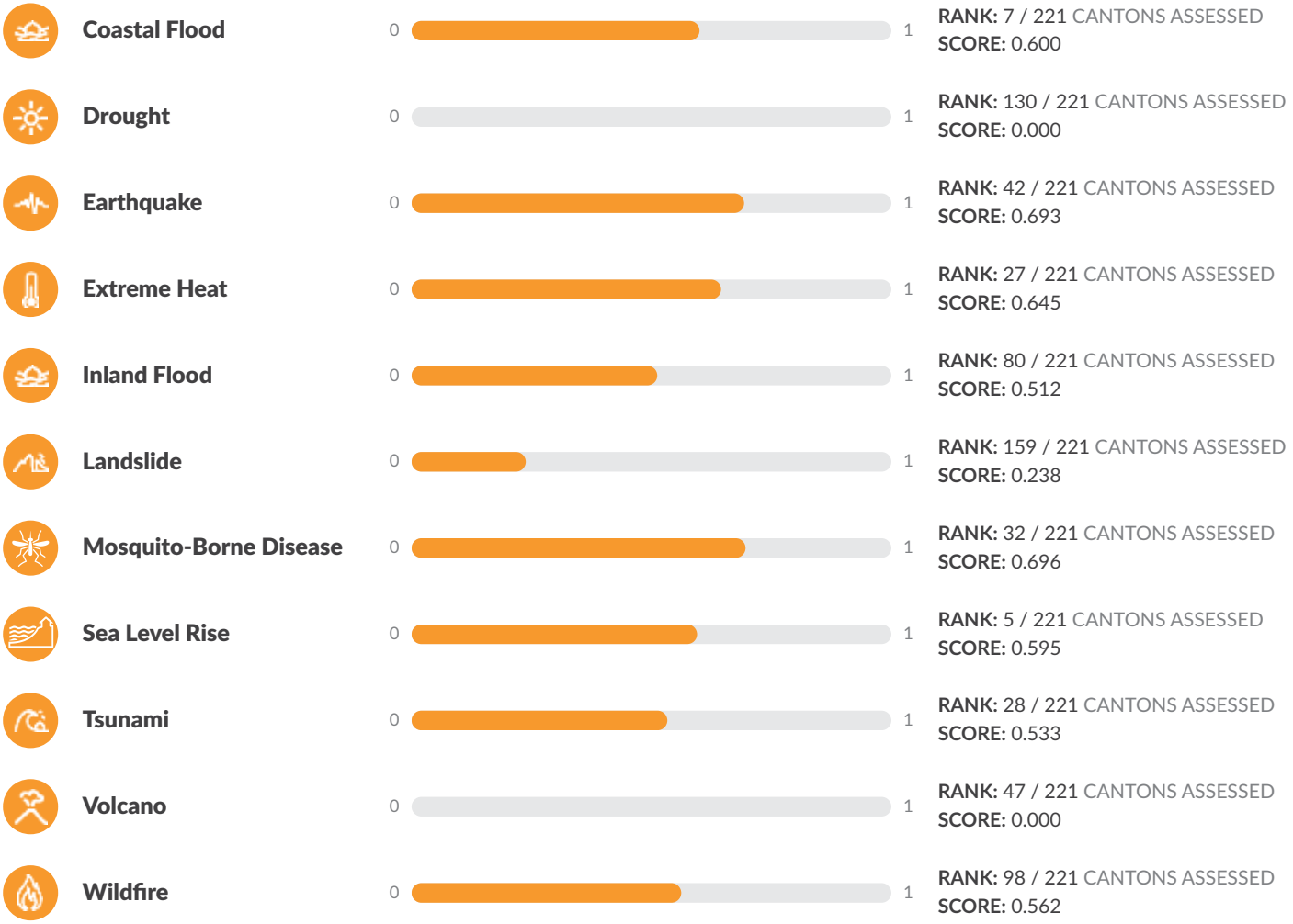
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

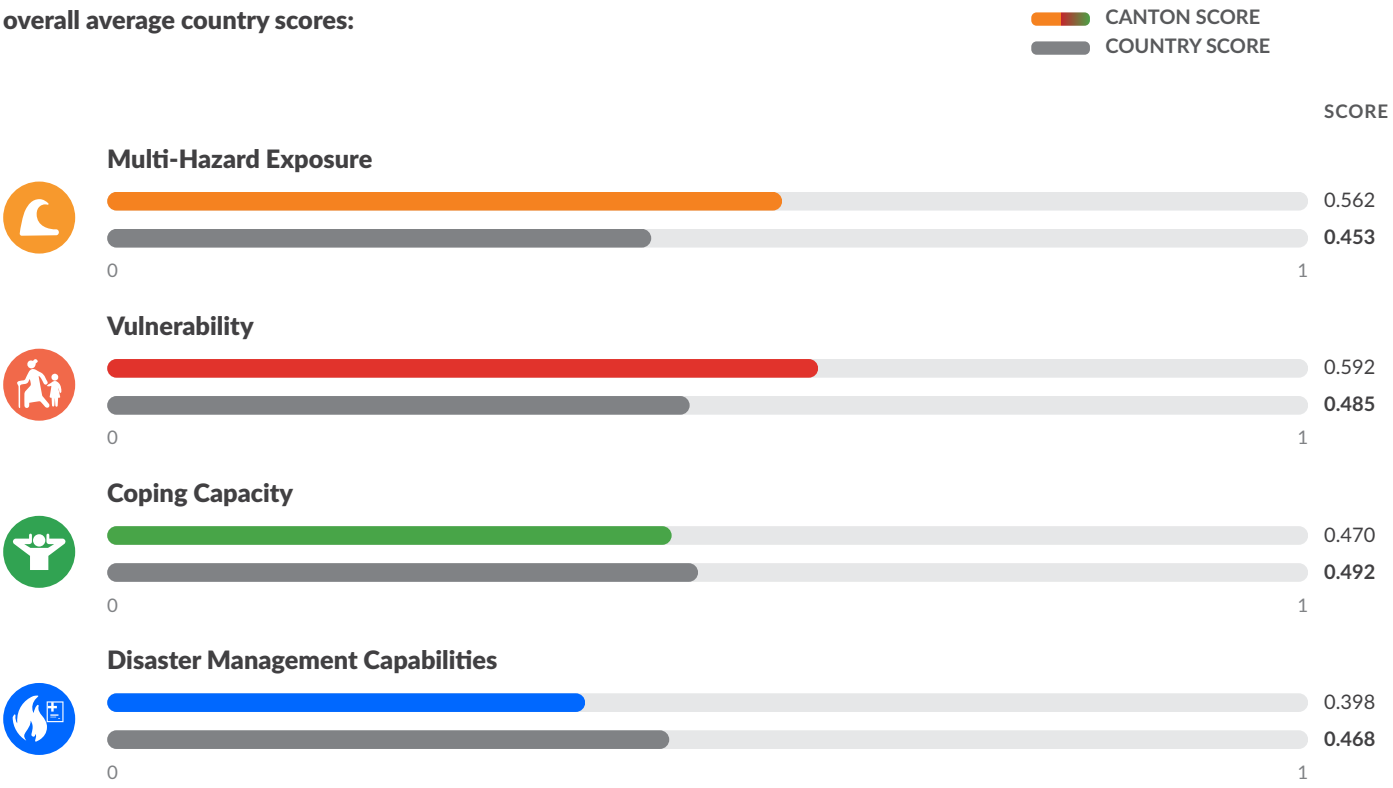


MULTI-HAZARD RISK (MHR)

RANKED
38 / 221
CANTONS ASSESSED
SCORE: 0.572

San Lorenzo's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SAN MIGUEL

PROVINCE: BOLÍVAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.462 • RANK: 139/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.502 • RANK: 95/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.480 • RANK: 114/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.408 • RANK: 170/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.290 • RANK: 182/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.536 • RANK: 65/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN BOLÍVAR PROVINCE

SAN MIGUEL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Chillanes	0.522
Guaranda	0.505
San Miguel	**0.462**
Echeandía	0.445
Chimbo	0.443
Caluma	0.427
Las Naves	0.421

MULTI-HAZARD EXPOSURE (MHE)

RANK: 182 / 221 CANTONS ASSESSED
SCORE: 0.290



MHE
0.290

Raw MHE
0.454

Relative MHE
0.126

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
29,965 people exposed
18,592 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: <1%

Inland Flood
<1%
88 people exposed
31 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Landslide
73%
21,748 people exposed
14,063 structures exposed (76%)
Critical Infrastructure Exposed: 84%

Mosquito-Borne Disease
13%
3,970 people exposed
2,498 structures exposed (13%)
Critical Infrastructure Exposed: 13%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
69%
20,663 people exposed
12,914 structures exposed (69%)
Critical Infrastructure Exposed: 67%

VULNERABILITY (V)

RANK: 95 / 221 CANTONS ASSESSED **SCORE: 0.502**

Vulnerability in San Miguel is primarily driven by Disaster Impacts and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.492

- **10.9** Average Years of Schooling
- **40.5%** Population (age 24 and over) with General Basic Education Schooling
- **6.7%** Population (age 24 and over) with No Schooling
- **5.7%** Adult Illiteracy Rate
- **56.2%** Households with No Internet Access
- **86.6%** Households with No Access to Television
- **74.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.563

- **68.2%** Homes with Access to Public Water Source
- **44.5%** Homes Connected to the Public Sewage System
- **42.7%** Homes without Piped Water
- **5.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.540

- **58.3** Age Dependency Ratio
- **15.2%** Unemployment Rate
- **57.7%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.318

- **1.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.474

- **0.4** Female to Male Labor Ratio (distance from parity)
- **40.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **85.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **47.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.527

- **11.4%** Prevalence of Disability (among persons age 5 and over)
- **3.2** Perinatal Mortality Rate (per 1,000 births)
- **9.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.355

- **4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.562

45	15	45	65
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.434

16.8%	0.8%	21.3%	79.3%	5.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.385

48.4	0.3%	2.3	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.632

0.5	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 170 / 221 CANTONS ASSESSED **SCORE: 0.408**

San Miguel exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.386

50.9%
Labor Force Participation

65,156
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.275

0%
Protected Area (% of land area)

-5,208.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.341

81.2%
Voter Participation

58.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.540

Communications Capacity

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.584

17.8%
Household Access to Fixed Phones

80.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.551

96.3%
Homes Served by the Public Electricity Network

72.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.531

18.3
Nurses and Midwives per 10,000 persons

18
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.493

34.7
Average Distance to Airport (km)

49.2
Average Distance to Sea or River Port (km)

1.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 65 / 221 CANTONS ASSESSED **SCORE: 0.536**

San Miguel exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.527

2.8	8.4%	0.5	21.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.546

8.1	7.3	2.5	6.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 114 / 221 CANTONS ASSESSED
SCORE: 0.480

San Miguel's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Disaster Impacts

Economic Capacity

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

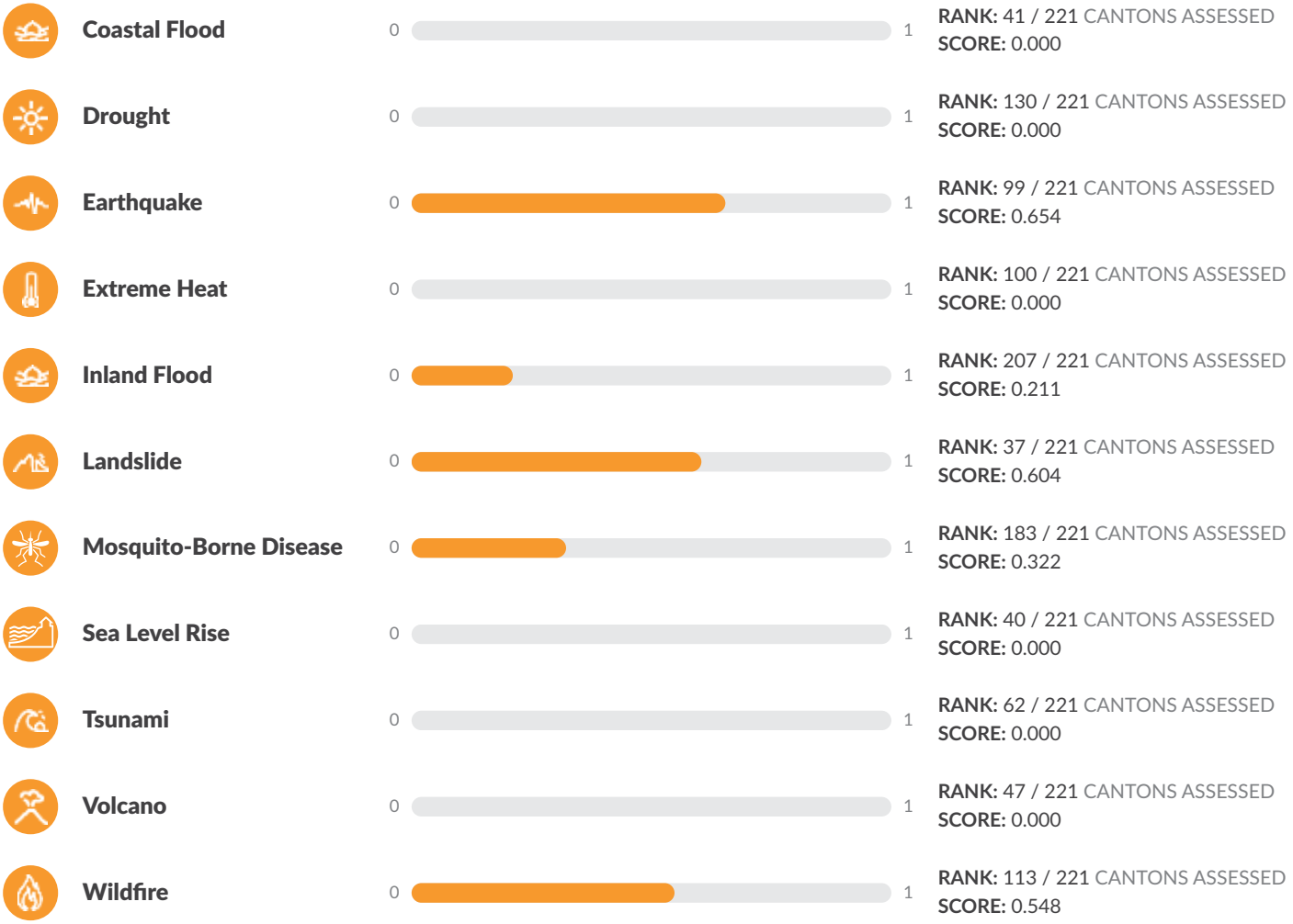
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
139 / 221
CANTONS ASSESSED
SCORE: 0.462

San Miguel's score and ranking are due to Very Low Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

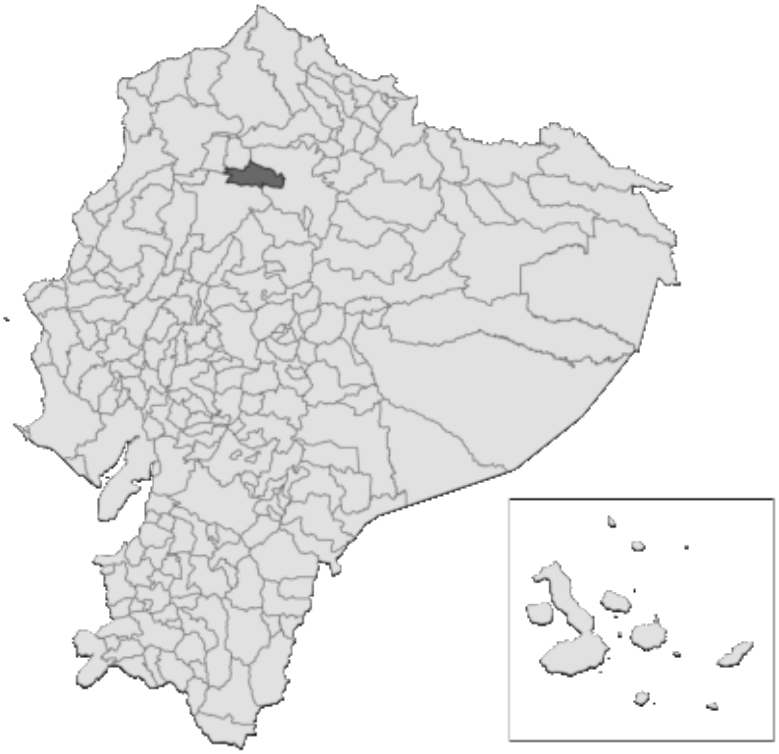
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SAN MIGUEL DE LOS BANCOS

PROVINCE: PICHINCHA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.463 • RANK: 138/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.481 • RANK: 113/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.296 • RANK: 176/221 CANTONS ASSESSED

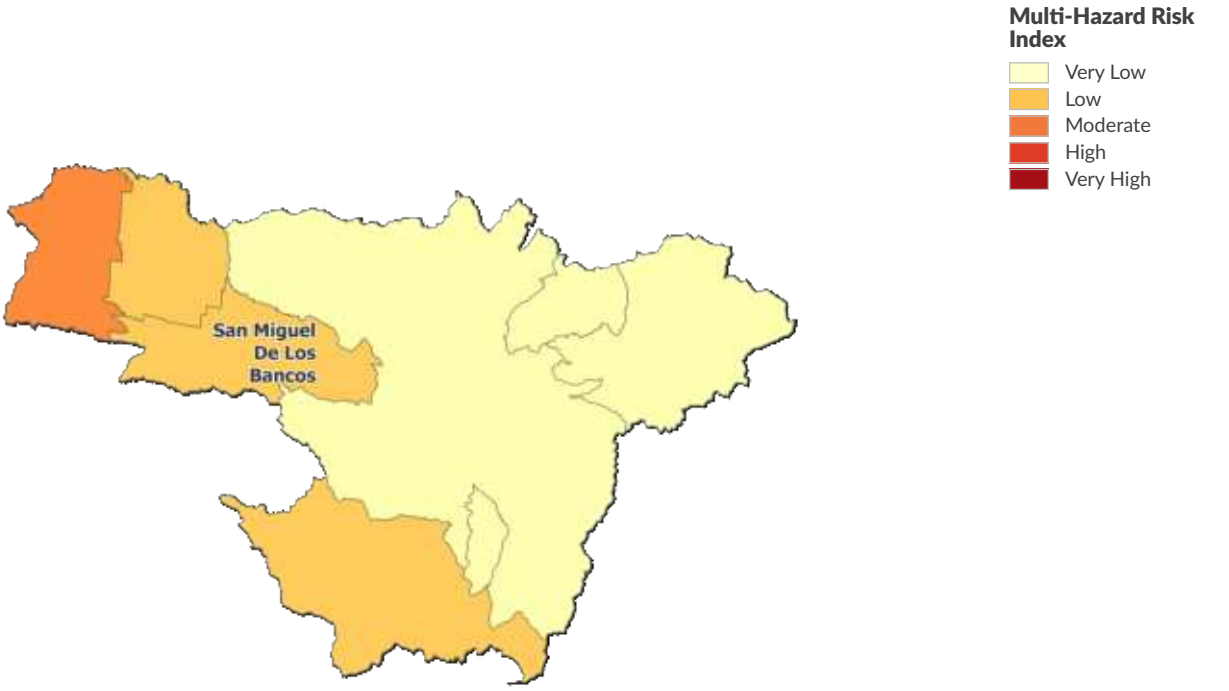
Vulnerability (V) - Low
SCORE: 0.450 • RANK: 148/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.508 • RANK: 94/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.386 • RANK: 163/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PICHINCHA PROVINCE

SAN MIGUEL DE LOS BANCOS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Puerto Quito	0.504
San Miguel De Los Bancos	**0.463**
Pedro Vicente Maldonado	0.449
Mejía	0.442
Cayambe	0.412
Distrito Metropolitano De Quito	0.393
Pedro Moncayo	0.381
Rumiñahui	0.313

MULTI-HAZARD EXPOSURE (MHE)

RANK: 176 / 221 CANTONS ASSESSED
SCORE: 0.296



MHE
0.296

Raw MHE
0.403

Relative MHE
0.188

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
21,413 people exposed
11,725 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
11%
2,279 people exposed
1,409 structures exposed (12%)
Critical Infrastructure Exposed: 7%

Landslide
41%
8,724 people exposed
5,094 structures exposed (43%)
Critical Infrastructure Exposed: 56%

Mosquito-Borne Disease
92%
19,729 people exposed
10,527 structures exposed (90%)
Critical Infrastructure Exposed: 98%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: <1%

Wildfire
45%
9,587 people exposed
5,891 structures exposed (50%)
Critical Infrastructure Exposed: 46%

VULNERABILITY (V)

RANK: 148 / 221 CANTONS ASSESSED **SCORE: 0.450**

Vulnerability in San Miguel De Los Bancos is primarily driven by Disaster Impacts and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.423

- **10.2** Average Years of Schooling
- **43.9%** Population (age 24 and over) with General Basic Education Schooling
- **5.9%** Population (age 24 and over) with No Schooling
- **3.9%** Adult Illiteracy Rate
- **41.3%** Households with No Internet Access
- **71.5%** Households with No Access to Television
- **74.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.410

- **78.5%** Homes with Access to Public Water Source
- **51.4%** Homes Connected to the Public Sewage System
- **19.4%** Homes without Piped Water
- **3.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.432

- **55.4** Age Dependency Ratio
- **11.9%** Unemployment Rate
- **42.8%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.333

- **2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.440

- **0.4** Female to Male Labor Ratio (distance from parity)
- **46.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **45.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **54.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.498

- **8%** Prevalence of Disability (among persons age 5 and over)
- **11.6** Perinatal Mortality Rate (per 1,000 births)
- **6.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.539

- **2.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.270

58	0	34	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.406

12.9%	1%	14.6%	83.4%	6.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.405

16	-2.2	28.3	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.609

0.3	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 94 / 221 CANTONS ASSESSED **SCORE: 0.508**

San Miguel De Los Bancos exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.493

60.4%
Labor Force Participation

38,814
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.221

0.1%
Protected Area (% of land area)

-9,920.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.599

84.9%
Voter Participation

90.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.527

Communications Capacity

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.606

11.3%
Household Access to Fixed Phones

87.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.699

98.5%
Homes Served by the Public Electricity Network

78.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.466

16.1
Nurses and Midwives per 10,000 persons

13.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.337

37.1
Average Distance to Airport (km)

107.3
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 163 / 221 CANTONS ASSESSED **SCORE: 0.386**

San Miguel De Los Bancos exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.367

3.1	18.1%	0	97.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.405

20.9	9.8	3.1	9.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 113 / 221 CANTONS ASSESSED
SCORE: 0.481

San Miguel De Los Bancos's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Mass Care Support

Disaster Impacts

Emergency Services

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

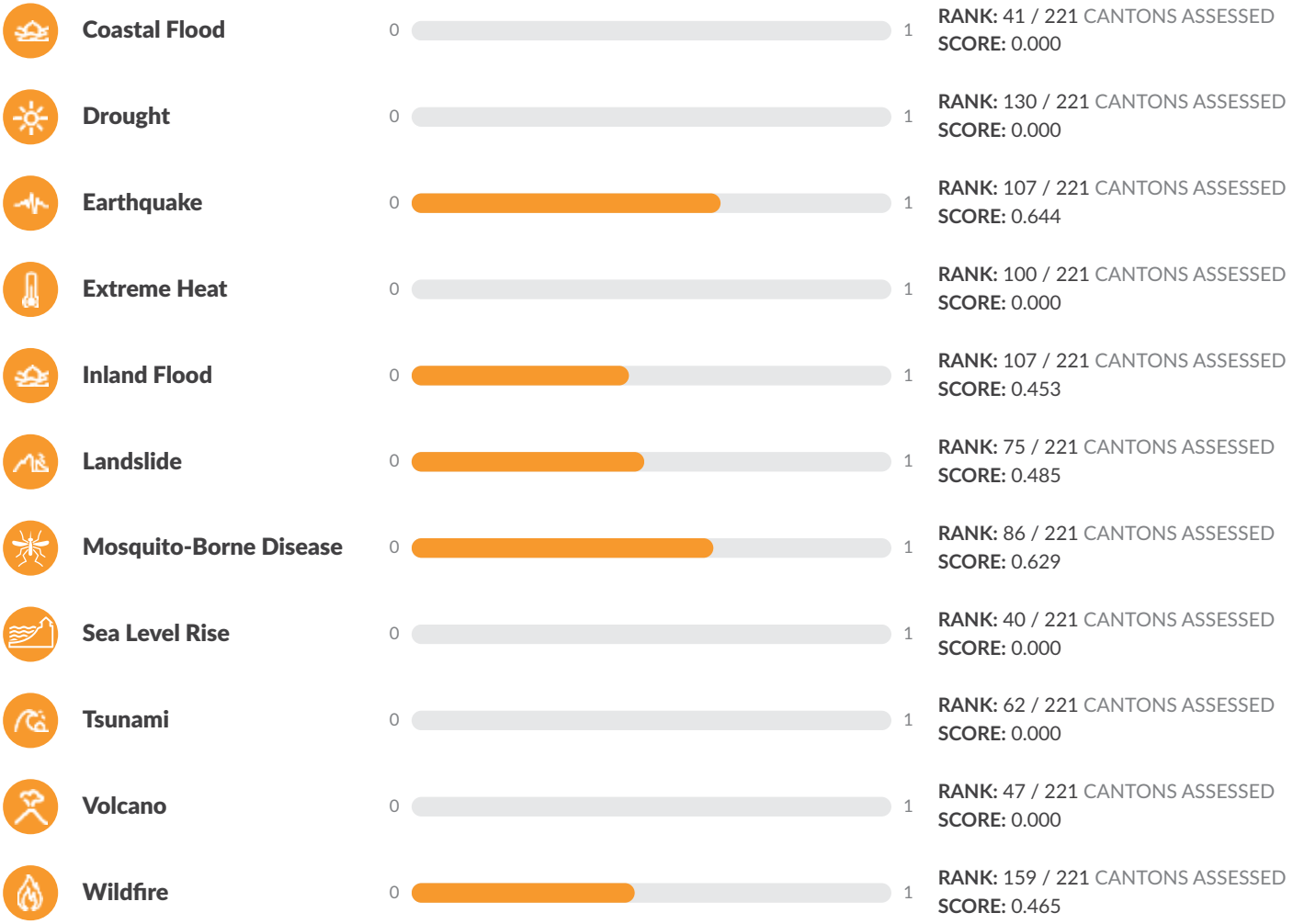
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

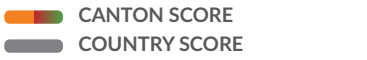


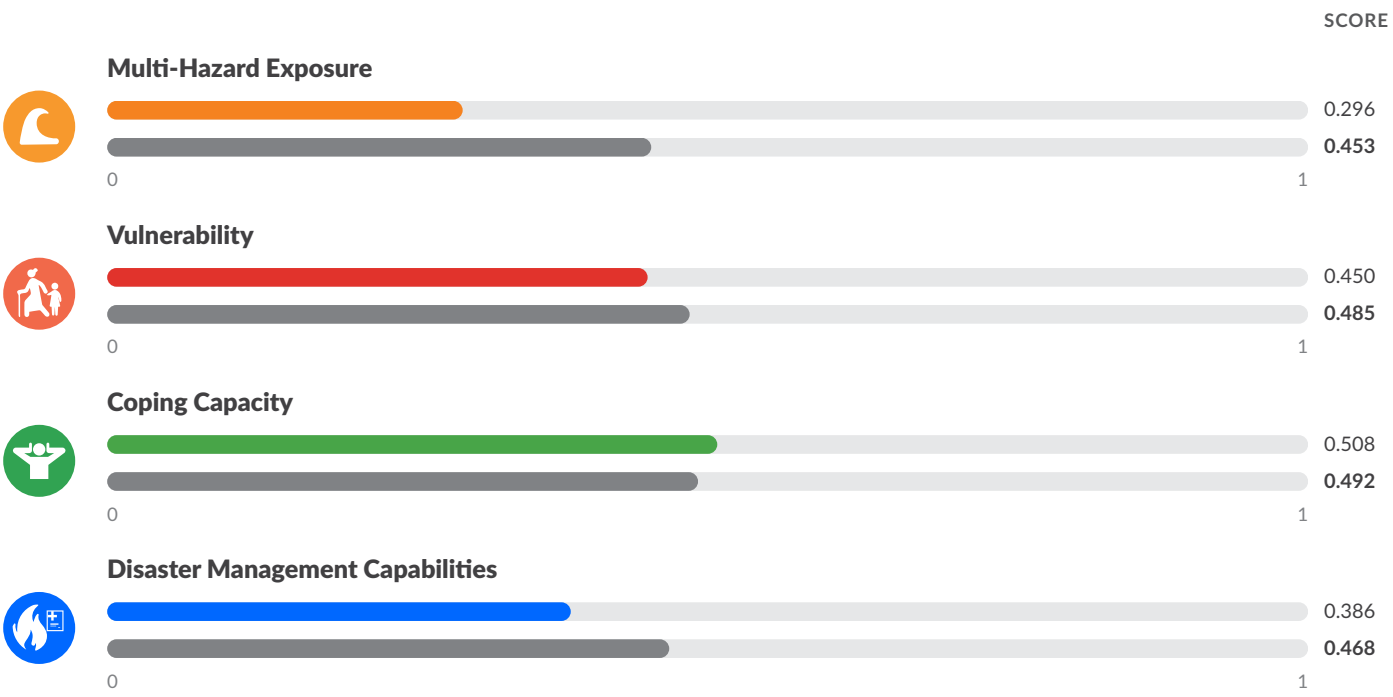
MULTI-HAZARD RISK (MHR)

RANKED
138 / 221
CANTONS ASSESSED
SCORE: 0.463

San Miguel De Los Bancos's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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NDPBA SUBNATIONAL PROFILE

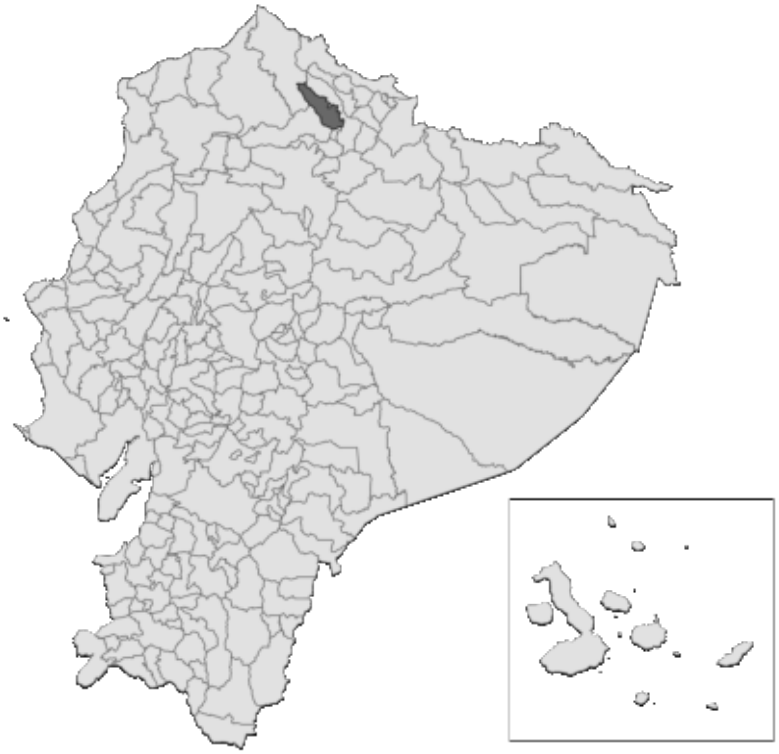
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SAN MIGUEL DE URCUQUÍ

PROVINCE: IMBABURA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.443 • RANK: 159/221 CANTONS ASSESSED

Vulnerability (V) - Low
SCORE: 0.452 • RANK: 147/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.523 • RANK: 81/221 CANTONS ASSESSED

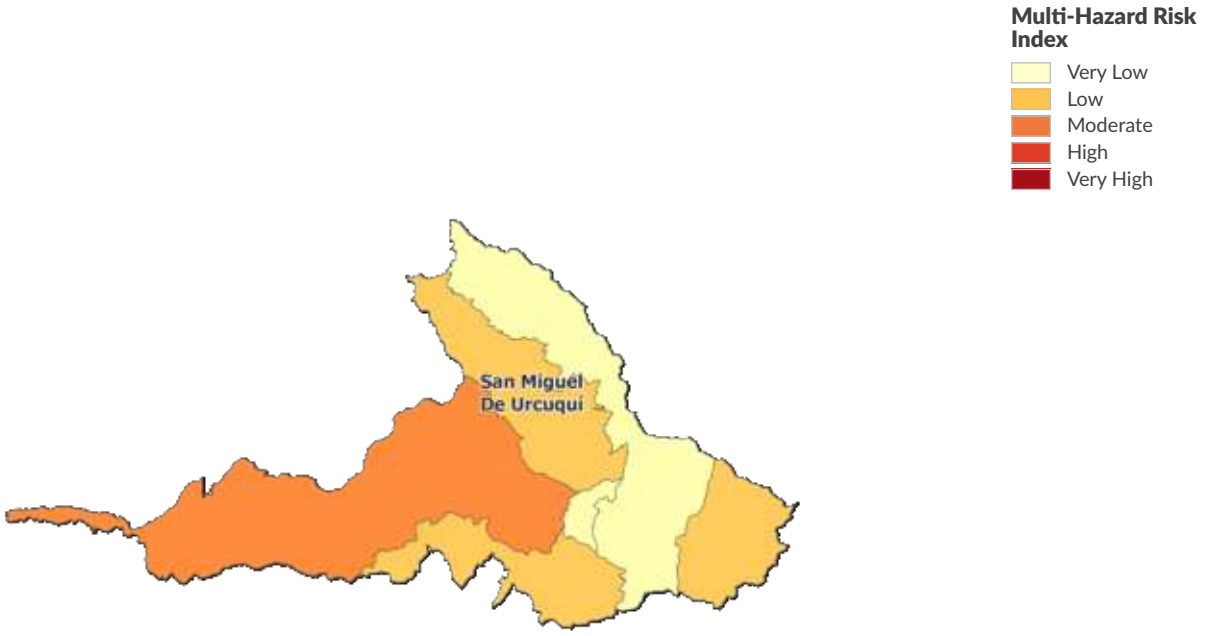
Coping Capacity (CC) - High
SCORE: 0.522 • RANK: 85/221 CANTONS ASSESSED

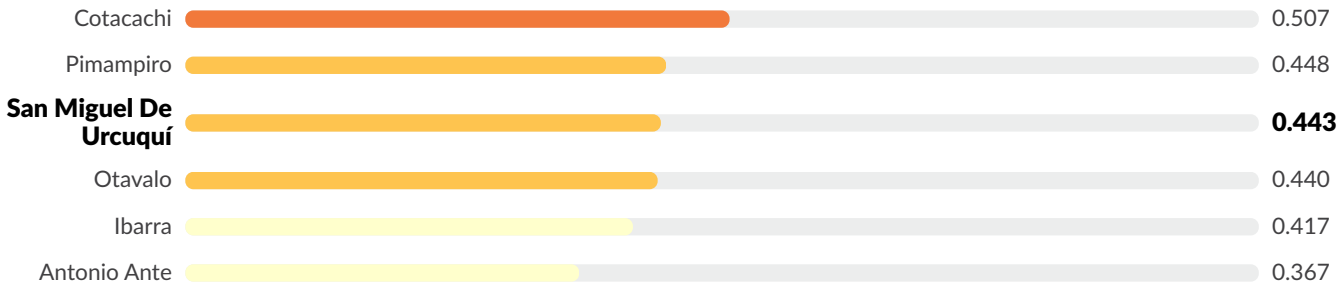
Multi-Hazard Exposure (MHE) - Low
SCORE: 0.340 • RANK: 160/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.500 • RANK: 82/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN IMBABURA PROVINCE

SAN MIGUEL DE URCUQUÍ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 160 / 221 CANTONS ASSESSED
SCORE: 0.340



MHE
0.340

Raw MHE
0.413

Relative MHE
0.267

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
31%
- **5,745** people exposed
- **4,469** structures exposed (36%)

Critical Infrastructure Exposed: 38%

Earthquake
100%
- **18,238** people exposed
- **12,544** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
5%
- **965** people exposed
- **335** structures exposed (3%)

Critical Infrastructure Exposed: 1%

Landslide
81%
- **14,798** people exposed
- **9,793** structures exposed (78%)

Critical Infrastructure Exposed: 77%

Mosquito-Borne Disease
5%
- **887** people exposed
- **745** structures exposed (6%)

Critical Infrastructure Exposed: 3%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
13%
- **2,383** people exposed
- **1,305** structures exposed (10%)

Critical Infrastructure Exposed: 14%

Wildfire
88%
- **15,999** people exposed
- **11,148** structures exposed (89%)

Critical Infrastructure Exposed: 94%

VULNERABILITY (V)

RANK: 147 / 221 CANTONS ASSESSED **SCORE: 0.452**

Vulnerability in San Miguel De Urcuquí is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.565

- **8.6** Average Years of Schooling
- **57.5%** Population (age 24 and over) with General Basic Education Schooling
- **7.7%** Population (age 24 and over) with No Schooling
- **6.3%** Adult Illiteracy Rate
- **50.2%** Households with No Internet Access
- **78.9%** Households with No Access to Television
- **72%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.439

- **92.5%** Homes with Access to Public Water Source
- **76%** Homes Connected to the Public Sewage System
- **32.2%** Homes without Piped Water
- **10.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.434

- **57.8** Age Dependency Ratio
- **8.8%** Unemployment Rate
- **45.4%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.540

- **4.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.411

- **0.4** Female to Male Labor Ratio (distance from parity)
- **35.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **80.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **39.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.308

- **7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.211

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **13.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.448

34
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

19
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

36
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.397

10.1%
Homes with Exterior Walls in Poor Condition

0.3%
Homes with Inadequate Materials Used in Outer Walls

15.3%
Homes with Roofs in Poor Condition

83.9%
Households with No Access to Vehicle for Private Use

8.6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.454

24.4
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

11
Net Migration Rate (per 1,000 persons)

0.29
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.596

0.3
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 85 / 221 CANTONS ASSESSED **SCORE: 0.522**

San Miguel De Urcuquí exhibits weaker Coping Capacity in the areas of Transportation Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.504

60.5%
Labor Force Participation

44,292
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.546

8.1%
Protected Area (% of land area)

-3,206.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.595

87%
Voter Participation

85.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.457

Communications Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.598

16.4%
Household Access to Fixed Phones

83%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.630

97.2%
Homes Served by the Public Electricity Network

77.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.352

11.7
Nurses and Midwives per 10,000 persons

9.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.249

43.9
Average Distance to Airport (km)

166.5
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 82 / 221 CANTONS ASSESSED **SCORE: 0.500**

San Miguel De Urcuquí exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.486

2.3	8.5%	0	16.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.513

13.6	6.1	2.9	6.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 81 / 221 CANTONS ASSESSED
SCORE: 0.523

San Miguel De Urcuquí's score and ranking are due to Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Healthcare Capacity

Disaster Impacts

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

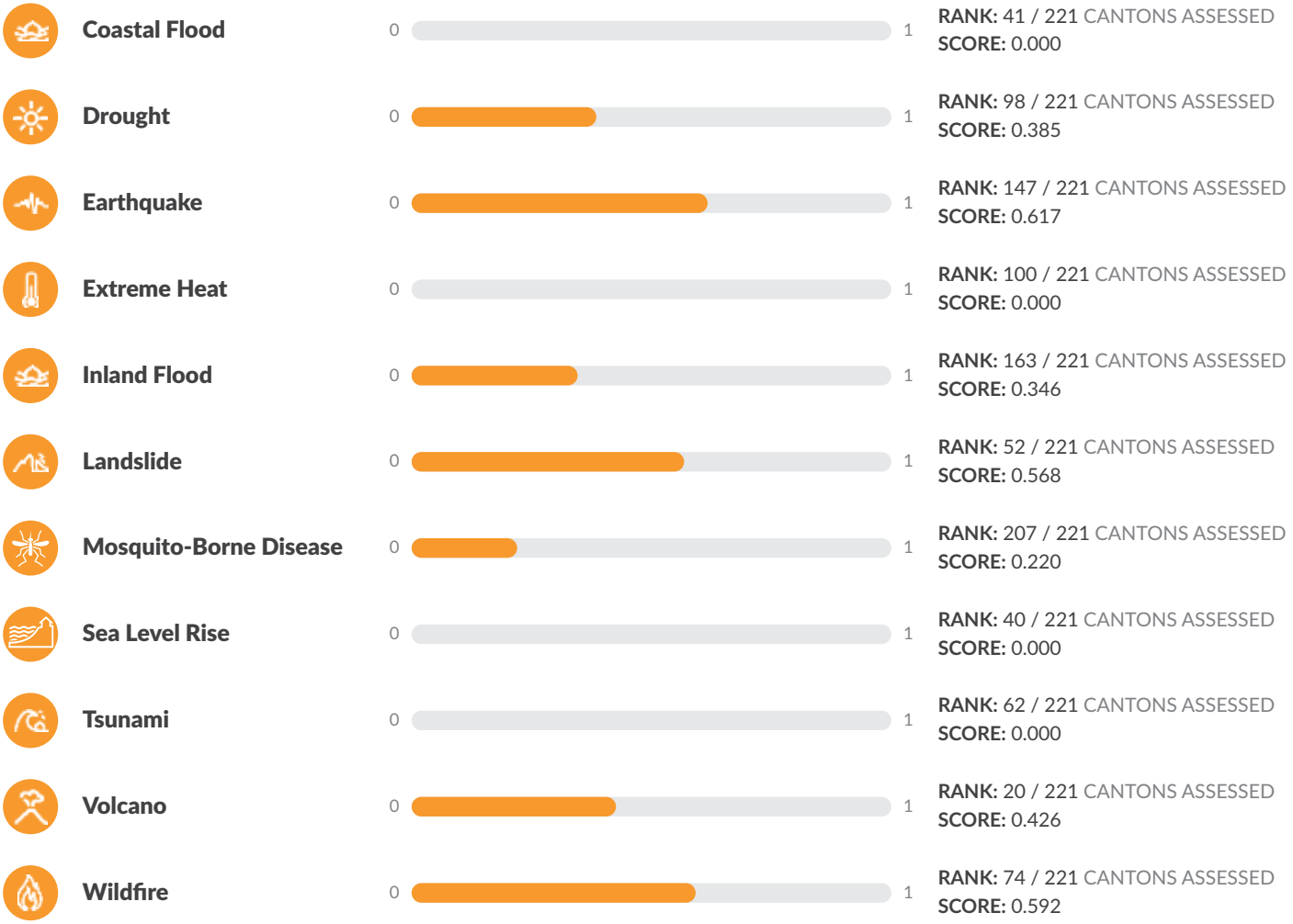
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

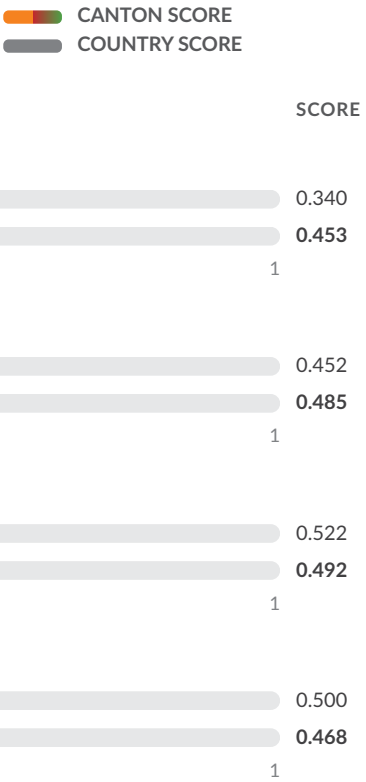


MULTI-HAZARD RISK (MHR)

RANKED
159 / 221
CANTONS ASSESSED
SCORE: 0.443

San Miguel De Urcuquí's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

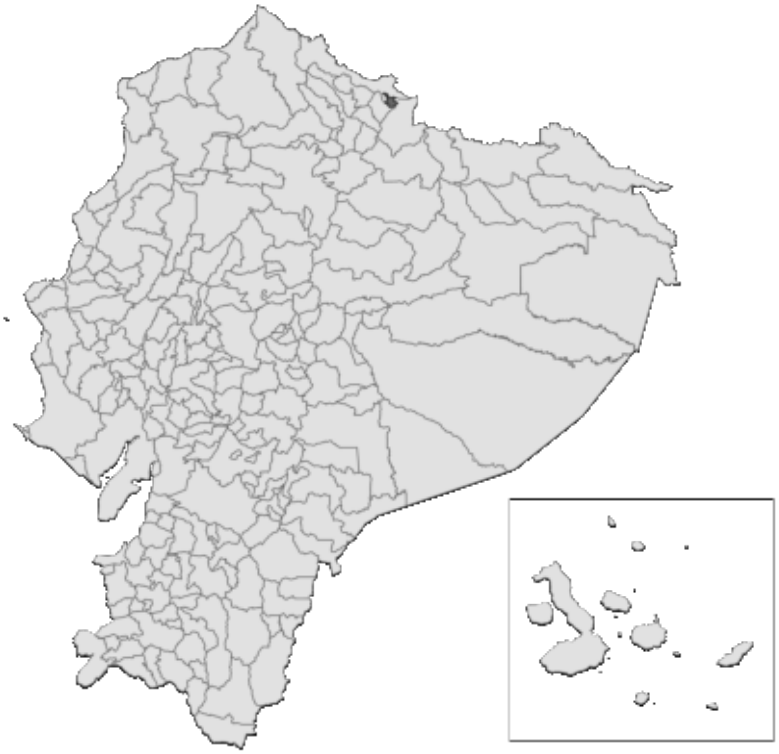
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ECUADOR

SAN PEDRO DE HUACA

PROVINCE: CARCHI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.347 • RANK: 218/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.589 • RANK: 36/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.155 • RANK: 214/221 CANTONS ASSESSED

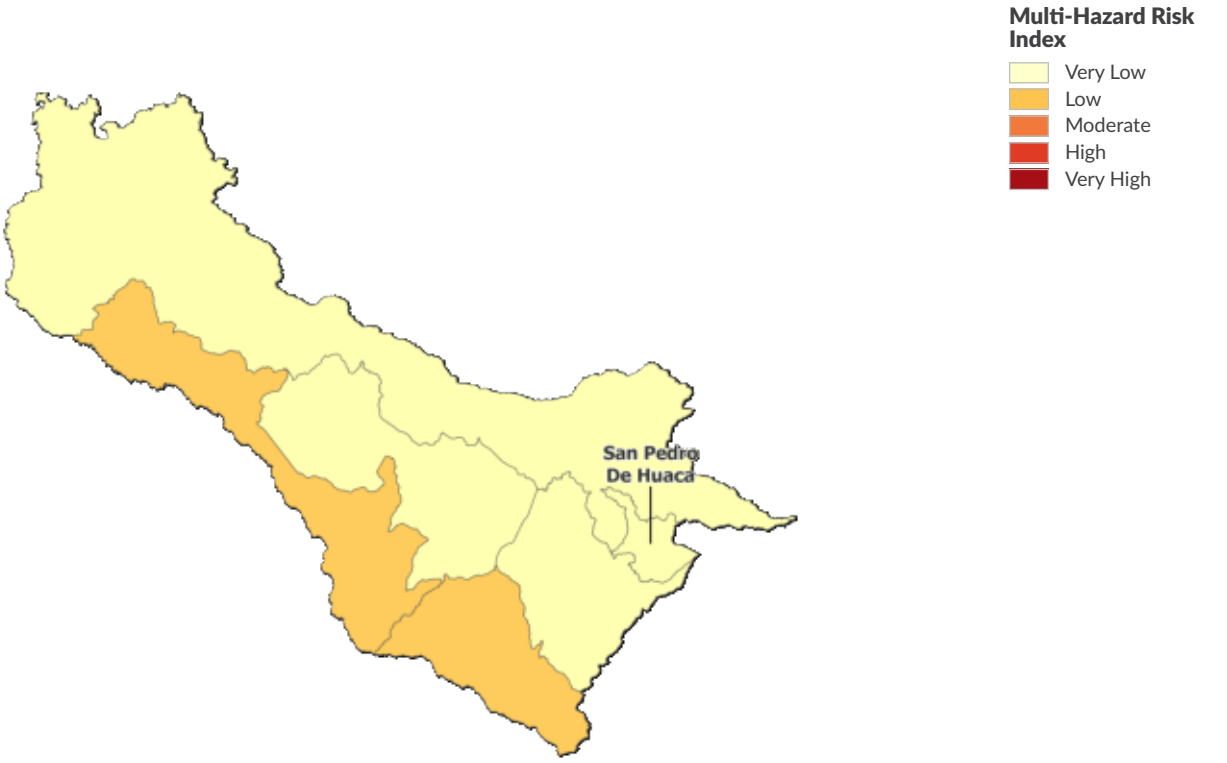
Vulnerability (V) - Very Low
SCORE: 0.404 • RANK: 183/221 CANTONS ASSESSED

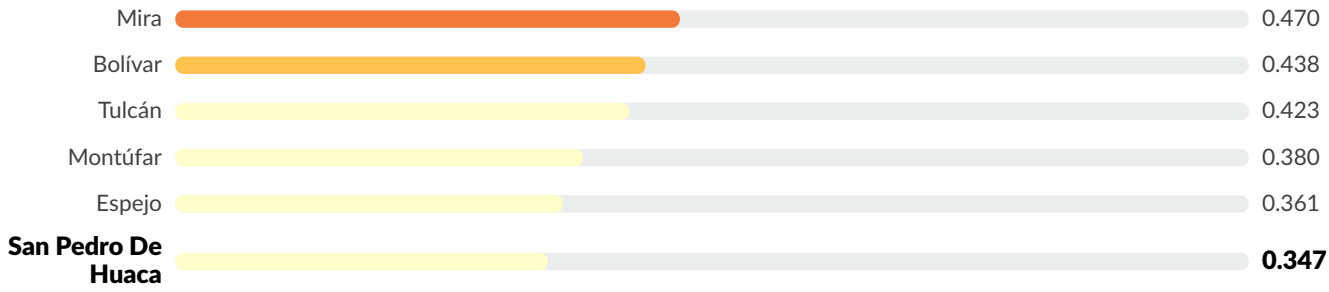
Coping Capacity (CC) - High
SCORE: 0.569 • RANK: 56/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.601 • RANK: 30/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CARCHI PROVINCE

SAN PEDRO DE HUACA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 214 / 221 CANTONS ASSESSED
SCORE: 0.155



MHE
0.155

Raw MHE
0.199

Relative MHE
0.111

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
8,507 people exposed
3,937 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
76 people exposed
64 structures exposed (2%)
Critical Infrastructure Exposed: 3%

Landslide
59%
4,981 people exposed
2,522 structures exposed (64%)
Critical Infrastructure Exposed: 54%

Mosquito-Borne Disease
1%
101 people exposed
90 structures exposed (2%)
Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
8,507 people exposed
3,937 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 183 / 221 CANTONS ASSESSED **SCORE: 0.404**

Vulnerability in San Pedro De Huaca is primarily driven by Population Pressures and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 117/221 CANTONS ASSESSED
SCORE: 0.502

- **9.5** Average Years of Schooling
- **55.6%** Population (age 24 and over) with General Basic Education Schooling
- **3.1%** Population (age 24 and over) with No Schooling
- **2.7%** Adult Illiteracy Rate
- **48.3%** Households with No Internet Access
- **89.8%** Households with No Access to Television
- **72.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.273

- **98.5%** Homes with Access to Public Water Source
- **79.4%** Homes Connected to the Public Sewage System
- **20.5%** Homes without Piped Water
- **6.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.322

- **49.6** Age Dependency Ratio
- **7.7%** Unemployment Rate
- **31.3%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.649

- **7.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.401

- **0.5** Female to Male Labor Ratio (distance from parity)
- **40.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **43.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **33.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.400

- **7.3%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **15.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.073

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **6.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.614

225
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

7
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

40
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

66
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.360

9.4%
Homes with Exterior Walls in Poor Condition

1.2%
Homes with Inadequate Materials Used in Outer Walls

14.5%
Homes with Roofs in Poor Condition

77.9%
Households with No Access to Vehicle for Private Use

6.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.592

103.8
Population Density (persons per sq km)

0.4%
Average Annual Population Change (2010-2022)

87.3
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.340

0.1
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 56 / 221 CANTONS ASSESSED **SCORE: 0.569**

San Pedro De Huaca exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.409

58.9%
Labor Force Participation

17,019
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 14/221 CANTONS ASSESSED
SCORE: 0.747

37.2%
Protected Area (% of land area)

-300.9
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.706

87.9%
Voter Participation

94.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.532

Communications Capacity

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.642

14.1%
Household Access to Fixed Phones

88%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.862

98.7%
Homes Served by the Public Electricity Network

89.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.186

7.6
Nurses and Midwives per 10,000 persons

5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.439

19.7
Average Distance to Airport (km)

140.9
Average Distance to Sea or River Port (km)

2.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 30 / 221 CANTONS ASSESSED **SCORE: 0.601**

San Pedro De Huaca exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.432

1.4	6.5%	0	54.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.769

12.7	1.9	1.6	1.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 36 / 221 CANTONS ASSESSED
SCORE: 0.589

San Pedro De Huaca's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Healthcare Capacity


Population Pressures


Economic Capacity


Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



Economic Capacity

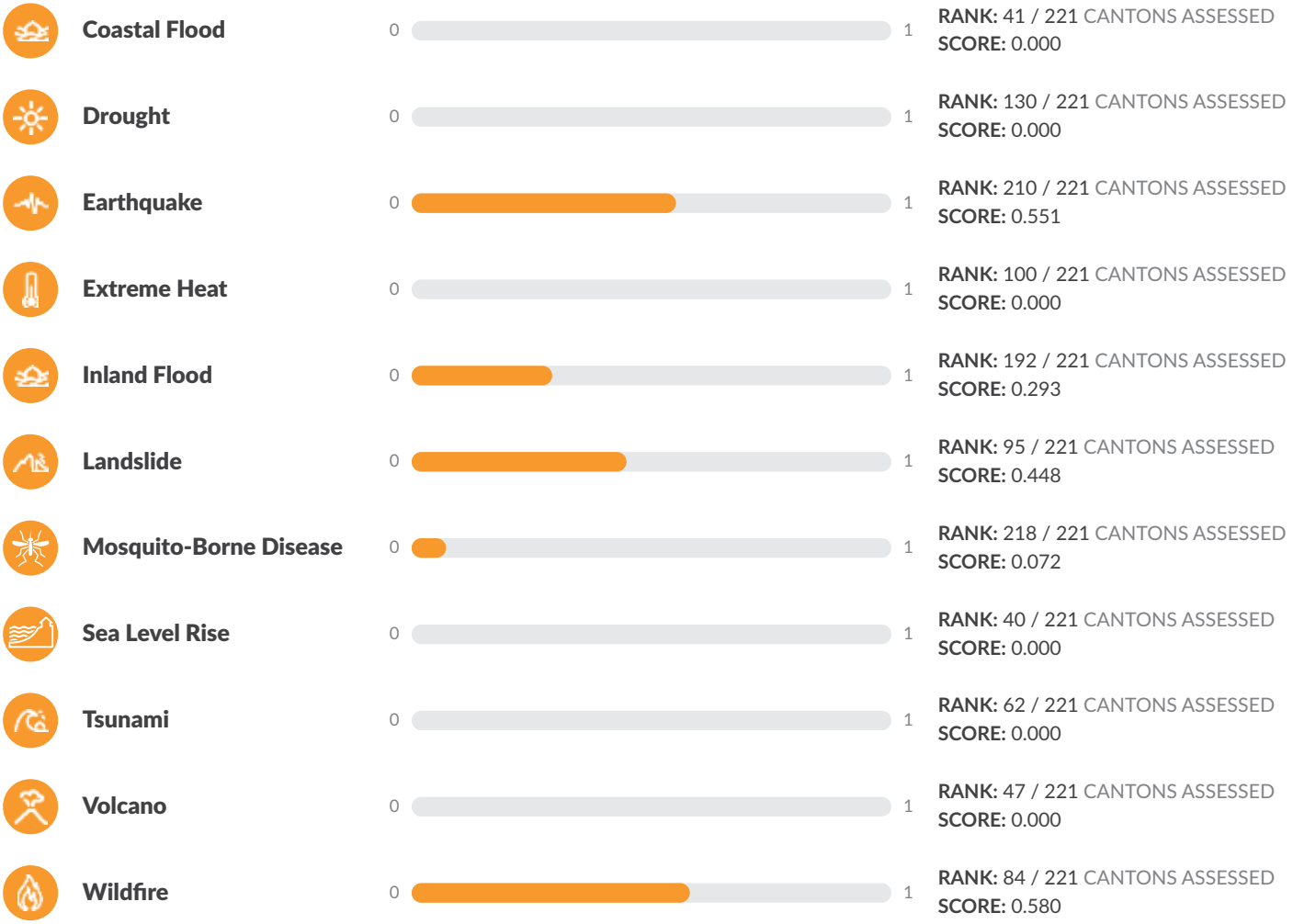
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

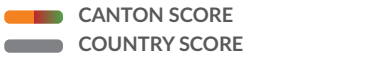


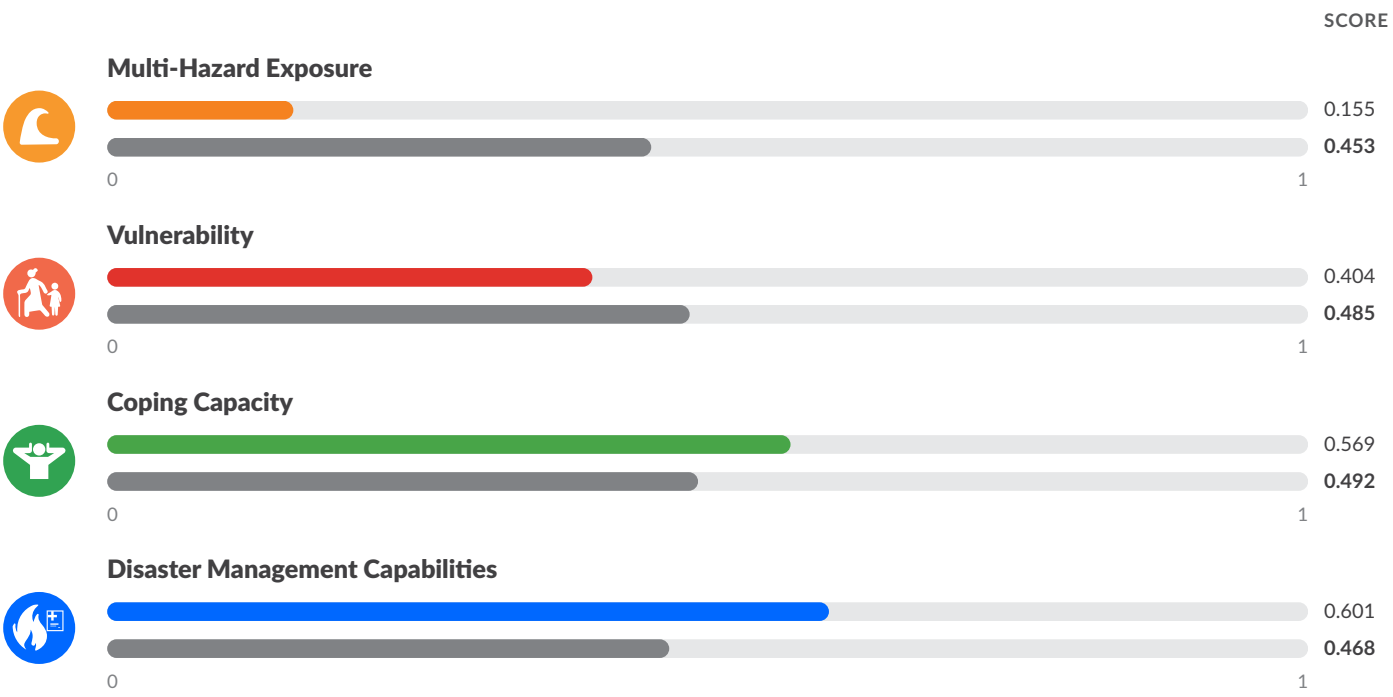
MULTI-HAZARD RISK (MHR)

RANKED
218 / 221
CANTONS ASSESSED
SCORE: 0.347

San Pedro De Huaca's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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SAN PEDRO DE PELILEO

NDPBA SUBNATIONAL PROFILE

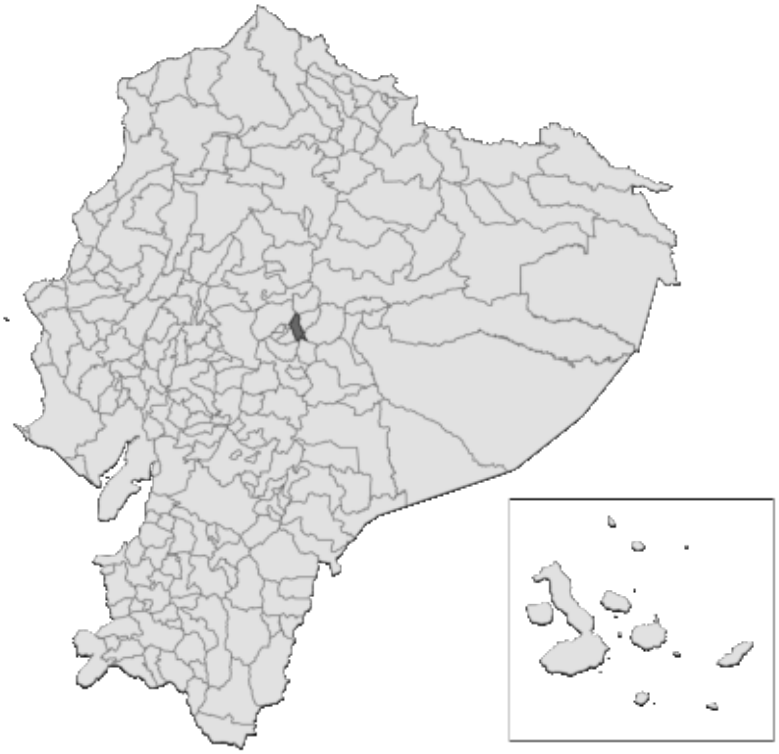
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SAN PEDRO DE PELILEO

PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.436 • RANK: 170/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.590 • RANK: 34/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.515 • RANK: 75/221 CANTONS ASSESSED

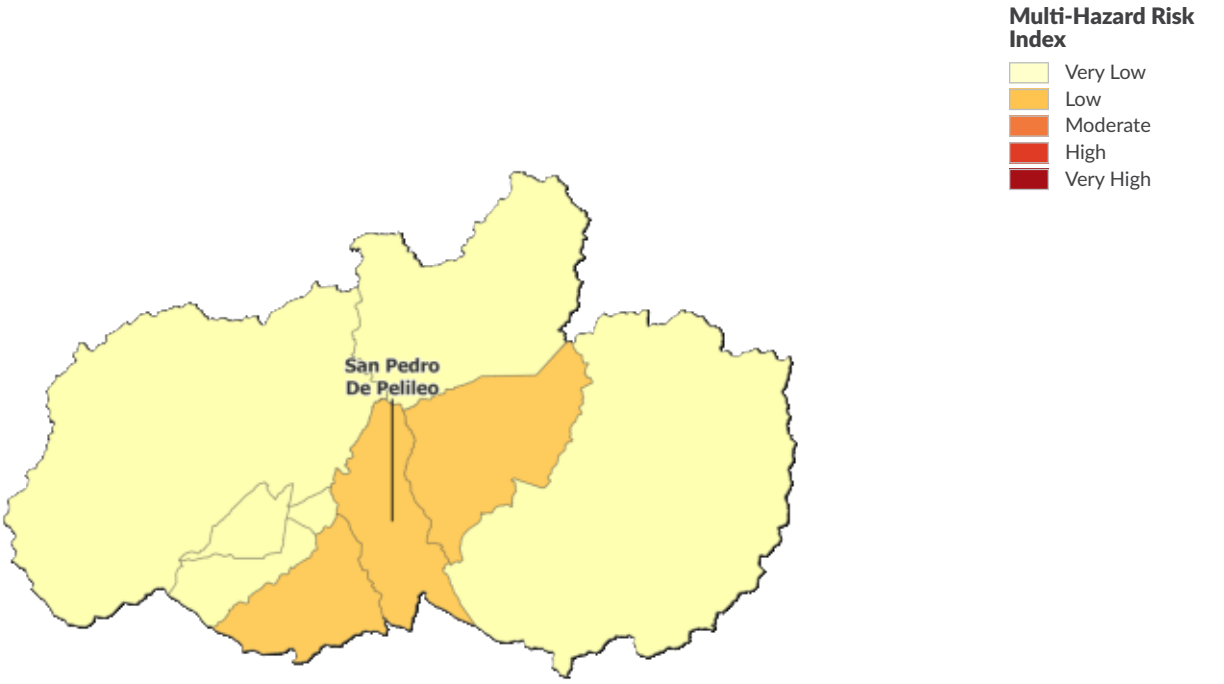
Vulnerability (V) - Very Low
SCORE: 0.411 • RANK: 179/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.593 • RANK: 42/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.589 • RANK: 35/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

SAN PEDRO DE PELILEO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454
San Pedro De Pelileo	**0.436**
Patate	0.431
Santiago De Píllaro	0.410
Ambato	0.409
Mocha	0.379
Baños De Agua Santa	0.364
Tisaleo	0.361
Cevallos	0.340

MULTI-HAZARD EXPOSURE (MHE)

RANK: 75 / 221 CANTONS ASSESSED
SCORE: 0.515



MHE
0.515

Raw MHE
0.678

Relative MHE
0.351

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
28%
- **18,347** people exposed
- **14,966** structures exposed (29%)

Critical Infrastructure Exposed: 13%

Earthquake
100%
- **65,536** people exposed
- **50,995** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **160** people exposed
- **141** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
56%
- **36,620** people exposed
- **29,334** structures exposed (58%)

Critical Infrastructure Exposed: 60%

Mosquito-Borne Disease
<1%
- **460** people exposed
- **449** structures exposed (<1%)

Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
73%
- **47,926** people exposed
- **35,908** structures exposed (70%)

Critical Infrastructure Exposed: 85%

Wildfire
95%
- **62,070** people exposed
- **48,002** structures exposed (94%)

Critical Infrastructure Exposed: 98%

VULNERABILITY (V)

RANK: 179 / 221 CANTONS ASSESSED **SCORE: 0.411**

Vulnerability in San Pedro De Pelileo is primarily driven by Vulnerable Health Status and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.487

- **9.8** Average Years of Schooling
- **50.2%** Population (age 24 and over) with General Basic Education Schooling
- **5.7%** Population (age 24 and over) with No Schooling
- **5.2%** Adult Illiteracy Rate
- **46.1%** Households with No Internet Access
- **82.5%** Households with No Access to Television
- **67.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.375

- **96%** Homes with Access to Public Water Source
- **77.1%** Homes Connected to the Public Sewage System
- **39.5%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.384

- **51.6** Age Dependency Ratio
- **8.2%** Unemployment Rate
- **44.4%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.169

- **0.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.295

- **0.2** Female to Male Labor Ratio (distance from parity)
- **27.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **74.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **23.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.541

- **9.6%** Prevalence of Disability (among persons age 5 and over)
- **8.5** Perinatal Mortality Rate (per 1,000 births)
- **10.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.325

- **1.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **18.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.466

41
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

37
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

20
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.278

8.7%
Homes with Exterior Walls in Poor Condition

0.2%
Homes with Inadequate Materials Used in Outer Walls

13.2%
Homes with Roofs in Poor Condition

69.9%
Households with No Access to Vehicle for Private Use

4.5%
Household Overcrowding

Population Pressures

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.469

320.1
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

6
Net Migration Rate (per 1,000 persons)

0.26
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.500

0.5
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 42 / 221 CANTONS ASSESSED **SCORE: 0.593**

San Pedro De Pelileo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.682

64.1%
Labor Force Participation

207,586
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.406

1%
Protected Area (% of land area)

-1,613
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.588

86.2%
Voter Participation

87%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.571

Communications Capacity

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.590

13%
Household Access to Fixed Phones

85.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.688

98.2%
Homes Served by the Public Electricity Network

79.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.419

11.7
Nurses and Midwives per 10,000 persons

14.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.585

15.3
Average Distance to Airport (km)

103
Average Distance to Sea or River Port (km)

4.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 35 / 221 CANTONS ASSESSED **SCORE: 0.589**

San Pedro De Pelileo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.490

1.8	5.9%	0.4	39.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.687

4.3	4.4	1.9	3.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 34 / 221 CANTONS ASSESSED
SCORE: 0.590

San Pedro De Pelileo's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Vulnerable Health Status



Mass Care Support



Disaster Impacts

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).



Mass Care Support

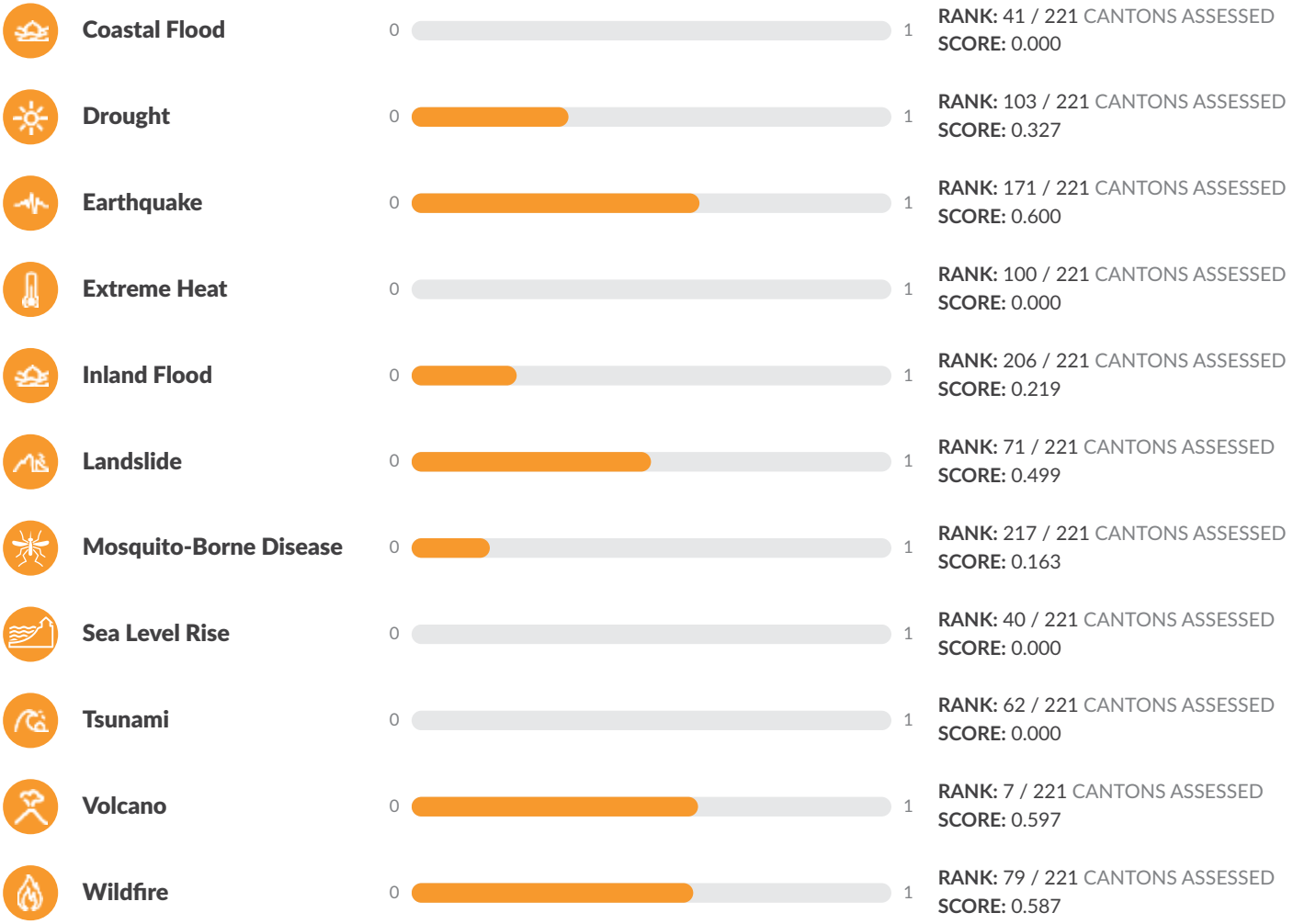
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
170 / 221
CANTONS ASSESSED
SCORE: 0.436

San Pedro De Pelileo's score and ranking are due to High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SANTA ANA

NDPBA SUBNATIONAL PROFILE

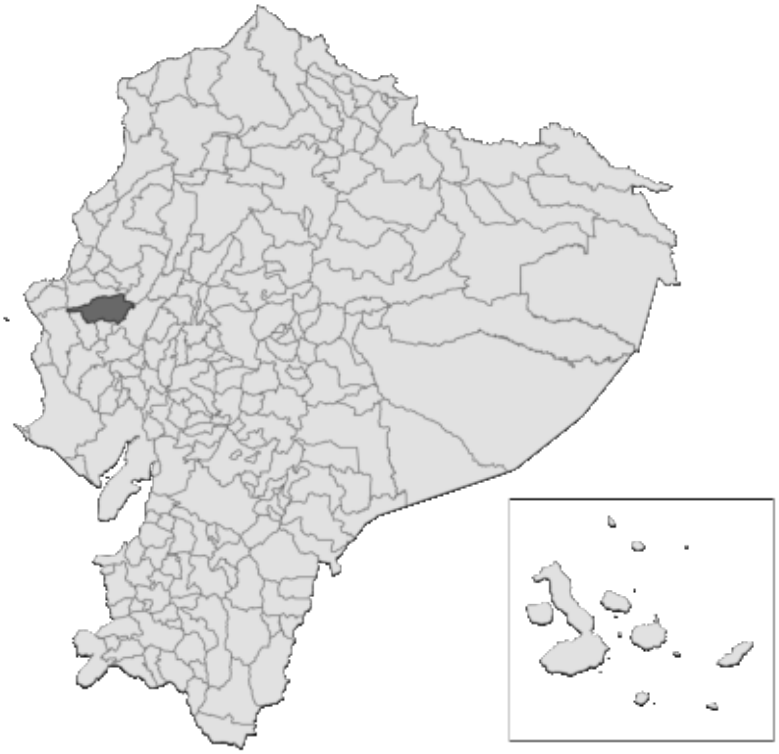
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SANTA ANA

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.627 • RANK: 6/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.591 • RANK: 26/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.380 • RANK: 196/221 CANTONS ASSESSED

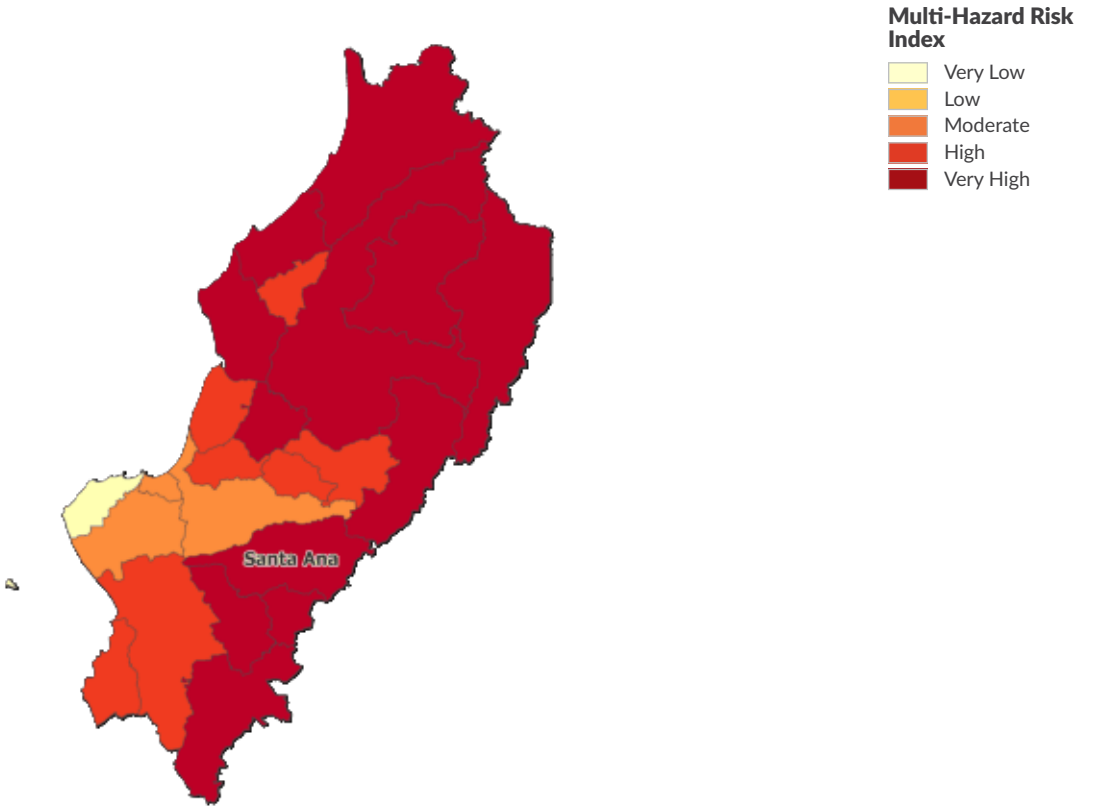
Coping Capacity (CC) - Low
SCORE: 0.417 • RANK: 163/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.648 • RANK: 32/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.313 • RANK: 199/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

SANTA ANA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	**0.627**	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 32 / 221 CANTONS ASSESSED
SCORE: 0.648



MHE
0.648

Raw MHE
0.676

Relative MHE
0.621

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
39%
- **21,447** people exposed
- **12,468** structures exposed (39%)

Critical Infrastructure Exposed: 44%

Earthquake
100%
- **55,225** people exposed
- **32,312** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
99%
- **54,691** people exposed
- **31,961** structures exposed (99%)

Critical Infrastructure Exposed: 100%

Inland Flood
41%
- **22,745** people exposed
- **14,166** structures exposed (44%)

Critical Infrastructure Exposed: 29%

Landslide
45%
- **25,017** people exposed
- **15,784** structures exposed (49%)

Critical Infrastructure Exposed: 53%

Mosquito-Borne Disease
97%
- **53,292** people exposed
- **31,137** structures exposed (96%)

Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
52%
- **28,779** people exposed
- **17,534** structures exposed (54%)

Critical Infrastructure Exposed: 48%

VULNERABILITY (V)

RANK: 26 / 221 CANTONS ASSESSED **SCORE: 0.591**

Vulnerability in Santa Ana is primarily driven by Marginalization and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.650

- **8.1** Average Years of Schooling
- **51.8%** Population (age 24 and over) with General Basic Education Schooling
- **12.6%** Population (age 24 and over) with No Schooling
- **10.5%** Adult Illiteracy Rate
- **58.3%** Households with No Internet Access
- **80.2%** Households with No Access to Television
- **87.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.713

- **43.6%** Homes with Access to Public Water Source
- **18.6%** Homes Connected to the Public Sewage System
- **57.6%** Homes without Piped Water
- **5.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.534

- **56.9** Age Dependency Ratio
- **15.4%** Unemployment Rate
- **72.8%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.775

- **11.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.740

- **0.6** Female to Male Labor Ratio (distance from parity)
- **50.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **90.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **81.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.519

- **12.1%** Prevalence of Disability (among persons age 5 and over)
- **4.8** Perinatal Mortality Rate (per 1,000 births)
- **8.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.309

- **4.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **5.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.531

132	18	37	9
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.706

28.4%	41.8%	25.8%	87.2%	7.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.418

50.5	0.6%	5	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.415

0.4	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 163 / 221 CANTONS ASSESSED **SCORE: 0.417**

Santa Ana exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.429

53.1%
Labor Force Participation

77,536
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 201/221 CANTONS ASSESSED
SCORE: 0.248

0%
Protected Area (% of land area)

-7,043.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.428

85.4%
Voter Participation

61.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.450

Communications Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.409

5.9%
Household Access to Fixed Phones

78.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.587

98%
Homes Served by the Public Electricity Network

68.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.318

6.8
Nurses and Midwives per 10,000 persons

12
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.487

24.2
Average Distance to Airport (km)

56.2
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 199 / 221 CANTONS ASSESSED **SCORE: 0.313**

Santa Ana exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.312

5.4	3.4%	0	43.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.314

23.4	13.3	4.7	12.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 196 / 221 CANTONS ASSESSED
SCORE: 0.380

Santa Ana's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Marginalization

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

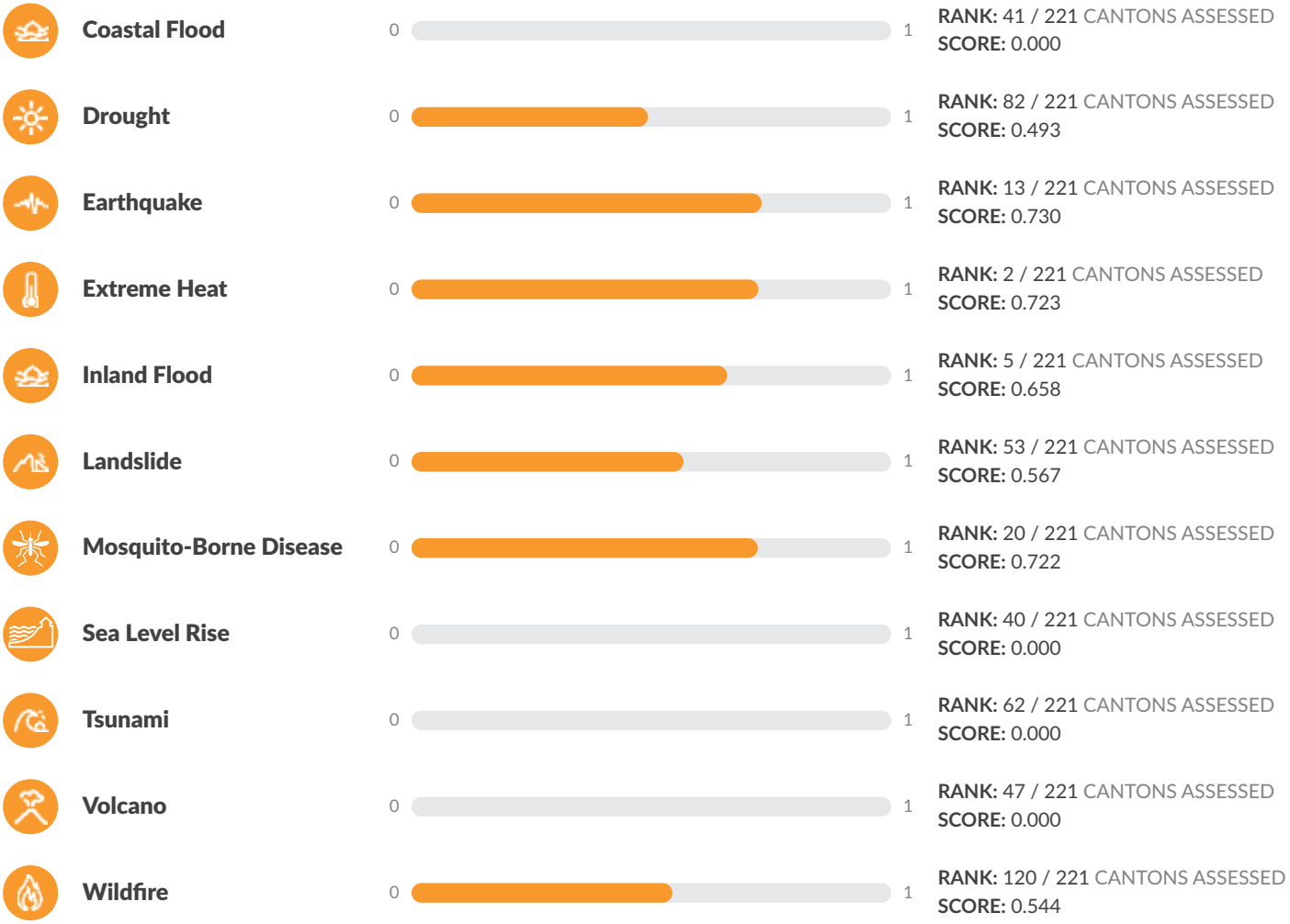
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

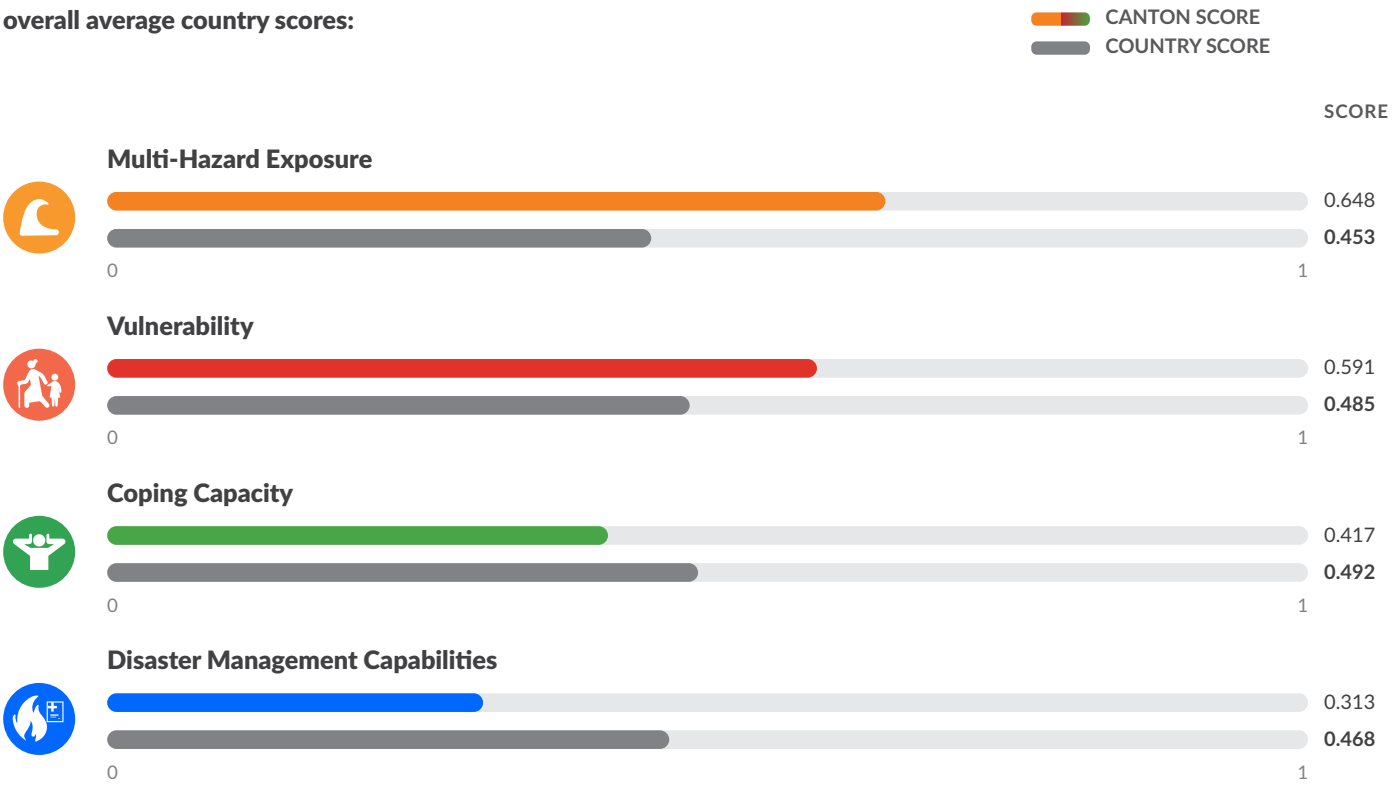


MULTI-HAZARD RISK (MHR)

RANKED
6 / 221
CANTONS ASSESSED
SCORE: 0.627

Santa Ana's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: PASTAZA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.431 • RANK: 172/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.474 • RANK: 128/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.146 • RANK: 215/221 CANTONS ASSESSED

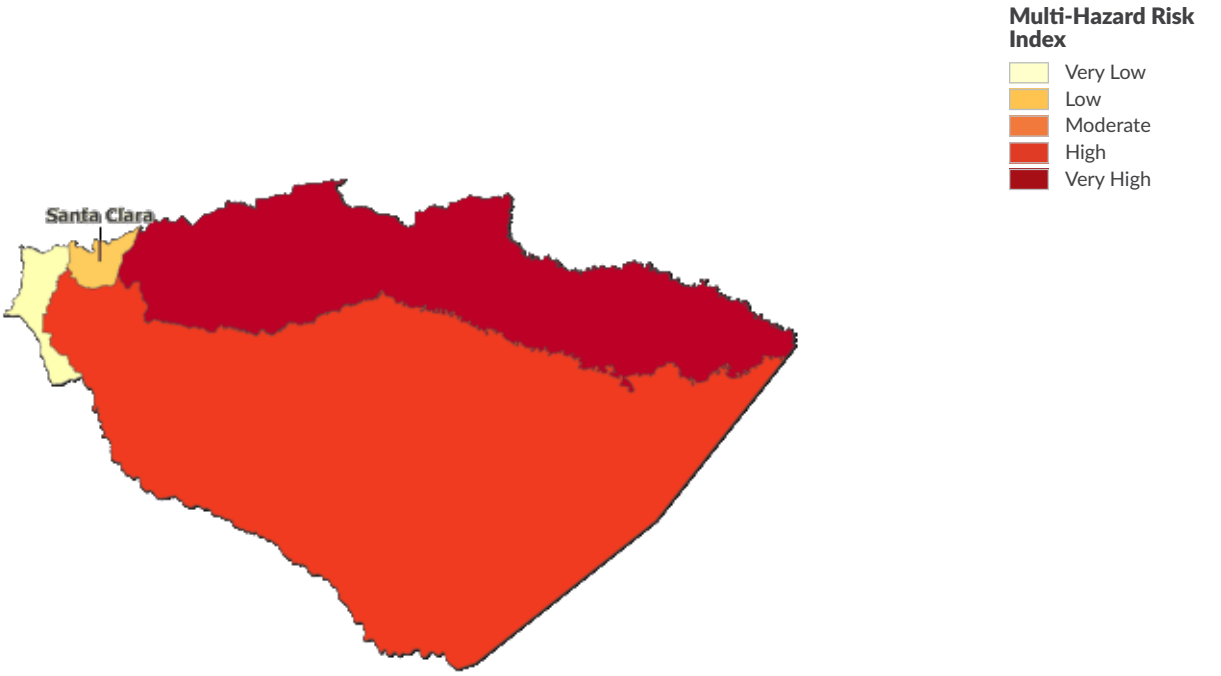
Vulnerability (V) - Low
SCORE: 0.430 • RANK: 162/221 CANTONS ASSESSED

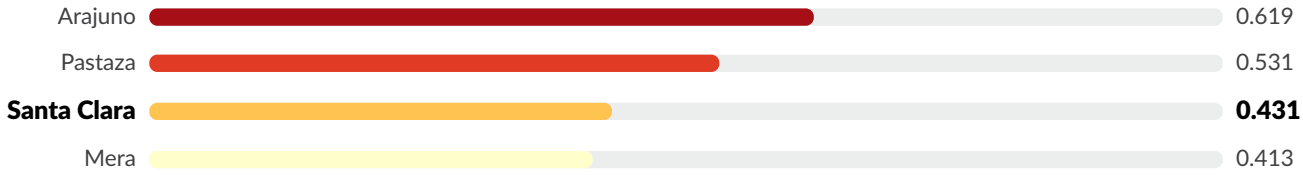
Coping Capacity (CC) - Moderate
SCORE: 0.486 • RANK: 111/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.366 • RANK: 182/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN PASTAZA PROVINCE

SANTA CLARA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 215 / 221 CANTONS ASSESSED
SCORE: 0.146



MHE
0.146

Raw MHE
0.144

Relative MHE
0.147

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
5,000 people exposed
3,182 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
18%
886 people exposed
363 structures exposed (11%)
Critical Infrastructure Exposed: 18%

Landslide
18%
904 people exposed
665 structures exposed (21%)
Critical Infrastructure Exposed: 16%

Mosquito-Borne Disease
99%
4,968 people exposed
3,157 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
46%
2,318 people exposed
1,844 structures exposed (58%)
Critical Infrastructure Exposed: 44%

VULNERABILITY (V)

RANK: 162 / 221 CANTONS ASSESSED **SCORE: 0.430**

Vulnerability in Santa Clara is primarily driven by Economic Constraints and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.477

- **10.5** Average Years of Schooling
- **37.8%** Population (age 24 and over) with General Basic Education Schooling
- **6%** Population (age 24 and over) with No Schooling
- **4.9%** Adult Illiteracy Rate
- **61.1%** Households with No Internet Access
- **82.2%** Households with No Access to Television
- **75.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.467

- **87%** Homes with Access to Public Water Source
- **57%** Homes Connected to the Public Sewage System
- **33.8%** Homes without Piped Water
- **6.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.490

- **58.2** Age Dependency Ratio
- **11.5%** Unemployment Rate
- **49.1%** Poverty Rate (based on UBN)
- **1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.623

- **6.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 150/221 CANTONS ASSESSED
SCORE: 0.405

- **0.3** Female to Male Labor Ratio (distance from parity)
- **45.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **59%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **26.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.359

- **10.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **11.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.226

- **40.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **6.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.261

74	0	27	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.477

16.7%	0.7%	20.2%	84.4%	8.5%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.464

14.5	2.1%	4	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.268

0.1	0.2	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 111 / 221 CANTONS ASSESSED **SCORE: 0.486**

Santa Clara exhibits weaker Coping Capacity in the areas of Economic Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.408

60%
Labor Force Participation

12,855
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.337

0%
Protected Area (% of land area)

-1,153.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.565

85.5%
Voter Participation

85.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 97/221 CANTONS ASSESSED
SCORE: 0.535

Communications Capacity

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.494

7.3%
Household Access to Fixed Phones

84.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.467

91.3%
Homes Served by the Public Electricity Network

75%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.677

22.1
Nurses and Midwives per 10,000 persons

35.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.500

22.7
Average Distance to Airport (km)

36.8
Average Distance to Sea or River Port (km)

0.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 182 / 221 CANTONS ASSESSED **SCORE: 0.366**

Santa Clara exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.226

7.4	4.4%	0	94.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.506

25.8	4	4	4.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 128 / 221 CANTONS ASSESSED
SCORE: 0.474

Santa Clara's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Mass Care Support



Economic Capacity



Energy Capacity



Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Energy Capacity

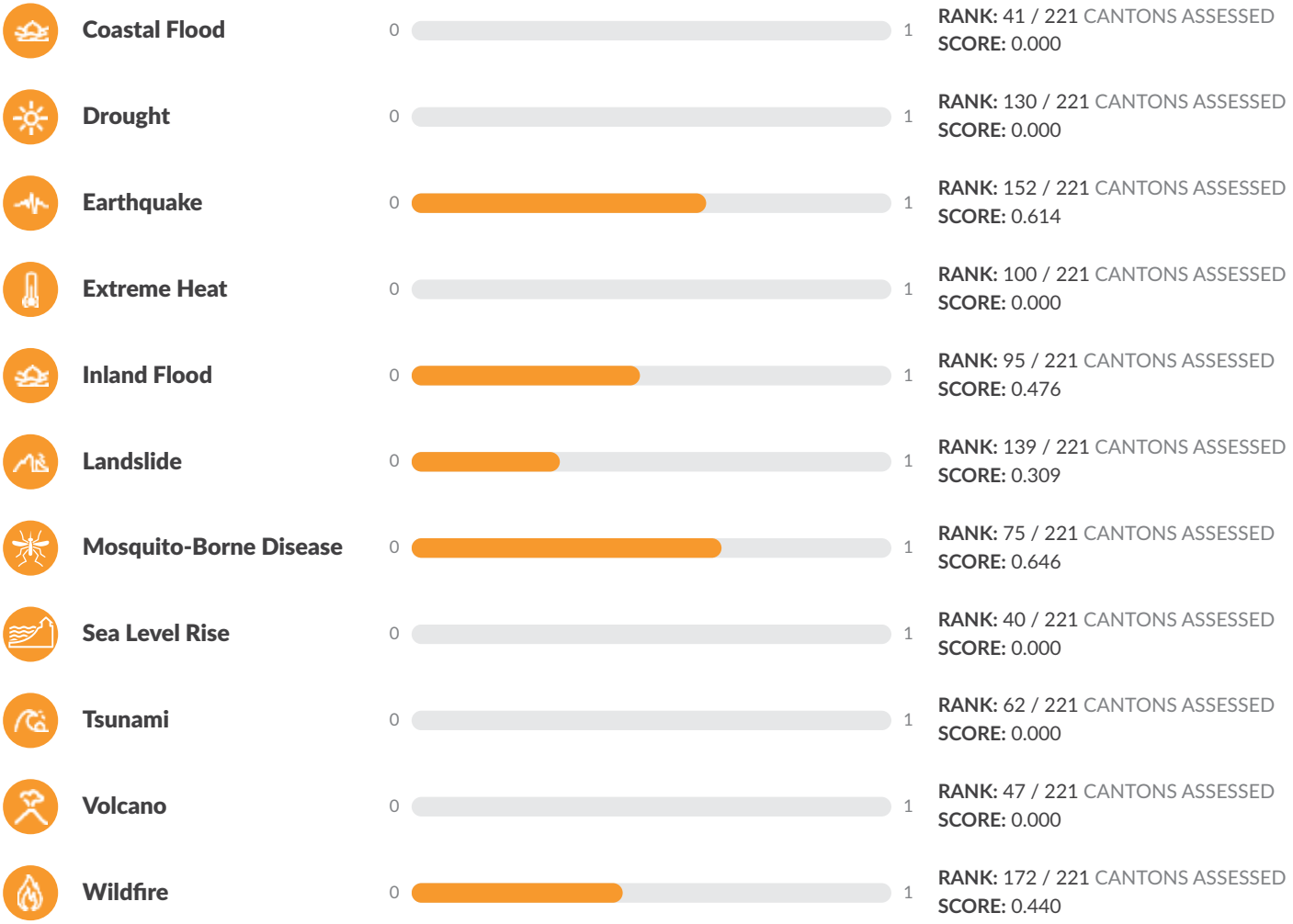
Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)

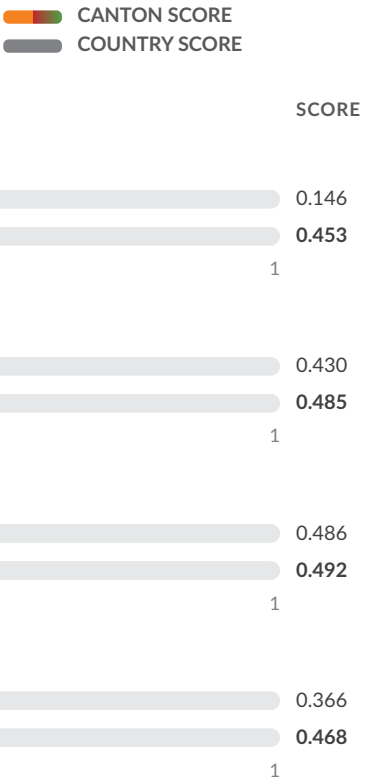


MULTI-HAZARD RISK (MHR)

RANKED
172 / 221
CANTONS ASSESSED
SCORE: 0.431

Santa Clara's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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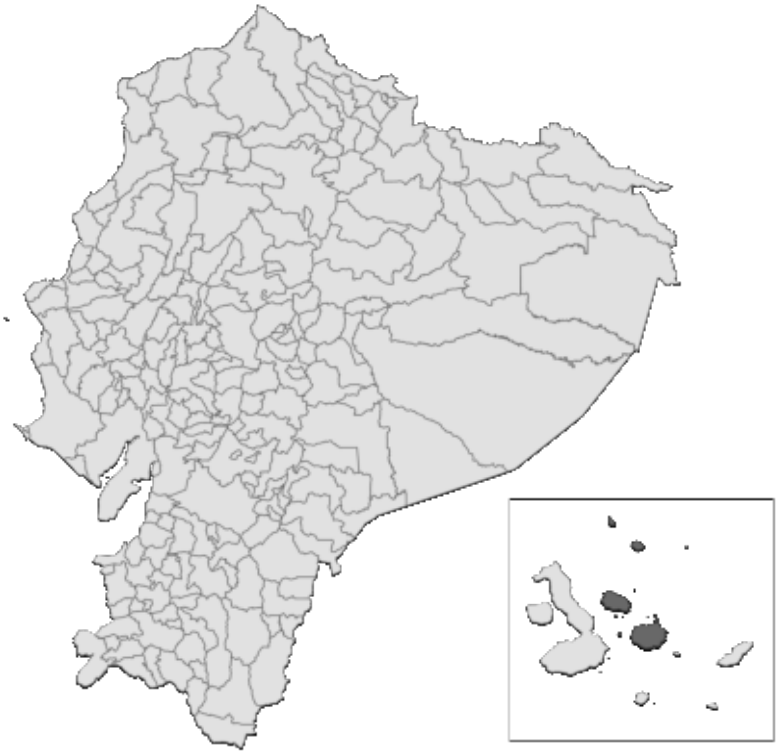
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SANTA CRUZ

PROVINCE: GALÁPAGOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.386 • RANK: 205/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.310 • RANK: 217/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.618 • RANK: 21/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.690 • RANK: 10/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.395 • RANK: 131/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.473 • RANK: 96/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GALÁPAGOS PROVINCE

SANTA CRUZ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Isabela	0.419
Santa Cruz	**0.386**
San Cristóbal	0.325

MULTI-HAZARD EXPOSURE (MHE)

RANK: 131 / 221 CANTONS ASSESSED
SCORE: 0.395



MHE
0.395

Raw MHE
0.411

Relative MHE
0.379

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
5%
- **965** people exposed
- **239** structures exposed (2%)
- **Critical Infrastructure Exposed:** 18%

Drought
79%
- **16,852** people exposed
- **4,845** structures exposed (46%)
- **Critical Infrastructure Exposed:** 73%

Earthquake
100%
- **21,257** people exposed
- **10,454** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
8%
- **1,790** people exposed
- **843** structures exposed (8%)
- **Critical Infrastructure Exposed:** 31%

Inland Flood
37%
- **7,957** people exposed
- **4,427** structures exposed (42%)
- **Critical Infrastructure Exposed:** 41%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** <1%

Mosquito-Borne Disease
82%
- **17,352** people exposed
- **8,973** structures exposed (86%)
- **Critical Infrastructure Exposed:** 85%

Sea Level Rise
3%
- **682** people exposed
- **141** structures exposed (1%)
- **Critical Infrastructure Exposed:** 17%

Tsunami
31%
- **6,505** people exposed
- **1,709** structures exposed (16%)
- **Critical Infrastructure Exposed:** 36%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

VULNERABILITY (V)

RANK: 217 / 221 CANTONS ASSESSED **SCORE: 0.310**

Vulnerability in Santa Cruz is primarily driven by Clean Water Access Vulnerability and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.143

- **12.8** Average Years of Schooling
- **25.3%** Population (age 24 and over) with General Basic Education Schooling
- **1.1%** Population (age 24 and over) with No Schooling
- **0.8%** Adult Illiteracy Rate
- **57.2%** Households with No Internet Access
- **33%** Households with No Access to Television
- **52.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.546

- **84.3%** Homes with Access to Public Water Source
- **3.3%** Homes Connected to the Public Sewage System
- **21.5%** Homes without Piped Water
- **4.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.266

- **41.4** Age Dependency Ratio
- **7.3%** Unemployment Rate
- **36.5%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.462

- **3.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.234

- **0.2** Female to Male Labor Ratio (distance from parity)
- **29.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **43.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **31.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 215/221 CANTONS ASSESSED
SCORE: 0.228

- **4.2%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.182

- **1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.420

18	12	43	20
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.221

1.5%	0.1%	3%	91.3%	5.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.322

9.3	1.6%	12.8	0.22
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.499

0.1	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 10 / 221 CANTONS ASSESSED **SCORE: 0.690**

Santa Cruz exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.779

76.8%
Labor Force Participation

192,459
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.867

97.4%
Protected Area (% of land area)

771.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.538

75.8%
Voter Participation

96.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.694

Communications Capacity

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.917

30.6%
Household Access to Fixed Phones

97.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.774

99.6%
Homes Served by the Public Electricity Network

76.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.521

14.5
Nurses and Midwives per 10,000 persons

21.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.564

27.7
Average Distance to Airport (km)

5.3
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 96 / 221 CANTONS ASSESSED **SCORE: 0.473**

Santa Cruz exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.430

3.3	7.1%	0.9	83.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.516

7.2	6.8	4.5	5.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 21 / 221 CANTONS ASSESSED
SCORE: 0.618

Santa Cruz's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Mass Care Support



Clean Water Access Vulnerability



Disaster Impacts



Emergency Services

KEY FACTORS INFLUENCING RESILIENCE



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Disaster Impacts

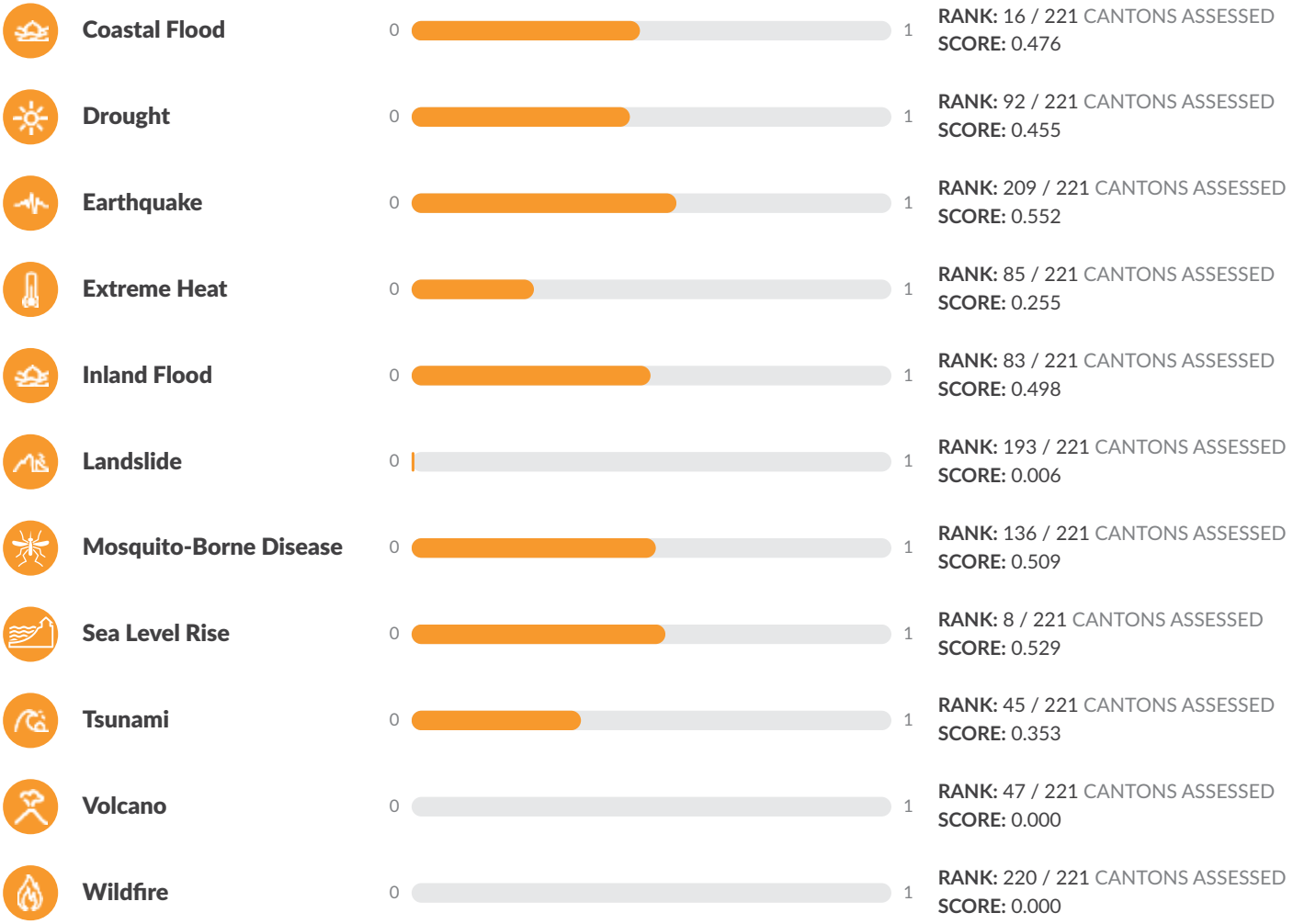
Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)

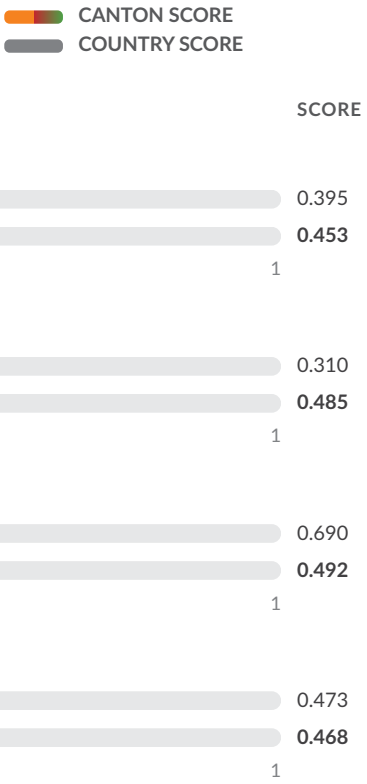


MULTI-HAZARD RISK (MHR)

RANKED
205 / 221
CANTONS ASSESSED
SCORE: 0.386

Santa Cruz's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SANTA ELENA

NDPBA SUBNATIONAL PROFILE

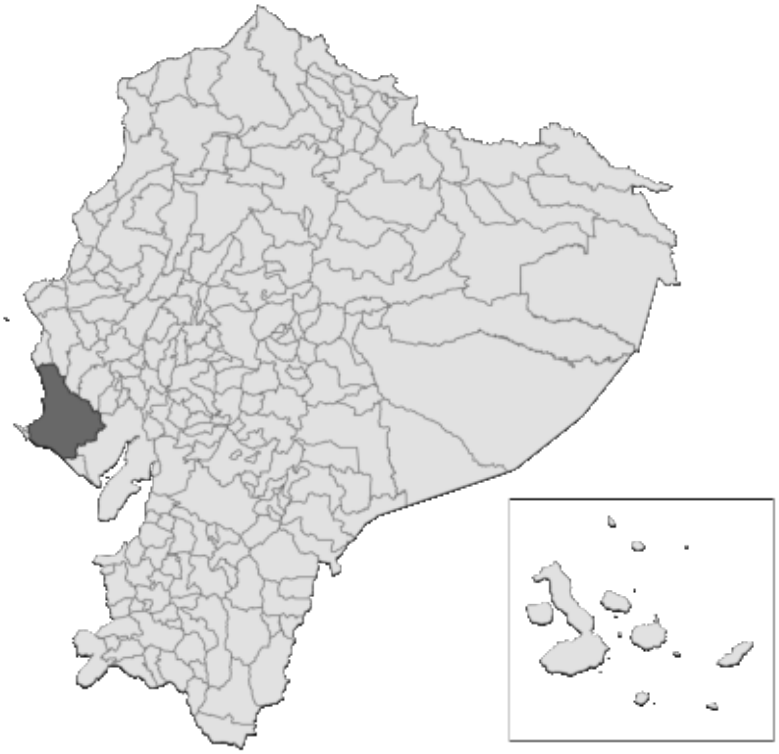
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SANTA ELENA

PROVINCE: SANTA ELENA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.548 • RANK: 52/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.505 • RANK: 91/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.523 • RANK: 81/221 CANTONS ASSESSED

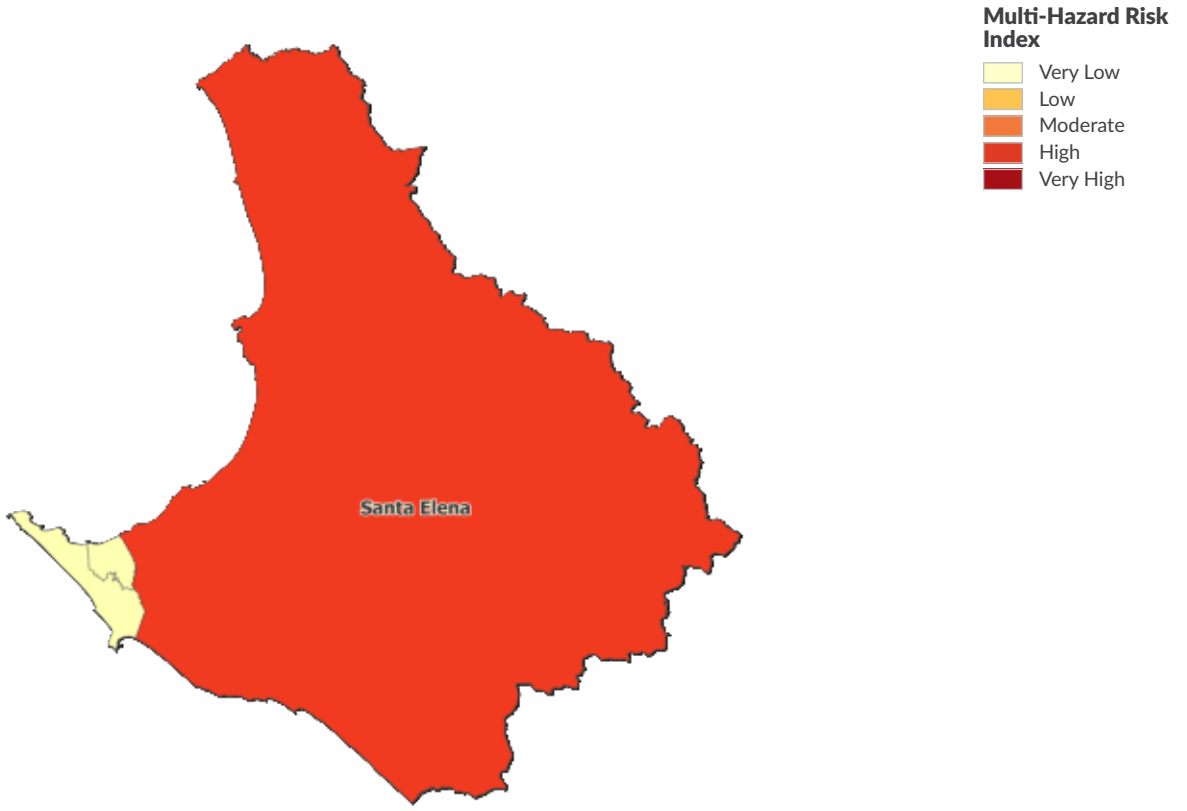
Coping Capacity (CC) - High
SCORE: 0.573 • RANK: 55/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.762 • RANK: 11/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.500 • RANK: 82/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SANTA ELENA PROVINCE

SANTA ELENA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Santa Elena	**0.548**
Salinas	0.427
La Libertad	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 11 / 221 CANTONS ASSESSED
SCORE: 0.762



MHE
0.762

Raw MHE
0.870

Relative MHE
0.654

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
2%
- **3,028** people exposed
- **2,367** structures exposed (3%)
- **Critical Infrastructure Exposed:** 2%

Drought
100%
- **189,780** people exposed
- **93,232** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **189,780** people exposed
- **93,232** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
64%
- **122,214** people exposed
- **56,870** structures exposed (61%)
- **Critical Infrastructure Exposed:** 65%

Inland Flood
11%
- **20,619** people exposed
- **9,245** structures exposed (10%)
- **Critical Infrastructure Exposed:** 16%

Landslide
1%
- **2,528** people exposed
- **680** structures exposed (<1%)
- **Critical Infrastructure Exposed:** 1%

Mosquito-Borne Disease
48%
- **92,036** people exposed
- **45,664** structures exposed (49%)
- **Critical Infrastructure Exposed:** 64%

Sea Level Rise
1%
- **1,938** people exposed
- **1,297** structures exposed (1%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
43%
- **81,172** people exposed
- **37,071** structures exposed (40%)
- **Critical Infrastructure Exposed:** 30%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
65%
- **122,656** people exposed
- **60,287** structures exposed (65%)
- **Critical Infrastructure Exposed:** 70%

VULNERABILITY (V)

RANK: 91 / 221 CANTONS ASSESSED **SCORE: 0.505**

Vulnerability in Santa Elena is primarily driven by Housing and Transportation Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 131/221 CANTONS ASSESSED
SCORE: 0.480

- **10.1** Average Years of Schooling
- **50.2%** Population (age 24 and over) with General Basic Education Schooling
- **2.8%** Population (age 24 and over) with No Schooling
- **2.9%** Adult Illiteracy Rate
- **55.5%** Households with No Internet Access
- **85.4%** Households with No Access to Television
- **79.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.558

- **89.1%** Homes with Access to Public Water Source
- **32.2%** Homes Connected to the Public Sewage System
- **28.3%** Homes without Piped Water
- **10.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.474

- **58.3** Age Dependency Ratio
- **17.9%** Unemployment Rate
- **50.7%** Poverty Rate (based on UBN)
- **0.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.494

- **4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.542

- **0.6** Female to Male Labor Ratio (distance from parity)
- **43.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **52.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **59%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.485

- **7.8%** Prevalence of Disability (among persons age 5 and over)
- **2.9** Perinatal Mortality Rate (per 1,000 births)
- **10.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.473

- **35.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **23** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.435

26	10	28	56
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.585

15.5%	11.6%	16.9%	88.5%	13.4%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.536

51.9	2.2%	12.8	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.382

0.6	0.1	0
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 55 / 221 CANTONS ASSESSED **SCORE: 0.573**

Santa Elena exhibits weaker Coping Capacity in the areas of Energy Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.571

54.5%
Labor Force Participation

417,580
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.002

0%
Protected Area (% of land area)

-31,049
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.841

92.3%
Voter Participation

95.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.498

Communications Capacity

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.485

6.9%
Household Access to Fixed Phones

84%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.410

93.8%
Homes Served by the Public Electricity Network

60.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.471

13.1
Nurses and Midwives per 10,000 persons

17.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.626

11
Average Distance to Airport (km)

26.5
Average Distance to Sea or River Port (km)

0.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 82 / 221 CANTONS ASSESSED **SCORE: 0.500**

Santa Elena exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.509

2.1	15.8%	1	89.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.491

12.5	5.8	4.7	5.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 81 / 221 CANTONS ASSESSED
SCORE: 0.523

Santa Elena's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Energy Capacity

Housing and Transportation Vulnerability

Clean Water Access Vulnerability

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

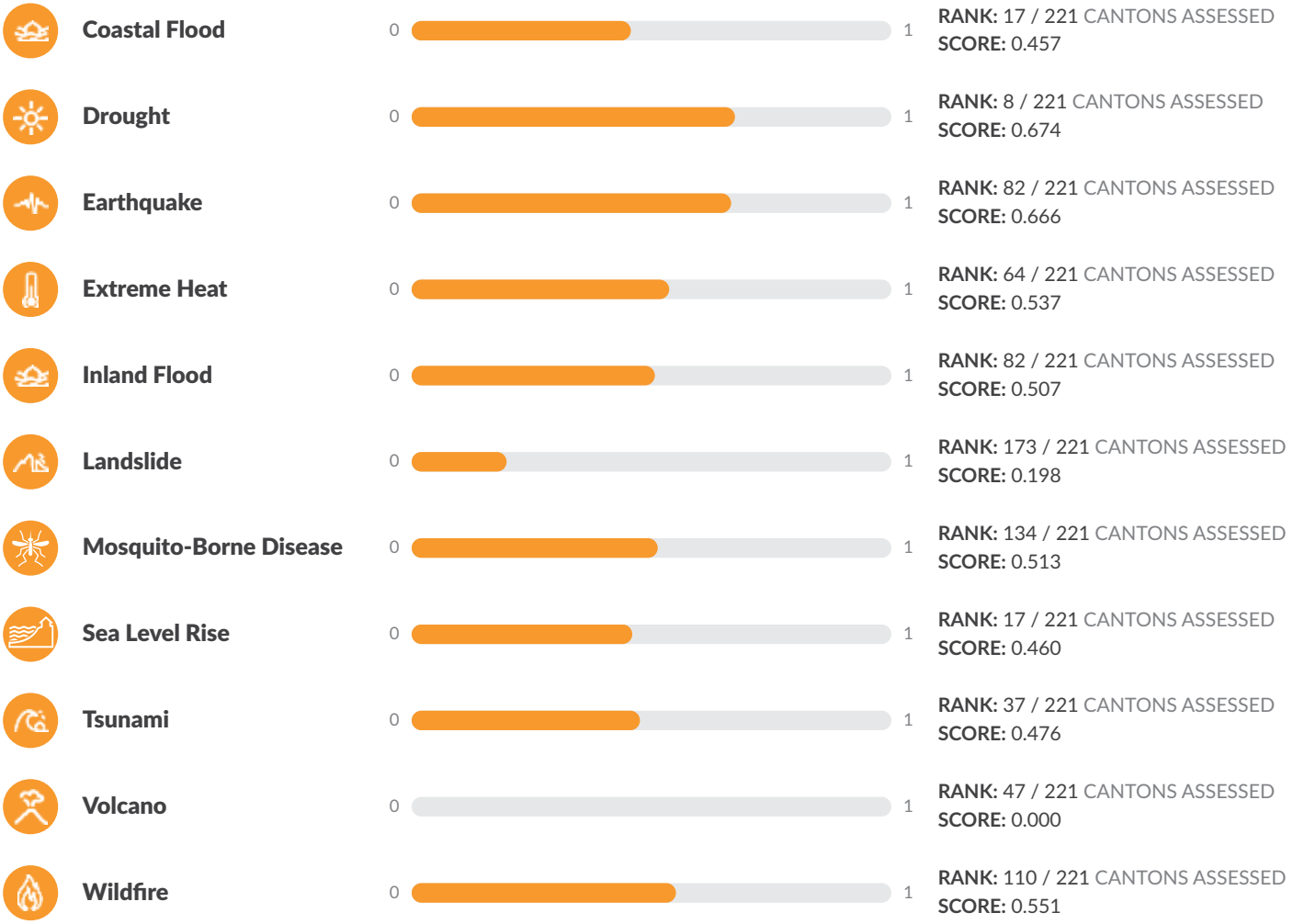
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

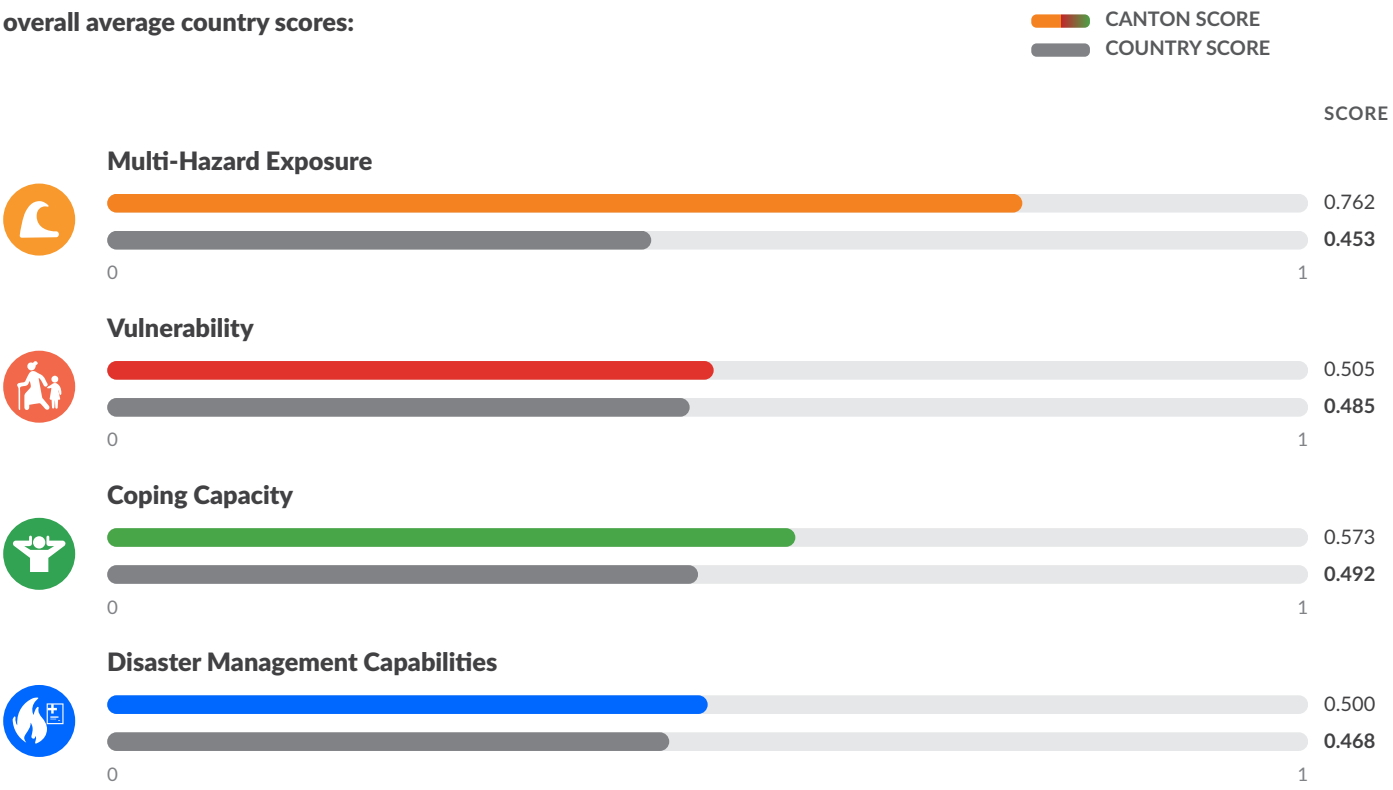


MULTI-HAZARD RISK (MHR)

RANKED
52 / 221
CANTONS ASSESSED
SCORE: 0.548

Santa Elena's score and ranking are due to Very High Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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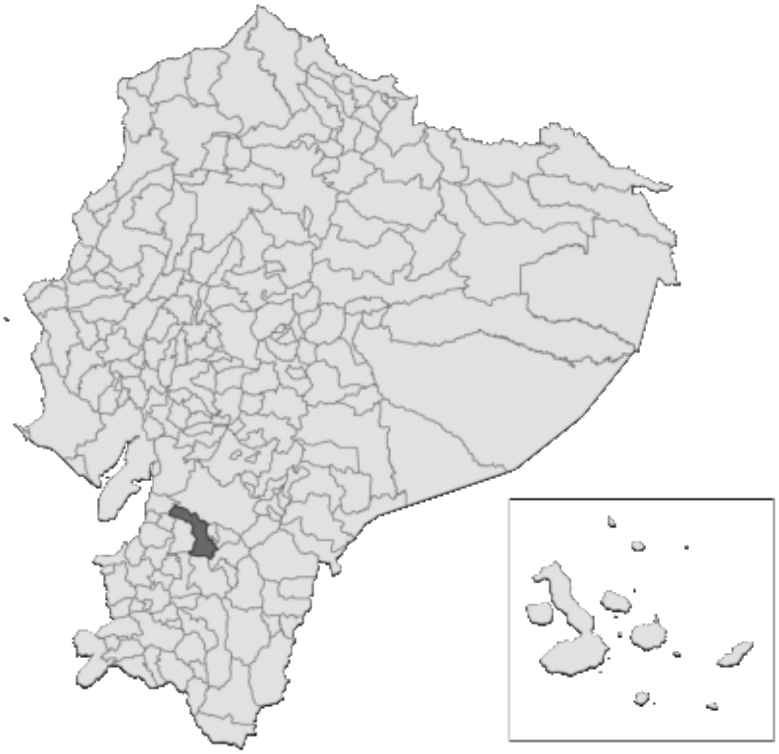
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SANTA ISABEL

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.508 • RANK: 94/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.462 • RANK: 138/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.419 • RANK: 122/221 CANTONS ASSESSED

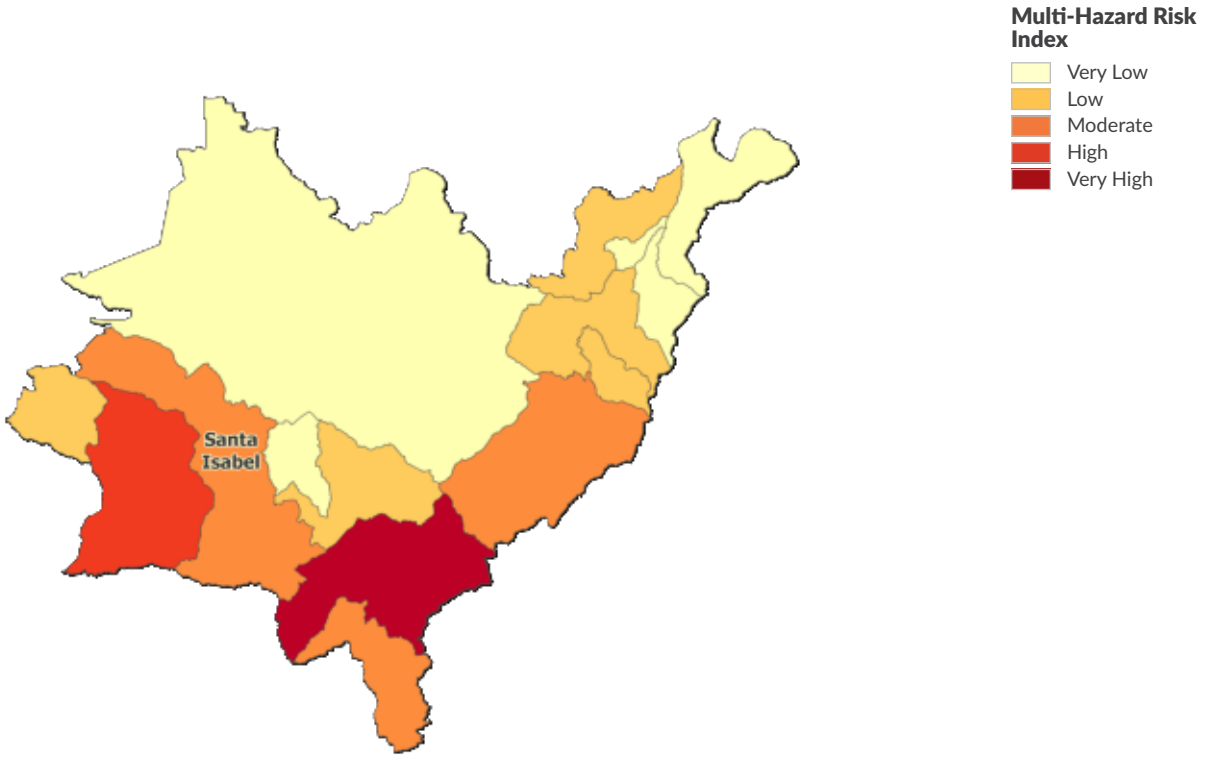
Vulnerability (V) - Moderate
SCORE: 0.471 • RANK: 129/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.413 • RANK: 166/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.445 • RANK: 129/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

SANTA ISABEL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	**0.508**
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 122 / 221 CANTONS ASSESSED
SCORE: 0.419



MHE
0.419

Raw MHE
0.515

Relative MHE
0.323

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
87%
- **22,048** people exposed
- **20,418** structures exposed (86%)

Critical Infrastructure Exposed: 85%

Earthquake
100%
- **25,477** people exposed
- **23,674** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
2%
- **505** people exposed
- **404** structures exposed (2%)

Critical Infrastructure Exposed: 5%

Landslide
69%
- **17,511** people exposed
- **16,356** structures exposed (69%)

Critical Infrastructure Exposed: 80%

Mosquito-Borne Disease
43%
- **11,023** people exposed
- **9,847** structures exposed (42%)

Critical Infrastructure Exposed: 18%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
46%
- **11,667** people exposed
- **10,344** structures exposed (44%)

Critical Infrastructure Exposed: 67%

VULNERABILITY (V)

RANK: 129 / 221 CANTONS ASSESSED **SCORE: 0.471**

Vulnerability in Santa Isabel is primarily driven by Disaster Impacts and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.521

- **8.6** Average Years of Schooling
- **58.5%** Population (age 24 and over) with General Basic Education Schooling
- **6.4%** Population (age 24 and over) with No Schooling
- **5.6%** Adult Illiteracy Rate
- **36.6%** Households with No Internet Access
- **70.8%** Households with No Access to Television
- **78.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.435

- **83.9%** Homes with Access to Public Water Source
- **36.1%** Homes Connected to the Public Sewage System
- **19.3%** Homes without Piped Water
- **3.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 151/221 CANTONS ASSESSED
SCORE: 0.450

- **63** Age Dependency Ratio
- **7.5%** Unemployment Rate
- **37.4%** Poverty Rate (based on UBN)
- **1.5%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.328

- **1.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.432

- **0.4** Female to Male Labor Ratio (distance from parity)
- **50.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **63.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **38.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.400

- **11.3%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.173

- **0.6** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **5.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.634

63	42	29	73
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.447

14.9%	1.2%	21.1%	79.1%	6.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 185/221 CANTONS ASSESSED
SCORE: 0.366

25.1	-0.8	6.2	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.737

0.3	0.4	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 166 / 221 CANTONS ASSESSED **SCORE: 0.413**

Santa Isabel exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.469

57.8%
Labor Force Participation

50,423
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.264

0%
Protected Area (% of land area)

-5,994.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.305

76%
Voter Participation

68.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.513

Communications Capacity

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.622

18%
Household Access to Fixed Phones

83.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.559

96.1%
Homes Served by the Public Electricity Network

73.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 109/221 CANTONS ASSESSED
SCORE: 0.465

10.1
Nurses and Midwives per 10,000 persons

21.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.407

46.6
Average Distance to Airport (km)

74.4
Average Distance to Sea or River Port (km)

1.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 129 / 221 CANTONS ASSESSED **SCORE: 0.445**

Santa Isabel exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.415

3.5	3.5%	0.7	56.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.476

8.2	6.8	5.6	6.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 138 / 221 CANTONS ASSESSED
SCORE: 0.462

Santa Isabel's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Governance

Transportation Capacity

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

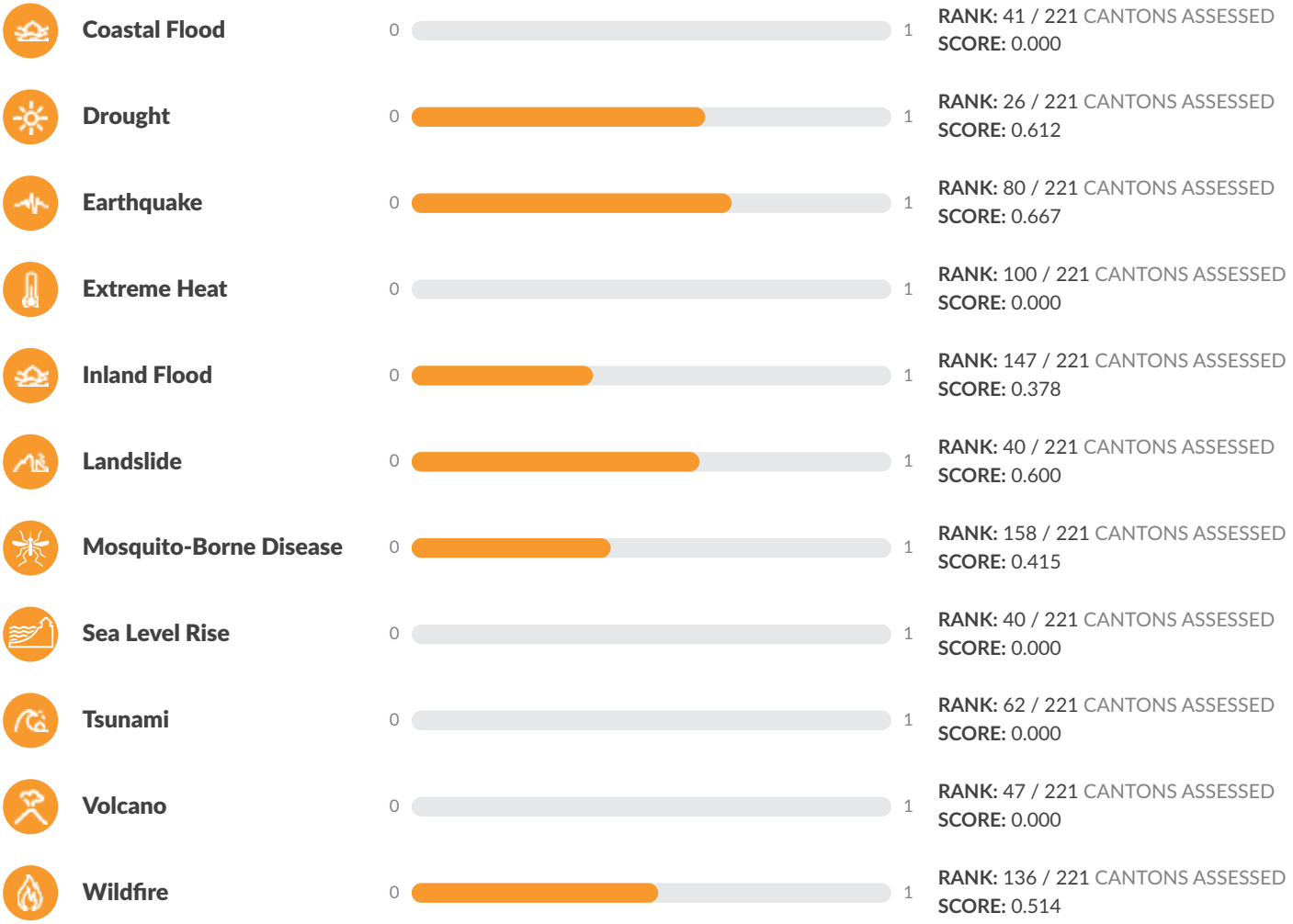
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
94 / 221
CANTONS ASSESSED
SCORE: 0.508

Santa Isabel's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SANTA LUCÍA

NDPBA SUBNATIONAL PROFILE

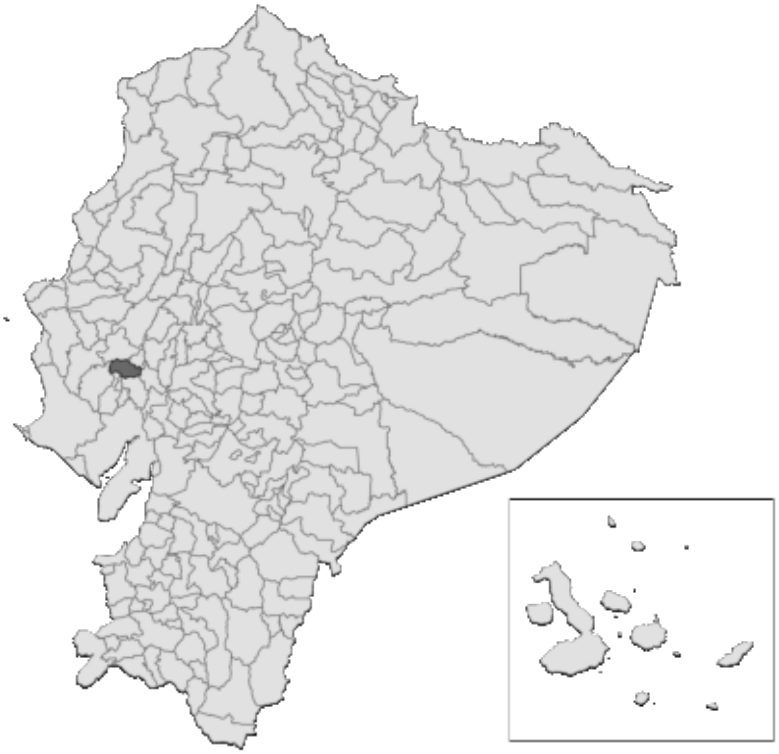
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SANTA LUCÍA

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.575 • RANK: 34/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.574 • RANK: 33/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.444 • RANK: 154/221 CANTONS ASSESSED

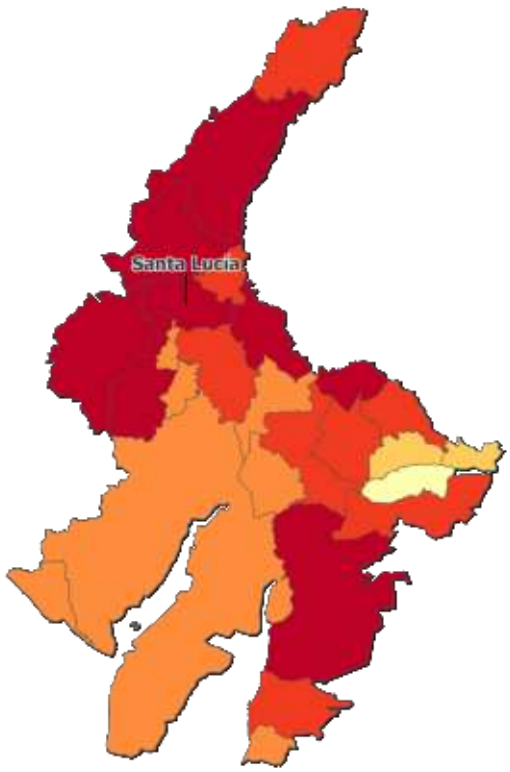
Coping Capacity (CC) - Low
SCORE: 0.440 • RANK: 153/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.631 • RANK: 36/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.467 • RANK: 100/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

SANTA LUCÍA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	**0.575**
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	0.536
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 36 / 221 CANTONS ASSESSED
SCORE: 0.631



MHE
0.631

Raw MHE
0.622

Relative MHE
0.640

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
23%
- **10,586** people exposed
- **5,148** structures exposed (26%)
- **Critical Infrastructure Exposed:** 31%

Earthquake
100%
- **46,914** people exposed
- **19,673** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
100%
- **46,914** people exposed
- **19,673** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Inland Flood
36%
- **17,014** people exposed
- **6,812** structures exposed (35%)
- **Critical Infrastructure Exposed:** 32%

Landslide
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Mosquito-Borne Disease
100%
- **46,690** people exposed
- **19,579** structures exposed (100%)
- **Critical Infrastructure Exposed:** 99%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
96%
- **44,961** people exposed
- **18,725** structures exposed (95%)
- **Critical Infrastructure Exposed:** 89%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
42%
- **19,909** people exposed
- **8,307** structures exposed (42%)
- **Critical Infrastructure Exposed:** 30%

VULNERABILITY (V)

RANK: 33 / 221 CANTONS ASSESSED **SCORE: 0.574**

Vulnerability in Santa Lucía is primarily driven by Housing and Transportation Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.719

- **8.2** Average Years of Schooling
- **55.3%** Population (age 24 and over) with General Basic Education Schooling
- **10.9%** Population (age 24 and over) with No Schooling
- **9.3%** Adult Illiteracy Rate
- **69%** Households with No Internet Access
- **90.5%** Households with No Access to Television
- **90.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.724

- **62.5%** Homes with Access to Public Water Source
- **14.3%** Homes Connected to the Public Sewage System
- **59.6%** Homes without Piped Water
- **7.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.590

- **55.9** Age Dependency Ratio
- **23.5%** Unemployment Rate
- **74.2%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.634

- **6.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.603

- **0.7** Female to Male Labor Ratio (distance from parity)
- **49.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **27.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **64%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.530

- **10.6%** Prevalence of Disability (among persons age 5 and over)
- **8.4** Perinatal Mortality Rate (per 1,000 births)
- **6.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.357

- **1.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **33.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.546

48
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

11
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

42
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

83
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.751

25.6%
Homes with Exterior Walls in Poor Condition

19.1%
Homes with Inadequate Materials Used in Outer Walls

28.8%
Homes with Roofs in Poor Condition

93.5%
Households with No Access to Vehicle for Private Use

12.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.455

119.7
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

3.1
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.213

0.2
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 153 / 221 CANTONS ASSESSED **SCORE: 0.440**

Santa Lucía exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.401

50.1%
Labor Force Participation

94,710
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.325

0%
Protected Area (% of land area)

-1,931.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.572

91.2%
Voter Participation

64.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.388

Communications Capacity

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.300

3.5%
Household Access to Fixed Phones

74%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.450

94.2%
Homes Served by the Public Electricity Network

65.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.214

5
Nurses and Midwives per 10,000 persons

8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.586

33.5
Average Distance to Airport (km)

16
Average Distance to Sea or River Port (km)

1.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 100 / 221 CANTONS ASSESSED **SCORE: 0.467**

Santa Lucía exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.411

2.8	6.1%	0.2	46.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.522

16.7	4.7	3.1	5.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 154 / 221 CANTONS ASSESSED
SCORE: 0.444

Santa Lucía's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Housing and Transportation Vulnerability

Clean Water Access Vulnerability

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

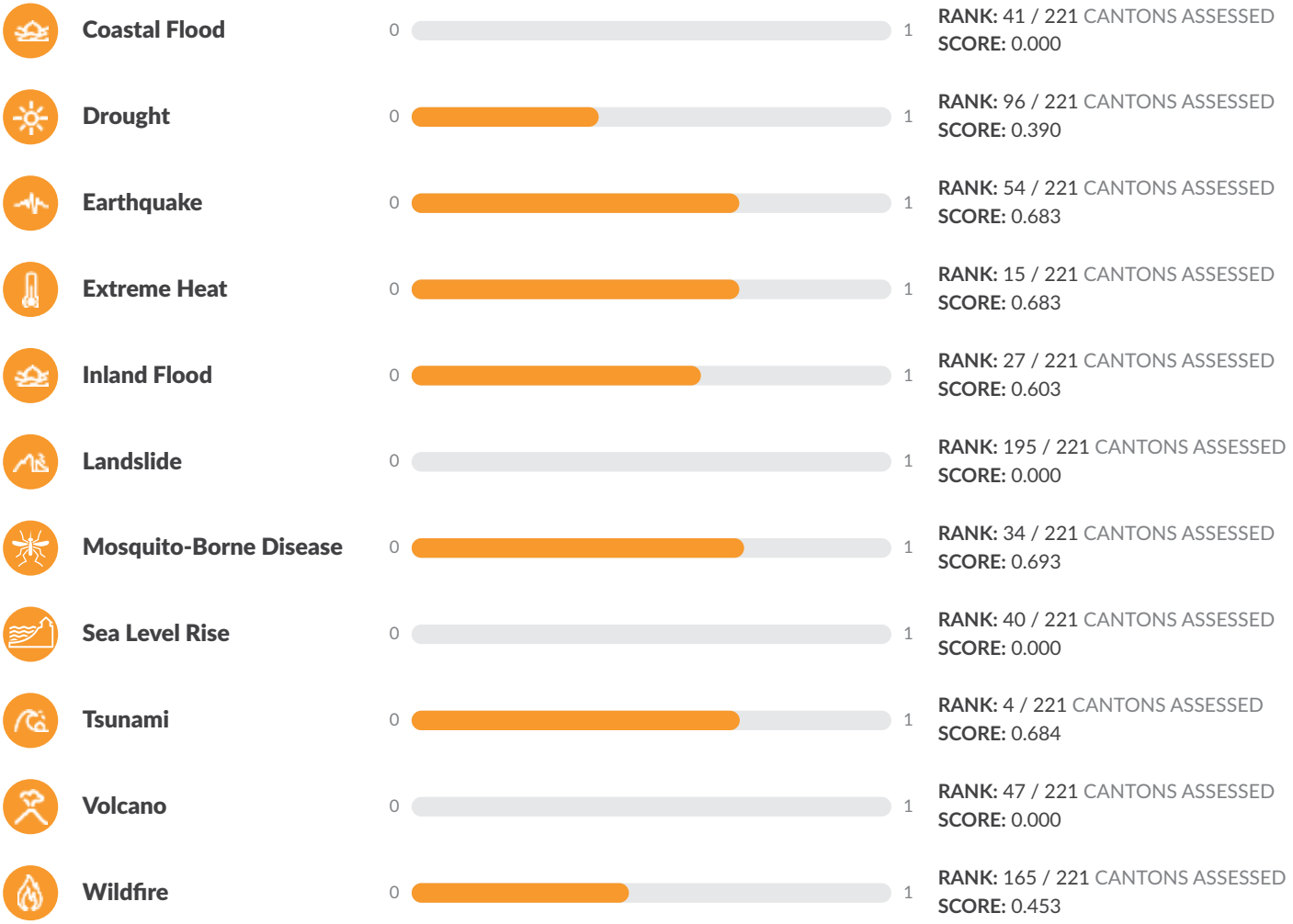
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

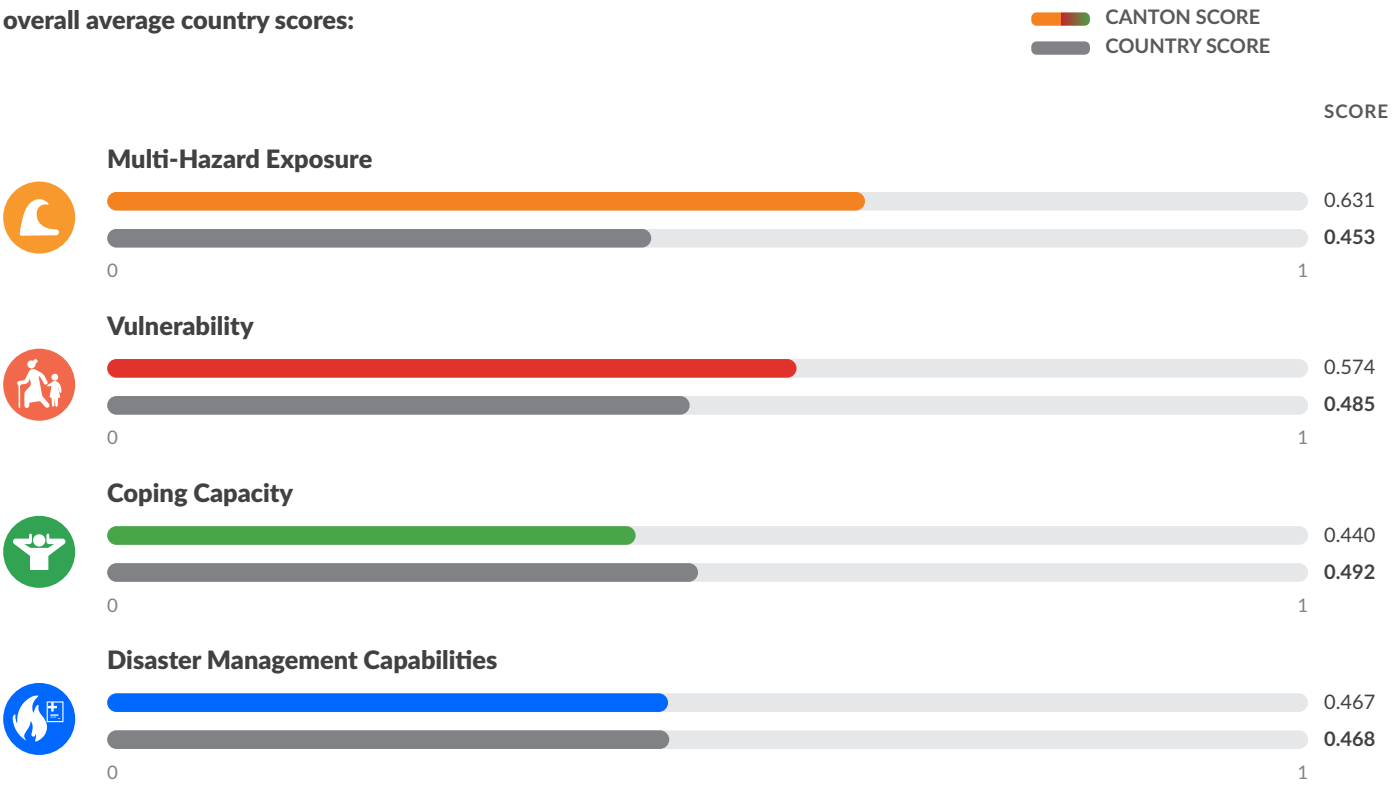


MULTI-HAZARD RISK (MHR)

RANKED
34 / 221
CANTONS ASSESSED
SCORE: 0.575

Santa Lucía's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SANTA ROSA

NDPBA SUBNATIONAL PROFILE

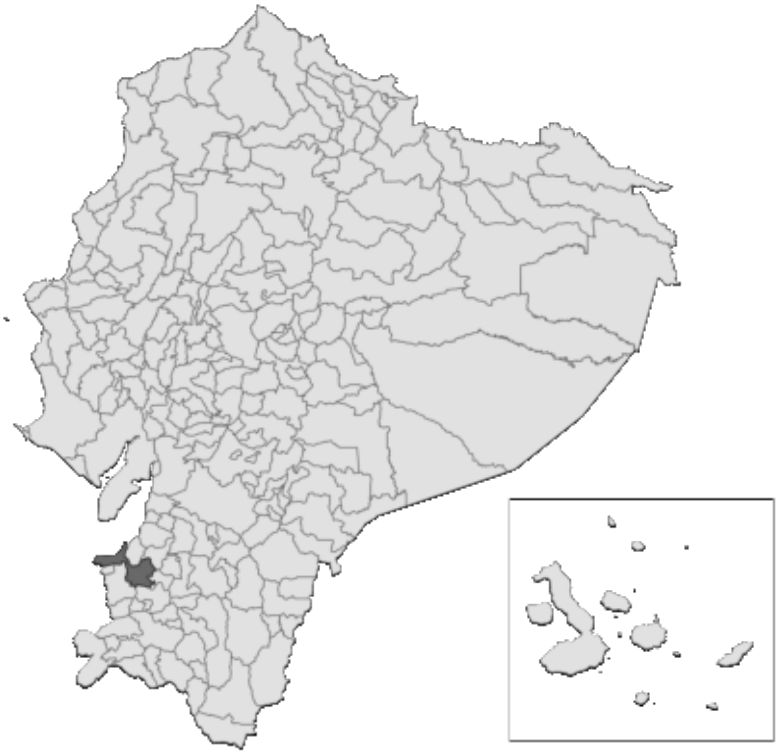
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SANTA ROSA

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.502 • RANK: 100/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.406 • RANK: 182/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.602 • RANK: 26/221 CANTONS ASSESSED

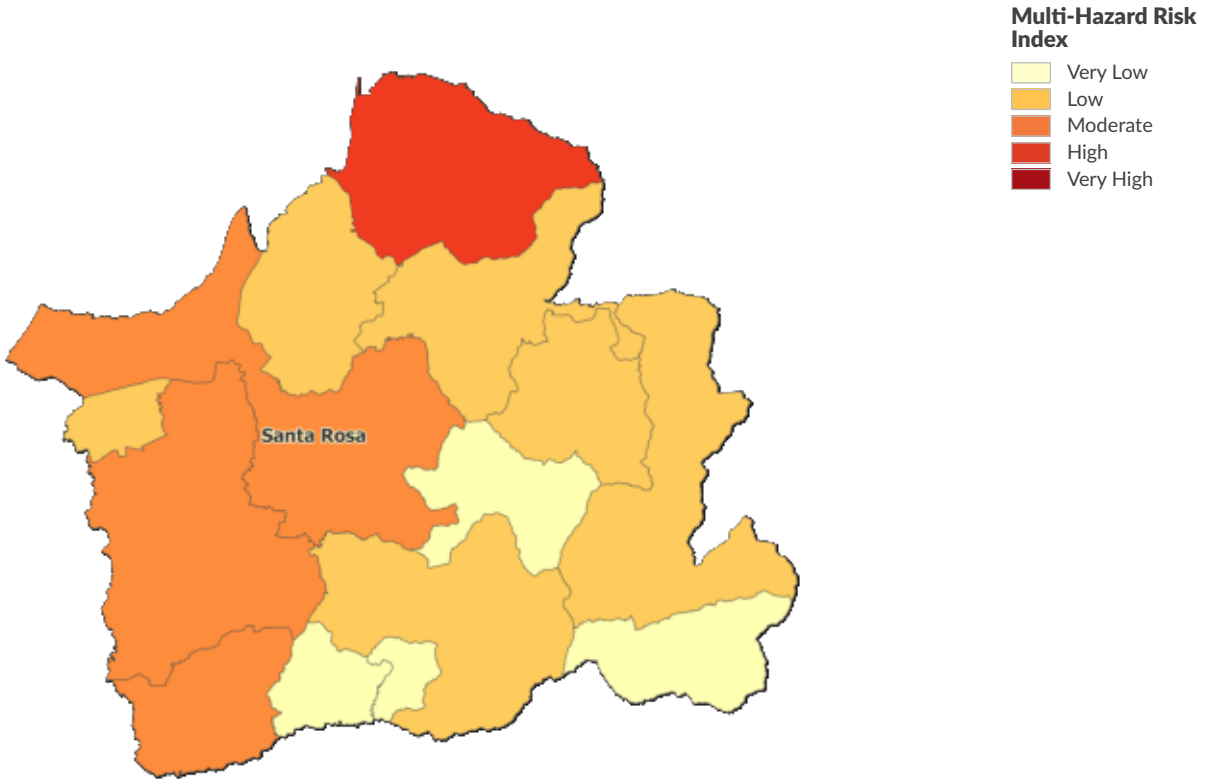
Coping Capacity (CC) - Very High
SCORE: 0.619 • RANK: 31/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.813 • RANK: 8/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.592 • RANK: 33/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

SANTA ROSA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	**0.502**
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	0.440
Huaquillas	0.435
Portovelo	0.424
Balsas	0.420
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 8 / 221 CANTONS ASSESSED
SCORE: 0.813



MHE
0.813

Raw MHE
0.741

Relative MHE
0.885

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
3%
- **2,237** people exposed
- **2,880** structures exposed (8%)
- **Critical Infrastructure Exposed:** 8%

Drought
100%
- **79,147** people exposed
- **35,457** structures exposed (99%)
- **Critical Infrastructure Exposed:** 98%

Earthquake
100%
- **79,373** people exposed
- **35,643** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
94%
- **74,228** people exposed
- **31,724** structures exposed (89%)
- **Critical Infrastructure Exposed:** 89%

Inland Flood
18%
- **14,641** people exposed
- **9,312** structures exposed (26%)
- **Critical Infrastructure Exposed:** 25%

Landslide
3%
- **2,498** people exposed
- **2,089** structures exposed (6%)
- **Critical Infrastructure Exposed:** 8%

Mosquito-Borne Disease
90%
- **71,459** people exposed
- **28,862** structures exposed (81%)
- **Critical Infrastructure Exposed:** 87%

Sea Level Rise
<1%
- **528** people exposed
- **1,120** structures exposed (3%)
- **Critical Infrastructure Exposed:** 8%

Tsunami
81%
- **63,927** people exposed
- **25,022** structures exposed (70%)
- **Critical Infrastructure Exposed:** 64%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
55%
- **43,588** people exposed
- **18,738** structures exposed (53%)
- **Critical Infrastructure Exposed:** 56%

VULNERABILITY (V)

RANK: 182 / 221 CANTONS ASSESSED **SCORE: 0.406**

Vulnerability in Santa Rosa is primarily driven by Population Pressures and Disaster Impacts. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.295

- **11.3** Average Years of Schooling
- **38.8%** Population (age 24 and over) with General Basic Education Schooling
- **2.8%** Population (age 24 and over) with No Schooling
- **2.1%** Adult Illiteracy Rate
- **37.2%** Households with No Internet Access
- **63.4%** Households with No Access to Television
- **67.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 197/221 CANTONS ASSESSED
SCORE: 0.275

- **95.2%** Homes with Access to Public Water Source
- **77.4%** Homes Connected to the Public Sewage System
- **10.3%** Homes without Piped Water
- **6.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.401

- **54.4** Age Dependency Ratio
- **16.6%** Unemployment Rate
- **30.3%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.581

- **5.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.397

- **0.4** Female to Male Labor Ratio (distance from parity)
- **46.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.2%** Prevalence of Child Marriage (among adolescents age 12-17)
- **45.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.460

- **8.1%** Prevalence of Disability (among persons age 5 and over)
- **4.2** Perinatal Mortality Rate (per 1,000 births)
- **5.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.464

- **19** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **16.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.485

66
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

14
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

32
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

27
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 142/221 CANTONS ASSESSED
SCORE: 0.411

9.1%
Homes with Exterior Walls in Poor Condition

7%
Homes with Inadequate Materials Used in Outer Walls

11.2%
Homes with Roofs in Poor Condition

82.4%
Households with No Access to Vehicle for Private Use

7.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.501

89.6
Population Density (persons per sq km)

1.3%
Average Annual Population Change (2010-2022)

19.8
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.481

0.3
Hazard Susceptibility (recent events 2015-2025)

0
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 31 / 221 CANTONS ASSESSED **SCORE: 0.619**

Santa Rosa exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.684

62.2%
Labor Force Participation

356,470
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.350

1.6%
Protected Area (% of land area)

-7,263.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.632

82.8%
Voter Participation

96.1%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.631

Communications Capacity

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.606

11.6%
Household Access to Fixed Phones

87.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.712

98%
Homes Served by the Public Electricity Network

82.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.506

16.1
Nurses and Midwives per 10,000 persons

17.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.701

8.8
Average Distance to Airport (km)

9.6
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 33 / 221 CANTONS ASSESSED **SCORE: 0.592**

Santa Rosa exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.608

2.2	8.3%	1.3	23.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 71/221 CANTONS ASSESSED
SCORE: 0.575

5.7	5.4	3.6	5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 26 / 221 CANTONS ASSESSED
SCORE: 0.602

Santa Rosa's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Population Pressures

Healthcare Capacity

Disaster Impacts

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

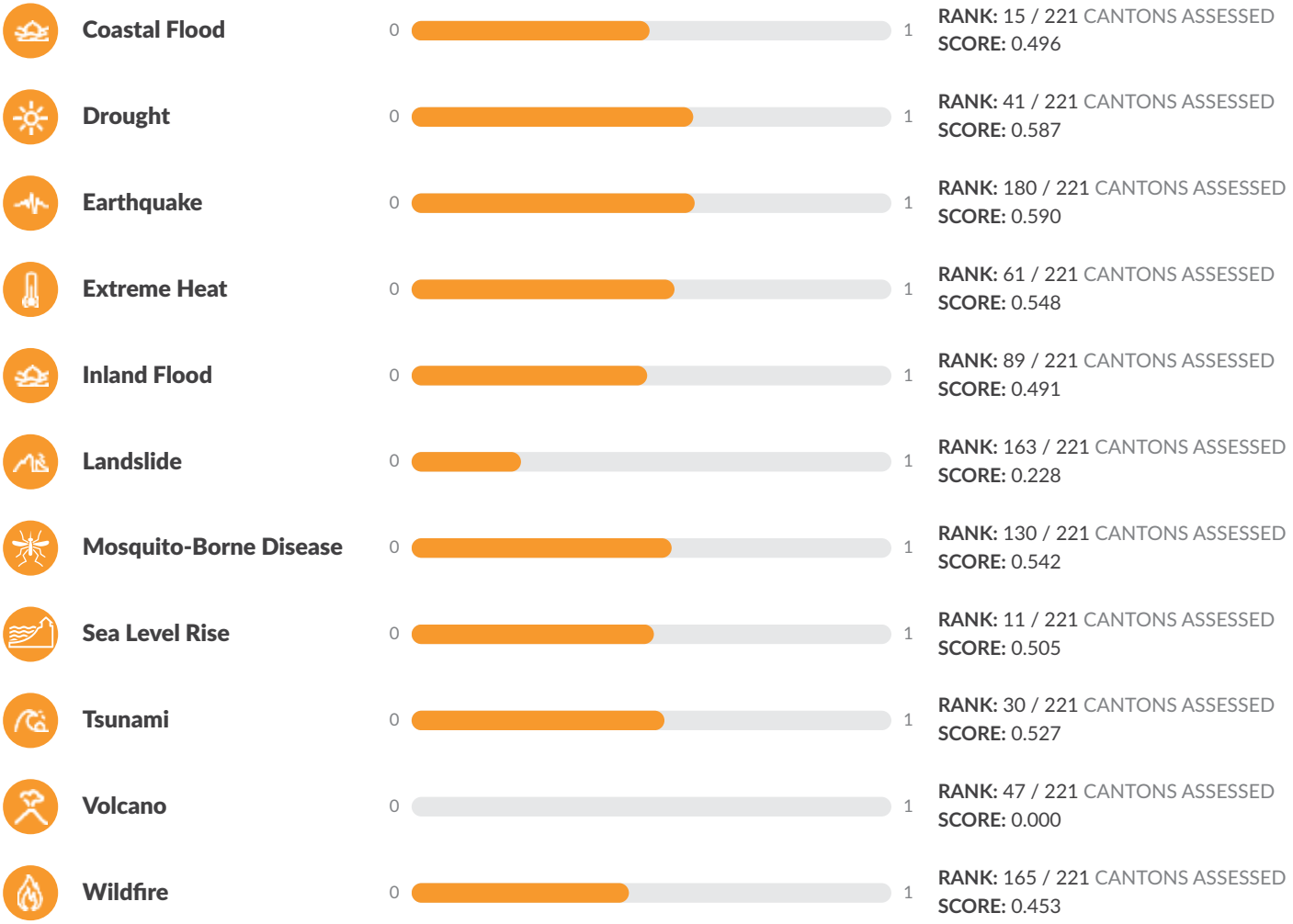
Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

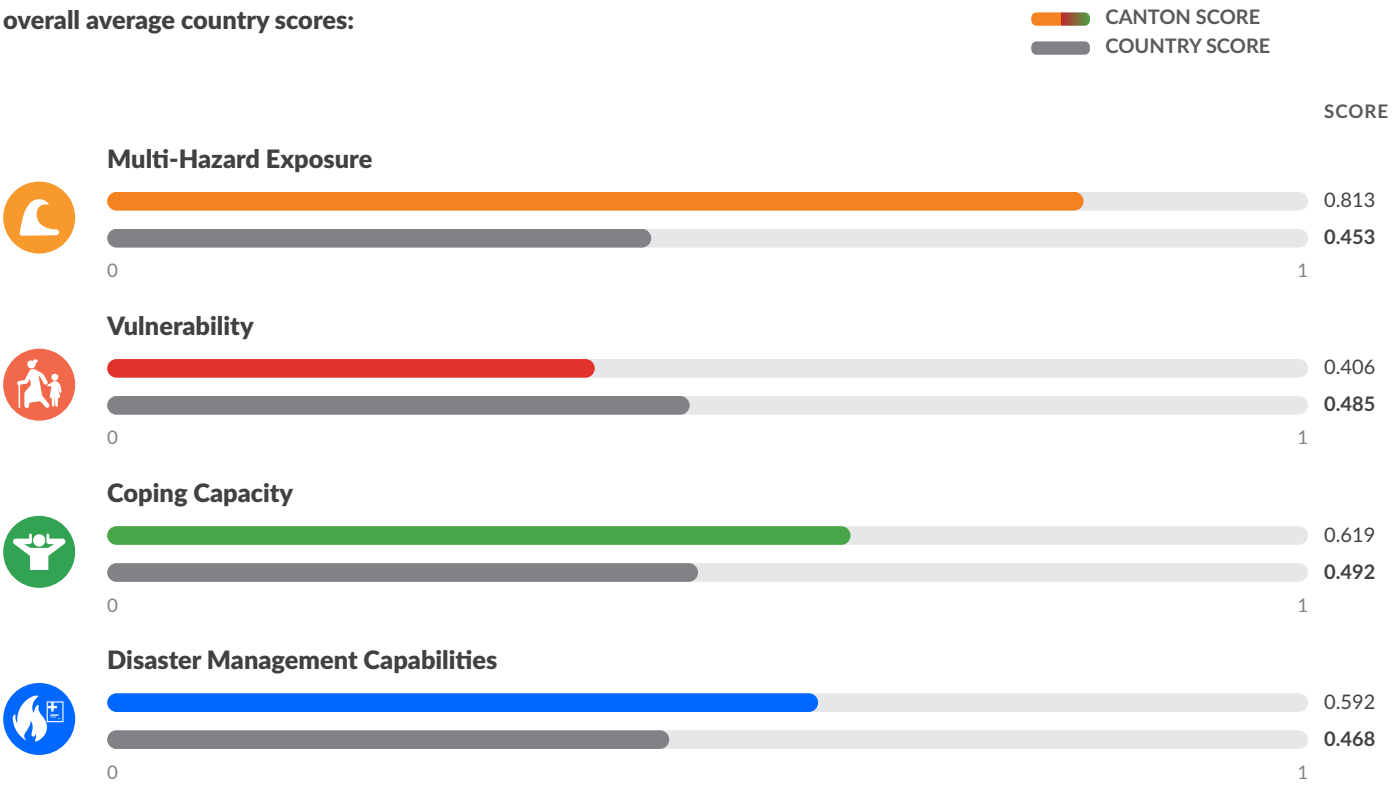


MULTI-HAZARD RISK (MHR)

RANKED
100 / 221
CANTONS ASSESSED
SCORE: 0.502

Santa Rosa's score and ranking are due to Very High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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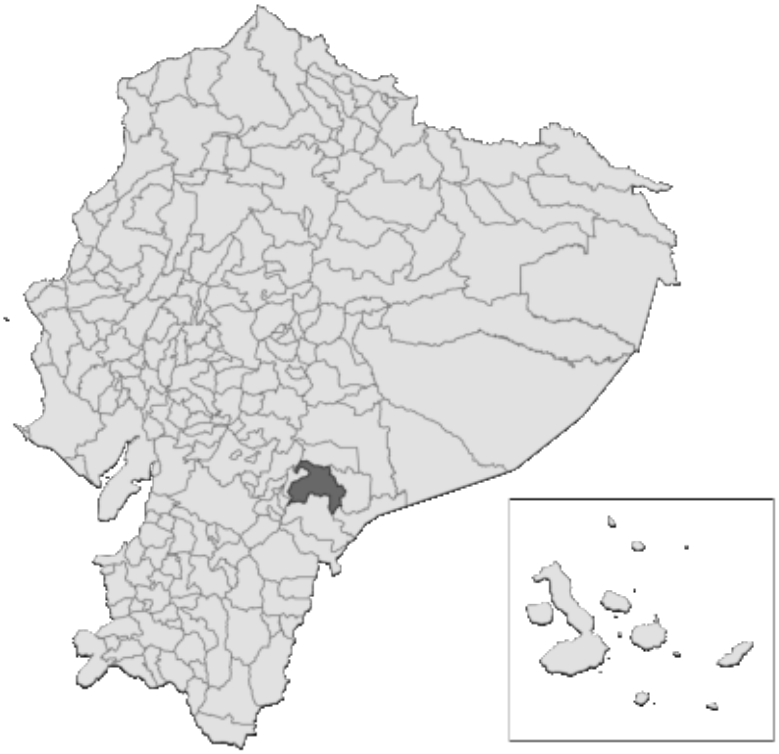
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SANTIAGO

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.461 • RANK: 140/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.525 • RANK: 79/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.419 • RANK: 122/221 CANTONS ASSESSED

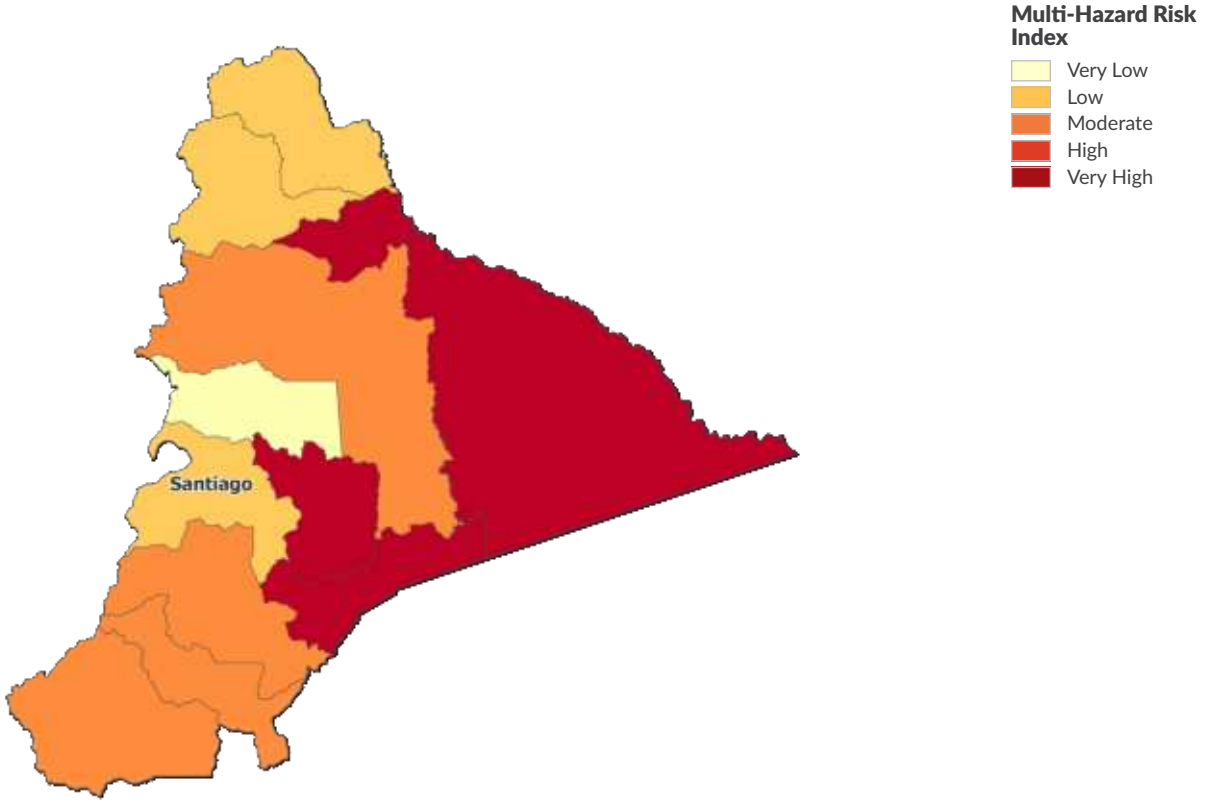
Vulnerability (V) - Moderate
SCORE: 0.472 • RANK: 128/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.478 • RANK: 118/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.569 • RANK: 47/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

SANTIAGO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	**0.461**
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 122 / 221 CANTONS ASSESSED
SCORE: 0.419



MHE
0.419

Raw MHE
0.370

Relative MHE
0.468

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
12,214 people exposed
8,024 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
3%
343 people exposed
330 structures exposed (4%)
Critical Infrastructure Exposed: 8%

Landslide
91%
11,106 people exposed
7,131 structures exposed (89%)
Critical Infrastructure Exposed: 95%

Mosquito-Borne Disease
98%
11,993 people exposed
7,767 structures exposed (97%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
12,181 people exposed
7,994 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 128 / 221 CANTONS ASSESSED **SCORE: 0.472**

Vulnerability in Santiago is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.433

- **10.3** Average Years of Schooling
- **46.3%** Population (age 24 and over) with General Basic Education Schooling
- **4.8%** Population (age 24 and over) with No Schooling
- **3%** Adult Illiteracy Rate
- **49.8%** Households with No Internet Access
- **70.7%** Households with No Access to Television
- **78.2%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.479

- **76.7%** Homes with Access to Public Water Source
- **62%** Homes Connected to the Public Sewage System
- **40.8%** Homes without Piped Water
- **4.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.641

- **66.8** Age Dependency Ratio
- **21.1%** Unemployment Rate
- **60.5%** Poverty Rate (based on UBN)
- **1.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.462

- **3.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.557

- **0.4** Female to Male Labor Ratio (distance from parity)
- **85.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **86.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **39.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.376

- **7.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.407

- **65.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **30.4** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.547

29	34	34	45
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.505

19.3%	0.5%	19.7%	82%	11.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.388

7.1	0.4%	1.2	0.33
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.397

0.2	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 118 / 221 CANTONS ASSESSED **SCORE: 0.478**

Santiago exhibits weaker Coping Capacity in the areas of Economic Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.355

51.7%
Labor Force Participation

36,805
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.657

40.4%
Protected Area (% of land area)

-6,846.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.444

75.4%
Voter Participation

90.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.576

Communications Capacity

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.572

22.7%
Household Access to Fixed Phones

74.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.410

88.6%
Homes Served by the Public Electricity Network

72.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.826

35.9
Nurses and Midwives per 10,000 persons

48.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 110/221 CANTONS ASSESSED
SCORE: 0.497

8.6
Average Distance to Airport (km)

67.8
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 47 / 221 CANTONS ASSESSED **SCORE: 0.569**

Santiago exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.691

2.7	66.5%	1.9	51.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.446

7.6	7.7	6.8	7.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 79 / 221 CANTONS ASSESSED
SCORE: 0.525

Santiago's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity | **Economic Constraints** | **Energy Capacity** | **Marginalization**

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

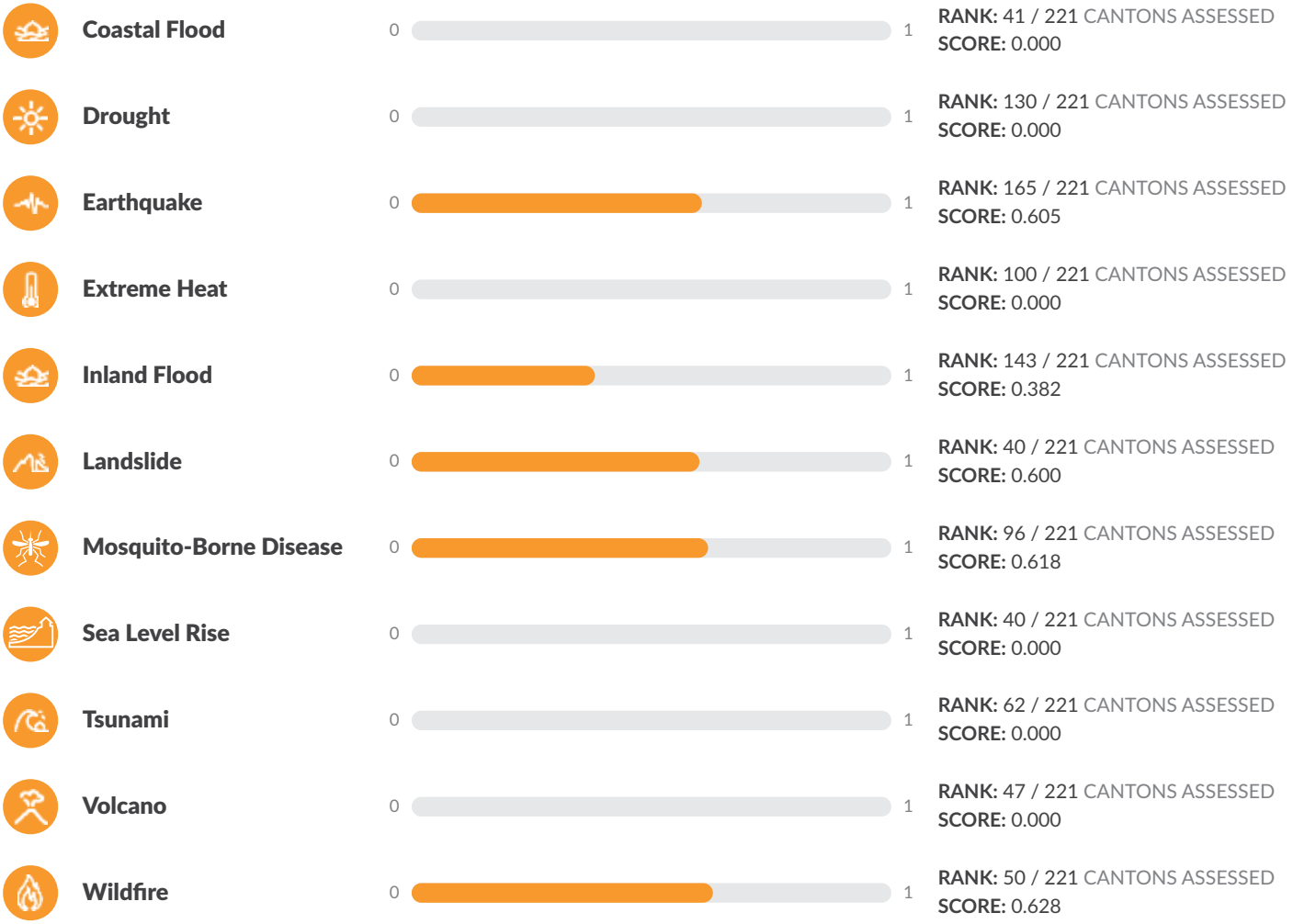
Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
140 / 221
CANTONS ASSESSED
SCORE: 0.461

Santiago's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SANTIAGO DE PÍLLARO

PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.410 • RANK: 197/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.569 • RANK: 48/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.348 • RANK: 155/221 CANTONS ASSESSED

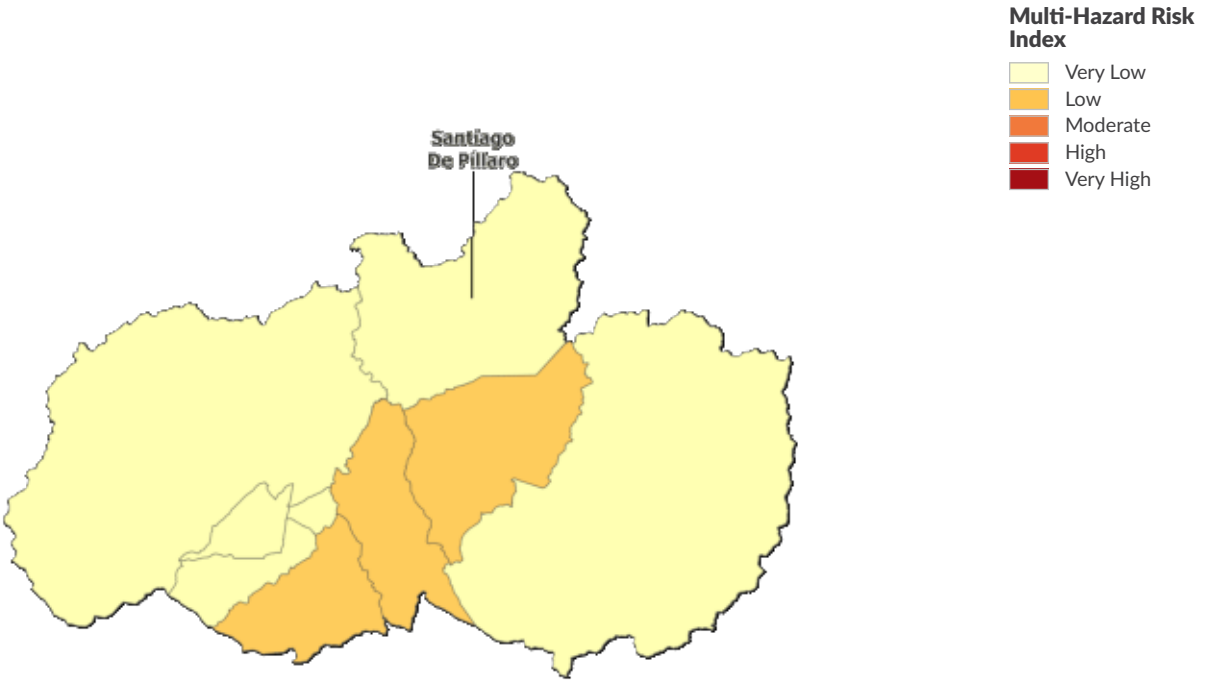
Vulnerability (V) - Very Low
SCORE: 0.404 • RANK: 183/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.577 • RANK: 53/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.535 • RANK: 66/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

SANTIAGO DE PÍLLARO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454	Mocha	0.379
San Pedro De Pelileo	0.436	Baños De Agua Santa	0.364
Patate	0.431	Tisaleo	0.361
Santiago De Píllaro	**0.410**	Cevallos	0.340
Ambato	0.409		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 155 / 221 CANTONS ASSESSED
SCORE: 0.348



MHE
0.348

Raw MHE
0.555

Relative MHE
0.142

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
43%
- **19,222** people exposed
- **14,354** structures exposed (40%)

Critical Infrastructure Exposed: 28%

Earthquake
100%
- **44,446** people exposed
- **36,032** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **222** people exposed
- **295** structures exposed (<1%)

Critical Infrastructure Exposed: 3%

Landslide
28%
- **12,519** people exposed
- **10,001** structures exposed (28%)

Critical Infrastructure Exposed: 41%

Mosquito-Borne Disease
1%
- **552** people exposed
- **485** structures exposed (1%)

Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
<1%
- **115** people exposed
- **26** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Wildfire
91%
- **40,604** people exposed
- **32,680** structures exposed (91%)

Critical Infrastructure Exposed: 98%

VULNERABILITY (V)

RANK: 183 / 221 CANTONS ASSESSED **SCORE: 0.404**

Vulnerability in Santiago De Píllaro is primarily driven by Vulnerable Health Status and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.538

- **9.7** Average Years of Schooling
- **47.9%** Population (age 24 and over) with General Basic Education Schooling
- **7.4%** Population (age 24 and over) with No Schooling
- **6.7%** Adult Illiteracy Rate
- **47.2%** Households with No Internet Access
- **91.2%** Households with No Access to Television
- **67.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.329

- **97%** Homes with Access to Public Water Source
- **63.2%** Homes Connected to the Public Sewage System
- **38%** Homes without Piped Water
- **3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.531

- **53.1** Age Dependency Ratio
- **16.7%** Unemployment Rate
- **45.8%** Poverty Rate (based on UBN)
- **2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.529

- **4.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.328

- **0.2** Female to Male Labor Ratio (distance from parity)
- **23.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **73.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **35.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.582

- **9.5%** Prevalence of Disability (among persons age 5 and over)
- **13.6** Perinatal Mortality Rate (per 1,000 births)
- **12.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 154/221 CANTONS ASSESSED
SCORE: 0.275

- **0.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **22.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.469

74	11	42	11
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.258

9.2%	0.4%	13.2%	69.7%	2.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.361

90.4	0.9%	3	0.24
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.285

0.3	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 53 / 221 CANTONS ASSESSED **SCORE: 0.577**

Santiago De Píllaro exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.561

61.2%
Labor Force Participation

82,537
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.767

55.5%
Protected Area (% of land area)

-1,715.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.547

84.6%
Voter Participation

85.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.558

Communications Capacity

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.614

16.7%
Household Access to Fixed Phones

84.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.710

98.2%
Homes Served by the Public Electricity Network

81.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.357

9.6
Nurses and Midwives per 10,000 persons

11.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.552

8.2
Average Distance to Airport (km)

98
Average Distance to Sea or River Port (km)

1.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 66 / 221 CANTONS ASSESSED **SCORE: 0.535**

Santiago De Píllaro exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.418

2.2	1%	0.9	59.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.652

3.9	7.6	2.3	3.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 48 / 221 CANTONS ASSESSED
SCORE: 0.569

Santiago De Píllaro's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Vulnerable Health Status

Mass Care Support

Information Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

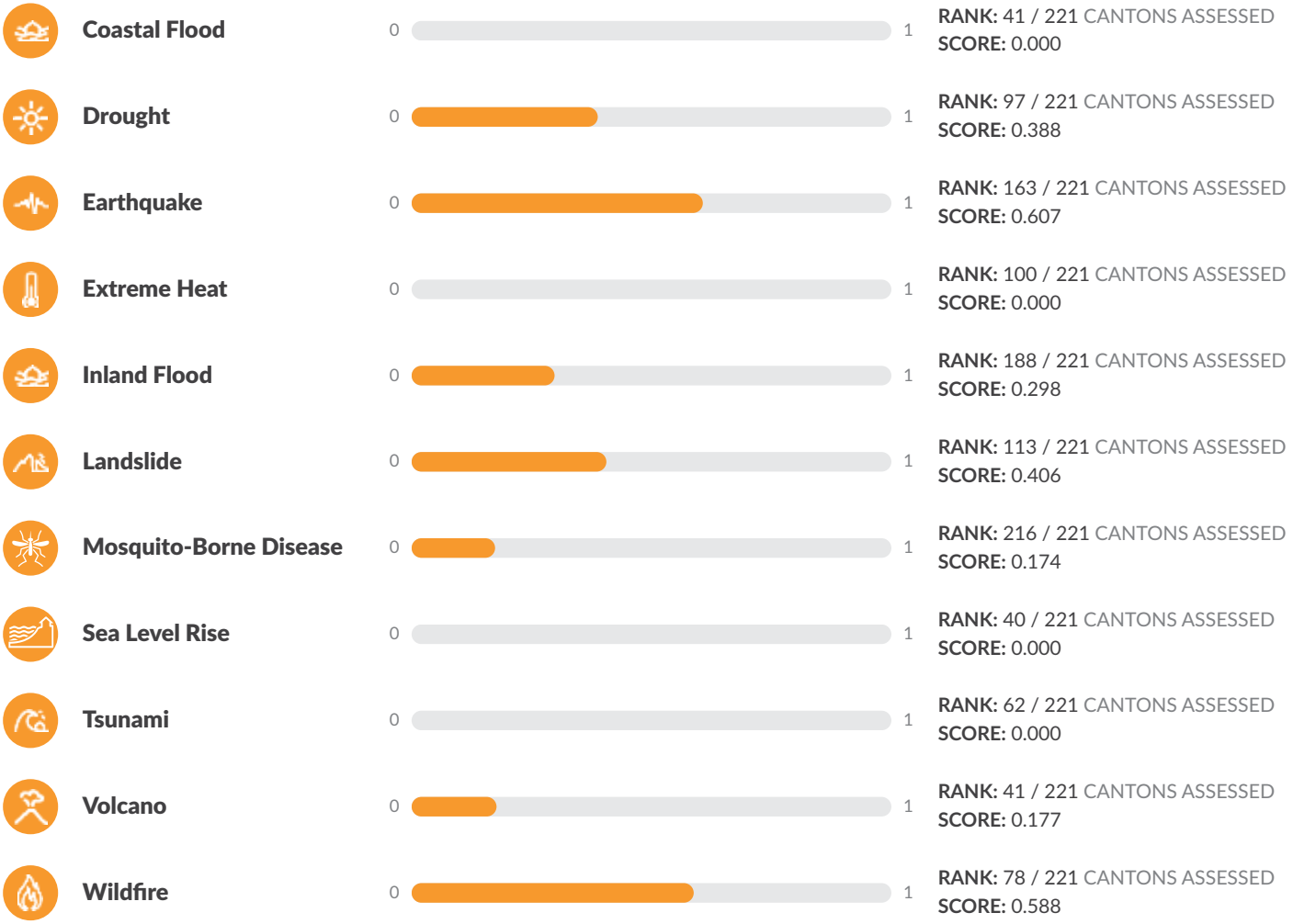
Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

HAZARD-SPECIFIC RISK (HSR)

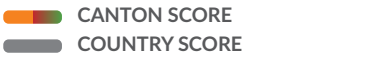


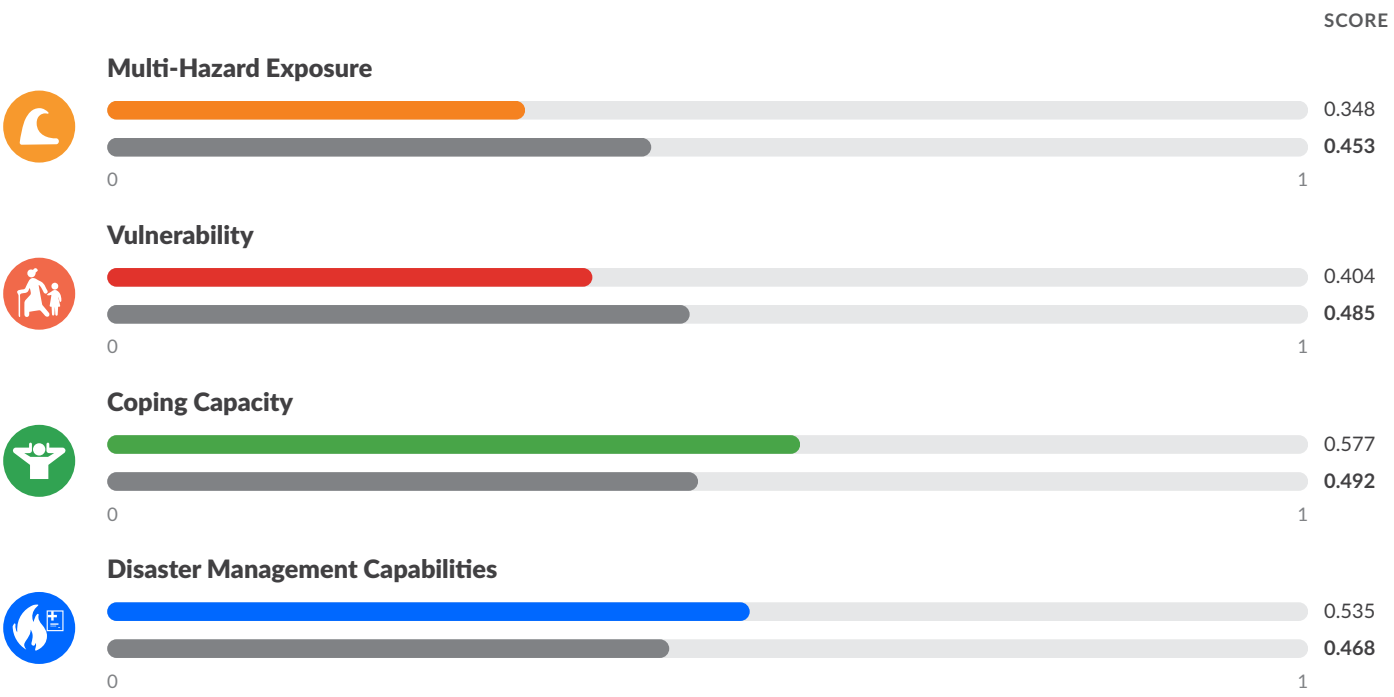
MULTI-HAZARD RISK (MHR)

RANKED
197 / 221
CANTONS ASSESSED
SCORE: 0.410

Santiago De Píllaro's score and ranking are due to Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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SANTO DOMINGO

NDPBA SUBNATIONAL PROFILE

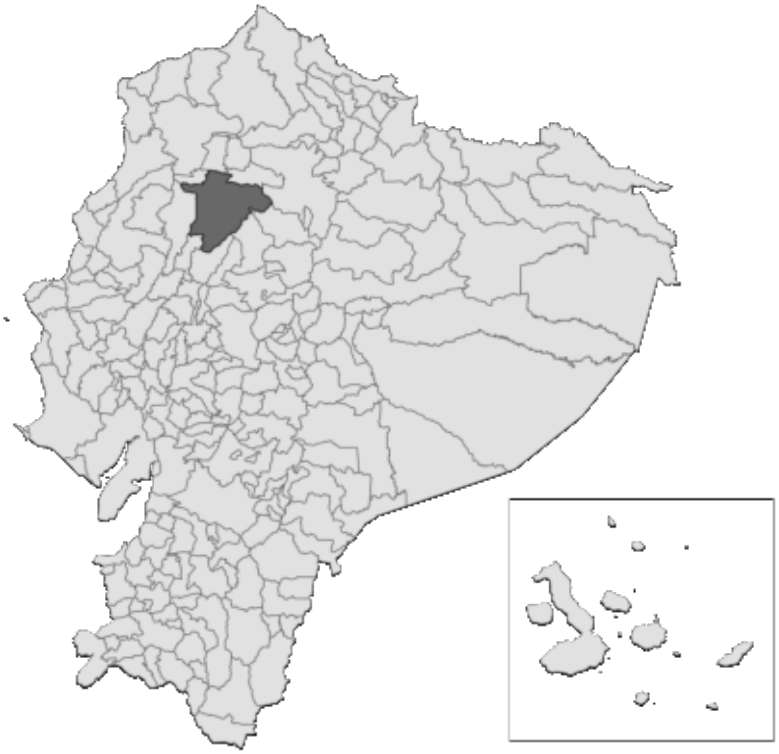
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SANTO DOMINGO

PROVINCE: SANTO DOMINGO DE LOS TSÁCHILAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.501 • RANK: 102/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.481 • RANK: 118/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.532 • RANK: 73/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.585 • RANK: 48/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.599 • RANK: 45/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.491 • RANK: 85/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SANTO DOMINGO DE LOS TSÁCHILAS PROVINCE

SANTO DOMINGO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Santo Domingo	**0.501**
La Concordia	0.473

MULTI-HAZARD EXPOSURE (MHE)

RANK: 45 / 221 CANTONS ASSESSED
SCORE: 0.599



MHE
0.599

Raw MHE
0.940

Relative MHE
0.258

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
483,913 people exposed
167,688 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
2%
8,481 people exposed
1,691 structures exposed (1%)
Critical Infrastructure Exposed: 5%

Inland Flood
10%
47,511 people exposed
18,138 structures exposed (11%)
Critical Infrastructure Exposed: 11%

Landslide
8%
37,707 people exposed
15,914 structures exposed (9%)
Critical Infrastructure Exposed: 10%

Mosquito-Borne Disease
100%
481,618 people exposed
166,098 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
5%
25,352 people exposed
7,223 structures exposed (4%)
Critical Infrastructure Exposed: 5%

Wildfire
70%
338,977 people exposed
118,939 structures exposed (71%)
Critical Infrastructure Exposed: 66%

VULNERABILITY (V)

RANK: 118 / 221 CANTONS ASSESSED **SCORE: 0.481**

Vulnerability in Santo Domingo is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.386

- **10.8** Average Years of Schooling
- **40.1%** Population (age 24 and over) with General Basic Education Schooling
- **4.4%** Population (age 24 and over) with No Schooling
- **3.3%** Adult Illiteracy Rate
- **40.1%** Households with No Internet Access
- **78%** Households with No Access to Television
- **69.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.409

- **76%** Homes with Access to Public Water Source
- **70.6%** Homes Connected to the Public Sewage System
- **27.1%** Homes without Piped Water
- **4.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.426

- **53.1** Age Dependency Ratio
- **14%** Unemployment Rate
- **45%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.607

- **6.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.481

- **0.4** Female to Male Labor Ratio (distance from parity)
- **43.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **69%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **51.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.496

- **7.2%** Prevalence of Disability (among persons age 5 and over)
- **5.1** Perinatal Mortality Rate (per 1,000 births)
- **7.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.506

- **31.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.552

41
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

20
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

40
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

57
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.365

9.6%
Homes with Exterior Walls in Poor Condition

1.3%
Homes with Inadequate Materials Used in Outer Walls

12.5%
Homes with Roofs in Poor Condition

79.7%
Households with No Access to Vehicle for Private Use

6.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.564

127.8
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

25.2
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.700

0.5
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 48 / 221 CANTONS ASSESSED **SCORE: 0.585**

Santo Domingo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.759

59.7%
Labor Force Participation

1,812,485
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.001

0%
Protected Area (% of land area)

-43,620.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.568

83.2%
Voter Participation

90.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.624

Communications Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.668

13%
Household Access to Fixed Phones

90.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.702

98.5%
Homes Served by the Public Electricity Network

78.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.550

15.5
Nurses and Midwives per 10,000 persons

23.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 74/221 CANTONS ASSESSED
SCORE: 0.575

9.5
Average Distance to Airport (km)

66.3
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 85 / 221 CANTONS ASSESSED **SCORE: 0.491**

Santo Domingo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.413

3.2	3.9%	1.8	132.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.569

8.3	6.6	2.4	5.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 73 / 221 CANTONS ASSESSED
SCORE: 0.532

Santo Domingo's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Mass Care Support

Population Pressures

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

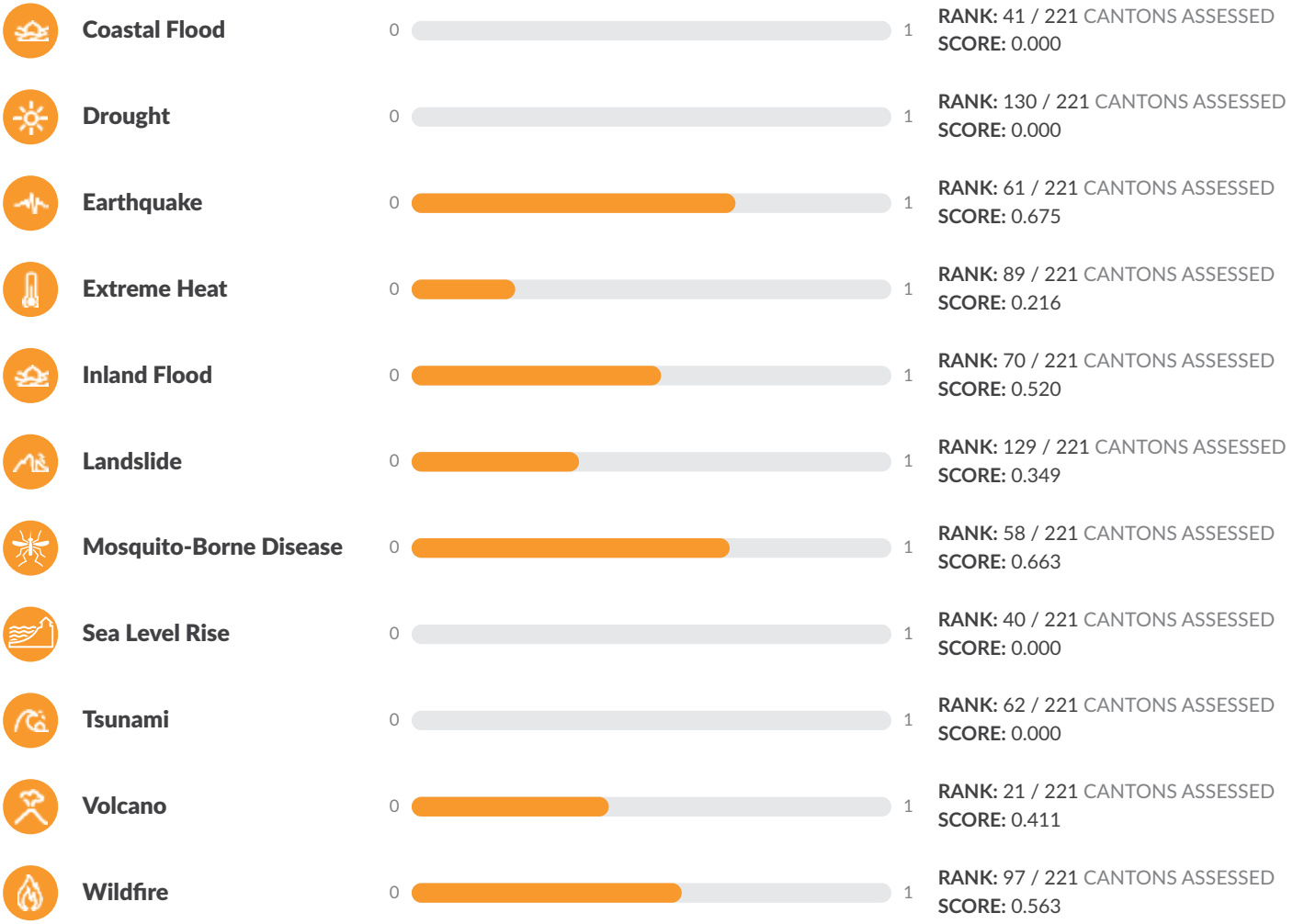
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

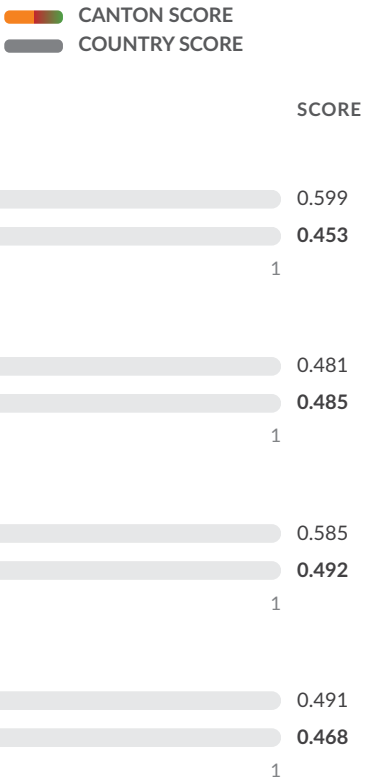


MULTI-HAZARD RISK (MHR)

RANKED
102 / 221
CANTONS ASSESSED
SCORE: 0.501

Santo Domingo's score and ranking are due to Very High Multi-Hazard Exposure combined with Moderate Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SAN VICENTE

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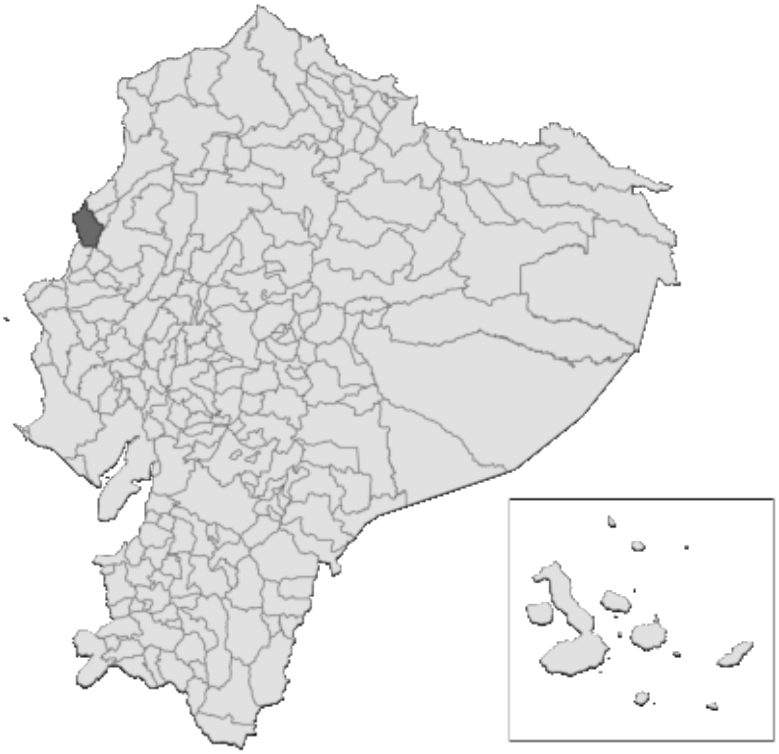
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SAN VICENTE

PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.623 • RANK: 8/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.584 • RANK: 28/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.403 • RANK: 182/221 CANTONS ASSESSED

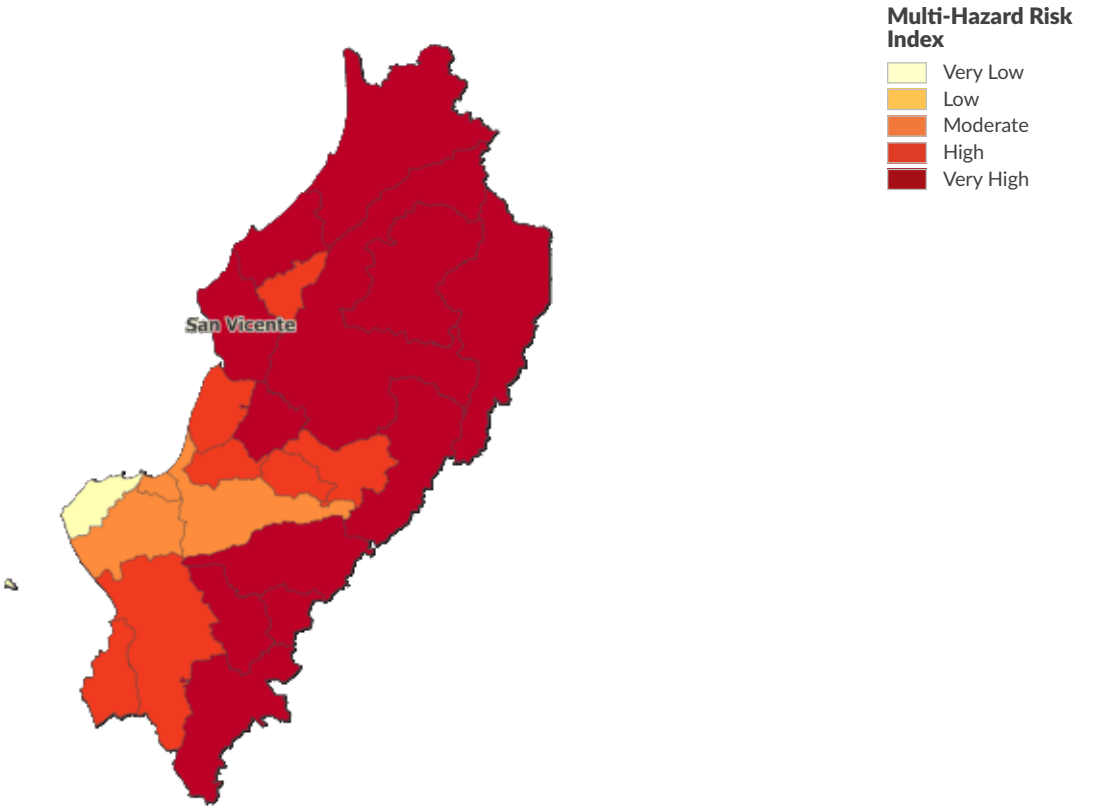
Coping Capacity (CC) - Low
SCORE: 0.422 • RANK: 160/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.703 • RANK: 20/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.372 • RANK: 179/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

SAN VICENTE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	**0.623**	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 20 / 221 CANTONS ASSESSED
SCORE: 0.703



MHE
0.703

Raw MHE
0.559

Relative MHE
0.847

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
6%
- **1,655** people exposed
- **1,529** structures exposed (10%)
- **Critical Infrastructure Exposed:** 9%

Drought
100%
- **25,913** people exposed
- **15,865** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **25,913** people exposed
- **15,865** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
77%
- **20,046** people exposed
- **13,246** structures exposed (83%)
- **Critical Infrastructure Exposed:** 89%

Inland Flood
20%
- **5,218** people exposed
- **2,976** structures exposed (19%)
- **Critical Infrastructure Exposed:** 23%

Landslide
25%
- **6,480** people exposed
- **3,984** structures exposed (25%)
- **Critical Infrastructure Exposed:** 32%

Mosquito-Borne Disease
89%
- **22,964** people exposed
- **13,958** structures exposed (88%)
- **Critical Infrastructure Exposed:** 100%

Sea Level Rise
2%
- **448** people exposed
- **436** structures exposed (3%)
- **Critical Infrastructure Exposed:** 8%

Tsunami
46%
- **11,972** people exposed
- **8,874** structures exposed (56%)
- **Critical Infrastructure Exposed:** 67%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
57%
- **14,738** people exposed
- **7,901** structures exposed (50%)
- **Critical Infrastructure Exposed:** 45%

VULNERABILITY (V)

RANK: 28 / 221 CANTONS ASSESSED **SCORE: 0.584**

Vulnerability in San Vicente is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 39/221 CANTONS ASSESSED
SCORE: 0.637

- **8.9** Average Years of Schooling
- **48.4%** Population (age 24 and over) with General Basic Education Schooling
- **9.6%** Population (age 24 and over) with No Schooling
- **8.2%** Adult Illiteracy Rate
- **68.1%** Households with No Internet Access
- **83.6%** Households with No Access to Television
- **89.8%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.724

- **53.8%** Homes with Access to Public Water Source
- **27.3%** Homes Connected to the Public Sewage System
- **66.2%** Homes without Piped Water
- **7.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 75/221 CANTONS ASSESSED
SCORE: 0.570

- **56.5** Age Dependency Ratio
- **20.7%** Unemployment Rate
- **74.8%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.696

- **8.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.643

- **0.5** Female to Male Labor Ratio (distance from parity)
- **52.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **66.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **81.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 155/221 CANTONS ASSESSED
SCORE: 0.385

- **10.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.239

- **22** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **16.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.548

15	23	45	72
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.624

22%	20.3%	20.6%	92.3%	6.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.450

33.9	1.1%	9.3	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.615

0.7	0.3	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 160 / 221 CANTONS ASSESSED **SCORE: 0.422**

San Vicente exhibits weaker Coping Capacity in the areas of Communications Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.379

53.2%
Labor Force Participation

38,107
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.326

1.7%
Protected Area (% of land area)

-9,251.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.473

84.7%
Voter Participation

74.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.446

Communications Capacity

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.378

6.4%
Household Access to Fixed Phones

73%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.382

94.7%
Homes Served by the Public Electricity Network

52.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.437

11.2
Nurses and Midwives per 10,000 persons

16.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.589

13
Average Distance to Airport (km)

61
Average Distance to Sea or River Port (km)

2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 179 / 221 CANTONS ASSESSED **SCORE: 0.372**

San Vicente exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.380

6.7	5.2%	0.9	68.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.364

12.1	10.5	6.5	10.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 182 / 221 CANTONS ASSESSED
SCORE: 0.403

San Vicente's score and ranking are due to Very High Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Marginalization

Information Access Vulnerability

Emergency Services

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

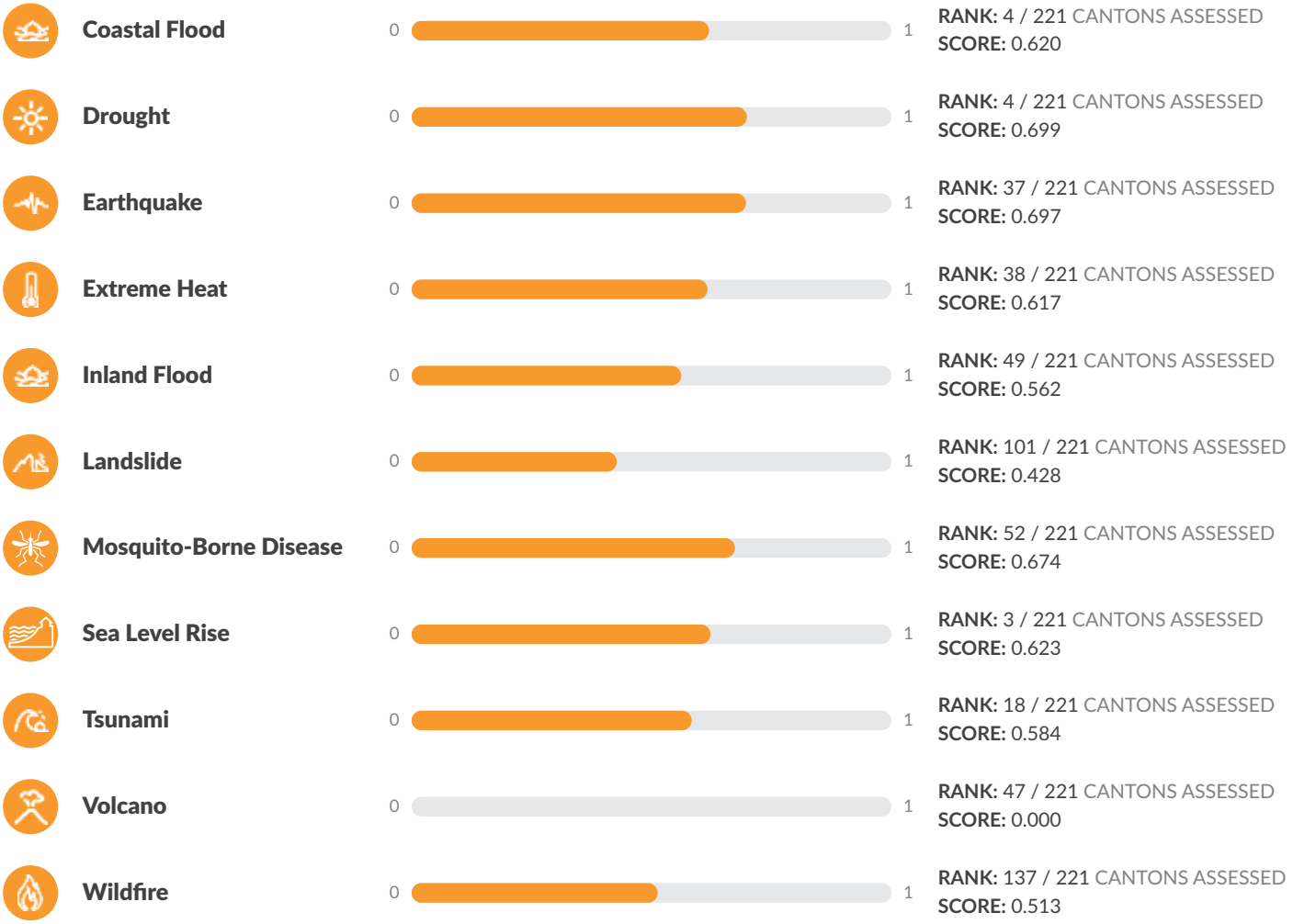
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
8 / 221
CANTONS ASSESSED
SCORE: 0.623

San Vicente's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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PROVINCE: COTOPAXI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.490 • RANK: 115/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.475 • RANK: 124/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.386 • RANK: 135/221 CANTONS ASSESSED

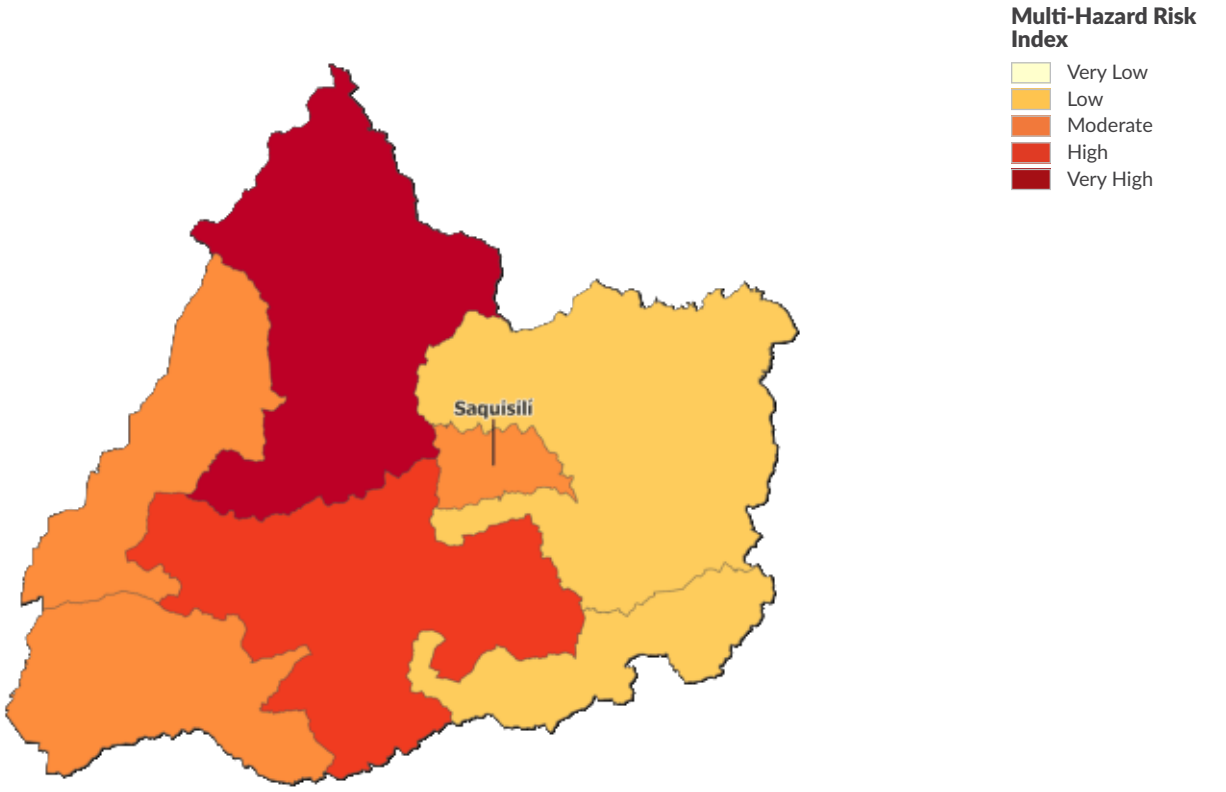
Vulnerability (V) - Low
SCORE: 0.454 • RANK: 145/221 CANTONS ASSESSED

Coping Capacity (CC) - Low
SCORE: 0.440 • RANK: 153/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.439 • RANK: 136/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN COTOPAXI PROVINCE

SAQUISILÍ • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sigchos	0.585		La Maná	0.475	
Pujilí	0.541		Salcedo	0.460	
Saquisilí	**0.490**		Latacunga	0.440	
Pangua	0.486				

MULTI-HAZARD EXPOSURE (MHE)

RANK: 135 / 221 CANTONS ASSESSED
SCORE: 0.386



MHE
0.386

Raw MHE
0.505

Relative MHE
0.266

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
82%
22,571 people exposed
18,721 structures exposed (86%)
Critical Infrastructure Exposed: 87%

Earthquake
100%
27,623 people exposed
21,663 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Landslide
41%
11,324 people exposed
7,696 structures exposed (36%)
Critical Infrastructure Exposed: 36%

Mosquito-Borne Disease
6%
1,704 people exposed
1,151 structures exposed (5%)
Critical Infrastructure Exposed: 15%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
<1%
18 people exposed
9 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Wildfire
100%
27,623 people exposed
21,663 structures exposed (100%)
Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 145 / 221 CANTONS ASSESSED **SCORE: 0.454**

Vulnerability in Saquisilí is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.568

- **9.4** Average Years of Schooling
- **41.1%** Population (age 24 and over) with General Basic Education Schooling
- **11.1%** Population (age 24 and over) with No Schooling
- **9.5%** Adult Illiteracy Rate
- **52.7%** Households with No Internet Access
- **90.3%** Households with No Access to Television
- **73%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.480

- **95.4%** Homes with Access to Public Water Source
- **57.1%** Homes Connected to the Public Sewage System
- **47.3%** Homes without Piped Water
- **8.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.482

- **55.4** Age Dependency Ratio
- **10.7%** Unemployment Rate
- **56.6%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.640

- **7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.379

- **0.3** Female to Male Labor Ratio (distance from parity)
- **34** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **78.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **30.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.475

- **8.4%** Prevalence of Disability (among persons age 5 and over)
- **9.2** Perinatal Mortality Rate (per 1,000 births)
- **9.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.232

- **1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **8.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.372

47
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

5
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

29
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

20
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.336

8.1%
Homes with Exterior Walls in Poor Condition

0.2%
Homes with Inadequate Materials Used in Outer Walls

12.5%
Homes with Roofs in Poor Condition

75.8%
Households with No Access to Vehicle for Private Use

8.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.451

155.7
Population Density (persons per sq km)

-0.2
Average Annual Population Change (2010-2022)

-0.6
Net Migration Rate (per 1,000 persons)

0.31
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.427

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 153 / 221 CANTONS ASSESSED **SCORE: 0.440**

Saquisilí exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.425

55.6%
Labor Force Participation

43,306
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.353

0%
Protected Area (% of land area)

-102.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.422

82.1%
Voter Participation

73.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.501

Communications Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.532

9.4%
Household Access to Fixed Phones

84.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.523

95.4%
Homes Served by the Public Electricity Network

72%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.388

11.1
Nurses and Midwives per 10,000 persons

12.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.560

13
Average Distance to Airport (km)

102.4
Average Distance to Sea or River Port (km)

3.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 136 / 221 CANTONS ASSESSED **SCORE: 0.439**

Saquisilí exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.362

2.8	12.9%	0	91.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.516

12.6	5.1	4.4	4.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 124 / 221 CANTONS ASSESSED
SCORE: 0.475

Saquisilí's score and ranking are due to Low Vulnerability combined with Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Healthcare Capacity

Governance

Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

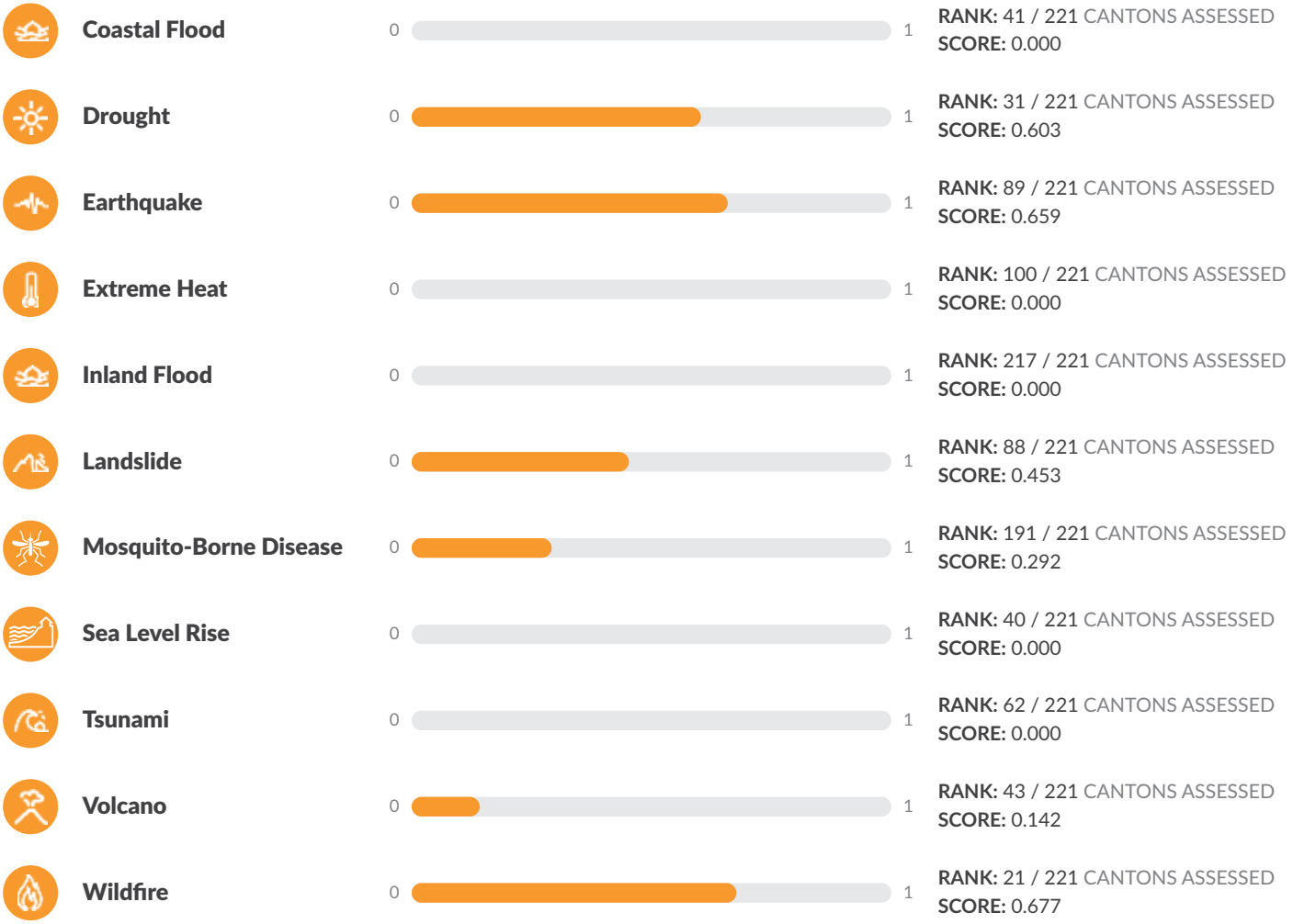
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
115 / 221
CANTONS ASSESSED
SCORE: 0.490

Saquisilí's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE

SCORE

Multi-Hazard Exposure

0.386
0.453

0 1

Vulnerability

0.454
0.485

0 1

Coping Capacity

0.440
0.492

0 1

Disaster Management Capabilities

0.439
0.468

0 1

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SARAGURO

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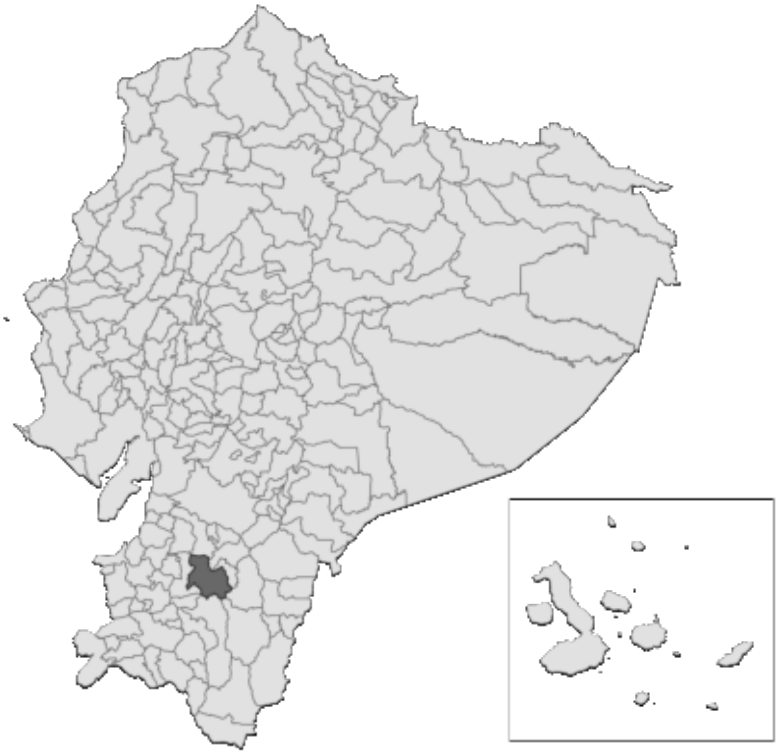
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SARAGURO

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.548 • RANK: 52/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.553 • RANK: 53/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.423 • RANK: 170/221 CANTONS ASSESSED

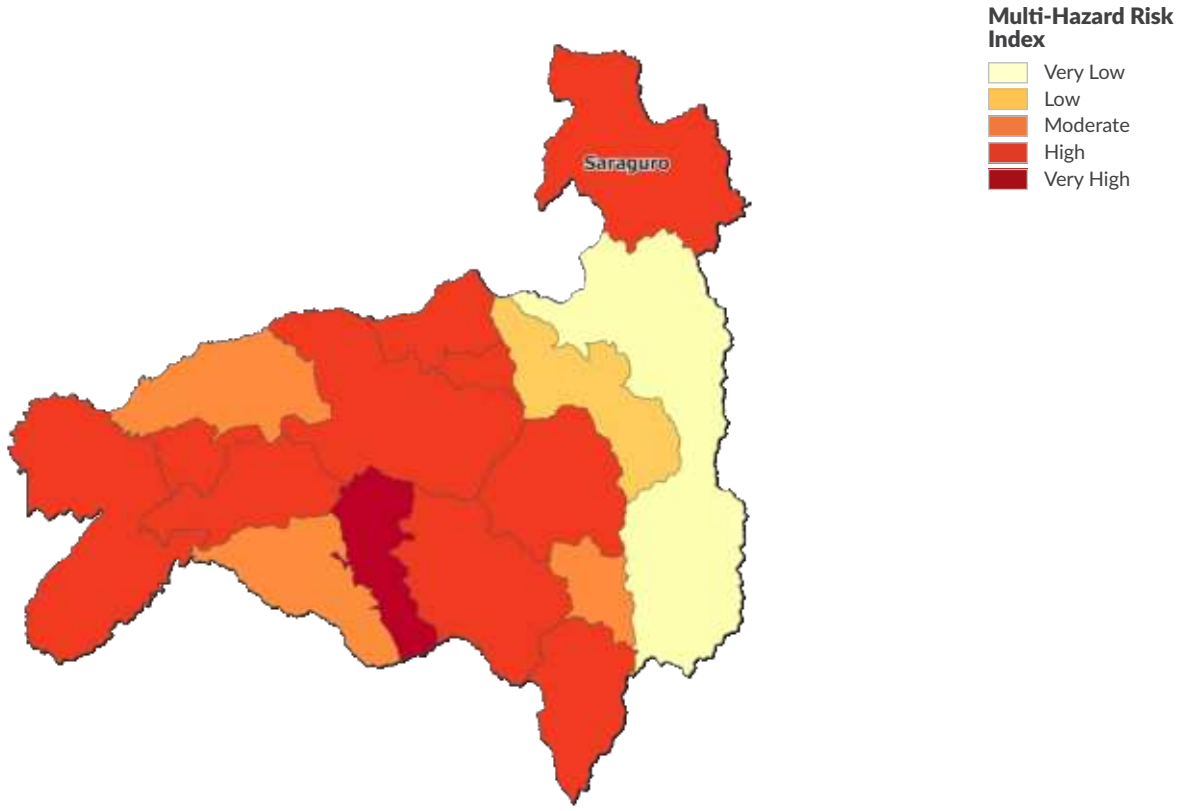
Coping Capacity (CC) - Very Low
SCORE: 0.360 • RANK: 195/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.462 • RANK: 101/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.462 • RANK: 107/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

SARAGURO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590
Espíndola	0.548
Saraguro	**0.548**
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 101 / 221 CANTONS ASSESSED
SCORE: 0.462



MHE
0.462

Raw MHE
0.560

Relative MHE
0.364

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
68%
- **23,044** people exposed
- **17,977** structures exposed (67%)

Critical Infrastructure Exposed: 86%

Earthquake
100%
- **33,805** people exposed
- **26,721** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
1%
- **419** people exposed
- **277** structures exposed (1%)

Critical Infrastructure Exposed: 2%

Landslide
94%
- **31,935** people exposed
- **25,264** structures exposed (95%)

Critical Infrastructure Exposed: 90%

Mosquito-Borne Disease
10%
- **3,283** people exposed
- **2,397** structures exposed (9%)

Critical Infrastructure Exposed: 9%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
87%
- **29,253** people exposed
- **22,871** structures exposed (86%)

Critical Infrastructure Exposed: 70%

VULNERABILITY (V)

RANK: 53 / 221 CANTONS ASSESSED **SCORE: 0.553**

Vulnerability in Saraguro is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.641

- **8.3** Average Years of Schooling
- **56.3%** Population (age 24 and over) with General Basic Education Schooling
- **10.2%** Population (age 24 and over) with No Schooling
- **8.9%** Adult Illiteracy Rate
- **46.3%** Households with No Internet Access
- **89.8%** Households with No Access to Television
- **81.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.644

- **85.1%** Homes with Access to Public Water Source
- **31.5%** Homes Connected to the Public Sewage System
- **51.9%** Homes without Piped Water
- **10.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.666

- **63** Age Dependency Ratio
- **13.1%** Unemployment Rate
- **64.7%** Poverty Rate (based on UBN)
- **4.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.536

- **4.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.447

- **0.4** Female to Male Labor Ratio (distance from parity)
- **34.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **67.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **61.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.477

- **9.7%** Prevalence of Disability (among persons age 5 and over)
- **6.3** Perinatal Mortality Rate (per 1,000 births)
- **5.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.226

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **12.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.606

99	11	32	126
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.623

21.7%	2.5%	29.1%	88.1%	11.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 182/221 CANTONS ASSESSED
SCORE: 0.374

26.8	-0.3	-0.3	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.553

0.3	0.1	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 195 / 221 CANTONS ASSESSED **SCORE: 0.360**

Saraguro exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.306

46.6%
Labor Force Participation

48,548
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.271

0%
Protected Area (% of land area)

-5,449.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.325

76.2%
Voter Participation

71.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.478

Communications Capacity

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.420

4.7%
Household Access to Fixed Phones

83%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.473

96.3%
Homes Served by the Public Electricity Network

61%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.642

22.7
Nurses and Midwives per 10,000 persons

27.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.377

46.6
Average Distance to Airport (km)

80.4
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 107 / 221 CANTONS ASSESSED **SCORE: 0.462**

Saraguro exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.477

2.5	8.6%	0.5	49
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.447

9.5	8.8	4.1	8.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 170 / 221 CANTONS ASSESSED
SCORE: 0.423

Saraguro's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Economic Constraints

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

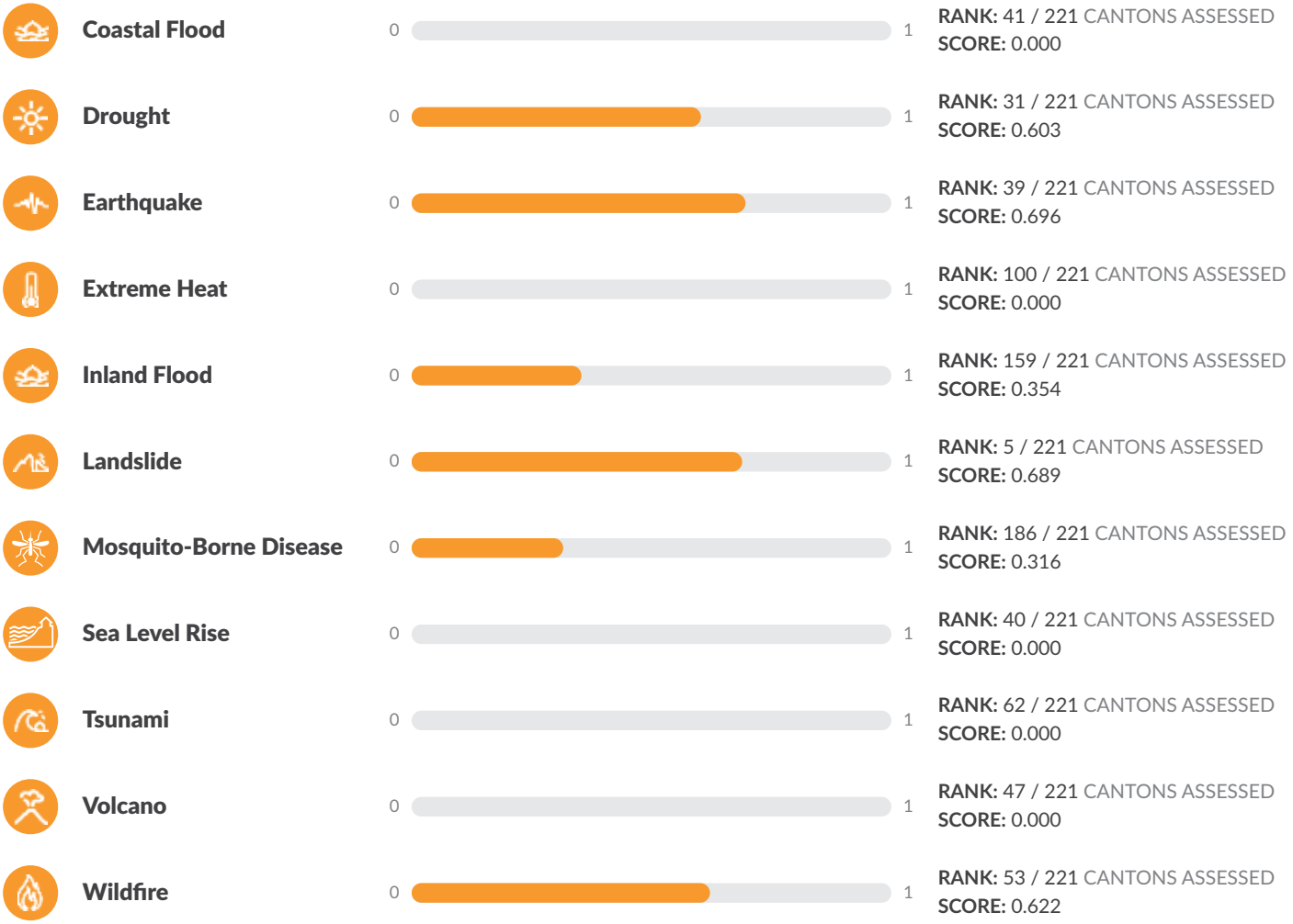
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

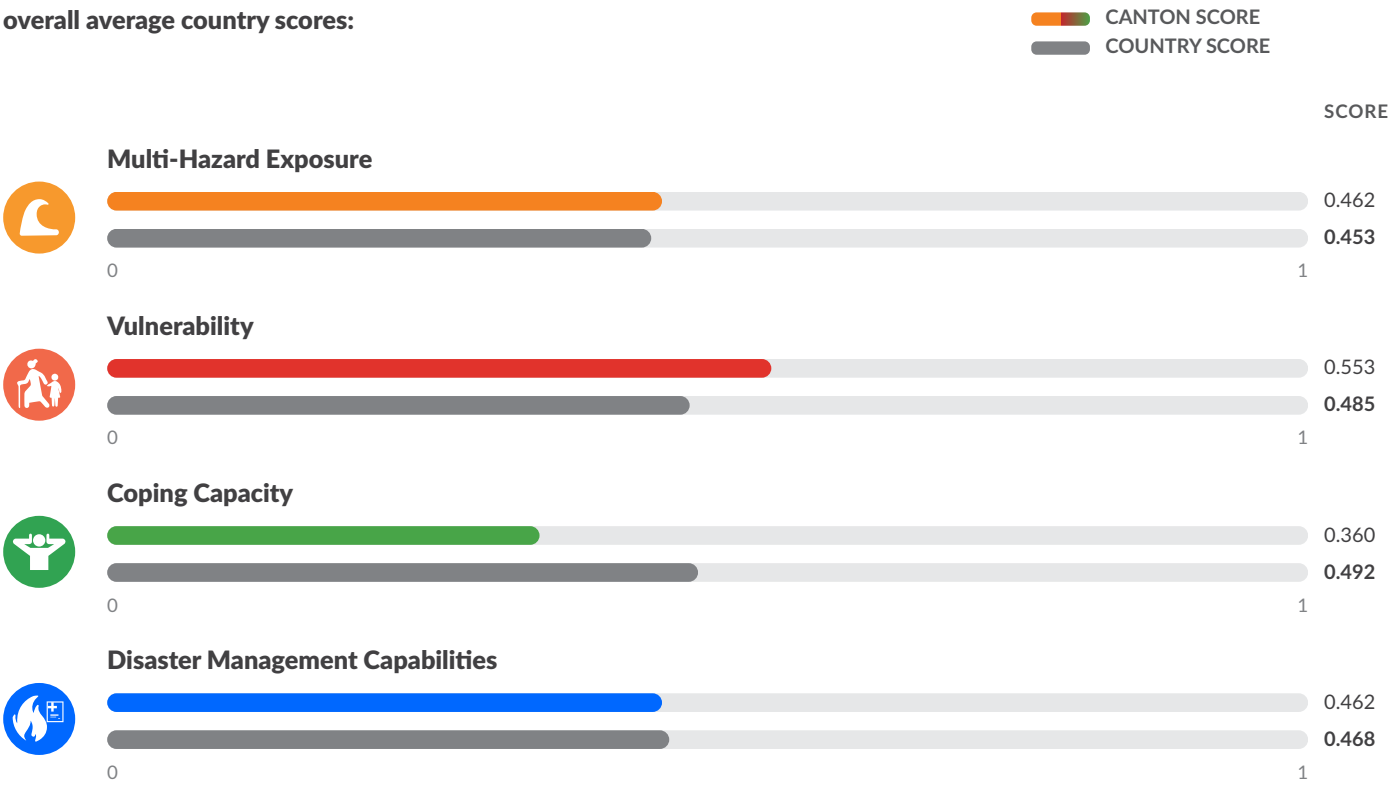


MULTI-HAZARD RISK (MHR)

RANKED
52 / 221
CANTONS ASSESSED
SCORE: 0.548

Saraguro's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SEVILLA DE ORO

NDPBA SUBNATIONAL PROFILE

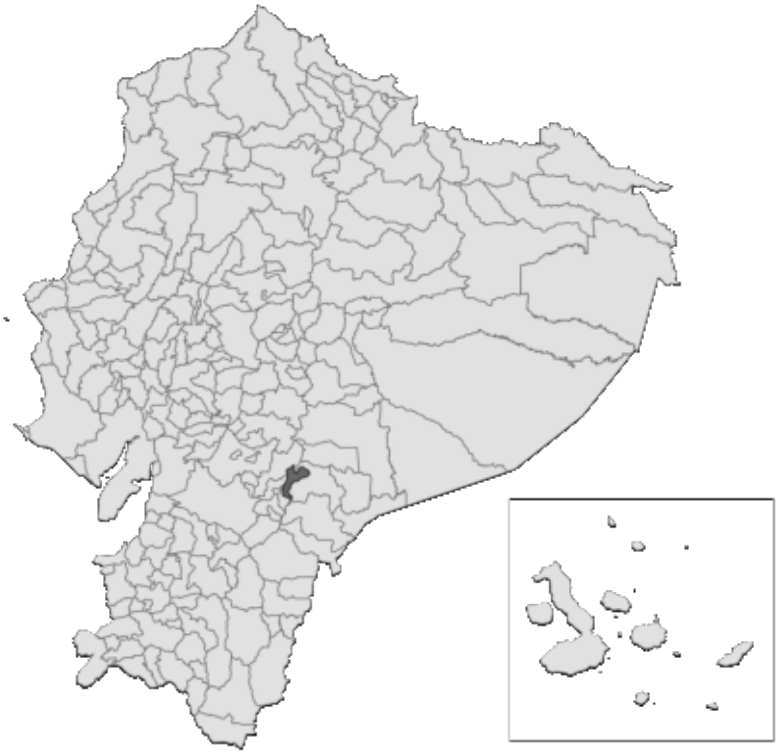
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ECUADOR

SEVILLA DE ORO

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.425 • RANK: 183/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.527 • RANK: 77/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.284 • RANK: 183/221 CANTONS ASSESSED

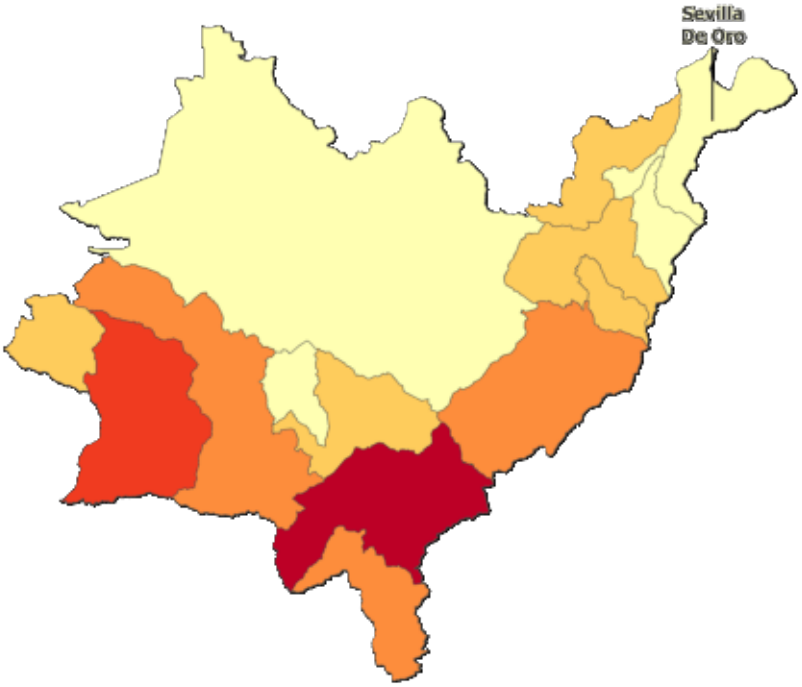
Vulnerability (V) - Very Low
SCORE: 0.359 • RANK: 206/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.558 • RANK: 64/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.383 • RANK: 169/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

SEVILLA DE ORO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	0.516
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	**0.425**
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 183 / 221 CANTONS ASSESSED
SCORE: 0.284



MHE
0.284

Raw MHE
0.253

Relative MHE
0.315

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
7,119 people exposed
5,074 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
0%
0 people exposed
1 structures exposed (<1%)
Critical Infrastructure Exposed: 0%

Landslide
95%
6,766 people exposed
4,911 structures exposed (97%)
Critical Infrastructure Exposed: 97%

Mosquito-Borne Disease
45%
3,213 people exposed
2,324 structures exposed (46%)
Critical Infrastructure Exposed: 41%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
7,119 people exposed
5,074 structures exposed (100%)
Critical Infrastructure Exposed: 96%

VULNERABILITY (V)

RANK: 206 / 221 CANTONS ASSESSED **SCORE: 0.359**

Vulnerability in Sevilla De Oro is primarily driven by Disaster Impacts and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.433

- **9.4** Average Years of Schooling
- **55.2%** Population (age 24 and over) with General Basic Education Schooling
- **4.9%** Population (age 24 and over) with No Schooling
- **3.3%** Adult Illiteracy Rate
- **28.8%** Households with No Internet Access
- **77%** Households with No Access to Television
- **66.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.251

- **88.4%** Homes with Access to Public Water Source
- **68.4%** Homes Connected to the Public Sewage System
- **15.4%** Homes without Piped Water
- **1.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.455

- **64** Age Dependency Ratio
- **10.5%** Unemployment Rate
- **26.8%** Poverty Rate (based on UBN)
- **1.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 199/221 CANTONS ASSESSED
SCORE: 0.265

- **1.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.276

- **0.2** Female to Male Labor Ratio (distance from parity)
- **10.4** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **64.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **37.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.446

- **10.5%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **15.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.125

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **19.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.568

140	19	23	39
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.303

11.1%	1.9%	17.8%	70.8%	1.8%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.203

14.6	-1.6	-9.3	0.26
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.520

0.1	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 64 / 221 CANTONS ASSESSED **SCORE: 0.558**

Sevilla De Oro exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.578

59.7%
Labor Force Participation

148,774
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 67/221 CANTONS ASSESSED
SCORE: 0.544

6.9%
Protected Area (% of land area)

-2,289.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.481

76.2%
Voter Participation

92.7%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.621

Communications Capacity

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.719

20.7%
Household Access to Fixed Phones

89.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.887

98.5%
Homes Served by the Public Electricity Network

91.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.535

17.3
Nurses and Midwives per 10,000 persons

19.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.343

38.6
Average Distance to Airport (km)

101.9
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 169 / 221 CANTONS ASSESSED **SCORE: 0.383**

Sevilla De Oro exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.366

3.1	4.4%	0	44.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.400

18.8	11.8	5.6	5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 77 / 221 CANTONS ASSESSED
SCORE: 0.527

Sevilla De Oro's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Mass Care Support

Emergency Services

Disaster Impacts

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

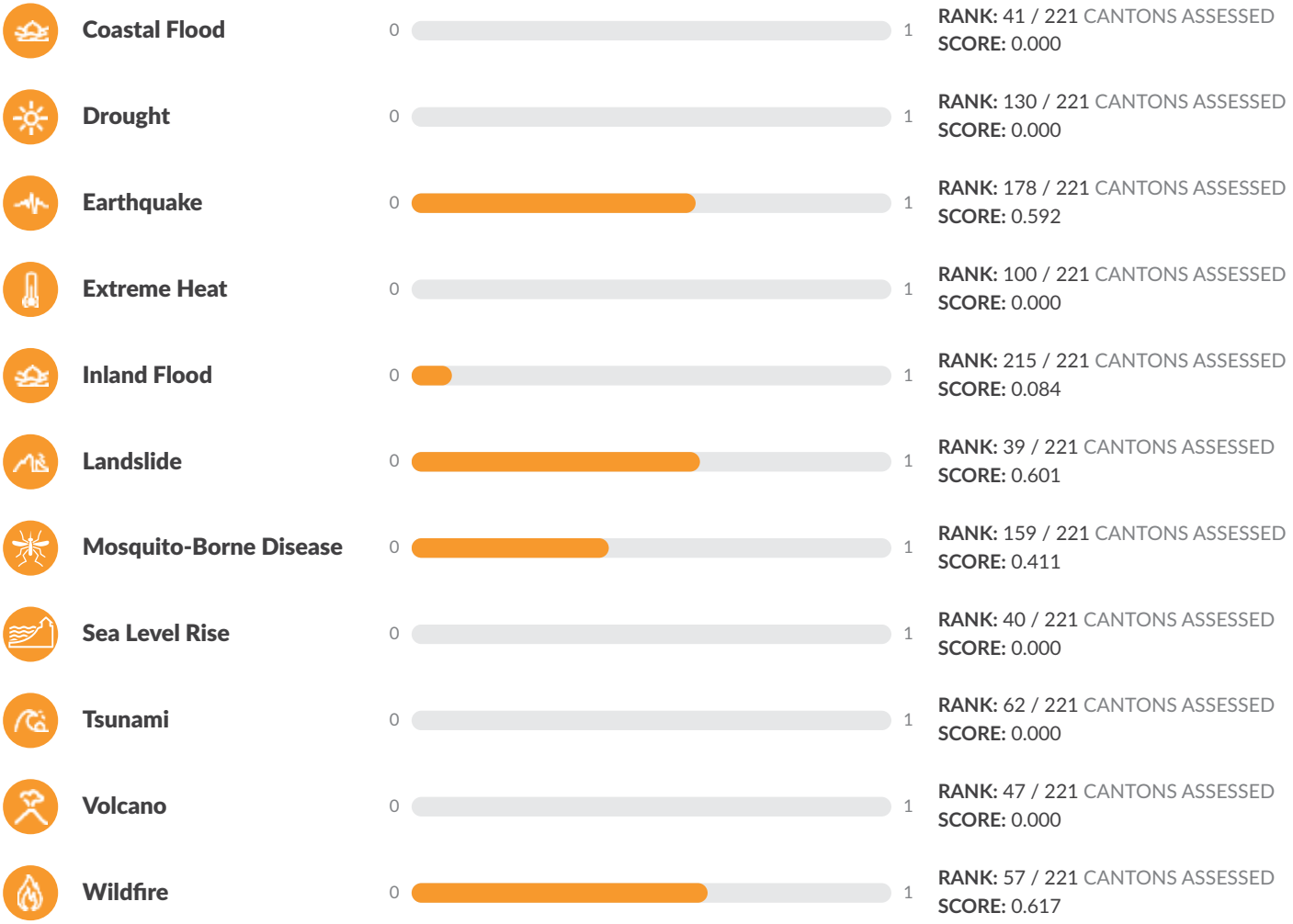
Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
183 / 221
CANTONS ASSESSED
SCORE: 0.425

Sevilla De Oro's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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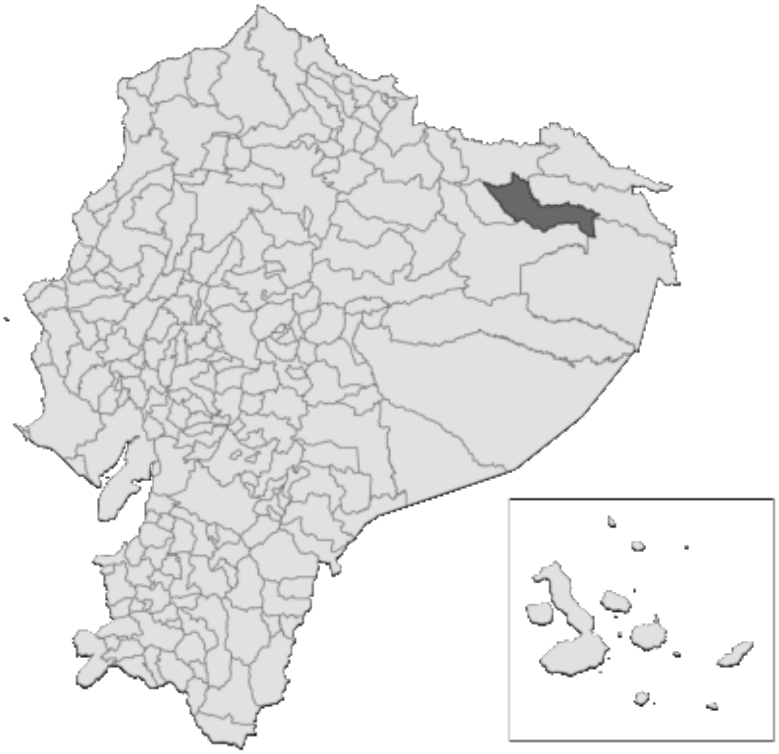
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PROVINCE: SUCUMBÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.531 • RANK: 72/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.507 • RANK: 88/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.503 • RANK: 92/221 CANTONS ASSESSED

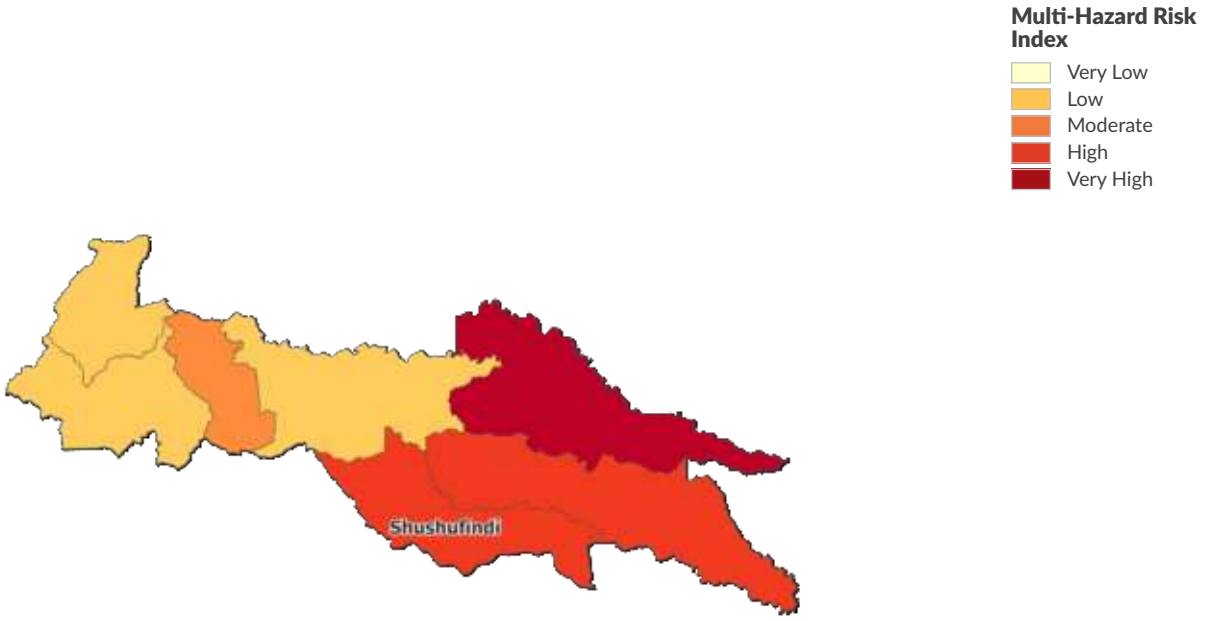
Coping Capacity (CC) - Very High
SCORE: 0.610 • RANK: 33/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.636 • RANK: 34/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.408 • RANK: 154/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SUCUMBÍOS PROVINCE

SHUSHUFINDI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Putumayo	0.567
Cuyabeno	0.539
Shushufindi	**0.531**
Cascales	0.485
Gonzalo Pizarro	0.468
Lago Agrio	0.461
Sucumbíos	0.445

MULTI-HAZARD EXPOSURE (MHE)

RANK: 34 / 221 CANTONS ASSESSED
SCORE: 0.636



MHE
0.636

Raw MHE
0.672

Relative MHE
0.600

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
62,659 people exposed
33,745 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
98%
61,365 people exposed
32,934 structures exposed (98%)
Critical Infrastructure Exposed: 97%

Inland Flood
46%
28,655 people exposed
17,370 structures exposed (51%)
Critical Infrastructure Exposed: 54%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
62,659 people exposed
33,743 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
82%
51,633 people exposed
28,496 structures exposed (84%)
Critical Infrastructure Exposed: 65%

VULNERABILITY (V)

RANK: 88 / 221 CANTONS ASSESSED **SCORE: 0.507**

Vulnerability in Shushufindi is primarily driven by Marginalization and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.422

- **10.3** Average Years of Schooling
- **40.9%** Population (age 24 and over) with General Basic Education Schooling
- **4.6%** Population (age 24 and over) with No Schooling
- **3.6%** Adult Illiteracy Rate
- **48.7%** Households with No Internet Access
- **71.9%** Households with No Access to Television
- **78.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 77/221 CANTONS ASSESSED
SCORE: 0.592

- **65.3%** Homes with Access to Public Water Source
- **39%** Homes Connected to the Public Sewage System
- **44%** Homes without Piped Water
- **5.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.595

- **55.3** Age Dependency Ratio
- **25.6%** Unemployment Rate
- **61.5%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.962

- **21.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.656

- **0.5** Female to Male Labor Ratio (distance from parity)
- **70.7** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **93.2%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **52.8%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.429

- **5.4%** Prevalence of Disability (among persons age 5 and over)
- **5.2** Perinatal Mortality Rate (per 1,000 births)
- **5.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.464

- **17.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.2** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **31.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.530

21	20	50	43
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.493

17.4%	0.4%	21.2%	85.7%	9.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.561

20.3	1.4%	32	0.31
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.238

0.1	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 33 / 221 CANTONS ASSESSED **SCORE: 0.610**

Shushufindi exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.708

57.2%
Labor Force Participation

1,582,127
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 1/221 CANTONS ASSESSED
SCORE: 0.891

35.3%
Protected Area (% of land area)

39,116.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.519

86.5%
Voter Participation

76%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.509

Communications Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.493

7.7%
Household Access to Fixed Phones

83.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.489

93.7%
Homes Served by the Public Electricity Network

72.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.441

14.8
Nurses and Midwives per 10,000 persons

13
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.611

12.1
Average Distance to Airport (km)

20.5
Average Distance to Sea or River Port (km)

0.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 154 / 221 CANTONS ASSESSED **SCORE: 0.408**

Shushufindi exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.402

6.1	4.8%	0.6	42.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.414

13.5	11.9	4.7	6.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 92 / 221 CANTONS ASSESSED
SCORE: 0.503

Shushufindi's score and ranking are due to High Vulnerability combined with Very High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Marginalization



Mass Care Support



Economic Constraints



Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

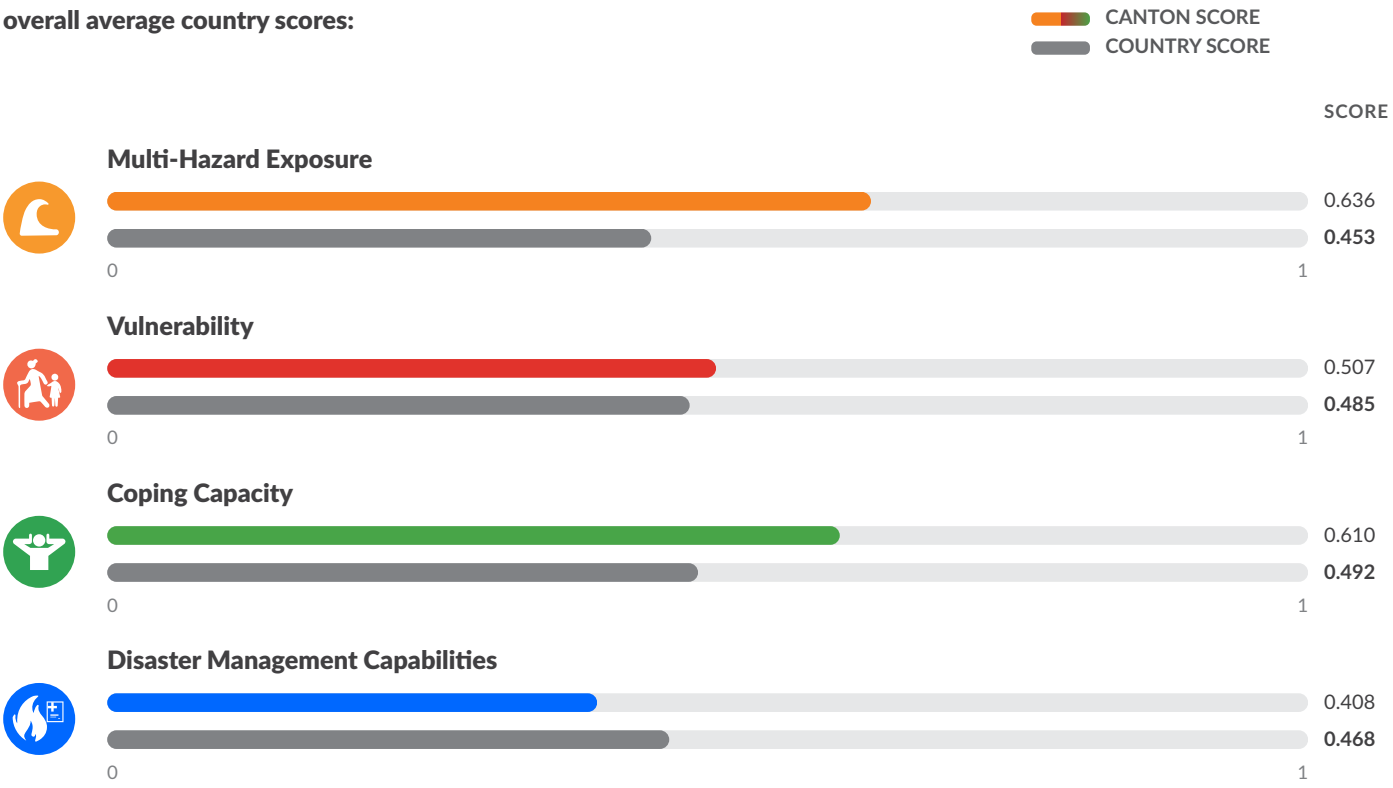
Coastal Flood	0 — 1	**RANK:** 41 / 221 CANTONS ASSESSED	**SCORE:** 0.000
Drought	0 — 1	**RANK:** 130 / 221 CANTONS ASSESSED	**SCORE:** 0.000
Earthquake	0 — 1	**RANK:** 96 / 221 CANTONS ASSESSED	**SCORE:** 0.655
Extreme Heat	0 — 1	**RANK:** 29 / 221 CANTONS ASSESSED	**SCORE:** 0.640
Inland Flood	0 — 1	**RANK:** 22 / 221 CANTONS ASSESSED	**SCORE:** 0.621
Landslide	0 — 1	**RANK:** 195 / 221 CANTONS ASSESSED	**SCORE:** 0.000
Mosquito-Borne Disease	0 — 1	**RANK:** 56 / 221 CANTONS ASSESSED	**SCORE:** 0.664
Sea Level Rise	0 — 1	**RANK:** 40 / 221 CANTONS ASSESSED	**SCORE:** 0.000
Tsunami	0 — 1	**RANK:** 62 / 221 CANTONS ASSESSED	**SCORE:** 0.000
Volcano	0 — 1	**RANK:** 47 / 221 CANTONS ASSESSED	**SCORE:** 0.000
Wildfire	0 — 1	**RANK:** 91 / 221 CANTONS ASSESSED	**SCORE:** 0.572

MULTI-HAZARD RISK (MHR)

RANKED
72 / 221
CANTONS ASSESSED
SCORE: 0.531

Shushufindi's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, Very High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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SIGCHOS

NDPBA SUBNATIONAL PROFILE

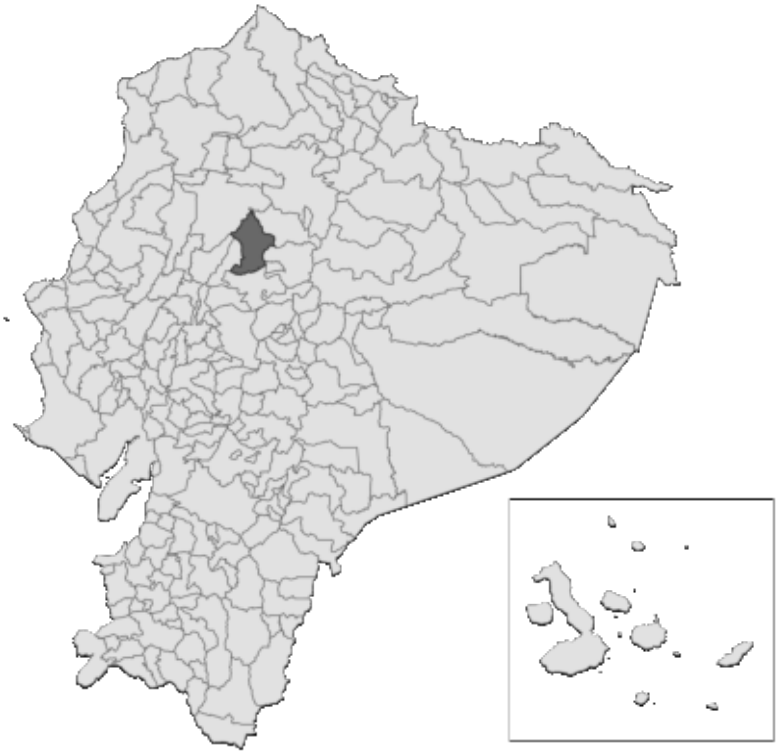
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ECUADOR

SIGCHOS

PROVINCE: COTOPAXI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.585 • RANK: 27/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.623 • RANK: 11/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.371 • RANK: 202/221 CANTONS ASSESSED

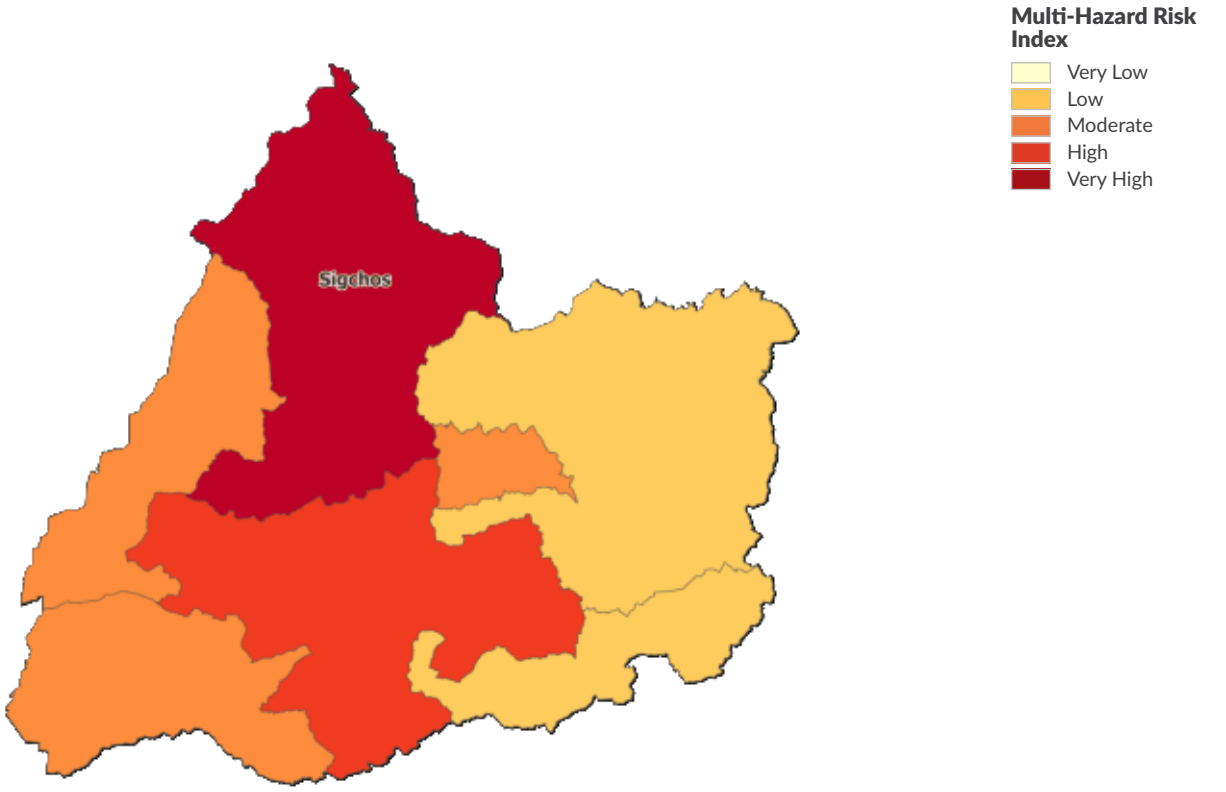
Coping Capacity (CC) - Very Low
SCORE: 0.355 • RANK: 198/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.452 • RANK: 107/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.381 • RANK: 171/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN COTOPAXI PROVINCE

SIGCHOS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sigchos	**0.585**
Pujilí	0.541
Saquisilí	0.490
Pangua	0.486
La Maná	0.475
Salcedo	0.460
Latacunga	0.440

MULTI-HAZARD EXPOSURE (MHE)

RANK: 107 / 221 CANTONS ASSESSED
SCORE: 0.452



MHE
0.452

Raw MHE
0.519

Relative MHE
0.386

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
10%
- **2,656** people exposed
- **1,925** structures exposed (9%)

Critical Infrastructure Exposed: 7%

Earthquake
100%
- **26,235** people exposed
- **20,627** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
2%
- **558** people exposed
- **569** structures exposed (3%)

Critical Infrastructure Exposed: 3%

Landslide
97%
- **25,337** people exposed
- **20,062** structures exposed (97%)

Critical Infrastructure Exposed: 97%

Mosquito-Borne Disease
10%
- **2,704** people exposed
- **2,436** structures exposed (12%)

Critical Infrastructure Exposed: 10%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
54%
- **14,119** people exposed
- **10,003** structures exposed (48%)

Critical Infrastructure Exposed: 46%

Wildfire
99%
- **26,043** people exposed
- **20,475** structures exposed (99%)

Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 11 / 221 CANTONS ASSESSED **SCORE: 0.623**

Vulnerability in Sigchos is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.813

- **6.8** Average Years of Schooling
- **46.8%** Population (age 24 and over) with General Basic Education Schooling
- **23%** Population (age 24 and over) with No Schooling
- **18.1%** Adult Illiteracy Rate
- **74.7%** Households with No Internet Access
- **94.9%** Households with No Access to Television
- **90.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.702

- **65.4%** Homes with Access to Public Water Source
- **25.8%** Homes Connected to the Public Sewage System
- **68.7%** Homes without Piped Water
- **6.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.738

- **68.4** Age Dependency Ratio
- **12.4%** Unemployment Rate
- **82.5%** Poverty Rate (based on UBN)
- **6.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.551

- **5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.558

- **0.4** Female to Male Labor Ratio (distance from parity)
- **28.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **95.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **76%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.572

- **12.3%** Prevalence of Disability (among persons age 5 and over)
- **19.4** Perinatal Mortality Rate (per 1,000 births)
- **7.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.308

- **2.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.8** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.423

23	15	22	51
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.681

25.2%	0.4%	29.5%	93.3%	17.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.354

13.6	-1.5	0.3	0.33
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.578

0.4	0.3	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 198 / 221 CANTONS ASSESSED **SCORE: 0.355**

Sigchos exhibits weaker Coping Capacity in the areas of Governance and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.303

50.2%
Labor Force Participation

23,676
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.649

45.4%
Protected Area (% of land area)

-8,220.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 203/221 CANTONS ASSESSED
SCORE: 0.273

80.8%
Voter Participation

41.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.390

Communications Capacity

0 — 1

RANK: 191/221 CANTONS ASSESSED
SCORE: 0.325

4.2%
Household Access to Fixed Phones

74%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 211/221 CANTONS ASSESSED
SCORE: 0.277

90.8%
Homes Served by the Public Electricity Network

45.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 69/221 CANTONS ASSESSED
SCORE: 0.573

19.5
Nurses and Midwives per 10,000 persons

21.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.383

35.8
Average Distance to Airport (km)

79.6
Average Distance to Sea or River Port (km)

0.7
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 171 / 221 CANTONS ASSESSED **SCORE: 0.381**

Sigchos exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.405

6.7	6.8%	1.6	101.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.358

13.4	14	5.1	10.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 202 / 221 CANTONS ASSESSED
SCORE: 0.371

Sigchos's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Information Access Vulnerability

Economic Constraints

Governance

Energy Capacity

KEY FACTORS INFLUENCING RESILIENCE

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

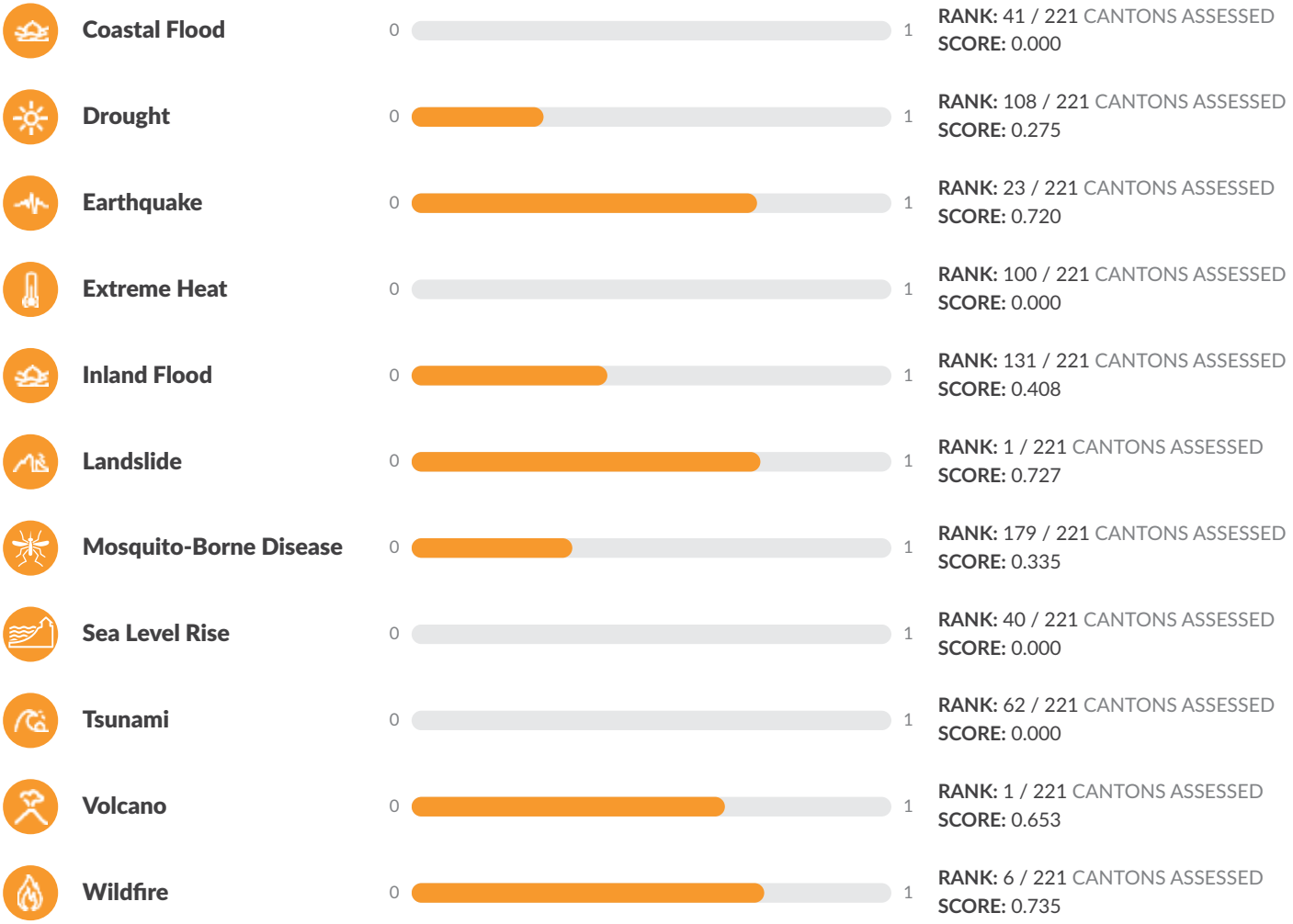
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

HAZARD-SPECIFIC RISK (HSR)

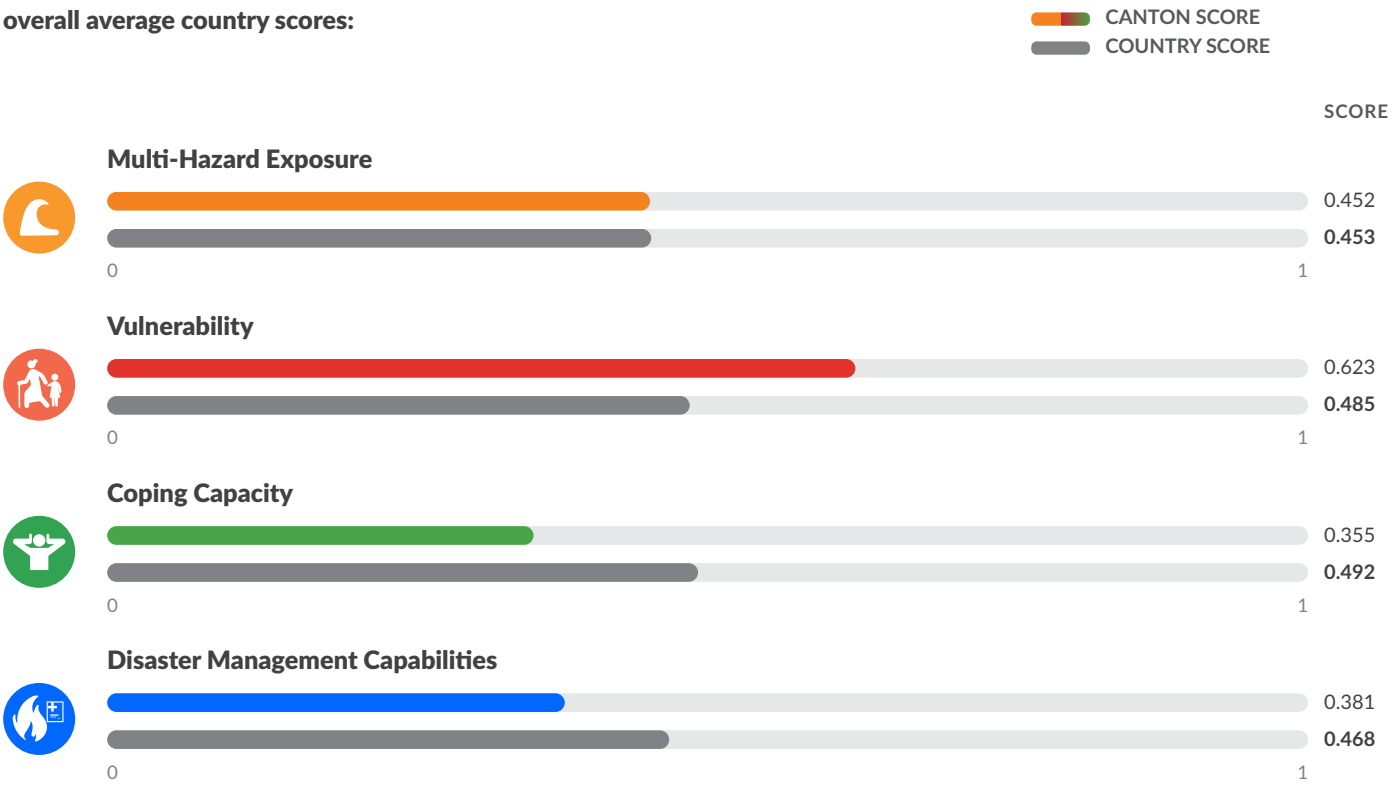


MULTI-HAZARD RISK (MHR)

RANKED
27 / 221
CANTONS ASSESSED
SCORE: 0.585

Sigchos's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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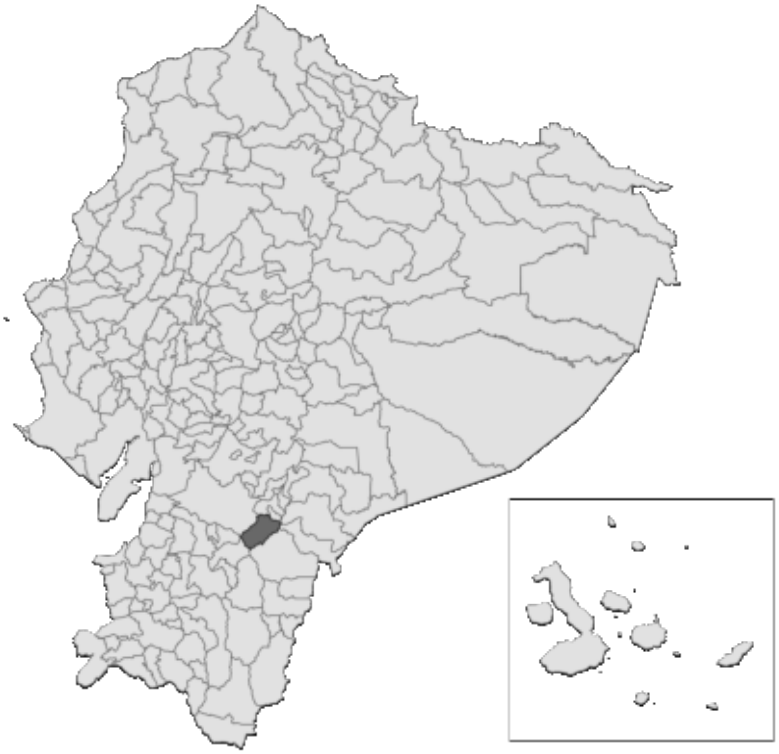
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SÍGSIG

PROVINCE: AZUAY



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.516 • RANK: 90/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.478 • RANK: 122/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.468 • RANK: 134/221 CANTONS ASSESSED

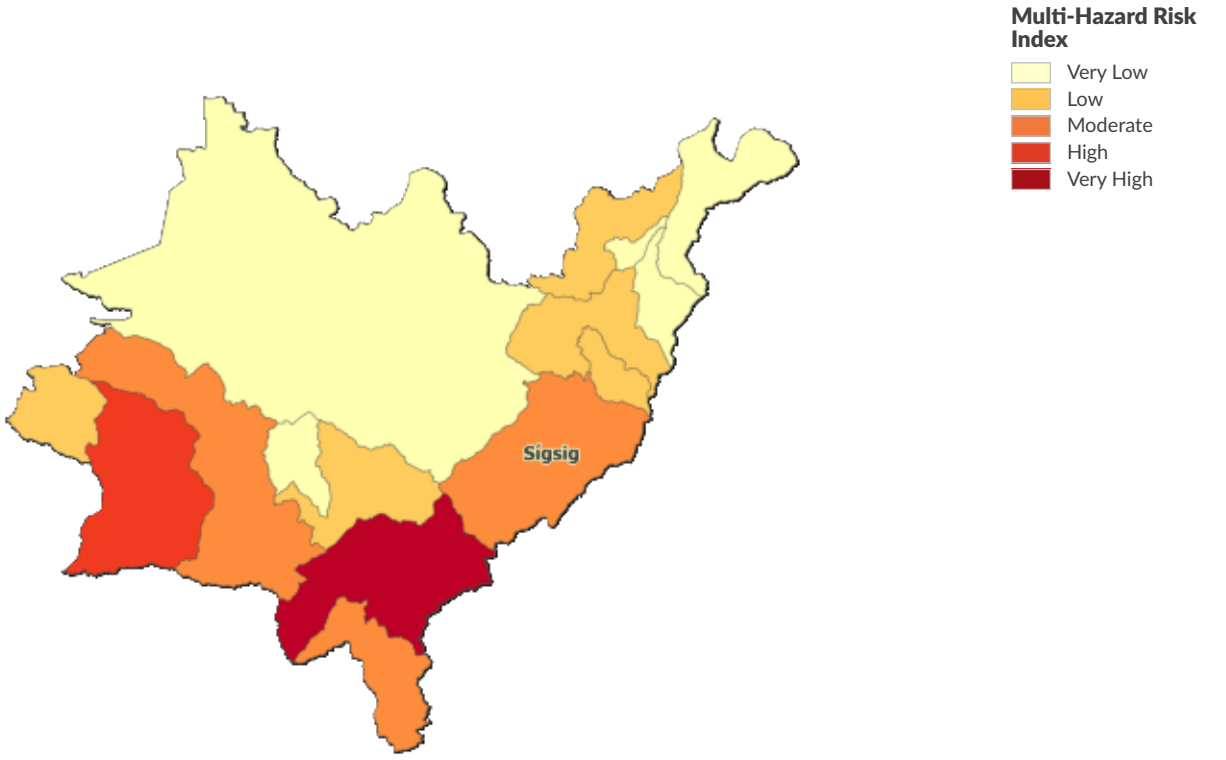
Coping Capacity (CC) - Low
SCORE: 0.426 • RANK: 159/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.469 • RANK: 96/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.456 • RANK: 112/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN AZUAY PROVINCE

SÍGSIG • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Nabón	0.574
Pucará	0.539
Sígsig	**0.516**
Santa Isabel	0.508
Oña	0.481
Gualaceo	0.469
Paute	0.461
Girón	0.457
Camilo Ponce Enríquez	0.455
Chordeleg	0.430
Sevilla De Oro	0.425
Cuenca	0.417
El Pan	0.407
San Fernando	0.394
Guachapala	0.385

MULTI-HAZARD EXPOSURE (MHE)

RANK: 96 / 221 CANTONS ASSESSED
SCORE: 0.469



MHE
0.469

Raw MHE
0.566

Relative MHE
0.372

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Drought
75%
- **24,312** people exposed
- **19,786** structures exposed (67%)
- **Critical Infrastructure Exposed:** 69%

Earthquake
100%
- **32,580** people exposed
- **29,482** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Inland Flood
2%
- **589** people exposed
- **618** structures exposed (2%)
- **Critical Infrastructure Exposed:** 7%

Landslide
93%
- **30,439** people exposed
- **27,142** structures exposed (92%)
- **Critical Infrastructure Exposed:** 91%

Mosquito-Borne Disease
8%
- **2,490** people exposed
- **2,117** structures exposed (7%)
- **Critical Infrastructure Exposed:** 59%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
86%
- **27,899** people exposed
- **25,753** structures exposed (87%)
- **Critical Infrastructure Exposed:** 76%

VULNERABILITY (V)

RANK: 122 / 221 CANTONS ASSESSED **SCORE: 0.478**

Vulnerability in Sígsig is primarily driven by Information Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.590

- **7.7** Average Years of Schooling
- **61.5%** Population (age 24 and over) with General Basic Education Schooling
- **7.5%** Population (age 24 and over) with No Schooling
- **6.9%** Adult Illiteracy Rate
- **36.5%** Households with No Internet Access
- **78.5%** Households with No Access to Television
- **79.1%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.466

- **90.5%** Homes with Access to Public Water Source
- **32.6%** Homes Connected to the Public Sewage System
- **41.4%** Homes without Piped Water
- **2.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.518

- **69.4** Age Dependency Ratio
- **7.4%** Unemployment Rate
- **52.4%** Poverty Rate (based on UBN)
- **1.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.339

- **2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.434

- **0.2** Female to Male Labor Ratio (distance from parity)
- **51.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **70.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **53.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.546

- **12.8%** Prevalence of Disability (among persons age 5 and over)
- **3.4** Perinatal Mortality Rate (per 1,000 births)
- **10.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 128/221 CANTONS ASSESSED
SCORE: 0.322

- **0.9** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **32.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.550

71	19	43	27
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.528

15.4%	7.1%	23.2%	85.4%	6.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.347

36.9	-0.5	-7.6	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.417

0.4	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 159 / 221 CANTONS ASSESSED **SCORE: 0.426**

Sígsig exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.470

59.7% Labor Force Participation	**33,075** Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.272

0% Protected Area (% of land area)	**-5,460.4** Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.289

73.3% Voter Participation	**72.3%** Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.569

Communications Capacity

0 — 1

RANK: 70/221 CANTONS ASSESSED
SCORE: 0.618

12.7% Household Access to Fixed Phones	**87.3%** Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.726

97.4% Homes Served by the Public Electricity Network	**85.8%** Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.542

16 Nurses and Midwives per 10,000 persons	**22** Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.392

27.5 Average Distance to Airport (km)	**118.1** Average Distance to Sea or River Port (km)	**1.3** Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 112 / 221 CANTONS ASSESSED **SCORE: 0.456**

Sígsig exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.449

4	2.6%	0.7	26.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.464

9.4	9.3	3.2	9.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 134 / 221 CANTONS ASSESSED
SCORE: 0.468

Sígsig's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Transportation Capacity

Information Access Vulnerability

Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

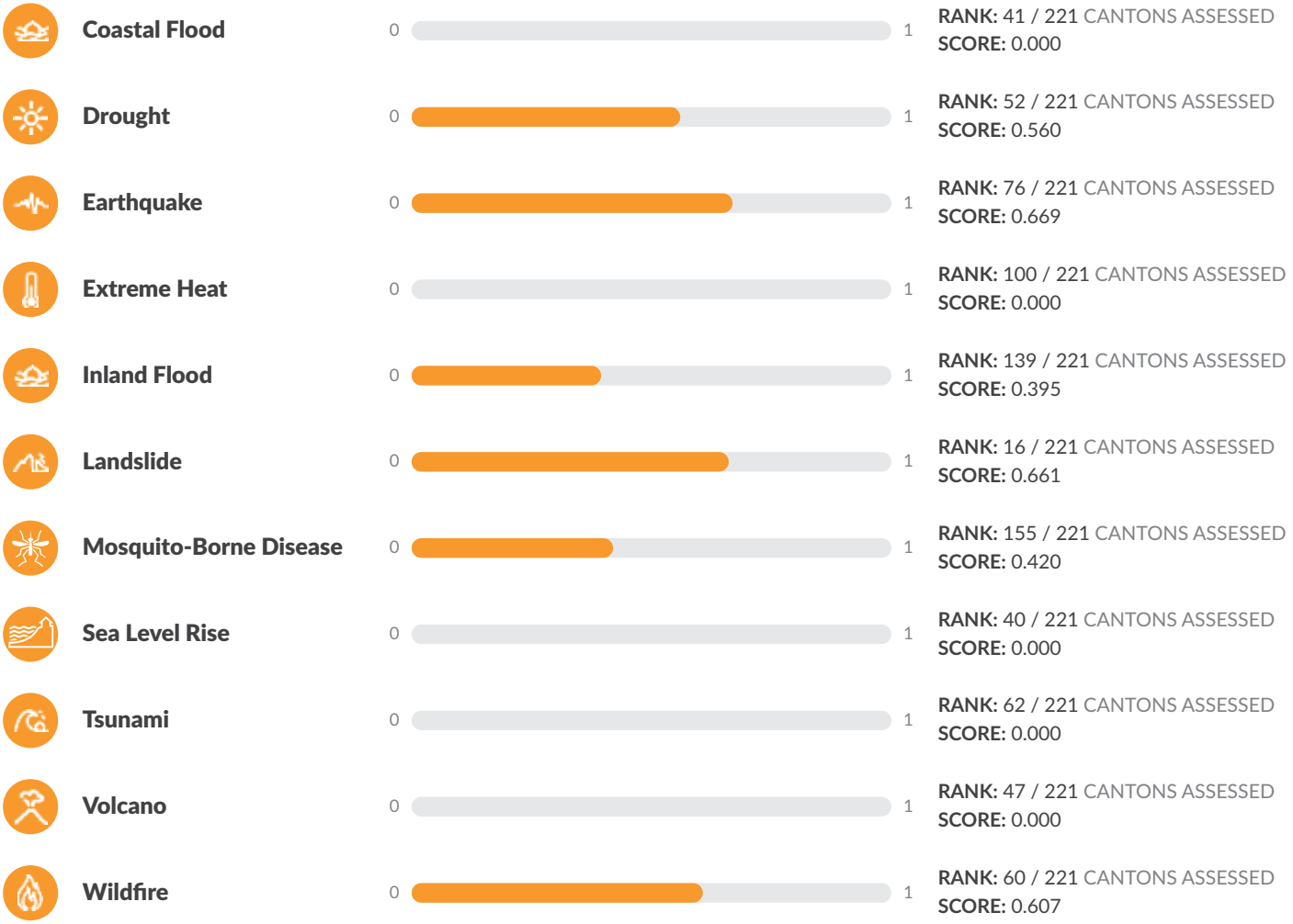
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

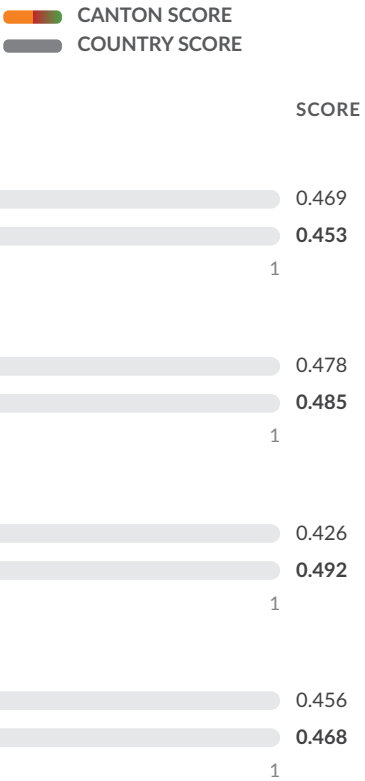


MULTI-HAZARD RISK (MHR)

RANKED
90 / 221
CANTONS ASSESSED
SCORE: 0.516

Sígsig's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

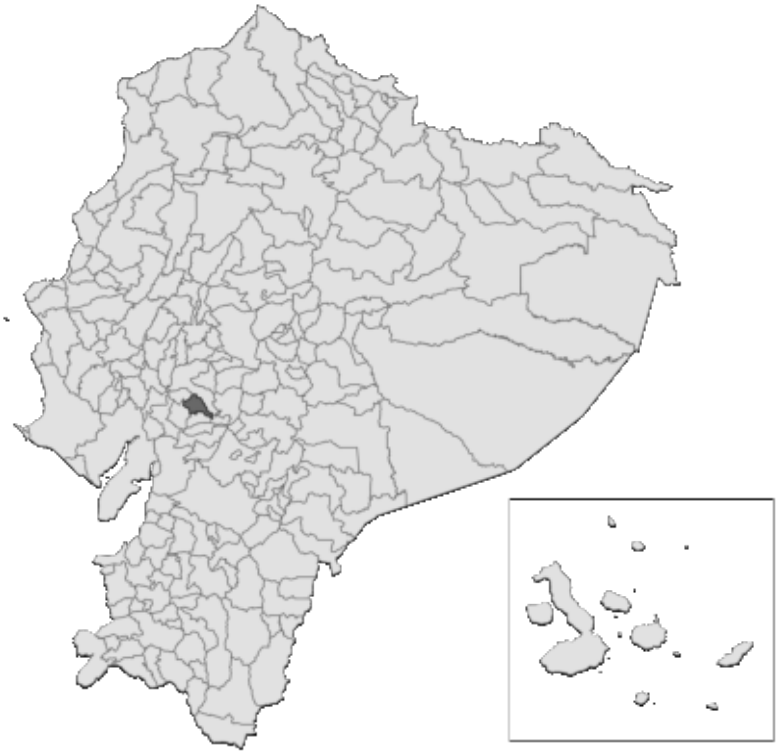
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SIMÓN BOLÍVAR

PROVINCE: GUAYAS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.536 • RANK: 66/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.570 • RANK: 36/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.423 • RANK: 170/221 CANTONS ASSESSED

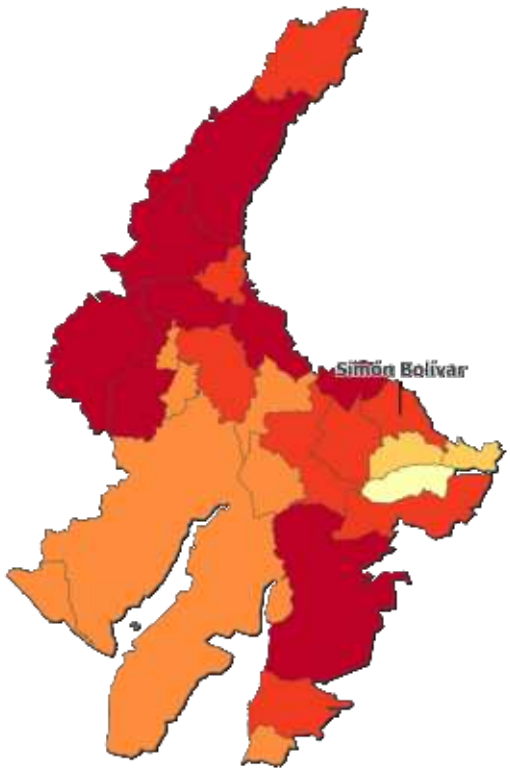
Coping Capacity (CC) - Moderate
SCORE: 0.466 • RANK: 129/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.413 • RANK: 128/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.374 • RANK: 177/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN GUAYAS PROVINCE

SIMÓN BOLÍVAR • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Salitre	0.617
Colimes	0.611
Pedro Carbo	0.611
Alfredo Baquerizo Moreno (Juján)	0.590
Naranjal	0.590
Balzar	0.576
Santa Lucía	0.575
Isidro Ayora	0.569
El Empalme	0.562
San Jacinto De Yaguachi	0.561
Palestina	0.554
El Triunfo	0.543
Balao	0.539
Daule	0.537
Simón Bolívar	**0.536**
Milagro	0.524
Lomas De Sargentillo	0.519
Nobol	0.517
Durán	0.502
Playas	0.497
Samborondón	0.484
Guayaquil	0.483
General Antonio Elizalde	0.453
Naranjito	0.449
Coronel Marcelino Maridueña	0.428

MULTI-HAZARD EXPOSURE (MHE)

RANK: 128 / 221 CANTONS ASSESSED
SCORE: 0.413



MHE
0.413

Raw MHE
0.499

Relative MHE
0.327

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
<1%
38 people exposed
25 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Earthquake
100%
30,830 people exposed
14,252 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
86%
26,607 people exposed
11,875 structures exposed (83%)
Critical Infrastructure Exposed: 88%

Inland Flood
72%
22,247 people exposed
10,323 structures exposed (72%)
Critical Infrastructure Exposed: 62%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
30,830 people exposed
14,252 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
5%
1,590 people exposed
733 structures exposed (5%)
Critical Infrastructure Exposed: 4%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
7%
2,152 people exposed
1,412 structures exposed (10%)
Critical Infrastructure Exposed: 7%

VULNERABILITY (V)

RANK: 36 / 221 CANTONS ASSESSED **SCORE: 0.570**

Vulnerability in Simón Bolívar is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.617

- **9.1** Average Years of Schooling
- **54.1%** Population (age 24 and over) with General Basic Education Schooling
- **5.7%** Population (age 24 and over) with No Schooling
- **5.2%** Adult Illiteracy Rate
- **57.6%** Households with No Internet Access
- **89.4%** Households with No Access to Television
- **89.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.723

- **49.2%** Homes with Access to Public Water Source
- **3.5%** Homes Connected to the Public Sewage System
- **52.5%** Homes without Piped Water
- **4.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.526

- **58.6** Age Dependency Ratio
- **11.4%** Unemployment Rate
- **72%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.777

- **11.5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.695

- **0.5** Female to Male Labor Ratio (distance from parity)
- **57.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **83.6%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **80.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.500

- **9.6%** Prevalence of Disability (among persons age 5 and over)
- **5.3** Perinatal Mortality Rate (per 1,000 births)
- **6.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.523

- **21.2** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **11.5** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **3.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.426

22 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**22** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**38** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**10** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.624

19.9% Homes with Exterior Walls in Poor Condition	**11.7%** Homes with Inadequate Materials Used in Outer Walls	**25.9%** Homes with Roofs in Poor Condition	**90.7%** Households with No Access to Vehicle for Private Use	**7.7%** Household Overcrowding

Population Pressures

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.518

101.3 Population Density (persons per sq km)	**1.3%** Average Annual Population Change (2010-2022)	**16.7** Net Migration Rate (per 1,000 persons)	**0.29** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.322

0.3 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 129 / 221 CANTONS ASSESSED **SCORE: 0.466**

Simón Bolívar exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.499

58.9%
Labor Force Participation

59,508
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.321

0%
Protected Area (% of land area)

-2,132.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.578

88.1%
Voter Participation

80.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.370

Communications Capacity

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.168

1.8%
Household Access to Fixed Phones

68.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.434

93.9%
Homes Served by the Public Electricity Network

64.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.214

8.5
Nurses and Midwives per 10,000 persons

5.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.662

15.7
Average Distance to Airport (km)

31
Average Distance to Sea or River Port (km)

2.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 177 / 221 CANTONS ASSESSED **SCORE: 0.374**

Simón Bolívar exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.302

4	1.9%	0	49.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.446

15.8	4.9	3.2	13.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 170 / 221 CANTONS ASSESSED
SCORE: 0.423

Simón Bolívar's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Communications Capacity



Healthcare Capacity



Clean Water Access Vulnerability



Mass Care Support

KEY FACTORS INFLUENCING RESILIENCE



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Clean Water Access Vulnerability

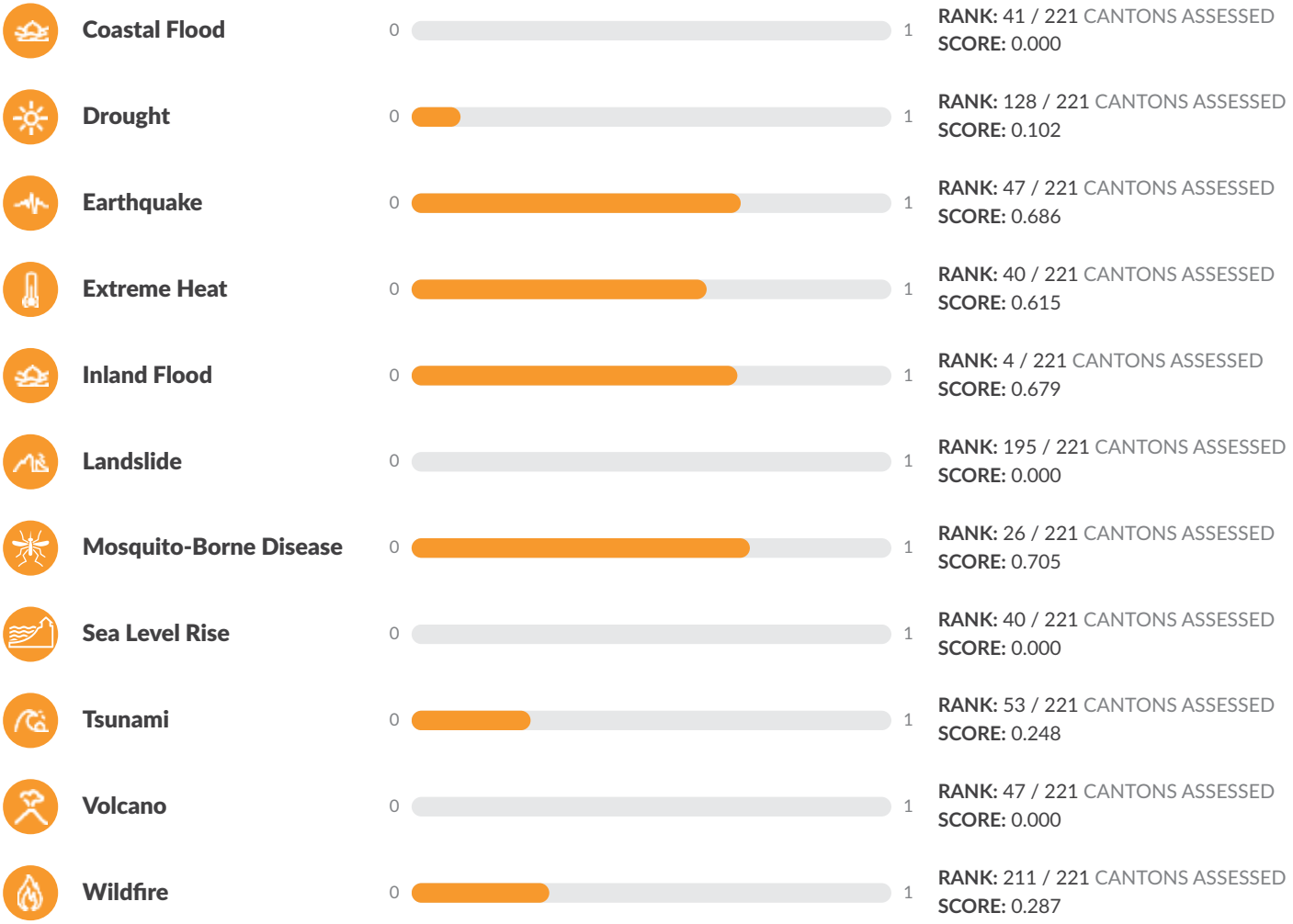
Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

HAZARD-SPECIFIC RISK (HSR)

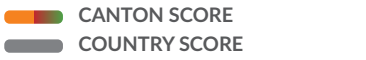


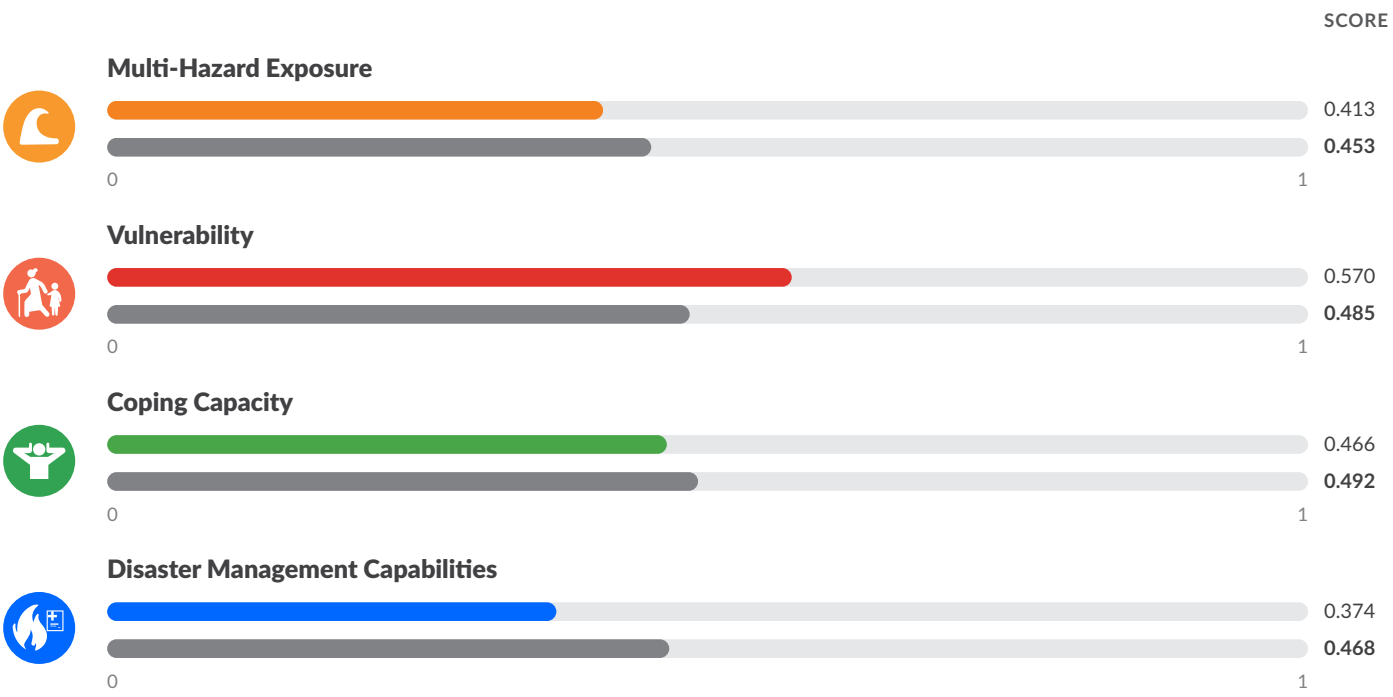
MULTI-HAZARD RISK (MHR)

RANKED
66 / 221
CANTONS ASSESSED
SCORE: 0.536

Simón Bolívar's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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SOZORANGA

NDPBA SUBNATIONAL PROFILE

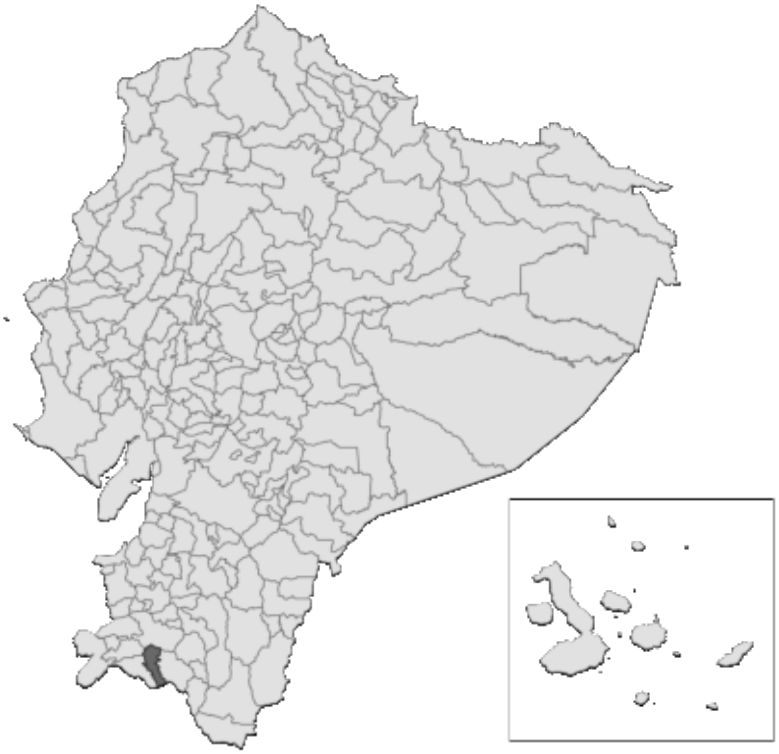
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SOZORANGA

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.590 • RANK: 21/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.561 • RANK: 45/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.353 • RANK: 210/221 CANTONS ASSESSED

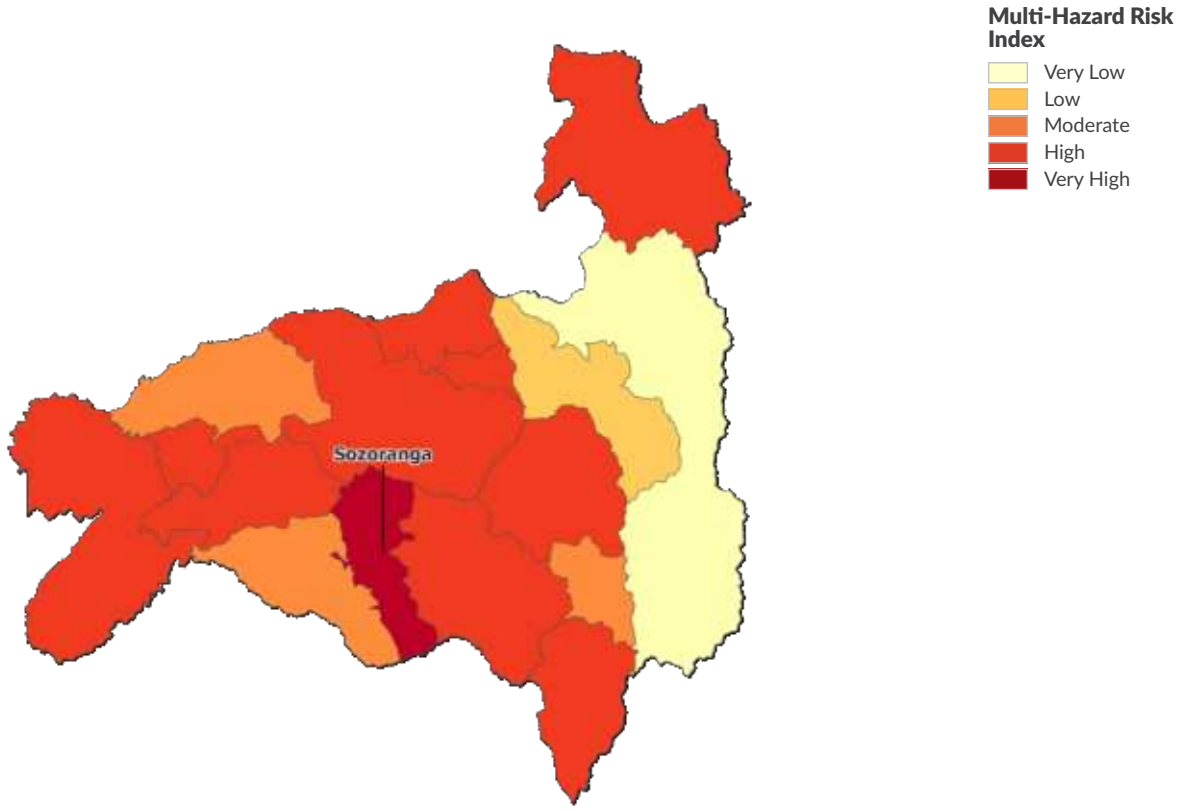
Coping Capacity (CC) - Very Low
SCORE: 0.248 • RANK: 220/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.418 • RANK: 124/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.371 • RANK: 180/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

SOZORANGA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	**0.590**
Espíndola	0.548
Saraguro	0.548
Zapotillo	0.546
Gonzanamá	0.544
Calvas	0.536
Paltas	0.532
Pindal	0.528
Chaguarpamba	0.524
Olmedo	0.521
Celica	0.520
Quilanga	0.494
Puyango	0.493
Macará	0.492
Catamayo	0.467
Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 124 / 221 CANTONS ASSESSED
SCORE: 0.418



MHE
0.418

Raw MHE
0.330

Relative MHE
0.506

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
100%
- **8,362** people exposed
- **5,974** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **8,362** people exposed
- **5,974** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
<1%
- **60** people exposed
- **20** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Landslide
92%
- **7,721** people exposed
- **5,526** structures exposed (93%)

Critical Infrastructure Exposed: 98%

Mosquito-Borne Disease
53%
- **4,398** people exposed
- **3,135** structures exposed (52%)

Critical Infrastructure Exposed: 31%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
94%
- **7,846** people exposed
- **5,724** structures exposed (96%)

Critical Infrastructure Exposed: 94%

VULNERABILITY (V)

RANK: 45 / 221 CANTONS ASSESSED **SCORE: 0.561**

Vulnerability in Sozoranga is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.639

- **8.2** Average Years of Schooling
- **71.4%** Population (age 24 and over) with General Basic Education Schooling
- **3.5%** Population (age 24 and over) with No Schooling
- **4.2%** Adult Illiteracy Rate
- **61.9%** Households with No Internet Access
- **85%** Households with No Access to Television
- **89.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.679

- **55.8%** Homes with Access to Public Water Source
- **24.2%** Homes Connected to the Public Sewage System
- **53.7%** Homes without Piped Water
- **5.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.790

- **77.7** Age Dependency Ratio
- **22.8%** Unemployment Rate
- **78.3%** Poverty Rate (based on UBN)
- **2.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 104/221 CANTONS ASSESSED
SCORE: 0.536

- **4.7%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.552

- **0.6** Female to Male Labor Ratio (distance from parity)
- **26.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **66.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **80%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.525

- **10%** Prevalence of Disability (among persons age 5 and over)
- **17.9** Perinatal Mortality Rate (per 1,000 births)
- **7.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.128

- **4.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **4.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.507

172	16	37	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.622

22.2%	2.2%	24.2%	91.3%	12.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 208/221 CANTONS ASSESSED
SCORE: 0.332

16.5	-0.6	3.4	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.350

0.2	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 220 / 221 CANTONS ASSESSED **SCORE: 0.248**

Sozoranga exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.129

41.9%
Labor Force Participation

9,548
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.295

0%
Protected Area (% of land area)

-3,882.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.138

73.4%
Voter Participation

31.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.461

Communications Capacity

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.566

26%
Household Access to Fixed Phones

70.7%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.376

95.7%
Homes Served by the Public Electricity Network

46.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 103/221 CANTONS ASSESSED
SCORE: 0.480

12.9
Nurses and Midwives per 10,000 persons

18.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.424

21.4
Average Distance to Airport (km)

106
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 180 / 221 CANTONS ASSESSED **SCORE: 0.371**

Sozoranga exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.390

3.6	20.8%	0	74.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.353

20.2	9.7	5.8	9.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 210 / 221 CANTONS ASSESSED
SCORE: 0.353

Sozoranga's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Governance

Economic Constraints

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

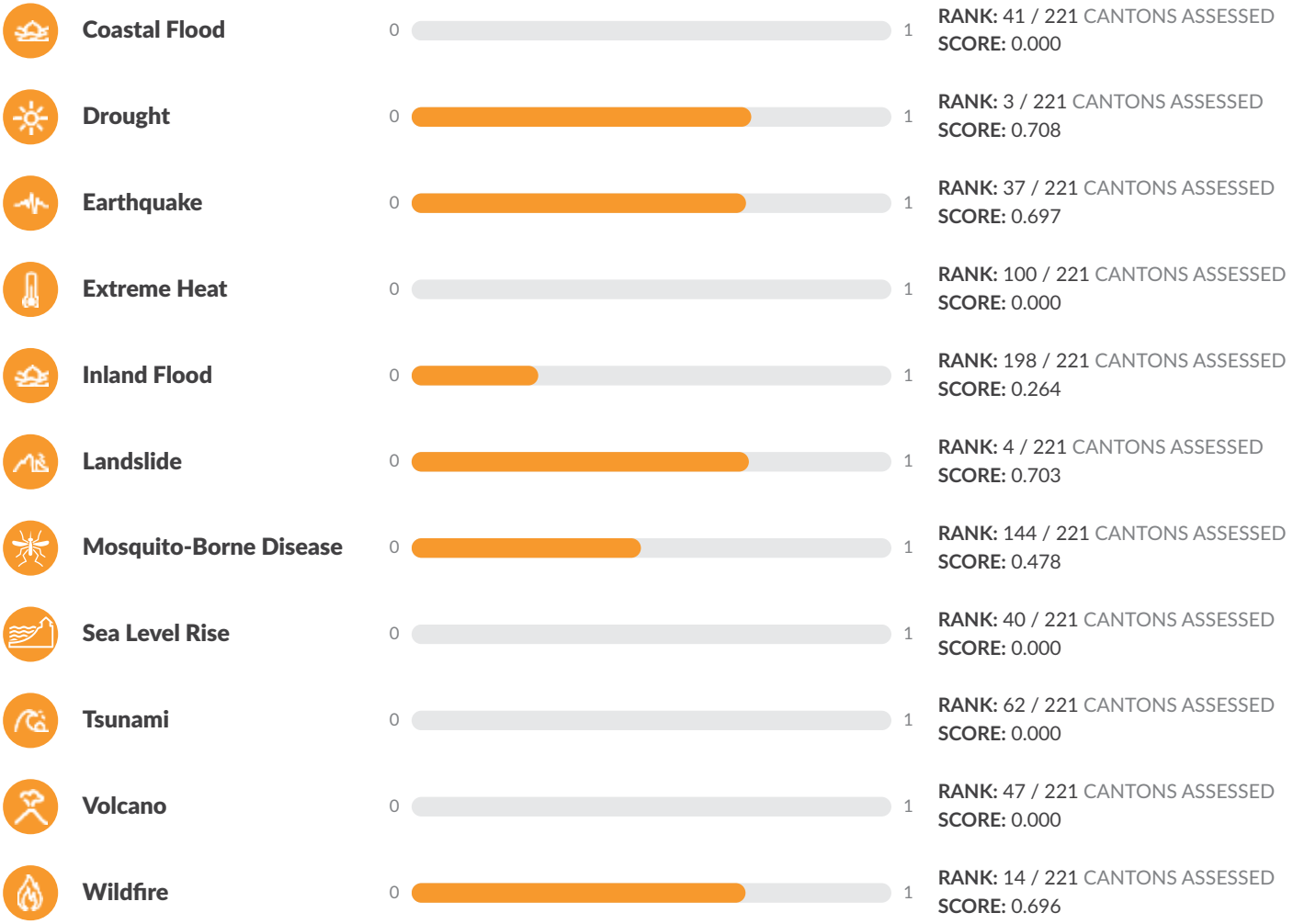
Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

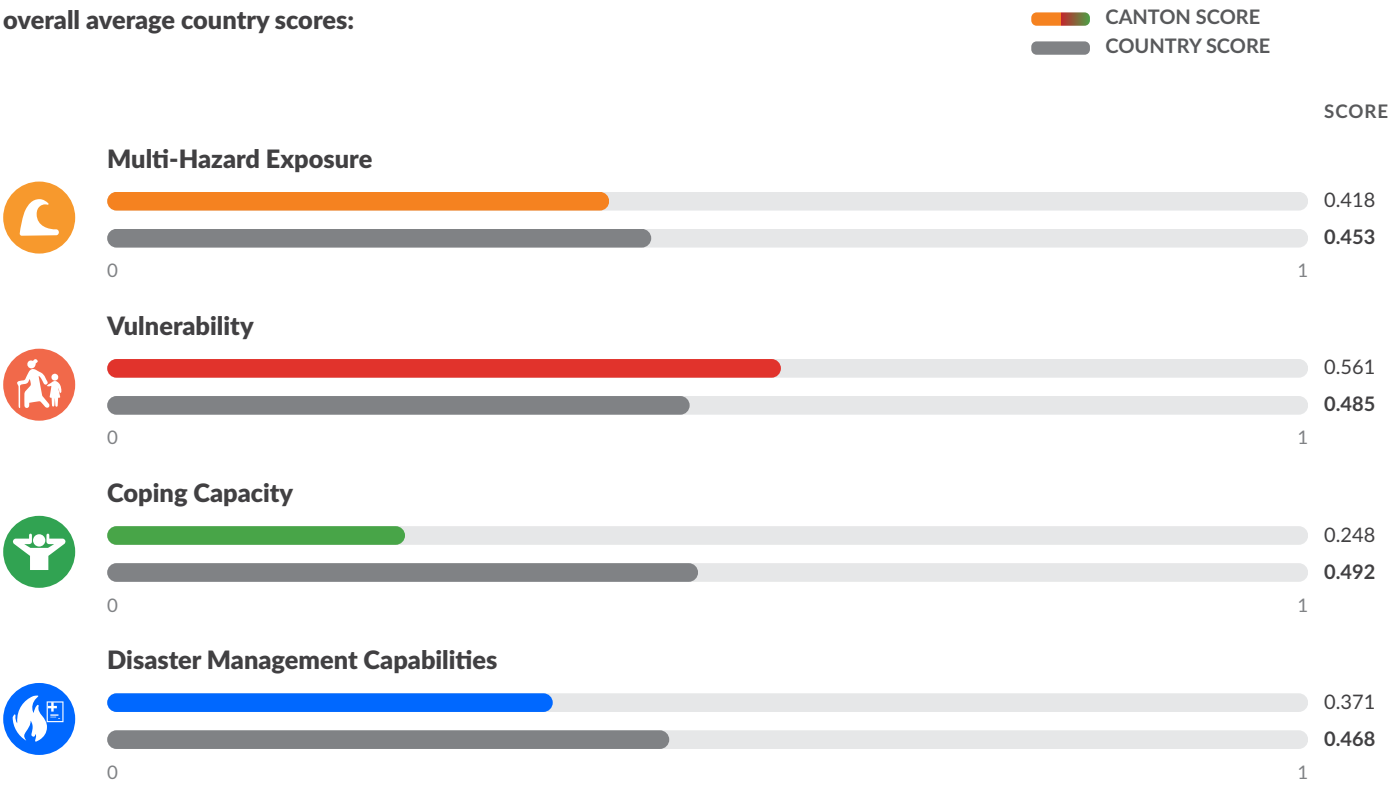


MULTI-HAZARD RISK (MHR)

RANKED
21 / 221
CANTONS ASSESSED
SCORE: 0.590

Sozoranga's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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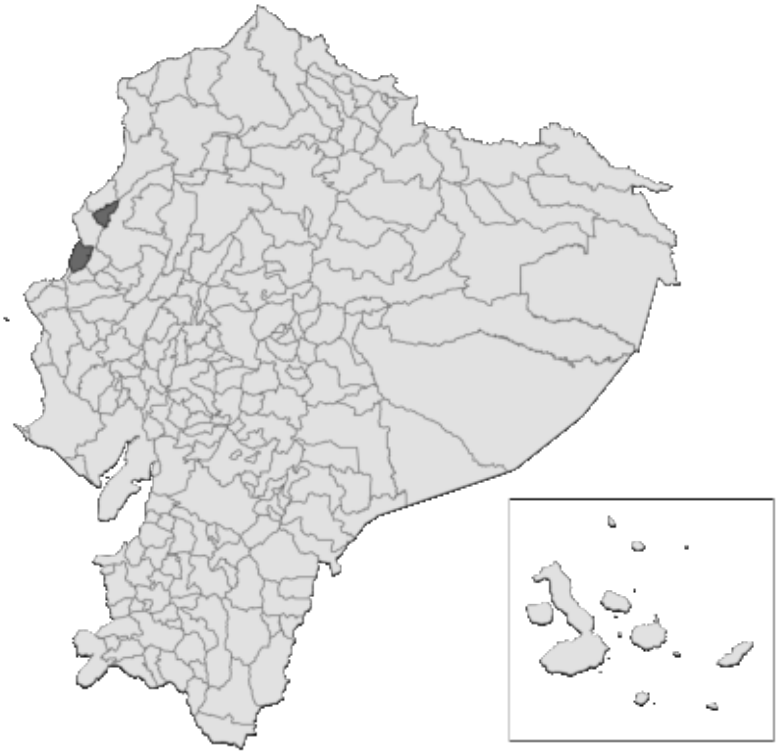
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PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.564 • RANK: 46/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.550 • RANK: 55/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.489 • RANK: 104/221 CANTONS ASSESSED

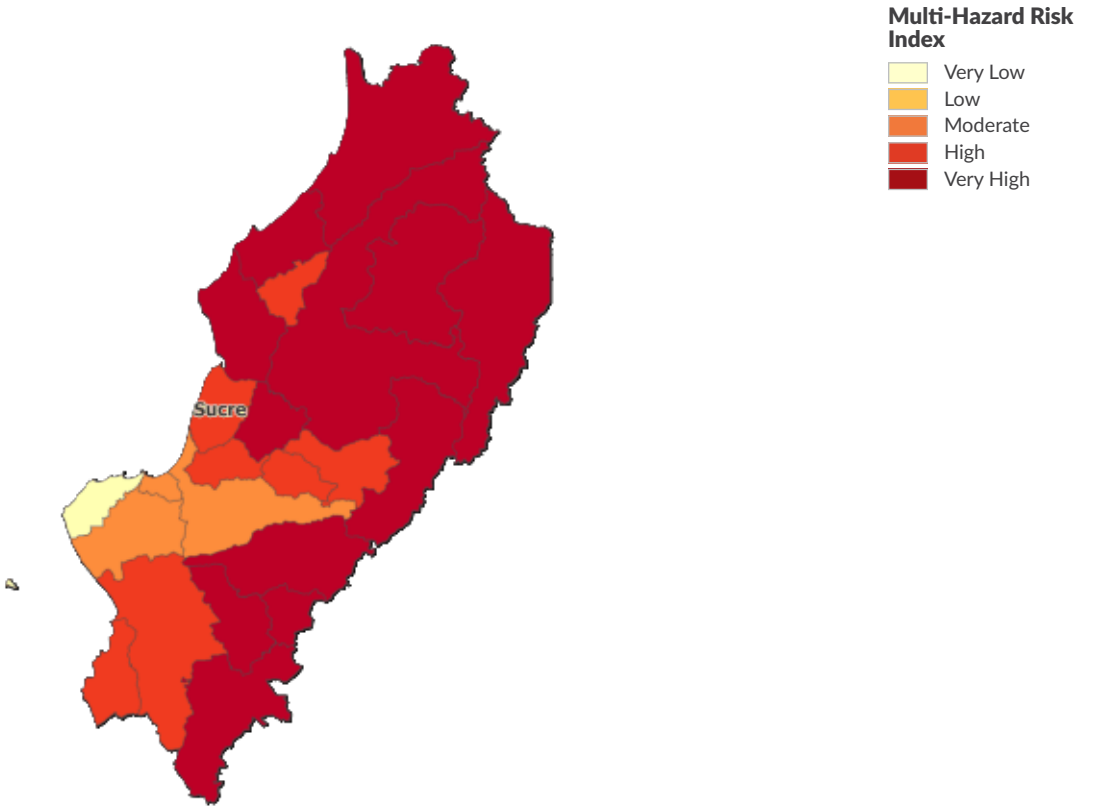
Coping Capacity (CC) - High
SCORE: 0.527 • RANK: 81/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.721 • RANK: 18/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.489 • RANK: 86/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

SUCRE • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	Tosagua	0.587	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	**Sucre**	**0.564**	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 18 / 221 CANTONS ASSESSED
SCORE: 0.721



MHE
0.721

Raw MHE
0.716

Relative MHE
0.726

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
3%
- **2,201** people exposed
- **1,559** structures exposed (4%)
- **Critical Infrastructure Exposed:** 4%

Drought
100%
- **66,319** people exposed
- **36,678** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Earthquake
100%
- **66,319** people exposed
- **36,678** structures exposed (100%)
- **Critical Infrastructure Exposed:** 100%

Extreme Heat
77%
- **50,766** people exposed
- **27,834** structures exposed (76%)
- **Critical Infrastructure Exposed:** 76%

Inland Flood
20%
- **13,420** people exposed
- **6,434** structures exposed (18%)
- **Critical Infrastructure Exposed:** 26%

Landslide
22%
- **14,656** people exposed
- **8,078** structures exposed (22%)
- **Critical Infrastructure Exposed:** 27%

Mosquito-Borne Disease
84%
- **55,890** people exposed
- **29,790** structures exposed (81%)
- **Critical Infrastructure Exposed:** 90%

Sea Level Rise
1%
- **664** people exposed
- **438** structures exposed (1%)
- **Critical Infrastructure Exposed:** <1%

Tsunami
53%
- **34,903** people exposed
- **20,053** structures exposed (55%)
- **Critical Infrastructure Exposed:** 58%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)
- **Critical Infrastructure Exposed:** 0%

Wildfire
51%
- **33,818** people exposed
- **18,441** structures exposed (50%)
- **Critical Infrastructure Exposed:** 53%

VULNERABILITY (V)

RANK: 55 / 221 CANTONS ASSESSED **SCORE: 0.550**

Vulnerability in Sucre is primarily driven by Disaster Impacts and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.540

- **9.7** Average Years of Schooling
- **45.4%** Population (age 24 and over) with General Basic Education Schooling
- **6.7%** Population (age 24 and over) with No Schooling
- **6.2%** Adult Illiteracy Rate
- **58.7%** Households with No Internet Access
- **81.3%** Households with No Access to Television
- **83.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 68/221 CANTONS ASSESSED
SCORE: 0.621

- **56.3%** Homes with Access to Public Water Source
- **40.9%** Homes Connected to the Public Sewage System
- **54.5%** Homes without Piped Water
- **5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.507

- **55.3** Age Dependency Ratio
- **16.5%** Unemployment Rate
- **66%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.720

- **9.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.554

- **0.5** Female to Male Labor Ratio (distance from parity)
- **58.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **27.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **67.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.505

- **9.4%** Prevalence of Disability (among persons age 5 and over)
- **4.6** Perinatal Mortality Rate (per 1,000 births)
- **8.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.302

- **20.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **15** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.2** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.625

67
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

49
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

49
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.573

21.1%
Homes with Exterior Walls in Poor Condition

15.7%
Homes with Inadequate Materials Used in Outer Walls

20.1%
Homes with Roofs in Poor Condition

86.2%
Households with No Access to Vehicle for Private Use

6.7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.435

90.7
Population Density (persons per sq km)

0.8%
Average Annual Population Change (2010-2022)

8.3
Net Migration Rate (per 1,000 persons)

0.27
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 29/221 CANTONS ASSESSED
SCORE: 0.633

0.6
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 81 / 221 CANTONS ASSESSED **SCORE: 0.527**

Sucre exhibits weaker Coping Capacity in the areas of Energy Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.521

55.7%
Labor Force Participation

162,509
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 99/221 CANTONS ASSESSED
SCORE: 0.367

2.1%
Protected Area (% of land area)

-7,505.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.556

86%
Voter Participation

83.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.558

Communications Capacity

0 — 1

RANK: 125/221 CANTONS ASSESSED
SCORE: 0.502

9.7%
Household Access to Fixed Phones

81%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.492

95.1%
Homes Served by the Public Electricity Network

68.8%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.633

21
Nurses and Midwives per 10,000 persons

28.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.604

20.5
Average Distance to Airport (km)

49.2
Average Distance to Sea or River Port (km)

2.9
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 86 / 221 CANTONS ASSESSED **SCORE: 0.489**

Sucre exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.523

3.4	5.9%	1.9	59.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.456

15.6	5.3	4.3	8.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 104 / 221 CANTONS ASSESSED
SCORE: 0.489

Sucre's score and ranking are due to High Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

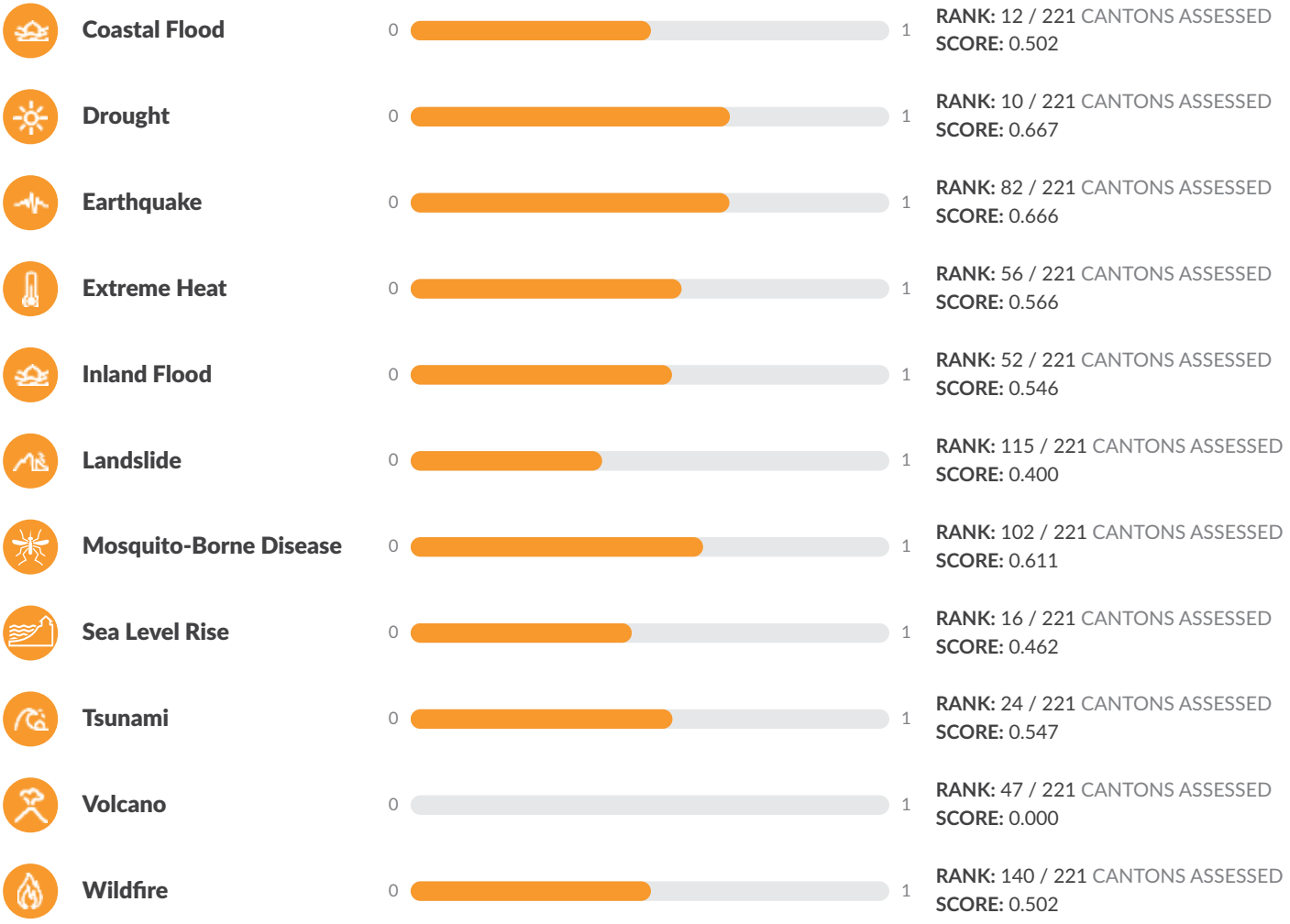
Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

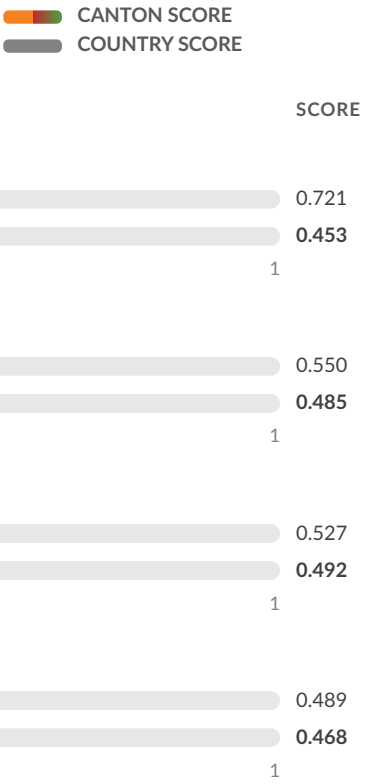


MULTI-HAZARD RISK (MHR)

RANKED
46 / 221
CANTONS ASSESSED
SCORE: 0.564

Sucre's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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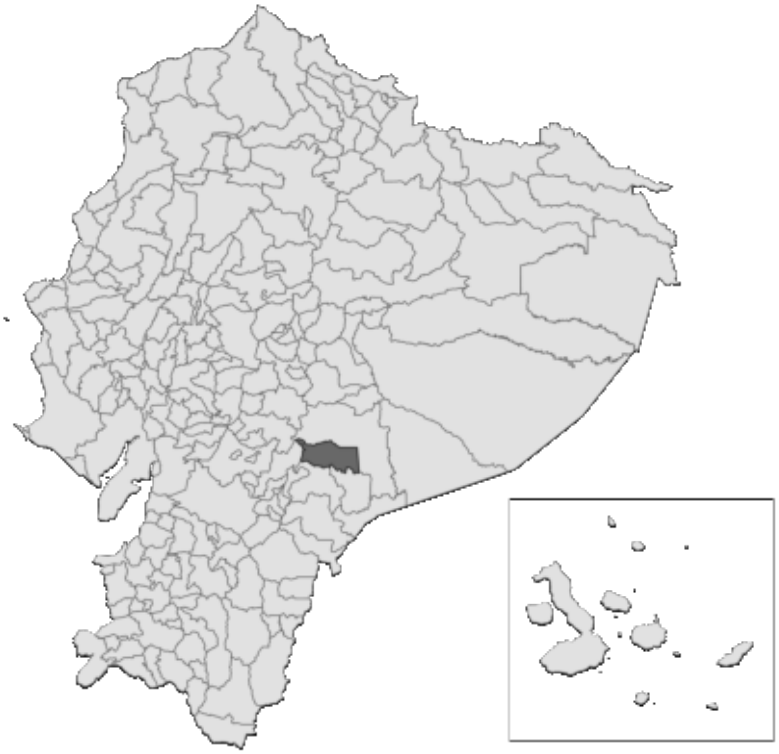
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SUCÚA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.426 • RANK: 181/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.556 • RANK: 57/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.373 • RANK: 139/221 CANTONS ASSESSED

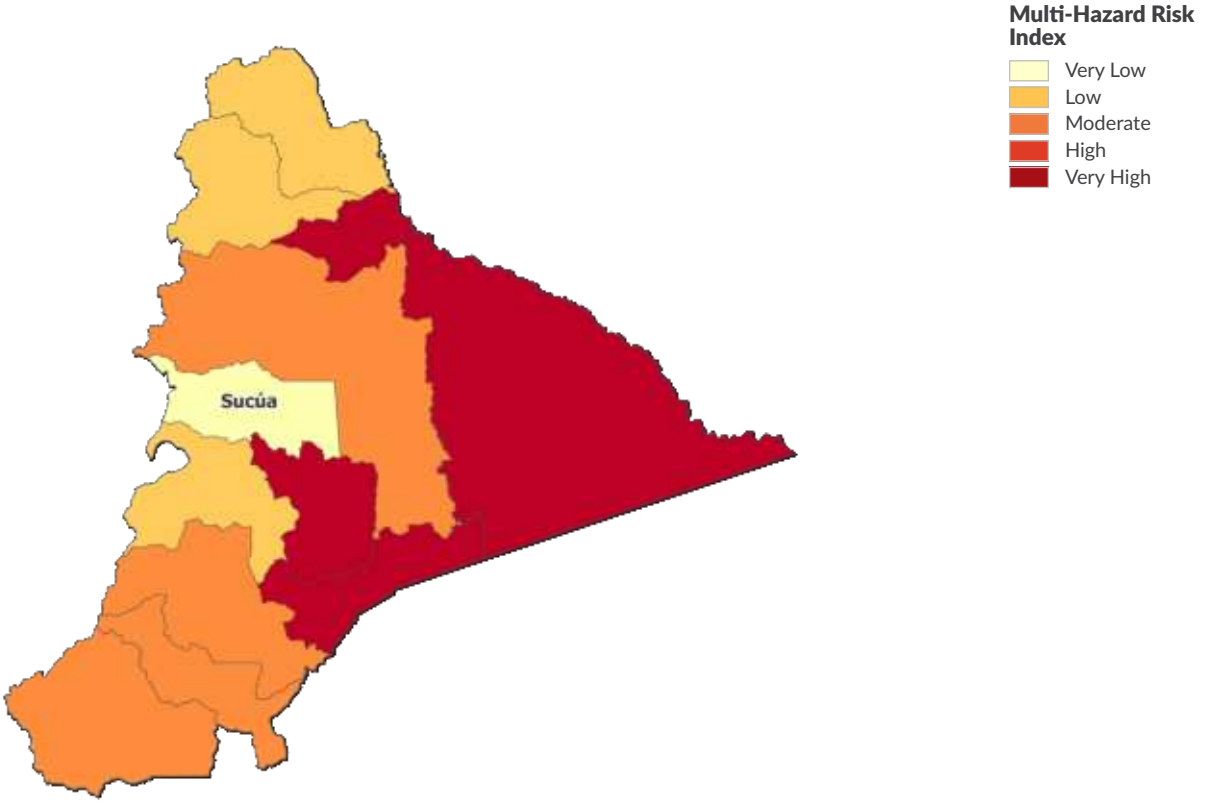
Vulnerability (V) - Moderate
SCORE: 0.478 • RANK: 122/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.493 • RANK: 104/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.652 • RANK: 15/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

SUCÚA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	**0.426**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 139 / 221 CANTONS ASSESSED
SCORE: 0.373



MHE
0.373

Raw MHE
0.454

Relative MHE
0.291

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
24,056 people exposed
14,633 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
2%
435 people exposed
298 structures exposed (2%)
Critical Infrastructure Exposed: 4%

Landslide
32%
7,578 people exposed
5,488 structures exposed (38%)
Critical Infrastructure Exposed: 34%

Mosquito-Borne Disease
99%
23,828 people exposed
14,326 structures exposed (98%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
87%
21,001 people exposed
13,314 structures exposed (91%)
Critical Infrastructure Exposed: 79%

VULNERABILITY (V)

RANK: 122 / 221 CANTONS ASSESSED **SCORE: 0.478**

Vulnerability in Sucúa is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.420

- **10.3** Average Years of Schooling
- **43.2%** Population (age 24 and over) with General Basic Education Schooling
- **6.2%** Population (age 24 and over) with No Schooling
- **3.2%** Adult Illiteracy Rate
- **46.8%** Households with No Internet Access
- **70.6%** Households with No Access to Television
- **72.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 133/221 CANTONS ASSESSED
SCORE: 0.471

- **87.5%** Homes with Access to Public Water Source
- **51.8%** Homes Connected to the Public Sewage System
- **38.1%** Homes without Piped Water
- **5.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 62/221 CANTONS ASSESSED
SCORE: 0.598

- **67.9** Age Dependency Ratio
- **18.9%** Unemployment Rate
- **51.6%** Poverty Rate (based on UBN)
- **0.9%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.529

- **4.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.558

- **0.4** Female to Male Labor Ratio (distance from parity)
- **78.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **79.5%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **39.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.396

- **7.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **8.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.496

- **22** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **52.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.512

38
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

23
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

33
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

38
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 139/221 CANTONS ASSESSED
SCORE: 0.420

13.5%
Homes with Exterior Walls in Poor Condition

1%
Homes with Inadequate Materials Used in Outer Walls

13.8%
Homes with Roofs in Poor Condition

80.3%
Households with No Access to Vehicle for Private Use

9.2%
Household Overcrowding

Population Pressures

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.534

19.7
Population Density (persons per sq km)

2.2%
Average Annual Population Change (2010-2022)

6.1
Net Migration Rate (per 1,000 persons)

0.33
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 126/221 CANTONS ASSESSED
SCORE: 0.415

0.4
Hazard Susceptibility (recent events 2015-2025)

0.2
Disaster Loss Ratio (recent events 2015-2025)

0
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 104 / 221 CANTONS ASSESSED **SCORE: 0.493**

Sucúa exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.416

53.4%
Labor Force Participation

60,800
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 31/221 CANTONS ASSESSED
SCORE: 0.680

39%
Protected Area (% of land area)

-5,002.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 166/221 CANTONS ASSESSED
SCORE: 0.380

73.5%
Voter Participation

86%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.619

Communications Capacity

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.645

19.5%
Household Access to Fixed Phones

84.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.533

92.1%
Homes Served by the Public Electricity Network

80.9%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.752

29.8
Nurses and Midwives per 10,000 persons

39.1
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.546

4.6
Average Distance to Airport (km)

70.2
Average Distance to Sea or River Port (km)

0.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 15 / 221 CANTONS ASSESSED **SCORE: 0.652**

Sucúa exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.693

2.2	7.8%	2.9	20.7
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.610

4.5	4.6	4	4.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 57 / 221 CANTONS ASSESSED
SCORE: 0.556

Sucúa's score and ranking are due to Moderate Vulnerability combined with Moderate Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance | **Economic Constraints** | **Economic Capacity** | **Marginalization**

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

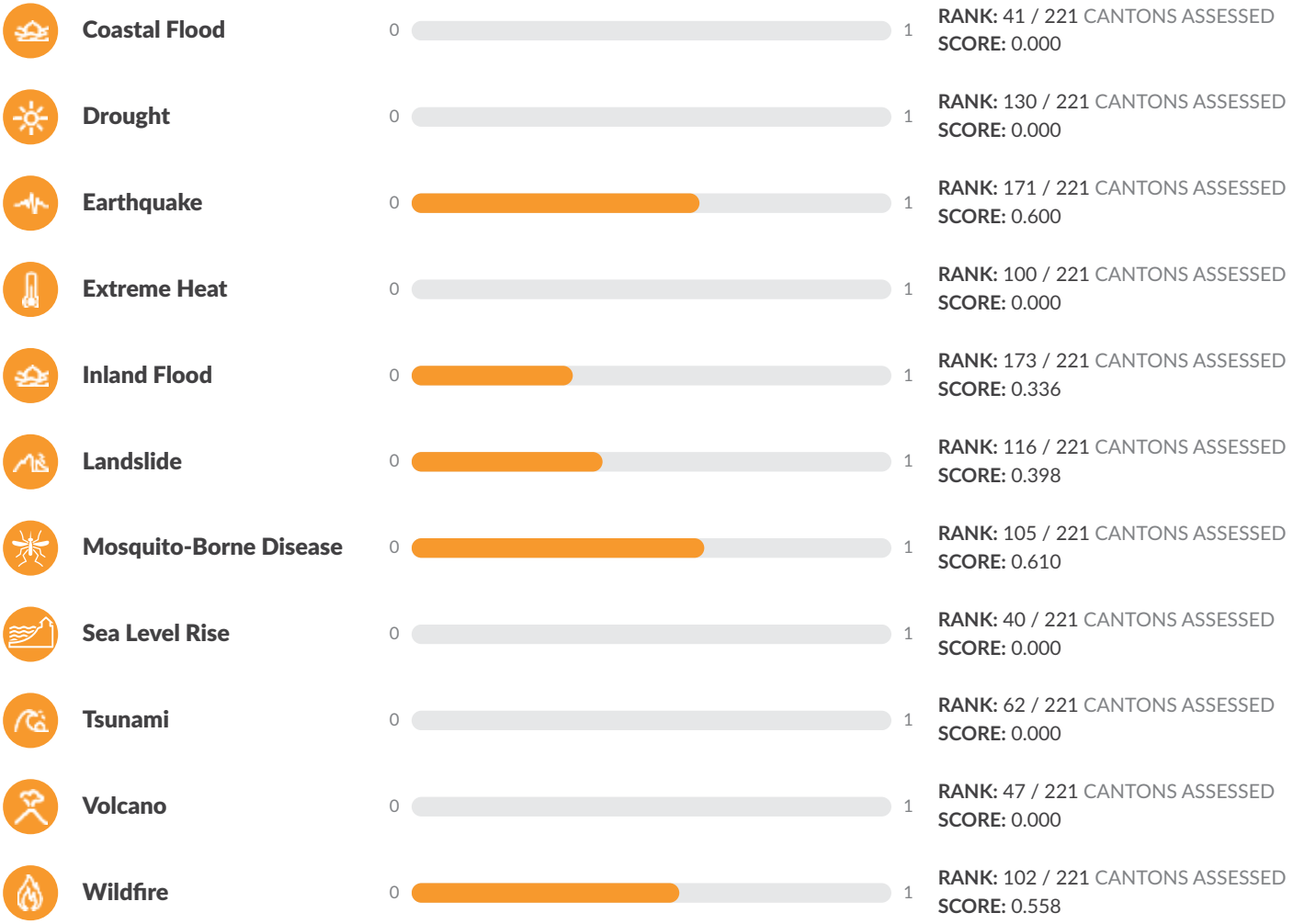
Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

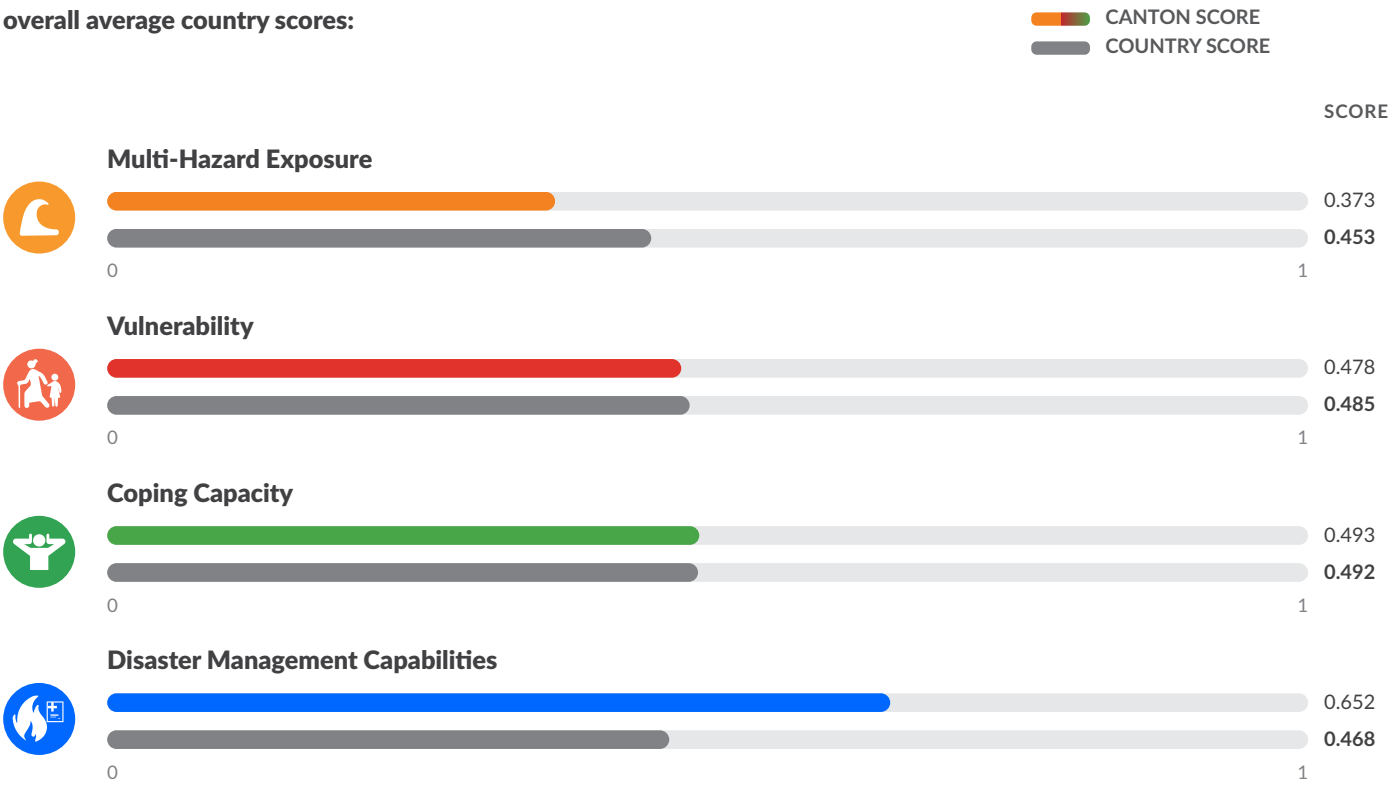


MULTI-HAZARD RISK (MHR)

RANKED
181 / 221
CANTONS ASSESSED
SCORE: 0.426

Sucúa's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate Vulnerability, Moderate Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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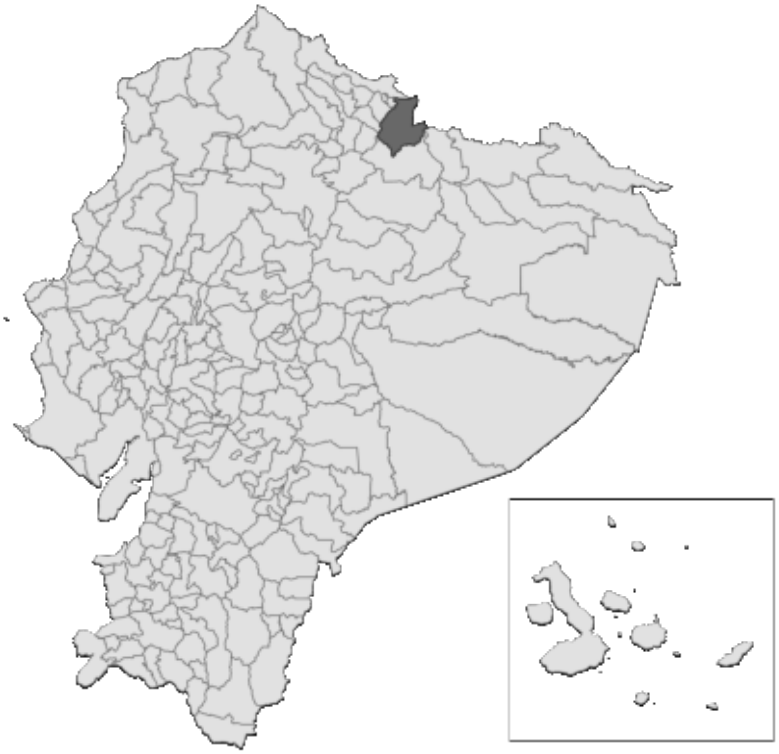
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SUCUMBÍOS

PROVINCE: SUCUMBÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.445 • RANK: 156/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.456 • RANK: 141/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.145 • RANK: 216/221 CANTONS ASSESSED

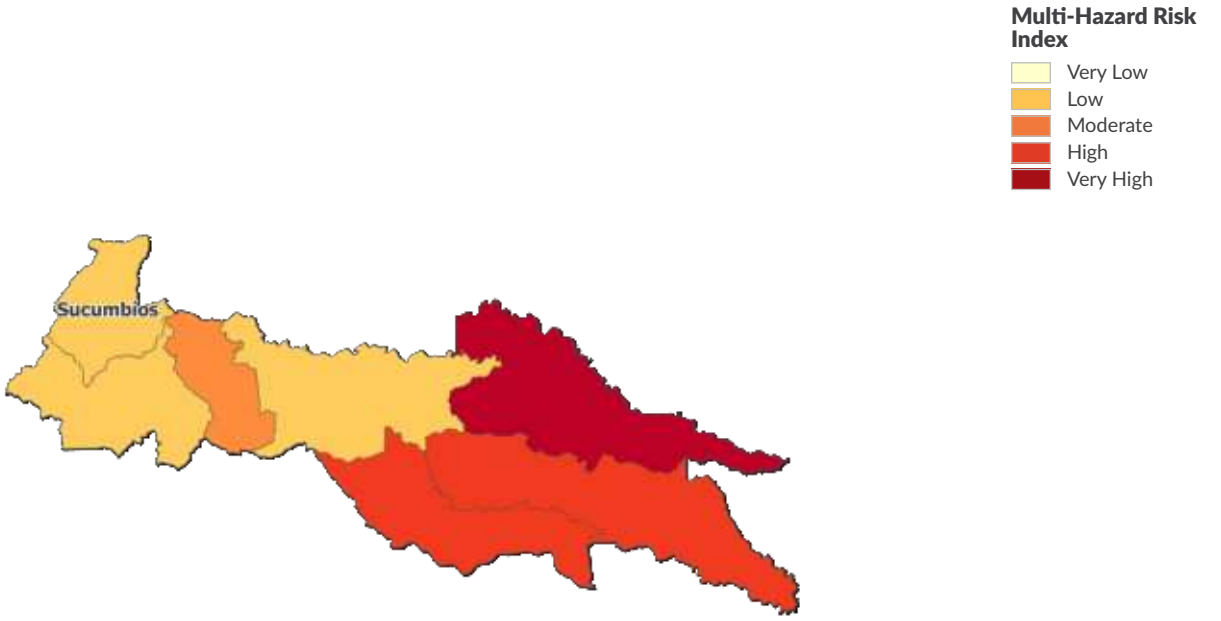
Vulnerability (V) - Low
SCORE: 0.445 • RANK: 151/221 CANTONS ASSESSED

Coping Capacity (CC) - Moderate
SCORE: 0.508 • RANK: 94/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.304 • RANK: 204/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN SUCUMBÍOS PROVINCE

SUCUMBÍOS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Putumayo	0.567
Cuyabeno	0.539
Shushufindi	0.531
Cascales	0.485
Gonzalo Pizarro	0.468
Lago Agrio	0.461
Sucumbíos	**0.445**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 216 / 221 CANTONS ASSESSED
SCORE: 0.145



MHE
0.145

Raw MHE
0.121

Relative MHE
0.169

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
5,522 people exposed
1,982 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
16 people exposed
46 structures exposed (2%)
Critical Infrastructure Exposed: 4%

Landslide
92%
5,078 people exposed
1,721 structures exposed (87%)
Critical Infrastructure Exposed: 88%

Mosquito-Borne Disease
25%
1,392 people exposed
563 structures exposed (28%)
Critical Infrastructure Exposed: 39%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
91%
5,042 people exposed
1,601 structures exposed (81%)
Critical Infrastructure Exposed: 78%

VULNERABILITY (V)

RANK: 151 / 221 CANTONS ASSESSED **SCORE: 0.445**

Vulnerability in Sucumbíos is primarily driven by Disaster Impacts and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.517

- **9.8** Average Years of Schooling
- **47.1%** Population (age 24 and over) with General Basic Education Schooling
- **4.5%** Population (age 24 and over) with No Schooling
- **3.5%** Adult Illiteracy Rate
- **53.1%** Households with No Internet Access
- **89.8%** Households with No Access to Television
- **80.6%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.553

- **83.3%** Homes with Access to Public Water Source
- **65.4%** Homes Connected to the Public Sewage System
- **38.8%** Homes without Piped Water
- **12.9%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 181/221 CANTONS ASSESSED
SCORE: 0.389

- **48.1** Age Dependency Ratio
- **11.9%** Unemployment Rate
- **49.7%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.172

- **0.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 200/221 CANTONS ASSESSED
SCORE: 0.301

- **0.5** Female to Male Labor Ratio (distance from parity)
- **5.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **0.5%** Prevalence of Child Marriage (among adolescents age 12-17)
- **78.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **29.4%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.337

- **8.3%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **12.9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.000

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 157/221 CANTONS ASSESSED
SCORE: 0.434

165	18	18	0
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.392

14.3%	0%	21%	86.4%	5.2%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.515

2.1	-0.6	65.2	0.32
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.598

0.2	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 94 / 221 CANTONS ASSESSED **SCORE: 0.508**

Sucumbíos exhibits weaker Coping Capacity in the areas of Transportation Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.347

56.4%
Labor Force Participation

12,613
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 37/221 CANTONS ASSESSED
SCORE: 0.666

45.3%
Protected Area (% of land area)

-7,017.1
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.634

84.4%
Voter Participation

94.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.490

Communications Capacity

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.370

12%
Household Access to Fixed Phones

52.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.674

96.6%
Homes Served by the Public Electricity Network

84.2%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.683

25.2
Nurses and Midwives per 10,000 persons

31.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.232

41.8
Average Distance to Airport (km)

115
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 204 / 221 CANTONS ASSESSED **SCORE: 0.304**

Sucumbíos exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.345

4	8.5%	0	66.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.262

35.7	10	5	20.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 141 / 221 CANTONS ASSESSED
SCORE: 0.456

Sucumbíos's score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Transportation Capacity



Emergency Services



Mass Care Support



Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Mass Care Support

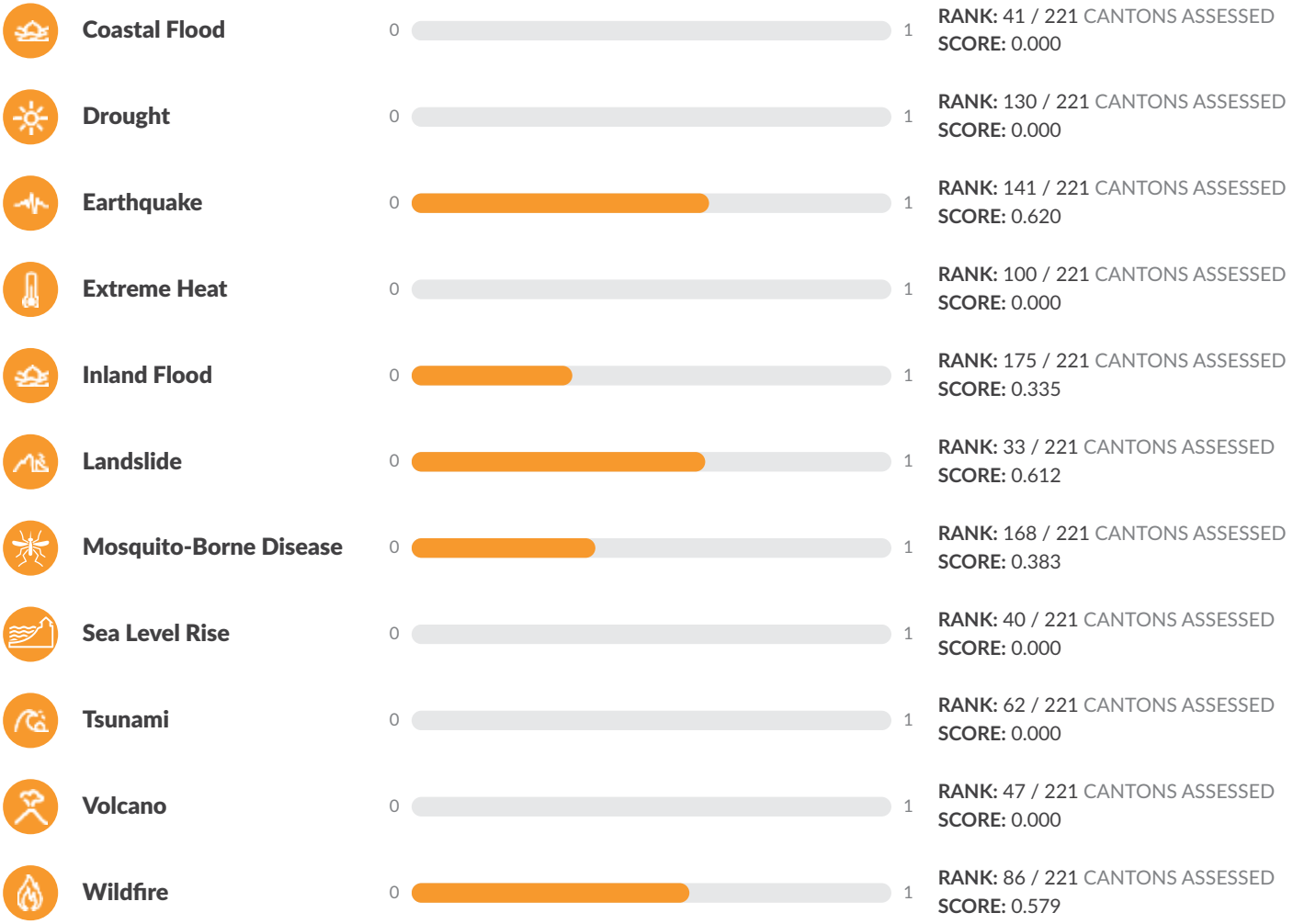
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)



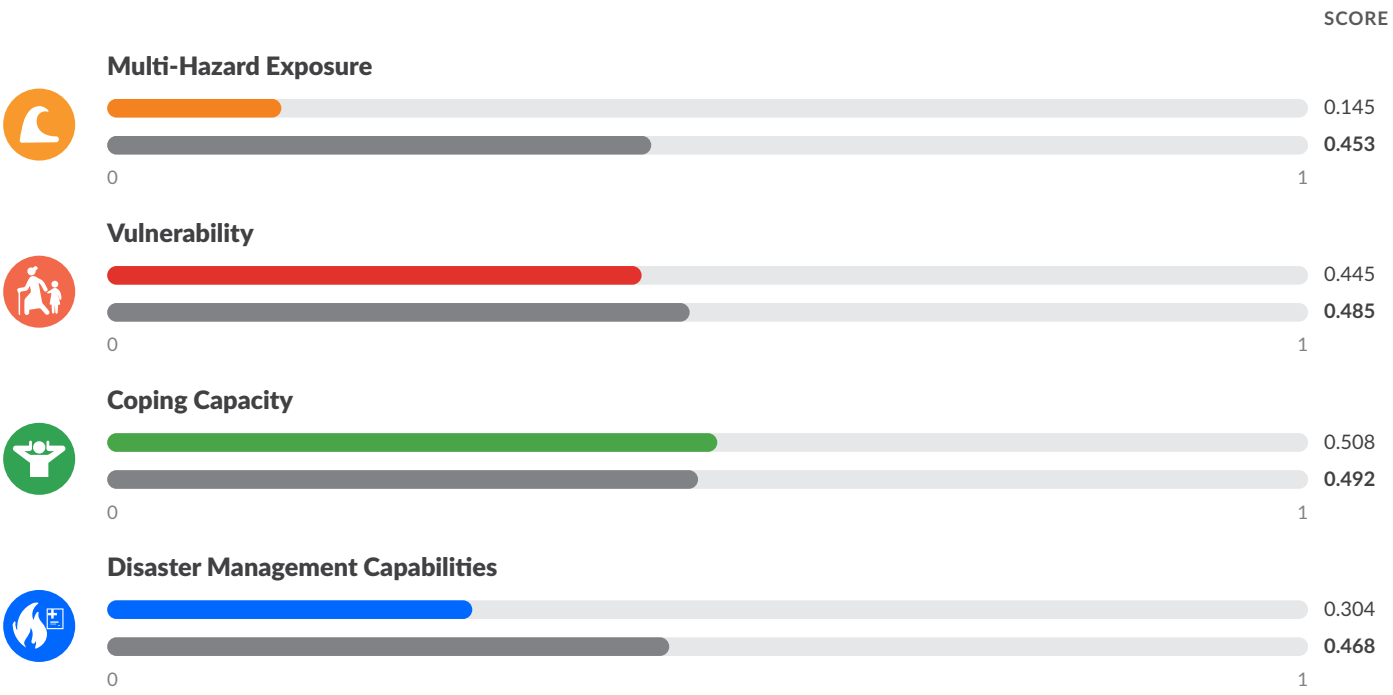
MULTI-HAZARD RISK (MHR)

RANKED
156 / 221
CANTONS ASSESSED
SCORE: 0.445

Sucumbíos's score and ranking are due to Very Low Multi-Hazard Exposure combined with Low Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE



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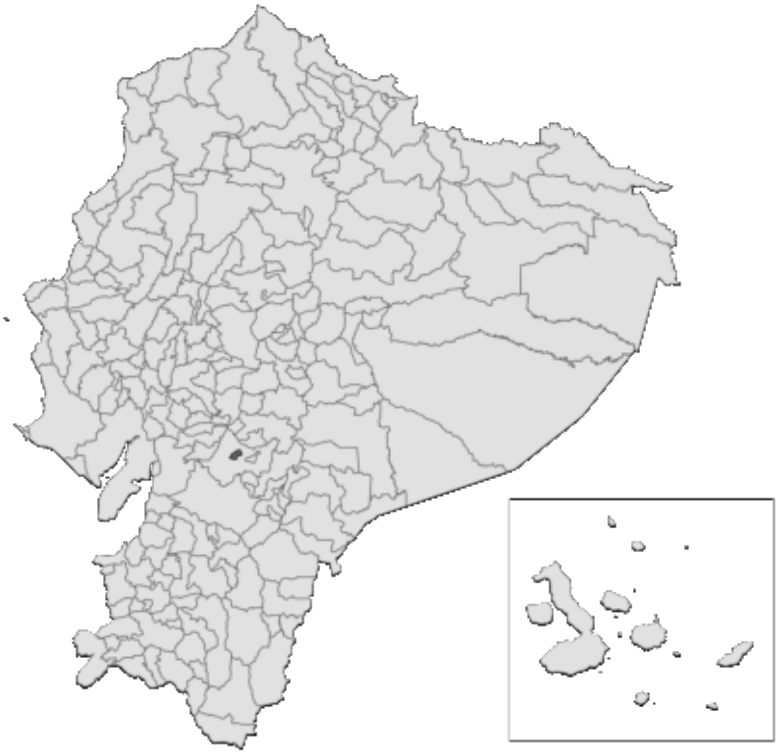
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SUSCAL

PROVINCE: CAÑAR



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.506 • RANK: 96/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.429 • RANK: 165/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.312 • RANK: 171/221 CANTONS ASSESSED

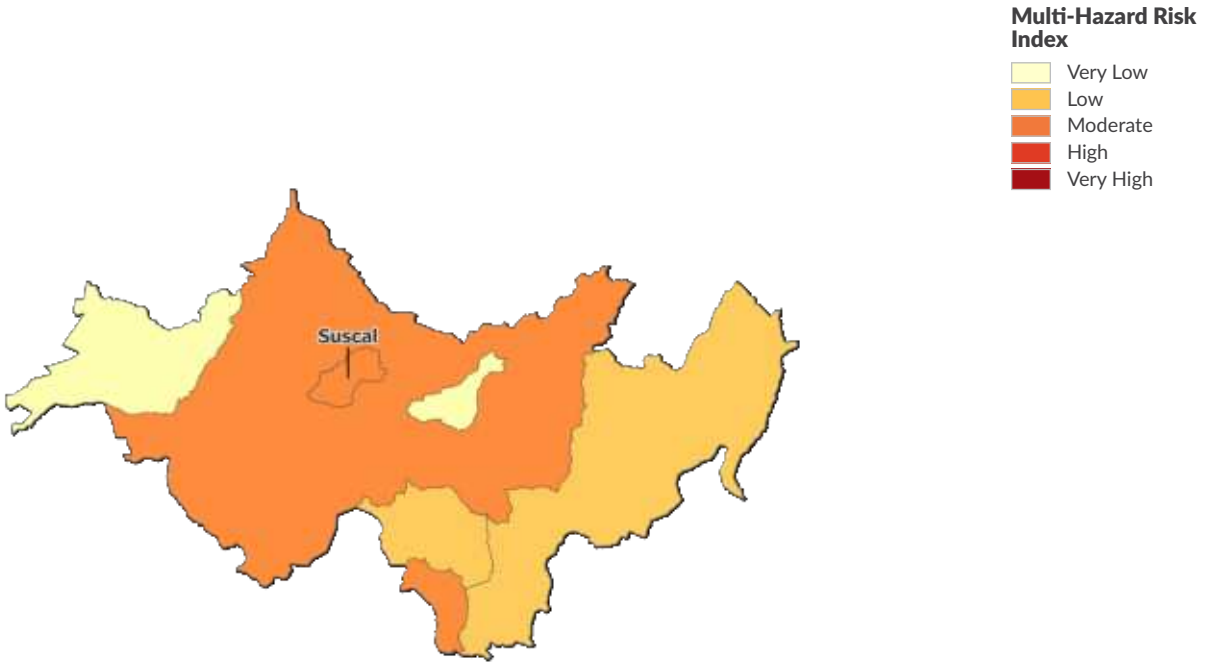
Vulnerability (V) - High
SCORE: 0.555 • RANK: 50/221 CANTONS ASSESSED

Coping Capacity (CC) - Very Low
SCORE: 0.334 • RANK: 209/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.509 • RANK: 78/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CAÑAR PROVINCE

SUSCAL • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Suscal	**0.506**
Cañar	0.504
Déleg	0.479
Biblián	0.457
Azogues	0.445
La Troncal	0.426
El Tambo	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 171 / 221 CANTONS ASSESSED
SCORE: 0.312



MHE
0.312

Raw MHE
0.253

Relative MHE
0.371

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
78%
- **4,745** people exposed
- **3,815** structures exposed (78%)

Critical Infrastructure Exposed: 80%

Earthquake
100%
- **6,075** people exposed
- **4,869** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Landslide
100%
- **6,075** people exposed
- **4,868** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Mosquito-Borne Disease
0%
- **0** people exposed
- **5** structures exposed (<1%)

Critical Infrastructure Exposed: 0%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
98%
- **5,980** people exposed
- **4,762** structures exposed (98%)

Critical Infrastructure Exposed: 97%

VULNERABILITY (V)

RANK: 50 / 221 CANTONS ASSESSED **SCORE: 0.555**

Vulnerability in Suscal is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.786

- **5.8** Average Years of Schooling
- **39.5%** Population (age 24 and over) with General Basic Education Schooling
- **33.6%** Population (age 24 and over) with No Schooling
- **29.7%** Adult Illiteracy Rate
- **64.9%** Households with No Internet Access
- **91.1%** Households with No Access to Television
- **87.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.559

- **92.8%** Homes with Access to Public Water Source
- **22.4%** Homes Connected to the Public Sewage System
- **51.7%** Homes without Piped Water
- **5.8%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.609

- **63.2** Age Dependency Ratio
- **21.7%** Unemployment Rate
- **61.5%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.197

- **0.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.590

- **0.5** Female to Male Labor Ratio (distance from parity)
- **39.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **66.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **85.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.560

- **22.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **19.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.391

- **4.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **21.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **4.4** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.412

66	0	35	44
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.536

16.7%	1.4%	25.2%	88.3%	8.3%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.372

86.8	-0.7	0.9	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.485

0.1	0.2	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 209 / 221 CANTONS ASSESSED **SCORE: 0.334**

Suscal exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.130

42.5%
Labor Force Participation

8,578
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.351

0%
Protected Area (% of land area)

-223.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 178/221 CANTONS ASSESSED
SCORE: 0.350

70.3%
Voter Participation

87.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.515

Communications Capacity

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.430

7.4%
Household Access to Fixed Phones

77.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 127/221 CANTONS ASSESSED
SCORE: 0.528

94.5%
Homes Served by the Public Electricity Network

75.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.642

25.9
Nurses and Midwives per 10,000 persons

23.8
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 132/221 CANTONS ASSESSED
SCORE: 0.460

27.1
Average Distance to Airport (km)

88.7
Average Distance to Sea or River Port (km)

1.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 78 / 221 CANTONS ASSESSED **SCORE: 0.509**

Suscal exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.407

2.1	6.5%	0	49.8
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.611

19.5	3.3	2.3	3.1
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 165 / 221 CANTONS ASSESSED
SCORE: 0.429

Suscal's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Capacity

Information Access Vulnerability

Governance

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

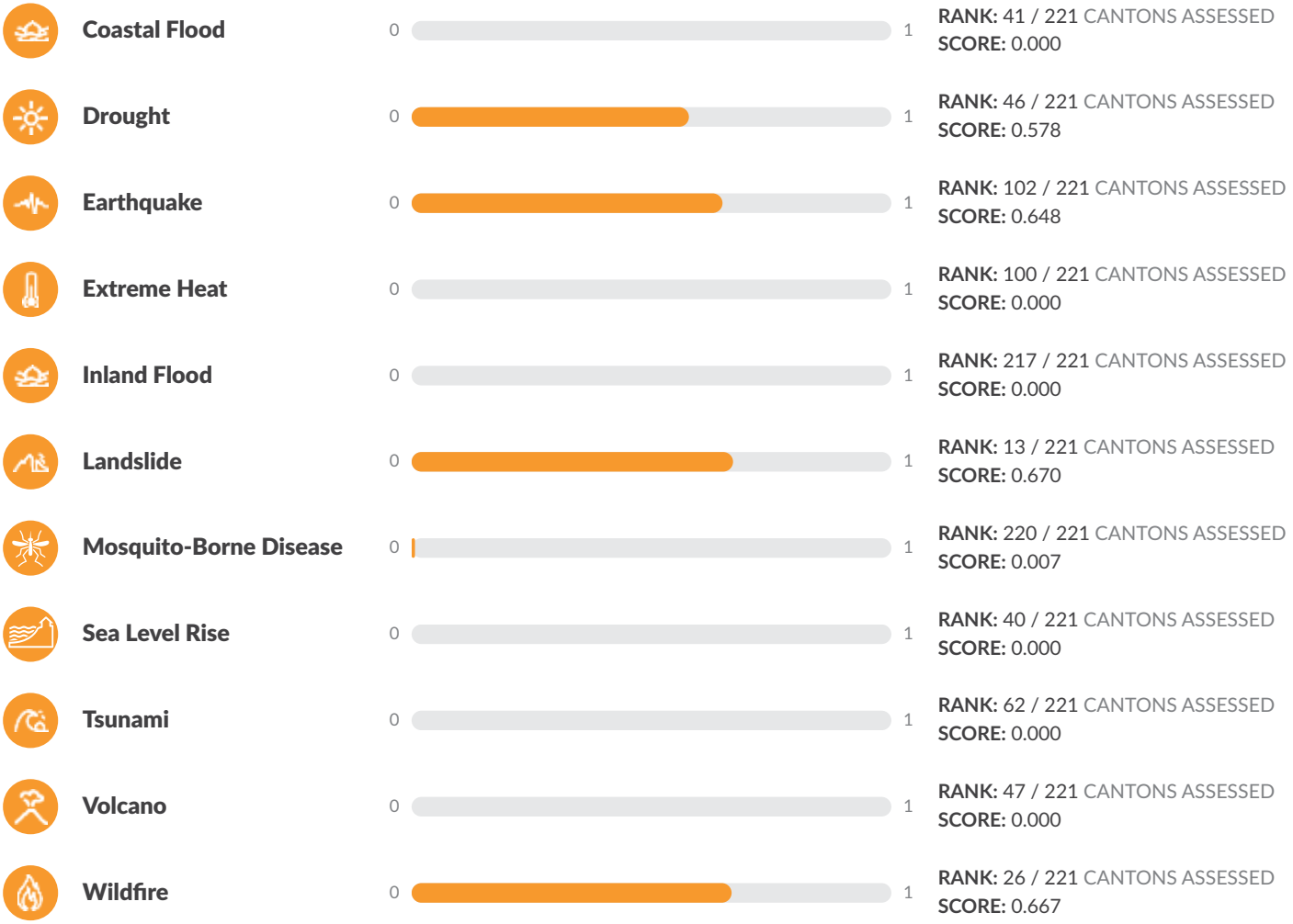
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
96 / 221
CANTONS ASSESSED
SCORE: 0.506

Suscal's score and ranking are due to Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

TAISHA

NDPBA SUBNATIONAL PROFILE

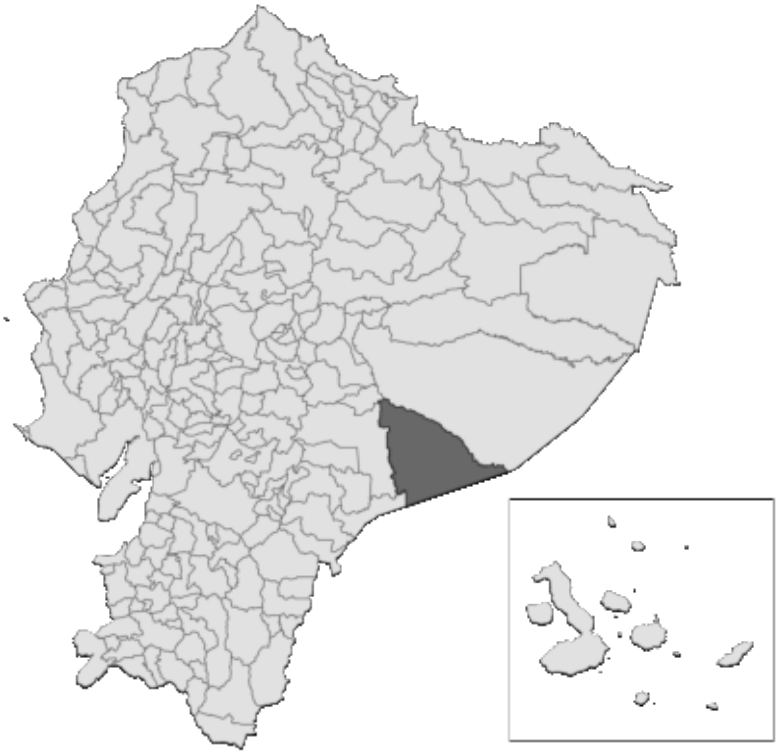
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TAISHA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.693 • RANK: 1/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.653 • RANK: 3/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.229 • RANK: 221/221 CANTONS ASSESSED

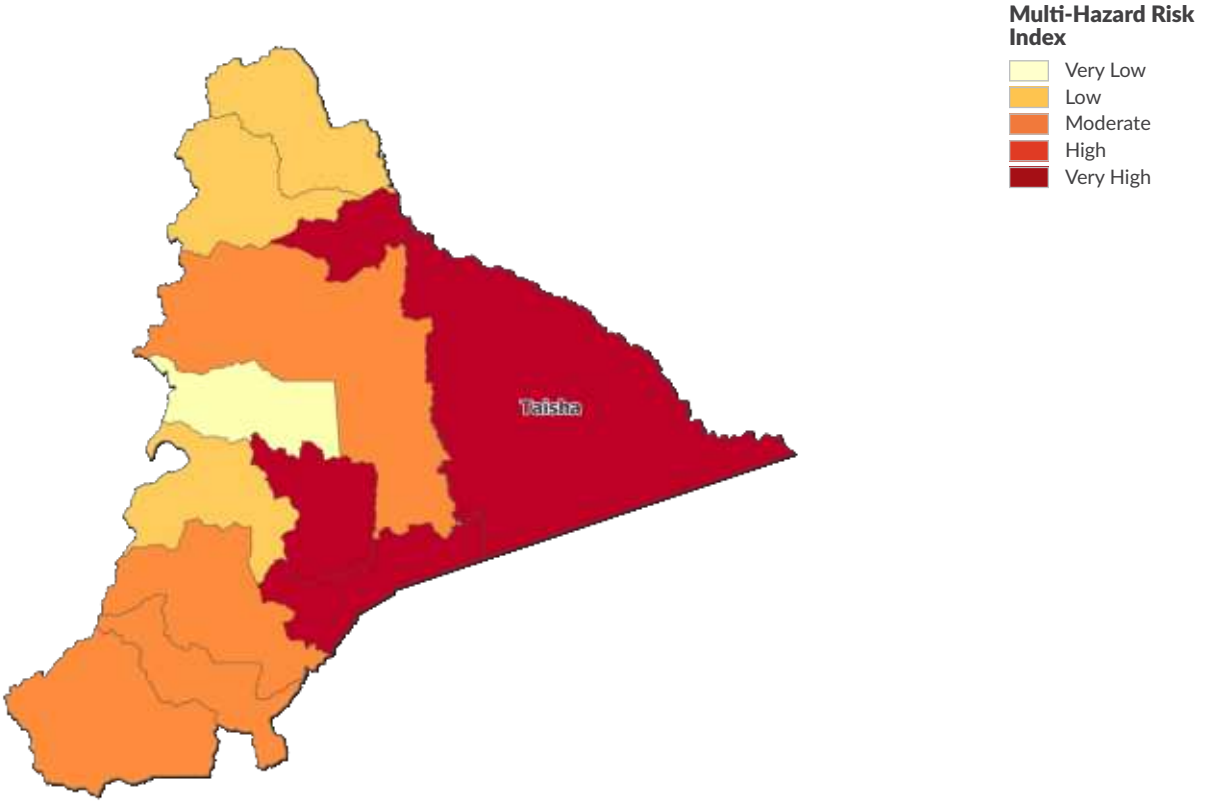
Coping Capacity (CC) - Very Low
SCORE: 0.190 • RANK: 221/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.458 • RANK: 103/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.148 • RANK: 220/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

TAISHA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	**0.693**
Tiwintza	0.636
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 103 / 221 CANTONS ASSESSED
SCORE: 0.458



MHE
0.458

Raw MHE
0.510

Relative MHE
0.405

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
24,723 people exposed
17,605 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
47%
11,631 people exposed
7,687 structures exposed (44%)
Critical Infrastructure Exposed: 19%

Inland Flood
42%
10,412 people exposed
8,279 structures exposed (47%)
Critical Infrastructure Exposed: 23%

Landslide
5%
1,218 people exposed
1,222 structures exposed (7%)
Critical Infrastructure Exposed: 5%

Mosquito-Borne Disease
100%
24,641 people exposed
17,516 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
100%
24,688 people exposed
17,535 structures exposed (100%)
Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 3 / 221 CANTONS ASSESSED **SCORE: 0.653**

Vulnerability in Taisha is primarily driven by Economic Constraints and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 12/221 CANTONS ASSESSED
SCORE: 0.737

- **8.7** Average Years of Schooling
- **40.1%** Population (age 24 and over) with General Basic Education Schooling
- **15.7%** Population (age 24 and over) with No Schooling
- **7%** Adult Illiteracy Rate
- **92.5%** Households with No Internet Access
- **95%** Households with No Access to Television
- **92.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.794

- **20.9%** Homes with Access to Public Water Source
- **7.2%** Homes Connected to the Public Sewage System
- **91.9%** Homes without Piped Water
- **2.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.942

- **104.6** Age Dependency Ratio
- **43.7%** Unemployment Rate
- **96.9%** Poverty Rate (based on UBN)
- **2.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.549

- **5%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 3/221 CANTONS ASSESSED
SCORE: 0.828

- **0.6** Female to Male Labor Ratio (distance from parity)
- **97.8** Adolescent Birth Rate (among females age 15-19) per 1,000
- **9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **98%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **76.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.216

- **3.7%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **3.1%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.559

- **6.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **70.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.298

3
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

7
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

16
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

60
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.614

10.4%
Homes with Exterior Walls in Poor Condition

13.4%
Homes with Inadequate Materials Used in Outer Walls

9.6%
Homes with Roofs in Poor Condition

98.4%
Households with No Access to Vehicle for Private Use

15.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.563

4.4
Population Density (persons per sq km)

3.1%
Average Annual Population Change (2010-2022)

1.3
Net Migration Rate (per 1,000 persons)

0.37
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.549

0.4
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 221 / 221 CANTONS ASSESSED **SCORE: 0.190**

Taisha exhibits weaker Coping Capacity in the areas of Energy Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 212/221 CANTONS ASSESSED
SCORE: 0.163

23.7%
Labor Force Participation

38,449
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.141

0%
Protected Area (% of land area)

-14,905
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.139

77.1%
Voter Participation

12.9%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.286

Communications Capacity

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.125

4%
Household Access to Fixed Phones

22%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.000

43.2%
Homes Served by the Public Electricity Network

23.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 64/221 CANTONS ASSESSED
SCORE: 0.581

21.3
Nurses and Midwives per 10,000 persons

20.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.436

11.1
Average Distance to Airport (km)

68.5
Average Distance to Sea or River Port (km)

0.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 220 / 221 CANTONS ASSESSED **SCORE: 0.148**

Taisha exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 219/221 CANTONS ASSESSED
SCORE: 0.195

22.2	1.7%	0.4	79.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 216/221 CANTONS ASSESSED
SCORE: 0.102

25.9	25.9	23.4	23.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 221 / 221 CANTONS ASSESSED
SCORE: 0.229

Taisha's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Energy Capacity



Economic Constraints



Emergency Services



Communications Capacity

KEY FACTORS INFLUENCING RESILIENCE



Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Emergency Services

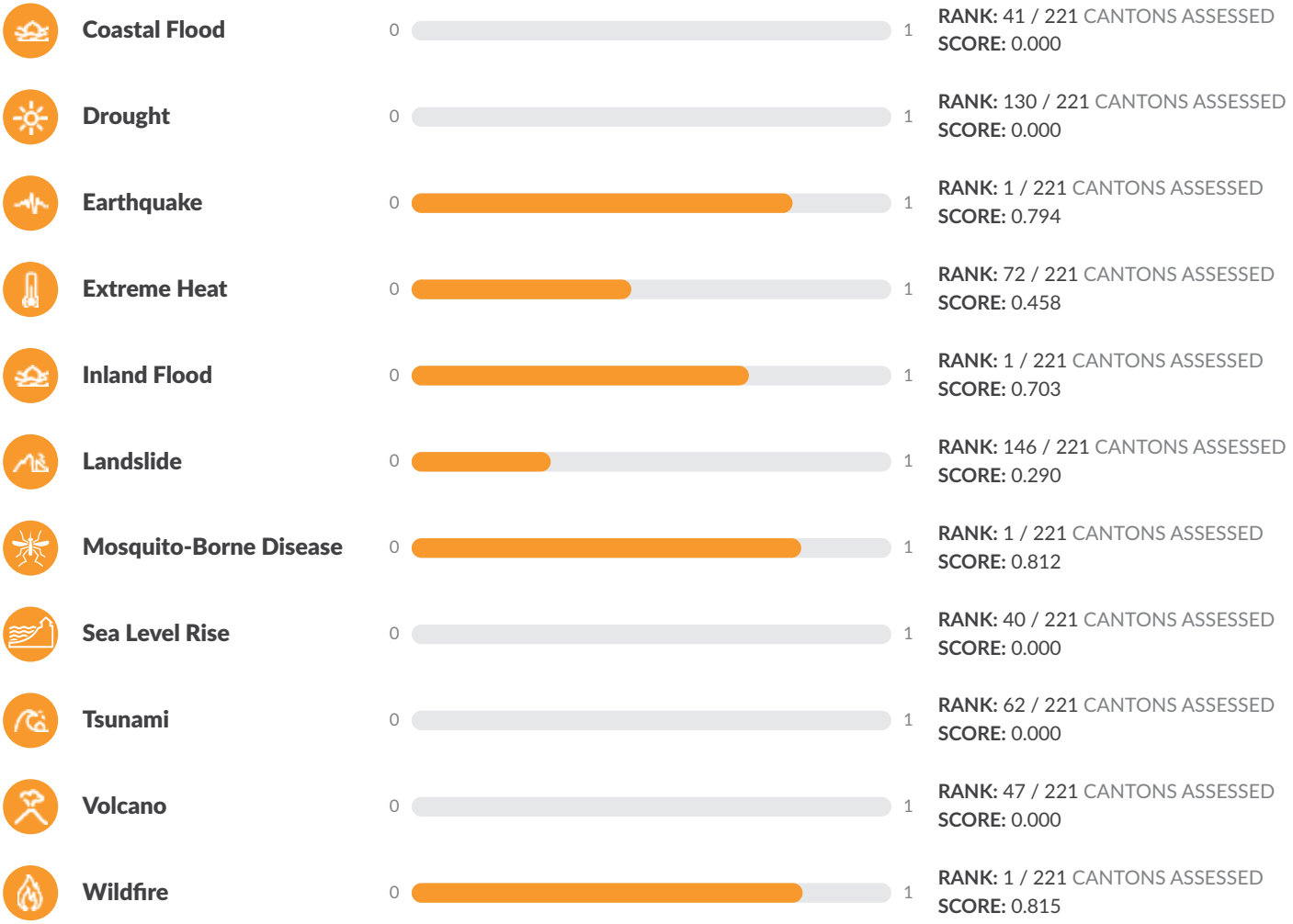
Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
1 / 221
CANTONS ASSESSED
SCORE: 0.693

Taisha's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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TENA

PROVINCE: NAPO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.473 • RANK: 129/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.512 • RANK: 87/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.426 • RANK: 119/221 CANTONS ASSESSED

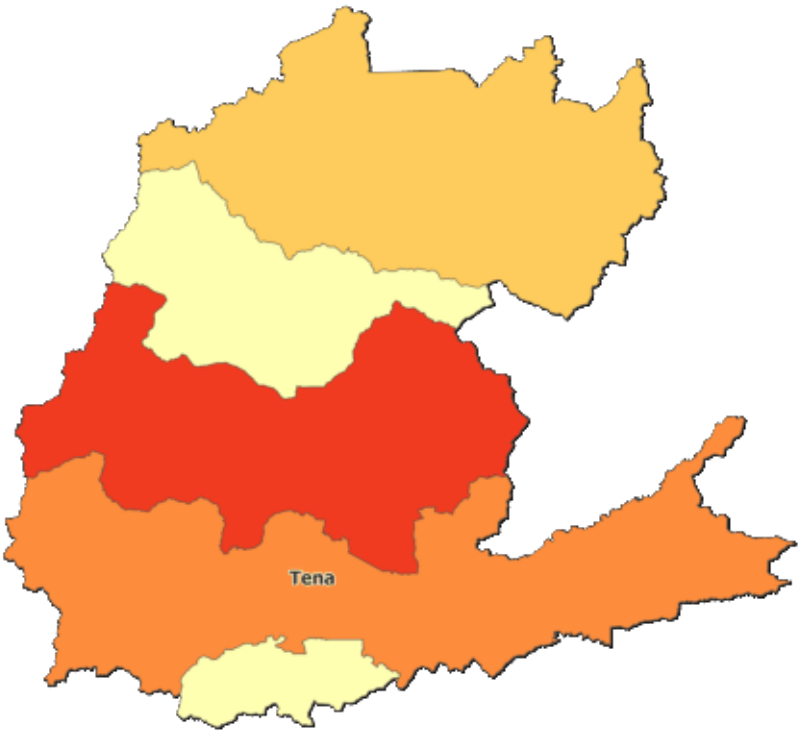
Vulnerability (V) - Moderate
SCORE: 0.503 • RANK: 93/221 CANTONS ASSESSED

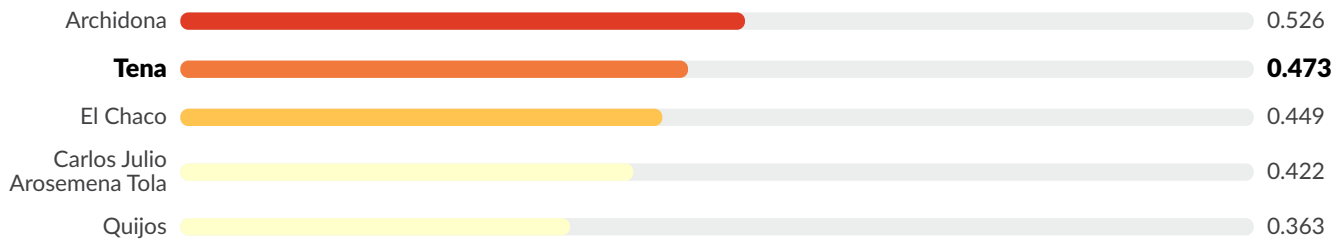
Coping Capacity (CC) - Very High
SCORE: 0.592 • RANK: 43/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.445 • RANK: 129/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN NAPO PROVINCE

TENA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 119 / 221 CANTONS ASSESSED
SCORE: 0.426



MHE
0.426

Raw MHE
0.647

Relative MHE
0.205

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
100,792 people exposed
38,957 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
2%
1,781 people exposed
909 structures exposed (2%)
Critical Infrastructure Exposed: 2%

Inland Flood
17%
17,569 people exposed
9,064 structures exposed (23%)
Critical Infrastructure Exposed: 29%

Landslide
10%
9,652 people exposed
4,280 structures exposed (11%)
Critical Infrastructure Exposed: 9%

Mosquito-Borne Disease
100%
100,668 people exposed
38,761 structures exposed (99%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
41%
41,212 people exposed
17,016 structures exposed (44%)
Critical Infrastructure Exposed: 34%

VULNERABILITY (V)

RANK: 93 / 221 CANTONS ASSESSED **SCORE: 0.503**

Vulnerability in Tena is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.340

- **11.7** Average Years of Schooling
- **32.9%** Population (age 24 and over) with General Basic Education Schooling
- **3%** Population (age 24 and over) with No Schooling
- **2.3%** Adult Illiteracy Rate
- **51.1%** Households with No Internet Access
- **78.4%** Households with No Access to Television
- **67%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 93/221 CANTONS ASSESSED
SCORE: 0.561

- **76.2%** Homes with Access to Public Water Source
- **47.4%** Homes Connected to the Public Sewage System
- **40.4%** Homes without Piped Water
- **7.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.652

- **61.5** Age Dependency Ratio
- **21%** Unemployment Rate
- **60.8%** Poverty Rate (based on UBN)
- **2.1%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.708

- **9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 78/221 CANTONS ASSESSED
SCORE: 0.559

- **0.3** Female to Male Labor Ratio (distance from parity)
- **89.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.4%** Prevalence of Child Marriage (among adolescents age 12-17)
- **76.4%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **45.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 144/221 CANTONS ASSESSED
SCORE: 0.399

- **6.3%** Prevalence of Disability (among persons age 5 and over)
- **1.7** Perinatal Mortality Rate (per 1,000 births)
- **5.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 2/221 CANTONS ASSESSED
SCORE: 0.689

- **169.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **25** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **5.6** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.349

15
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

9
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

24
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

31
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.480

15.4%
Homes with Exterior Walls in Poor Condition

0.6%
Homes with Inadequate Materials Used in Outer Walls

16.9%
Homes with Roofs in Poor Condition

82.9%
Households with No Access to Vehicle for Private Use

12.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.549

20.7
Population Density (persons per sq km)

2.4%
Average Annual Population Change (2010-2022)

14.7
Net Migration Rate (per 1,000 persons)

0.31
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 112/221 CANTONS ASSESSED
SCORE: 0.448

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 43 / 221 CANTONS ASSESSED **SCORE: 0.592**

Tena exhibits weaker Coping Capacity in the areas of Energy Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.580

57.2%
Labor Force Participation

265,703
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.826

37.3%
Protected Area (% of land area)

4,451.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.537

85.7%
Voter Participation

81.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.581

Communications Capacity

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.571

17.6%
Household Access to Fixed Phones

79.1%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 164/221 CANTONS ASSESSED
SCORE: 0.456

93.1%
Homes Served by the Public Electricity Network

69.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.771

34.9
Nurses and Midwives per 10,000 persons

35.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.525

23.5
Average Distance to Airport (km)

19.3
Average Distance to Sea or River Port (km)

0.3
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 129 / 221 CANTONS ASSESSED **SCORE: 0.445**

Tena exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.508

2.8	13.9%	1.5	99.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.383

15.9	13	4.9	7.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 87 / 221 CANTONS ASSESSED
SCORE: 0.512

Tena's score and ranking are due to Moderate Vulnerability combined with Very High Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Economic Constraints

Emergency Services

Clean Water Access Vulnerability

Marginalization

KEY FACTORS INFLUENCING RESILIENCE

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

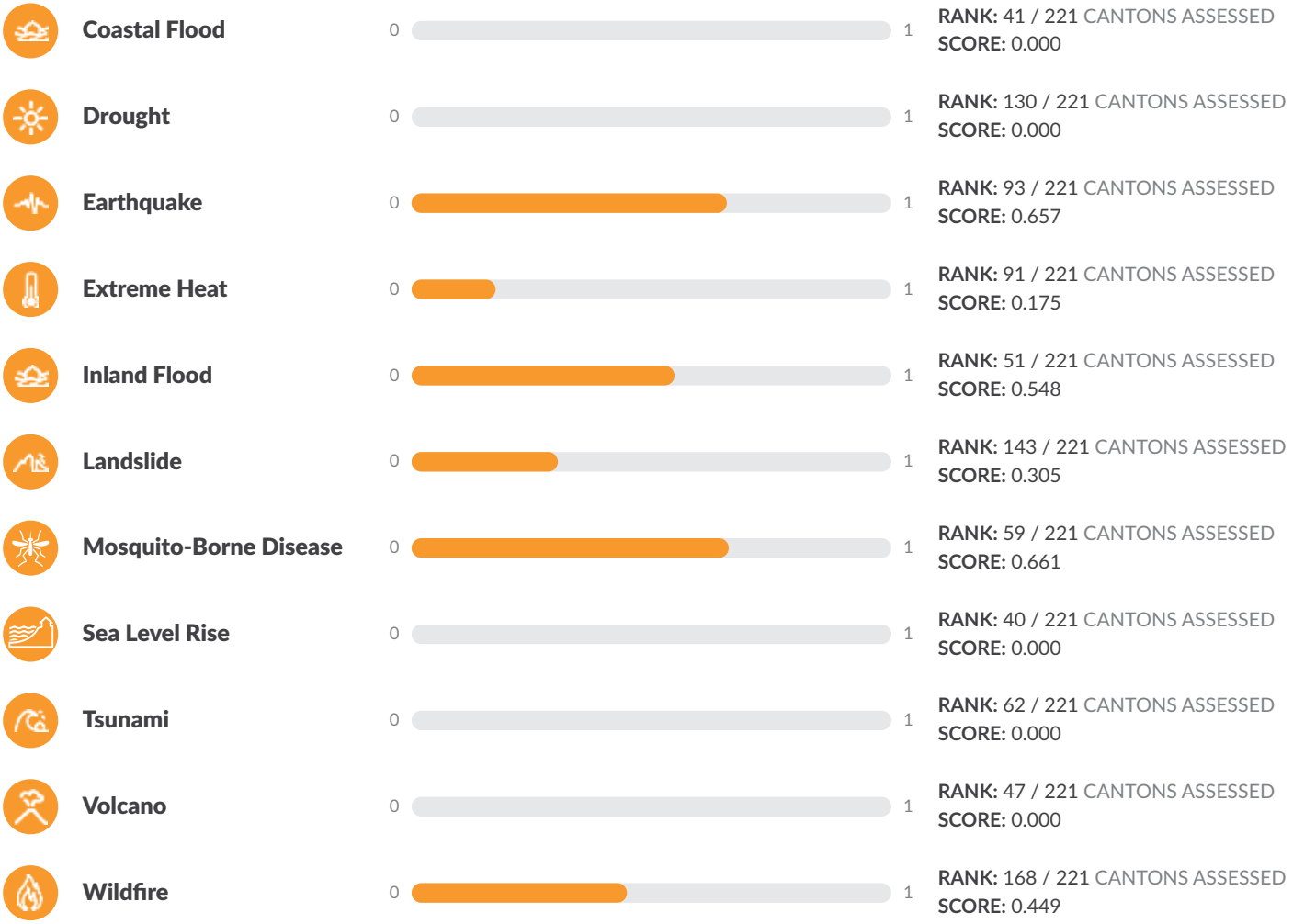
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

HAZARD-SPECIFIC RISK (HSR)

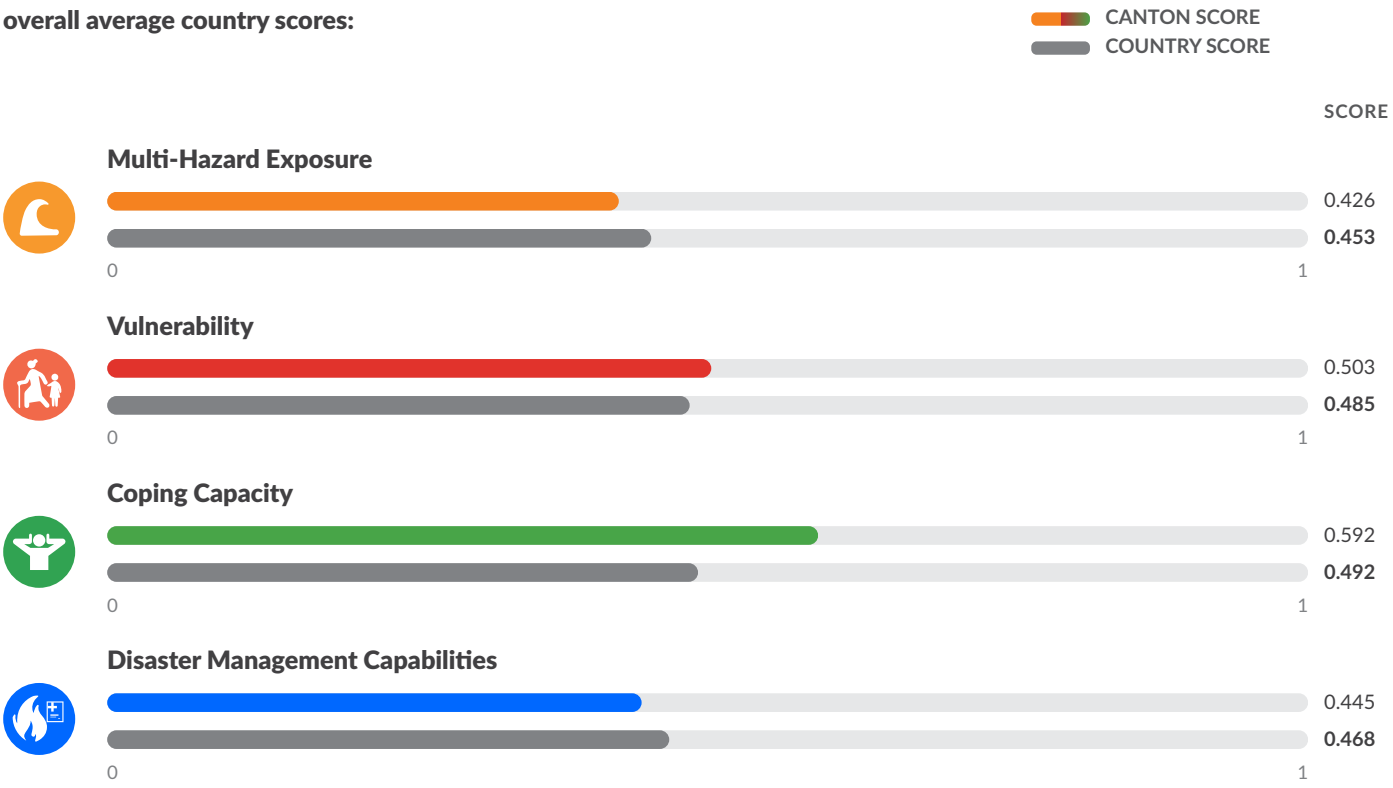


MULTI-HAZARD RISK (MHR)

RANKED
129 / 221
CANTONS ASSESSED
SCORE: 0.473

Tena's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Very High Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

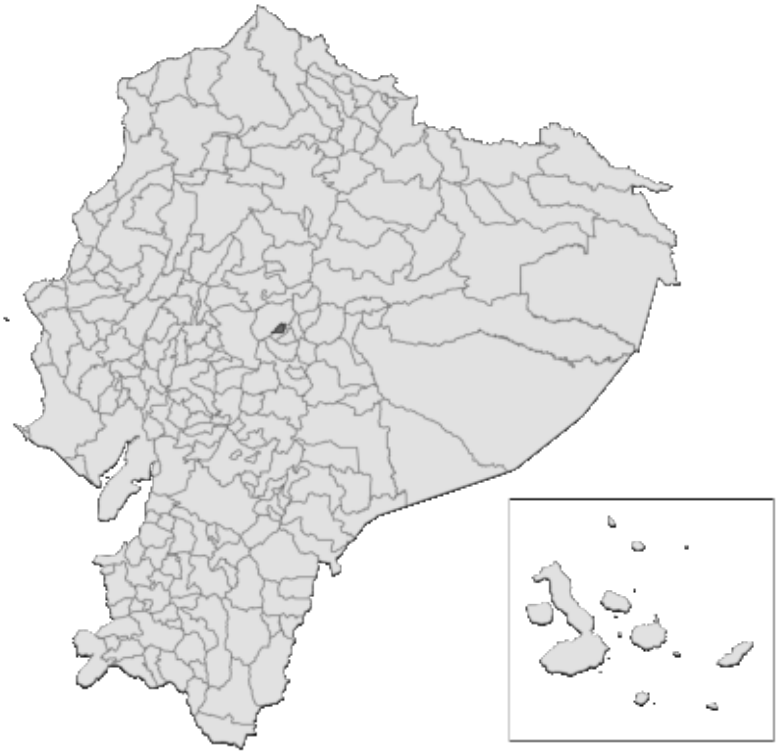
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TISALEO

PROVINCE: TUNGURAHUA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.361 • RANK: 216/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.390 • RANK: 191/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.583 • RANK: 41/221 CANTONS ASSESSED

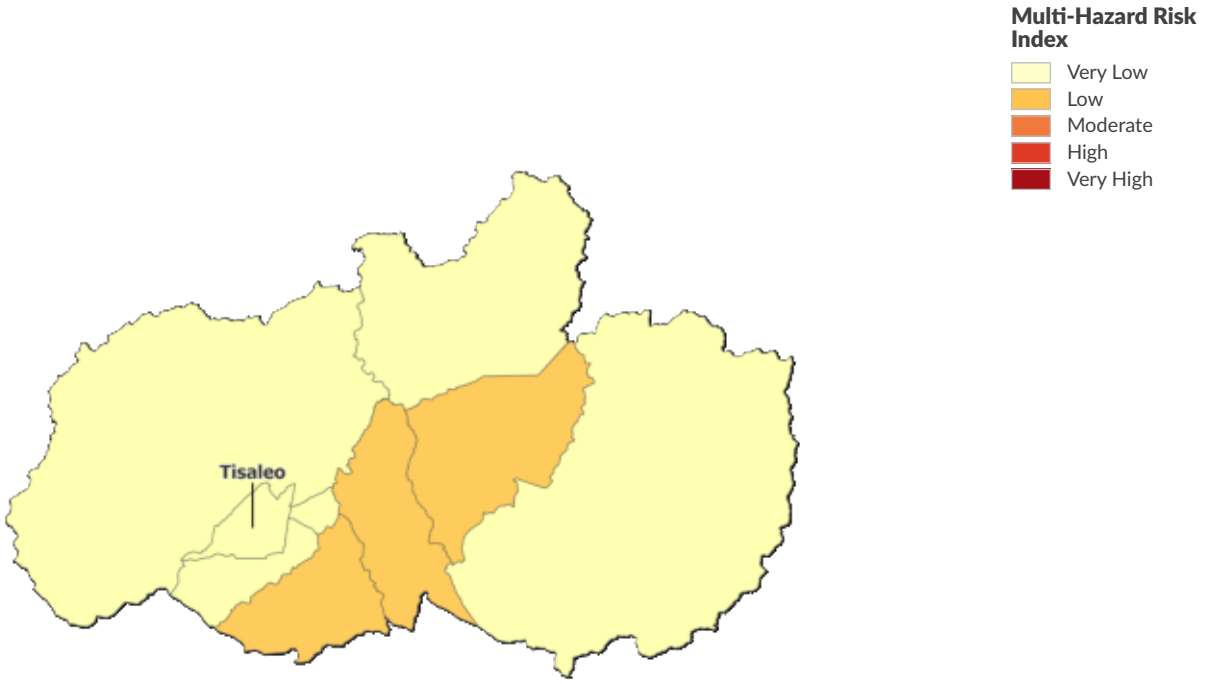
Coping Capacity (CC) - Very High
SCORE: 0.600 • RANK: 38/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very Low
SCORE: 0.195 • RANK: 209/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.540 • RANK: 64/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN TUNGURAHUA PROVINCE

TISALEO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Quero	0.454
San Pedro De Pelileo	0.436
Patate	0.431
Santiago De Píllaro	0.410
Ambato	0.409
Mocha	0.379
Baños De Agua Santa	0.364
Tisaleo	**0.361**
Cevallos	0.340

MULTI-HAZARD EXPOSURE (MHE)

RANK: 209 / 221 CANTONS ASSESSED
SCORE: 0.195



MHE
0.195

Raw MHE
0.337

Relative MHE
0.053

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
<1%
- **76** people exposed
- **84** structures exposed (<1%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **14,085** people exposed
- **13,983** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
3%
- **358** people exposed
- **398** structures exposed (3%)

Critical Infrastructure Exposed: <1%

Landslide
22%
- **3,032** people exposed
- **2,759** structures exposed (20%)

Critical Infrastructure Exposed: 37%

Mosquito-Borne Disease
5%
- **725** people exposed
- **846** structures exposed (6%)

Critical Infrastructure Exposed: 8%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
100%
- **14,085** people exposed
- **13,983** structures exposed (100%)

Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 191 / 221 CANTONS ASSESSED **SCORE: 0.390**

Vulnerability in Tisaleo is primarily driven by Information Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.549

- **9.4** Average Years of Schooling
- **58.3%** Population (age 24 and over) with General Basic Education Schooling
- **4.5%** Population (age 24 and over) with No Schooling
- **4.3%** Adult Illiteracy Rate
- **45.4%** Households with No Internet Access
- **92.6%** Households with No Access to Television
- **67.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.373

- **97.4%** Homes with Access to Public Water Source
- **62.5%** Homes Connected to the Public Sewage System
- **34.7%** Homes without Piped Water
- **6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.267

- **51.7** Age Dependency Ratio
- **5.3%** Unemployment Rate
- **40.7%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 196/221 CANTONS ASSESSED
SCORE: 0.295

- **1.6%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.289

- **0.2** Female to Male Labor Ratio (distance from parity)
- **27.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **1.9%** Prevalence of Child Marriage (among adolescents age 12-17)
- **60%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **28%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.512

- **8.8%** Prevalence of Disability (among persons age 5 and over)
- **7.9** Perinatal Mortality Rate (per 1,000 births)
- **14.7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.123

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **18.9** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.349

46
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

8
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

41
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

0
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.257

7.6%
Homes with Exterior Walls in Poor Condition

0.6%
Homes with Inadequate Materials Used in Outer Walls

13.7%
Homes with Roofs in Poor Condition

62.4%
Households with No Access to Vehicle for Private Use

3.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 160/221 CANTONS ASSESSED
SCORE: 0.411

233.2
Population Density (persons per sq km)

1.2%
Average Annual Population Change (2010-2022)

-0.6
Net Migration Rate (per 1,000 persons)

0.25
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.476

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 38 / 221 CANTONS ASSESSED **SCORE: 0.600**

Tisaleo exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.678

69%
Labor Force Participation

47,734
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 36/221 CANTONS ASSESSED
SCORE: 0.670

18.4%
Protected Area (% of land area)

-480.6
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.518

85.2%
Voter Participation

80.2%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.580

Communications Capacity

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.700

27.6%
Household Access to Fixed Phones

85.2%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.789

98.7%
Homes Served by the Public Electricity Network

85.5%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.256

6.5
Nurses and Midwives per 10,000 persons

8.6
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.576

18.7
Average Distance to Airport (km)

93
Average Distance to Sea or River Port (km)

4.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 64 / 221 CANTONS ASSESSED **SCORE: 0.540**

Tisaleo exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.368

1.5	0.8%	0	37.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 25/221 CANTONS ASSESSED
SCORE: 0.713

10.4	2.3	2.1	2.3
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 41 / 221 CANTONS ASSESSED
SCORE: 0.583

Tisaleo's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Mass Care Support

Information Access Vulnerability

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

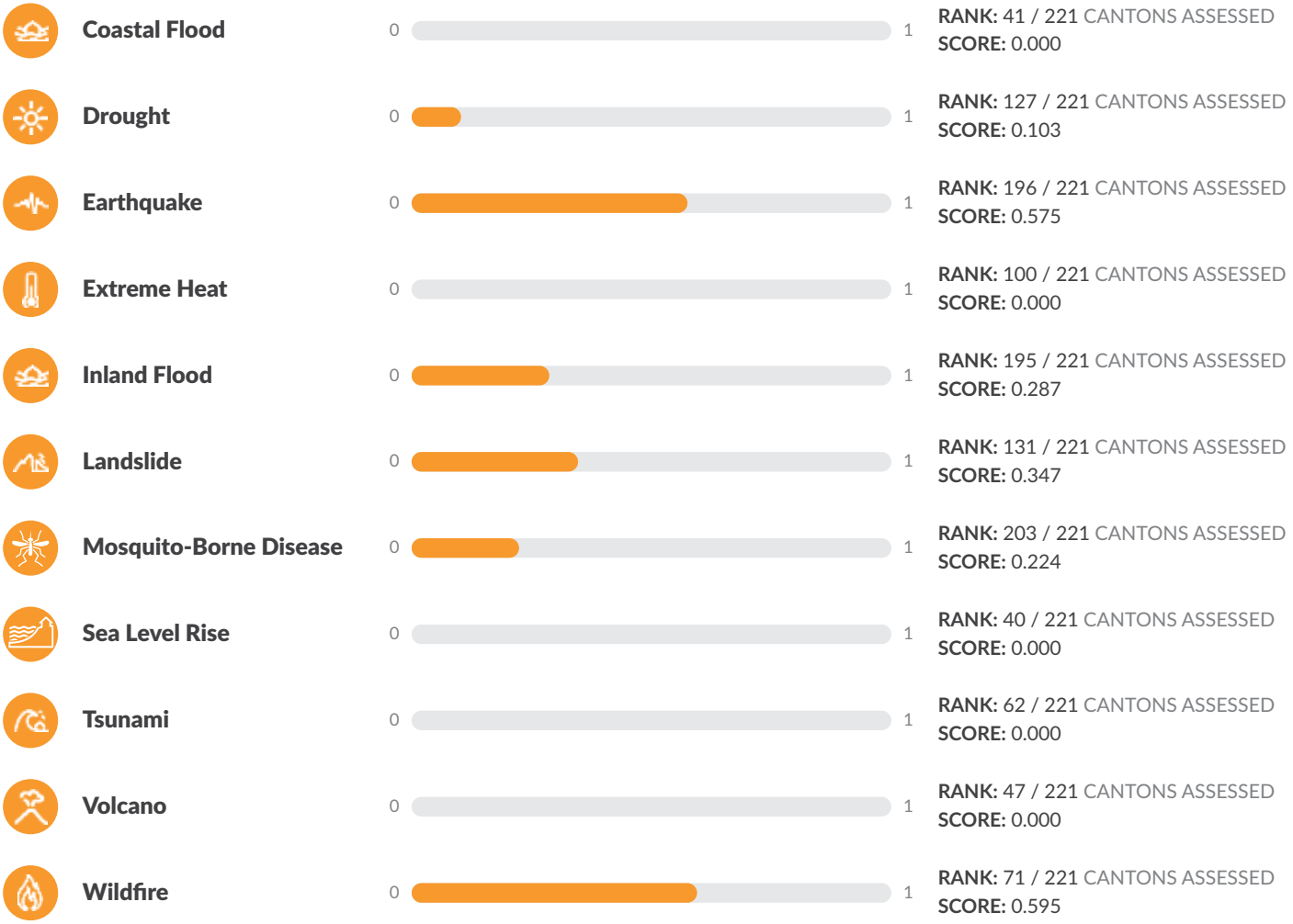
Information Access Vulnerability

The ability to understand hazard and disaster-related information before, during, and after an event is central to acting on that information. If information channels and formats are limited, the groups and individuals exposed to information inclusive of mitigation options, preparedness measures, available resources, and impending hazard events, will likewise be limited. Information access enables the building and diversification of exposed populations' critical skill sets both before and after disasters strike.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)

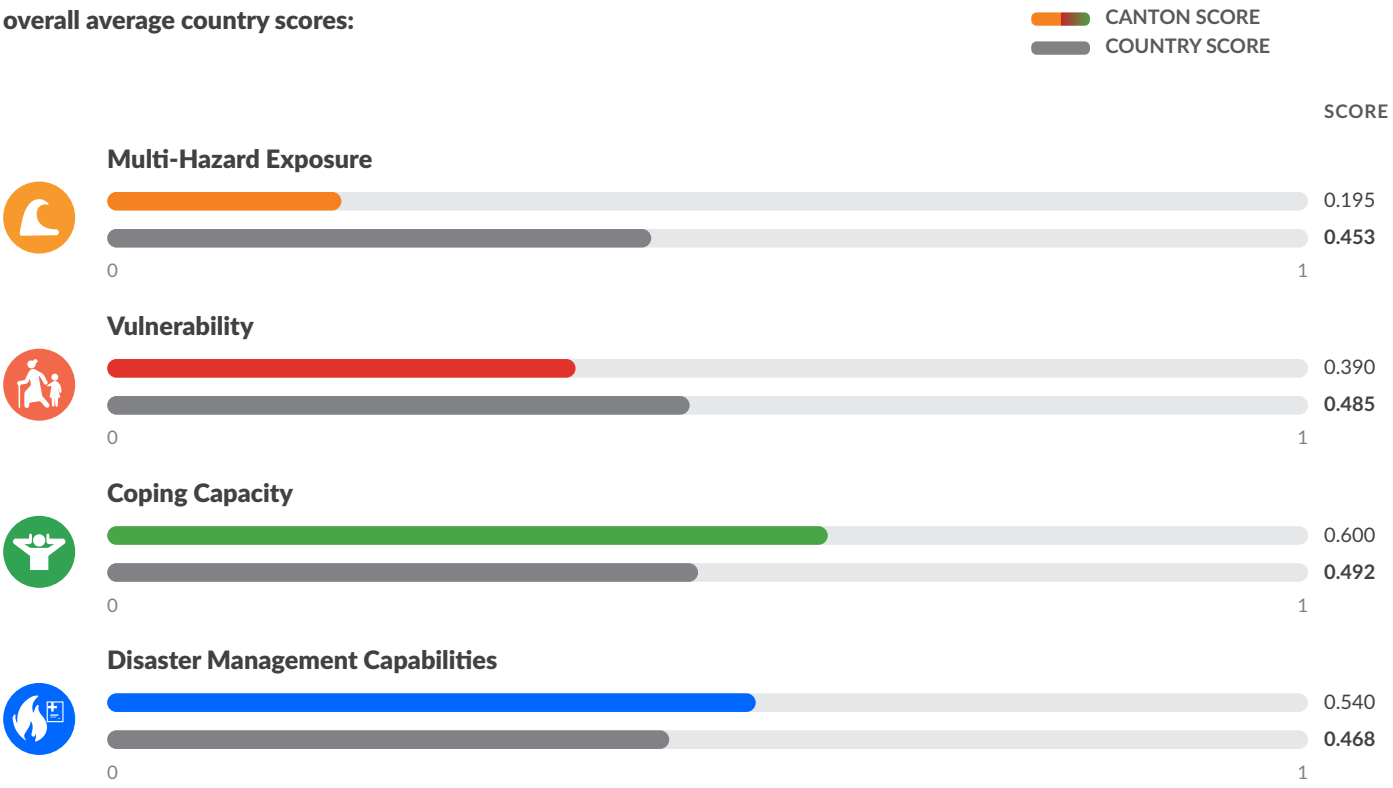


MULTI-HAZARD RISK (MHR)

RANKED
216 / 221
CANTONS ASSESSED
SCORE: 0.361

Tisaleo's score and ranking are due to Very Low Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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TIWINTZA

NDPBA SUBNATIONAL PROFILE

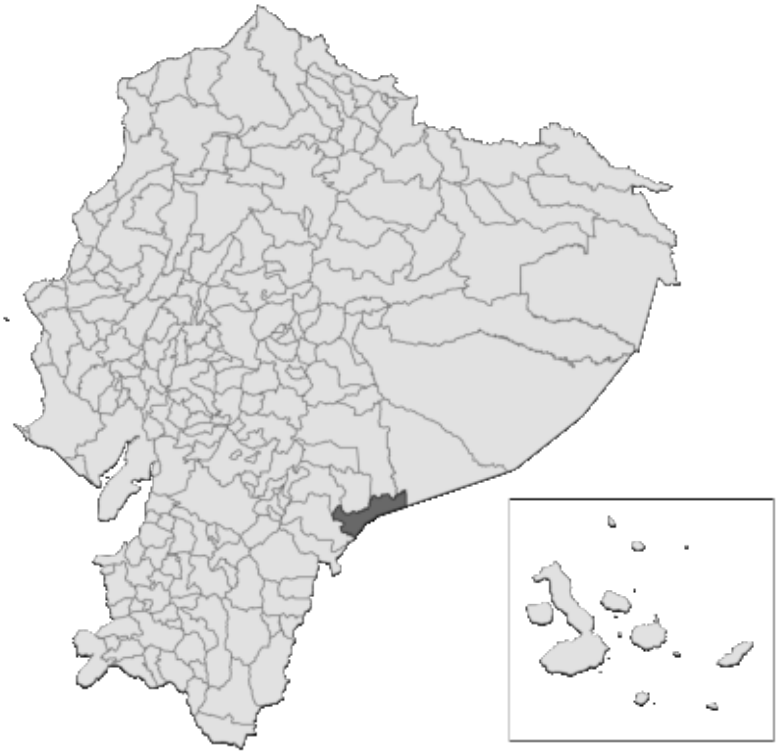
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TIWINTZA

PROVINCE: MORONA SANTIAGO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.636 • RANK: 3/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.648 • RANK: 4/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.271 • RANK: 219/221 CANTONS ASSESSED

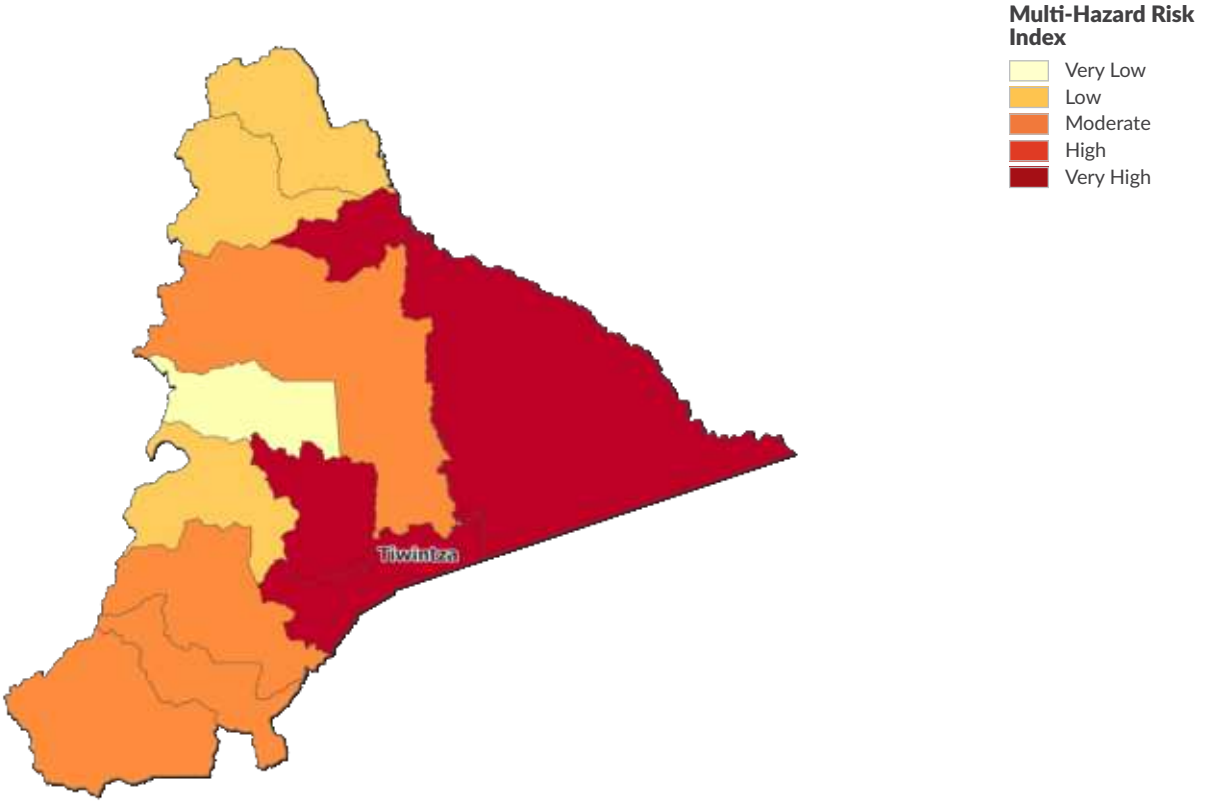
Coping Capacity (CC) - Very Low
SCORE: 0.279 • RANK: 216/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.357 • RANK: 145/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.183 • RANK: 219/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MORONA SANTIAGO PROVINCE

TIWINTZA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Taisha	0.693
Tiwintza	**0.636**
Logroño	0.602
Huamboya	0.577
Morona	0.499
Limón Indanza	0.491
Gualaquiza	0.484
San Juan Bosco	0.474
Santiago	0.461
Pablo Sexto	0.442
Palora	0.429
Sucúa	0.426

MULTI-HAZARD EXPOSURE (MHE)

RANK: 145 / 221 CANTONS ASSESSED
SCORE: 0.357



MHE
0.357

Raw MHE
0.330

Relative MHE
0.383

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
10,189 people exposed
6,538 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
32%
3,292 people exposed
1,897 structures exposed (29%)
Critical Infrastructure Exposed: 41%

Inland Flood
32%
3,273 people exposed
2,400 structures exposed (37%)
Critical Infrastructure Exposed: 12%

Landslide
19%
1,887 people exposed
1,407 structures exposed (22%)
Critical Infrastructure Exposed: 38%

Mosquito-Borne Disease
100%
10,189 people exposed
6,533 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
96%
9,774 people exposed
6,348 structures exposed (97%)
Critical Infrastructure Exposed: 88%

VULNERABILITY (V)

RANK: 4 / 221 CANTONS ASSESSED **SCORE: 0.648**

Vulnerability in Tiwintza is primarily driven by Economic Constraints and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.631

- **9.2** Average Years of Schooling
- **54.3%** Population (age 24 and over) with General Basic Education Schooling
- **4.8%** Population (age 24 and over) with No Schooling
- **2.8%** Adult Illiteracy Rate
- **84.6%** Households with No Internet Access
- **89.3%** Households with No Access to Television
- **90.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.787

- **41.8%** Homes with Access to Public Water Source
- **19.5%** Homes Connected to the Public Sewage System
- **84.6%** Homes without Piped Water
- **6.3%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.860

- **92.1** Age Dependency Ratio
- **27.1%** Unemployment Rate
- **93.4%** Poverty Rate (based on UBN)
- **1.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.702

- **8.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 8/221 CANTONS ASSESSED
SCORE: 0.788

- **0.5** Female to Male Labor Ratio (distance from parity)
- **74.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **9.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **95.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **90.5%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 206/221 CANTONS ASSESSED
SCORE: 0.299

- **5.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 47/221 CANTONS ASSESSED
SCORE: 0.482

- **6.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **39.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **6.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 121/221 CANTONS ASSESSED
SCORE: 0.476

10	25	23	84
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 4/221 CANTONS ASSESSED
SCORE: 0.789

30%	3.4%	30.1%	95.7%	21.6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.546

7.9	2.3%	5.1	0.36
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.474

0.2	0.2	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 216 / 221 CANTONS ASSESSED **SCORE: 0.279**

Tiwintza exhibits weaker Coping Capacity in the areas of Energy Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 221/221 CANTONS ASSESSED
SCORE: 0.116

36.8%
Labor Force Participation

18,006
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 6/221 CANTONS ASSESSED
SCORE: 0.855

51.8%
Protected Area (% of land area)

4,100.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.155

72.4%
Voter Participation

41.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 202/221 CANTONS ASSESSED
SCORE: 0.375

Communications Capacity

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.196

5.9%
Household Access to Fixed Phones

28.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.102

58.4%
Homes Served by the Public Electricity Network

46%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.692

25.8
Nurses and Midwives per 10,000 persons

32.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.511

20.1
Average Distance to Airport (km)

23.9
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 219 / 221 CANTONS ASSESSED **SCORE: 0.183**

Tiwintza exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.266

6.9	6.4%	0	81.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 218/221 CANTONS ASSESSED
SCORE: 0.100

51.2	51.6	7.1	22.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 219 / 221 CANTONS ASSESSED
SCORE: 0.271

Tiwintza's score and ranking are due to Very High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Emergency Services


Energy Capacity


Economic Capacity


Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.



Economic Capacity

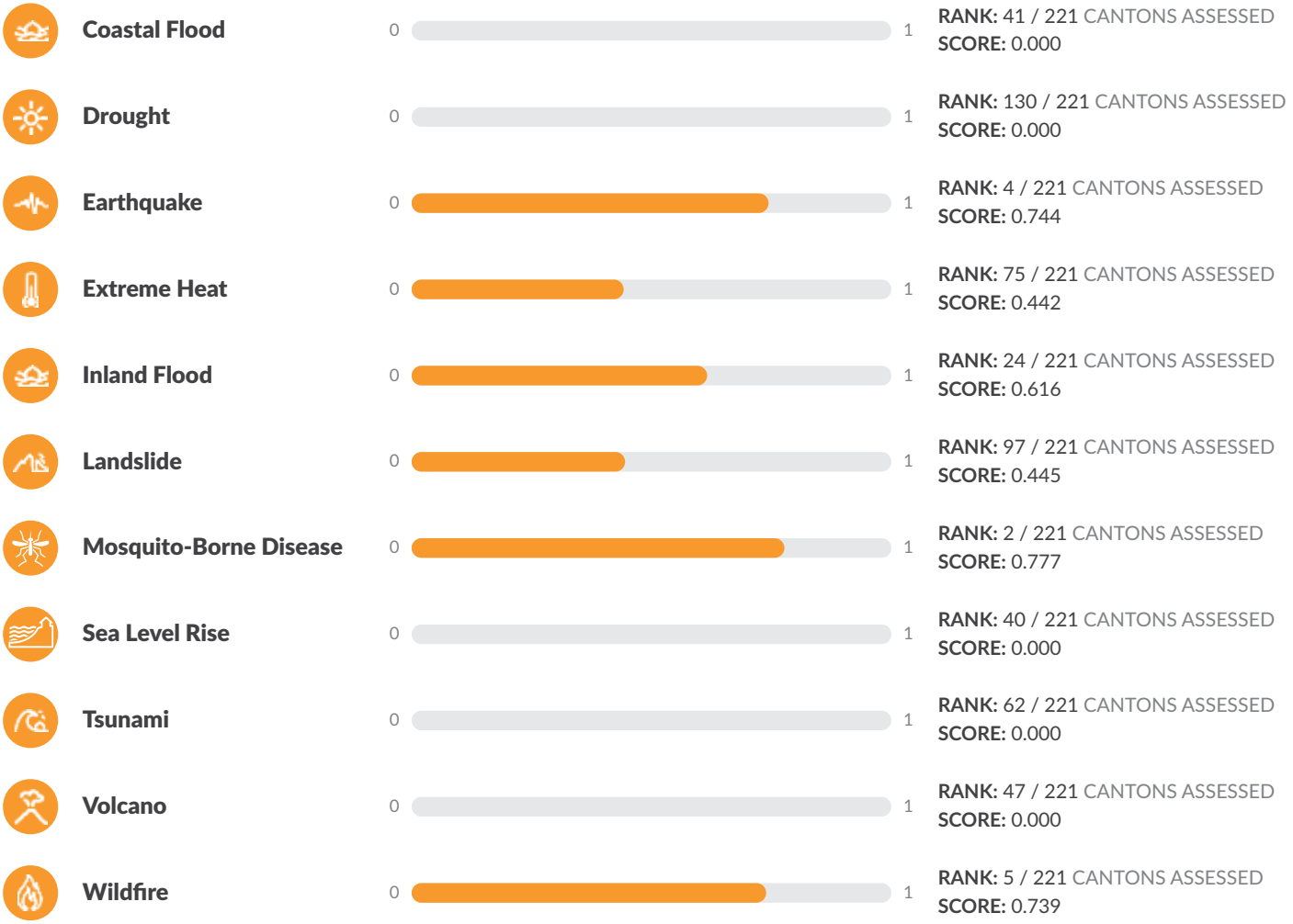
A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
3 / 221
CANTONS ASSESSED
SCORE: 0.636

Tiwintza's score and ranking are due to Low Multi-Hazard Exposure combined with Very High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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TOSAGUA

NDPBA SUBNATIONAL PROFILE

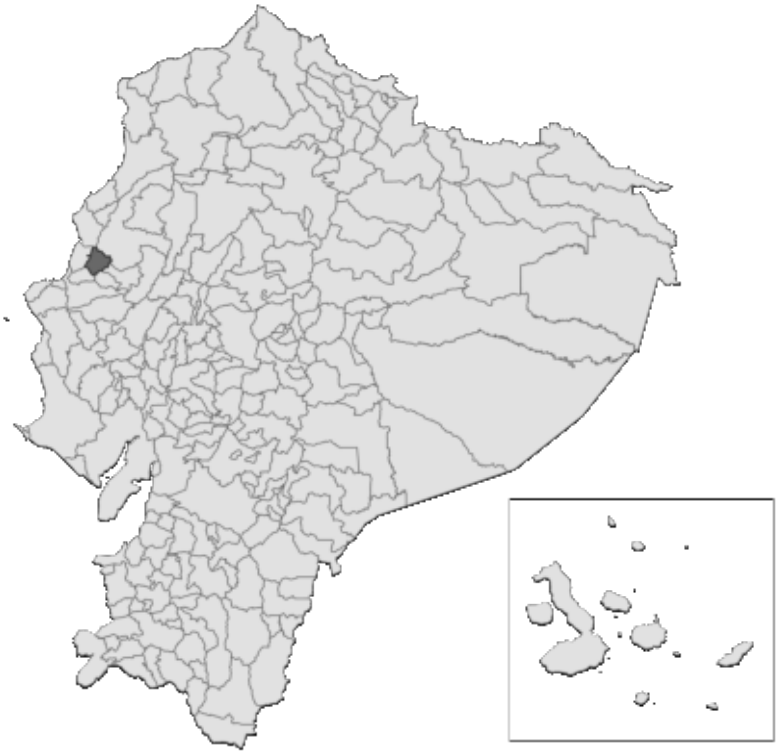
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PROVINCE: MANABÍ



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.587 • RANK: 26/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.548 • RANK: 59/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.447 • RANK: 148/221 CANTONS ASSESSED

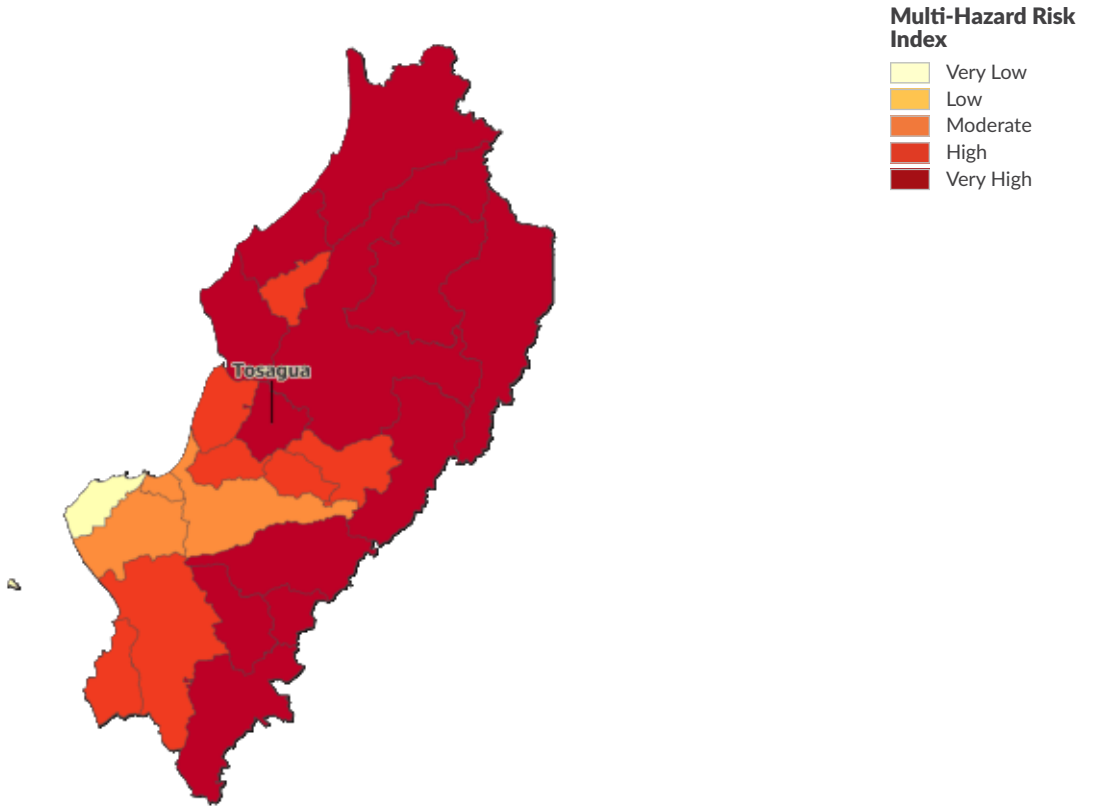
Coping Capacity (CC) - Low
SCORE: 0.442 • RANK: 150/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.692 • RANK: 22/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.449 • RANK: 122/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN MANABÍ PROVINCE

TOSAGUA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Pedernales	0.638	Olmedo	0.592	Jipijapa	0.532
Santa Ana	0.627	**Tosagua**	**0.587**	Rocafuerte	0.527
Jama	0.625	Flavio Alfaro	0.581	Portoviejo	0.498
Paján	0.623	El Carmen	0.574	Montecristi	0.484
San Vicente	0.623	Junín	0.565	Jaramijó	0.471
Pichincha	0.619	Sucre	0.564	Manta	0.415
Chone	0.617	Bolívar	0.562		
24 De Mayo	0.607	Puerto López	0.544		

MULTI-HAZARD EXPOSURE (MHE)

RANK: 22 / 221 CANTONS ASSESSED
SCORE: 0.692



MHE
0.692

Raw MHE
0.650

Relative MHE
0.733

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
<1%
- **181** people exposed
- **144** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Drought
100%
- **45,719** people exposed
- **25,495** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Earthquake
100%
- **45,754** people exposed
- **25,516** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
100%
- **45,754** people exposed
- **25,516** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Inland Flood
35%
- **16,120** people exposed
- **8,157** structures exposed (32%)

Critical Infrastructure Exposed: 34%

Landslide
<1%
- **19** people exposed
- **9** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Mosquito-Borne Disease
75%
- **34,373** people exposed
- **19,252** structures exposed (75%)

Critical Infrastructure Exposed: 61%

Sea Level Rise
<1%
- **103** people exposed
- **77** structures exposed (<1%)

Critical Infrastructure Exposed: <1%

Tsunami
44%
- **20,193** people exposed
- **11,670** structures exposed (46%)

Critical Infrastructure Exposed: 64%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
59%
- **26,855** people exposed
- **15,592** structures exposed (61%)

Critical Infrastructure Exposed: 64%

VULNERABILITY (V)

RANK: 59 / 221 CANTONS ASSESSED **SCORE: 0.548**

Vulnerability in Tosagua is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.603

- **9.1** Average Years of Schooling
- **50.1%** Population (age 24 and over) with General Basic Education Schooling
- **7.8%** Population (age 24 and over) with No Schooling
- **7.2%** Adult Illiteracy Rate
- **60.8%** Households with No Internet Access
- **84.8%** Households with No Access to Television
- **85.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 52/221 CANTONS ASSESSED
SCORE: 0.662

- **70.9%** Homes with Access to Public Water Source
- **10%** Homes Connected to the Public Sewage System
- **50.3%** Homes without Piped Water
- **5.1%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 116/221 CANTONS ASSESSED
SCORE: 0.501

- **53.8** Age Dependency Ratio
- **16.2%** Unemployment Rate
- **62.7%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.651

- **7.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.640

- **0.6** Female to Male Labor Ratio (distance from parity)
- **51.3** Adolescent Birth Rate (among females age 15-19) per 1,000
- **8.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **58.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **68.6%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.381

- **9.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **7.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 149/221 CANTONS ASSESSED
SCORE: 0.289

- **19.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **12.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 20/221 CANTONS ASSESSED
SCORE: 0.606

78
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

41
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

42
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.641

25.8%
Homes with Exterior Walls in Poor Condition

27.4%
Homes with Inadequate Materials Used in Outer Walls

22.1%
Homes with Roofs in Poor Condition

87.1%
Households with No Access to Vehicle for Private Use

7%
Household Overcrowding

Population Pressures

0 — 1

RANK: 143/221 CANTONS ASSESSED
SCORE: 0.440

112.4
Population Density (persons per sq km)

1%
Average Annual Population Change (2010-2022)

3
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 85/221 CANTONS ASSESSED
SCORE: 0.501

0.3
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 150 / 221 CANTONS ASSESSED **SCORE: 0.442**

Tosagua exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.392

49.3%
Labor Force Participation

96,548
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.356

0.2%
Protected Area (% of land area)

-1,113.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.538

90%
Voter Participation

64.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 179/221 CANTONS ASSESSED
SCORE: 0.426

Communications Capacity

0 — 1

RANK: 192/221 CANTONS ASSESSED
SCORE: 0.320

3.5%
Household Access to Fixed Phones

76.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 156/221 CANTONS ASSESSED
SCORE: 0.473

96.2%
Homes Served by the Public Electricity Network

61.3%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.307

6.5
Nurses and Midwives per 10,000 persons

11.7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.602

25.6
Average Distance to Airport (km)

53.8
Average Distance to Sea or River Port (km)

4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 122 / 221 CANTONS ASSESSED **SCORE: 0.449**

Tosagua exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 152/221 CANTONS ASSESSED
SCORE: 0.372

3.4	4.5%	0.2	52
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 96/221 CANTONS ASSESSED
SCORE: 0.525

6.2	6.1	4.8	5.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 148 / 221 CANTONS ASSESSED
SCORE: 0.447

Tosagua's score and ranking are due to High Vulnerability combined with Low Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Healthcare Capacity

Communications Capacity

Clean Water Access Vulnerability

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

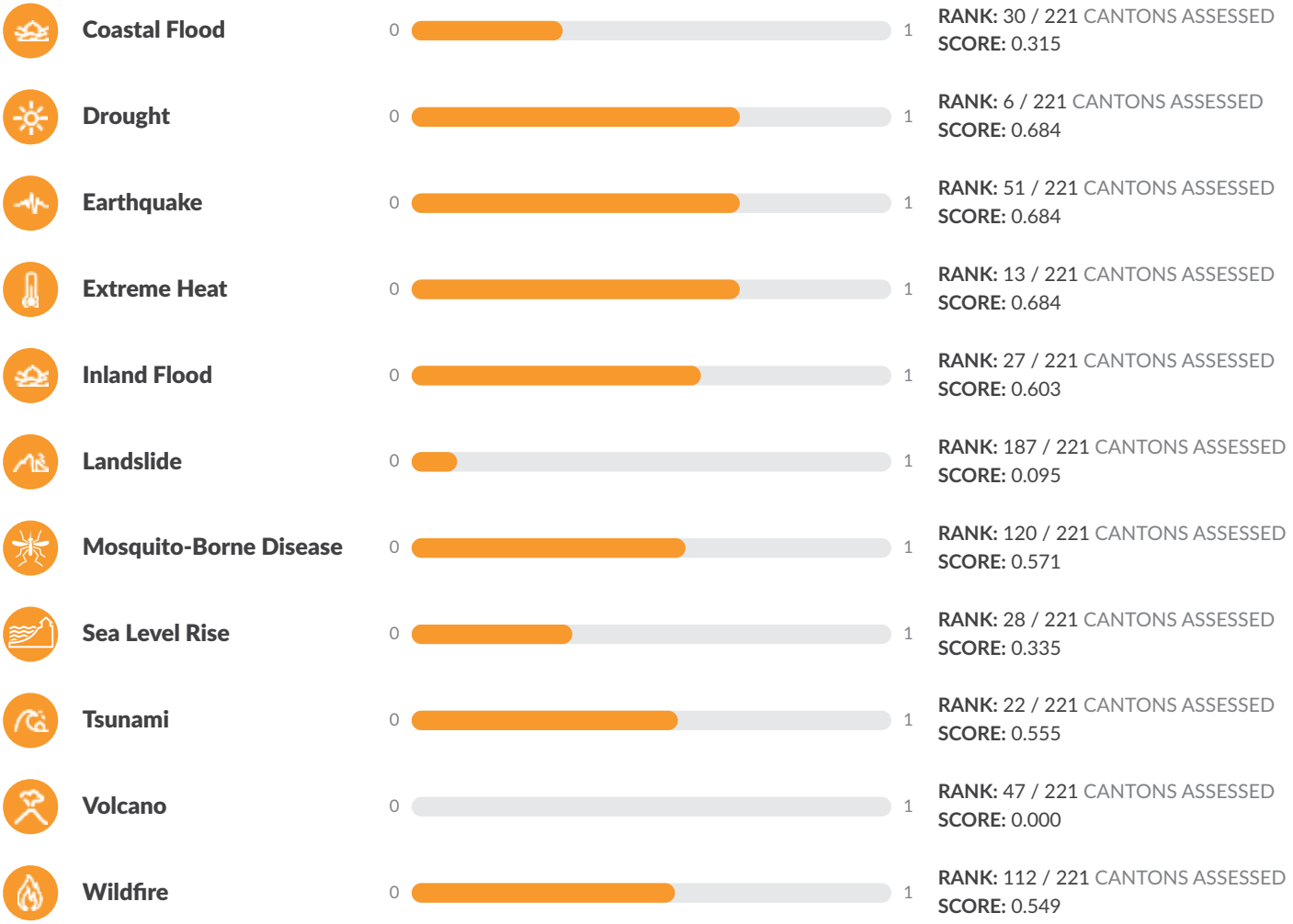
Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

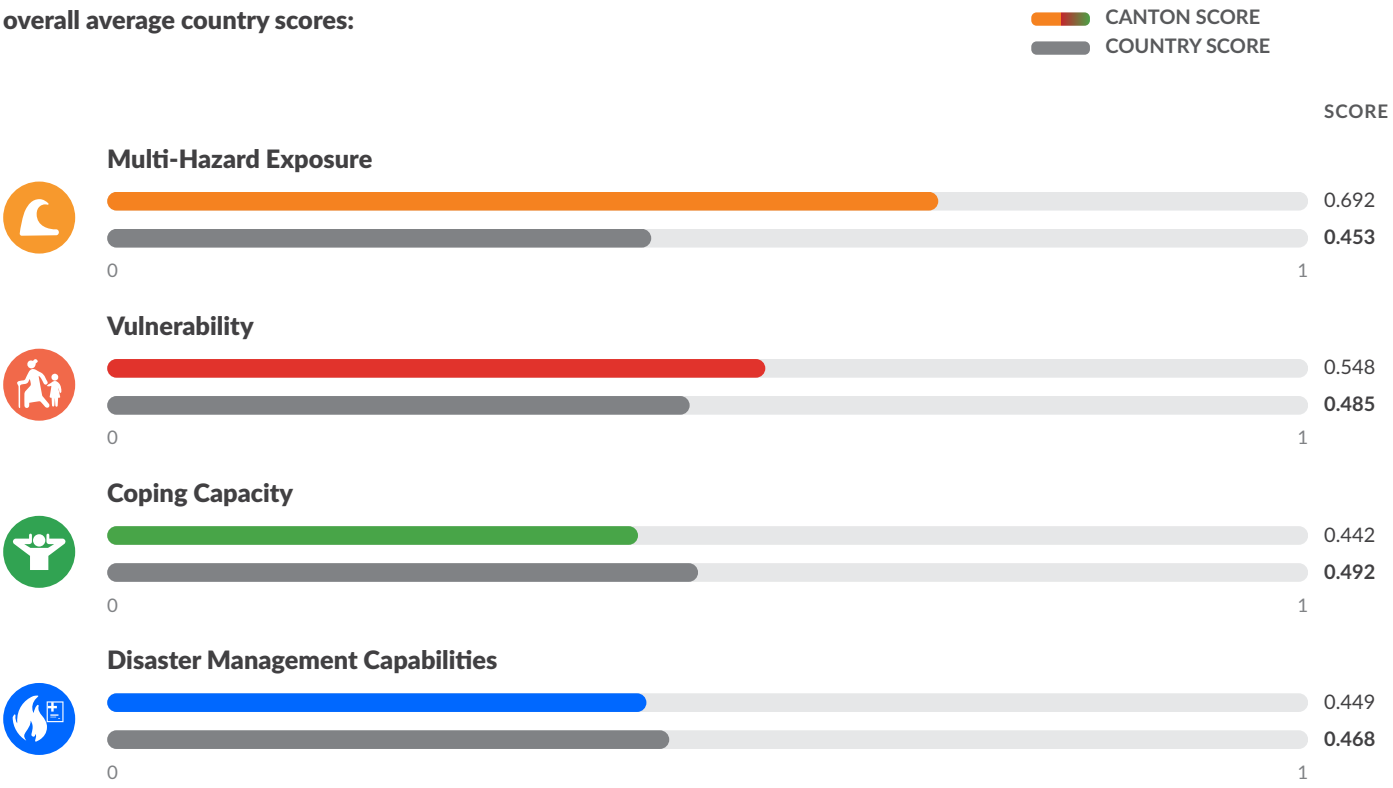


MULTI-HAZARD RISK (MHR)

RANKED
26 / 221
CANTONS ASSESSED
SCORE: 0.587

Tosagua's score and ranking are due to Very High Multi-Hazard Exposure combined with High Vulnerability, Low Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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TULCÁN

NDPBA SUBNATIONAL PROFILE

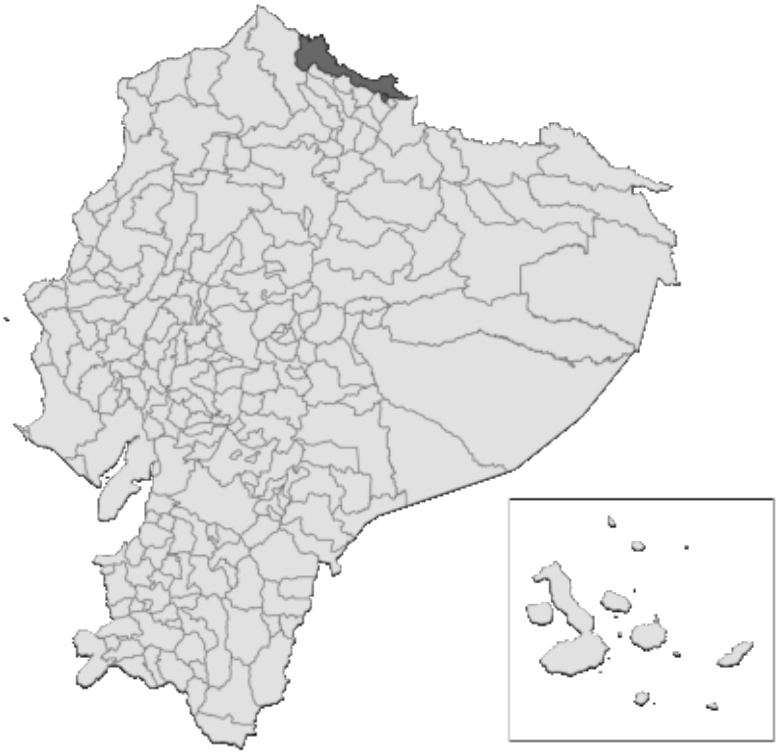
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TULCÁN

PROVINCE: CARCHI



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.423 • RANK: 185/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.585 • RANK: 37/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.448 • RANK: 108/221 CANTONS ASSESSED

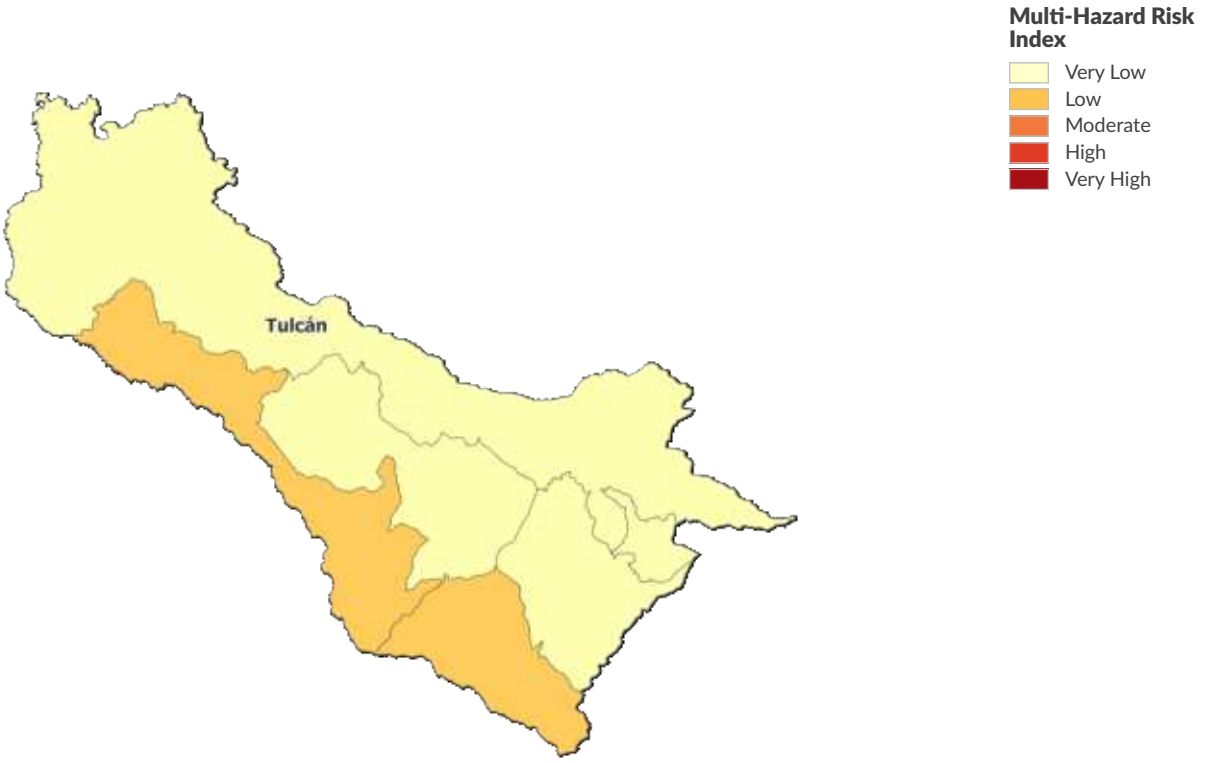
Vulnerability (V) - Low
SCORE: 0.453 • RANK: 146/221 CANTONS ASSESSED

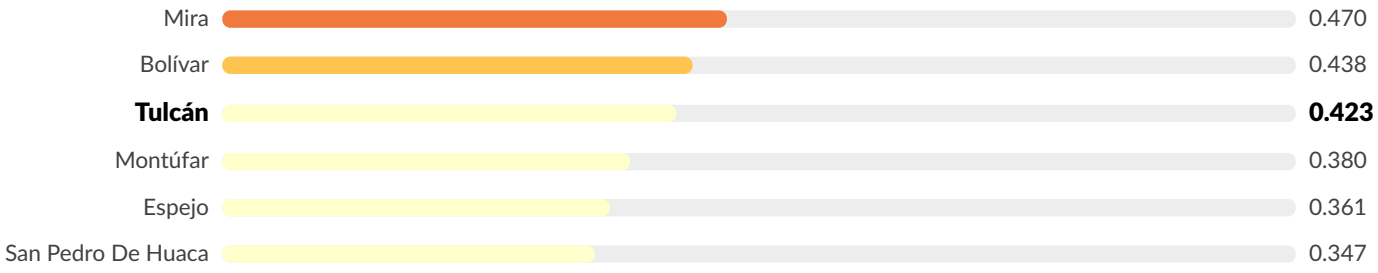
Coping Capacity (CC) - Very High
SCORE: 0.603 • RANK: 35/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.606 • RANK: 27/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN CARCHI PROVINCE

TULCÁN • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE





MULTI-HAZARD EXPOSURE (MHE)

RANK: 108 / 221 CANTONS ASSESSED
SCORE: 0.448



MHE
0.448

Raw MHE
0.637

Relative MHE
0.259

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
100,149 people exposed
31,260 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
<1%
523 people exposed
146 structures exposed (<1%)
Critical Infrastructure Exposed: <1%

Inland Flood
2%
1,715 people exposed
640 structures exposed (2%)
Critical Infrastructure Exposed: 4%

Landslide
47%
46,811 people exposed
16,434 structures exposed (53%)
Critical Infrastructure Exposed: 49%

Mosquito-Borne Disease
39%
39,553 people exposed
11,662 structures exposed (37%)
Critical Infrastructure Exposed: 48%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
3%
2,820 people exposed
1,675 structures exposed (5%)
Critical Infrastructure Exposed: 6%

Wildfire
98%
97,854 people exposed
30,686 structures exposed (98%)
Critical Infrastructure Exposed: 99%

VULNERABILITY (V)

RANK: 146 / 221 CANTONS ASSESSED **SCORE: 0.453**

Vulnerability in Tulcán is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.355

- **10.7** Average Years of Schooling
- **43.6%** Population (age 24 and over) with General Basic Education Schooling
- **3.7%** Population (age 24 and over) with No Schooling
- **3.5%** Adult Illiteracy Rate
- **39%** Households with No Internet Access
- **69.4%** Households with No Access to Television
- **59.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.372

- **93.5%** Homes with Access to Public Water Source
- **81.2%** Homes Connected to the Public Sewage System
- **18.6%** Homes without Piped Water
- **10.7%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 180/221 CANTONS ASSESSED
SCORE: 0.390

- **48.7** Age Dependency Ratio
- **12.2%** Unemployment Rate
- **29.6%** Poverty Rate (based on UBN)
- **1.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.411

- **2.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 148/221 CANTONS ASSESSED
SCORE: 0.408

- **0.3** Female to Male Labor Ratio (distance from parity)
- **30.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **79.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **46.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.482

- **7.5%** Prevalence of Disability (among persons age 5 and over)
- **5.3** Perinatal Mortality Rate (per 1,000 births)
- **12.5%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.171

- **0** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.4** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **12.8** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.1** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 102/221 CANTONS ASSESSED
SCORE: 0.490

35	14	47	27
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 188/221 CANTONS ASSESSED
SCORE: 0.315

8.8%	1%	11.2%	72.5%	6%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.561

50.9	0.5%	89.5	0.26
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.749

0.5	0.3	0.2
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 35 / 221 CANTONS ASSESSED **SCORE: 0.603**

Tulcán exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.665

61.7%
Labor Force Participation

305,748
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 88/221 CANTONS ASSESSED
SCORE: 0.427

6.9%
Protected Area (% of land area)

-10,372
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 55/221 CANTONS ASSESSED
SCORE: 0.590

84.6%
Voter Participation

90.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.613

Communications Capacity

0 — 1

RANK: 34/221 CANTONS ASSESSED
SCORE: 0.707

27%
Household Access to Fixed Phones

86%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 44/221 CANTONS ASSESSED
SCORE: 0.732

97.4%
Homes Served by the Public Electricity Network

86.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.613

24.9
Nurses and Midwives per 10,000 persons

21
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.402

9.4
Average Distance to Airport (km)

149.6
Average Distance to Sea or River Port (km)

0.6
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 27 / 221 CANTONS ASSESSED **SCORE: 0.606**

Tulcán exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.554

1.9	5.9%	1.8	65.1
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.657

9.1	6	1.7	2.7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 37 / 221 CANTONS ASSESSED
SCORE: 0.585

Tulcán's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Disaster Impacts

Transportation Capacity

Population Pressures

Vulnerable Health Status

KEY FACTORS INFLUENCING RESILIENCE

Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

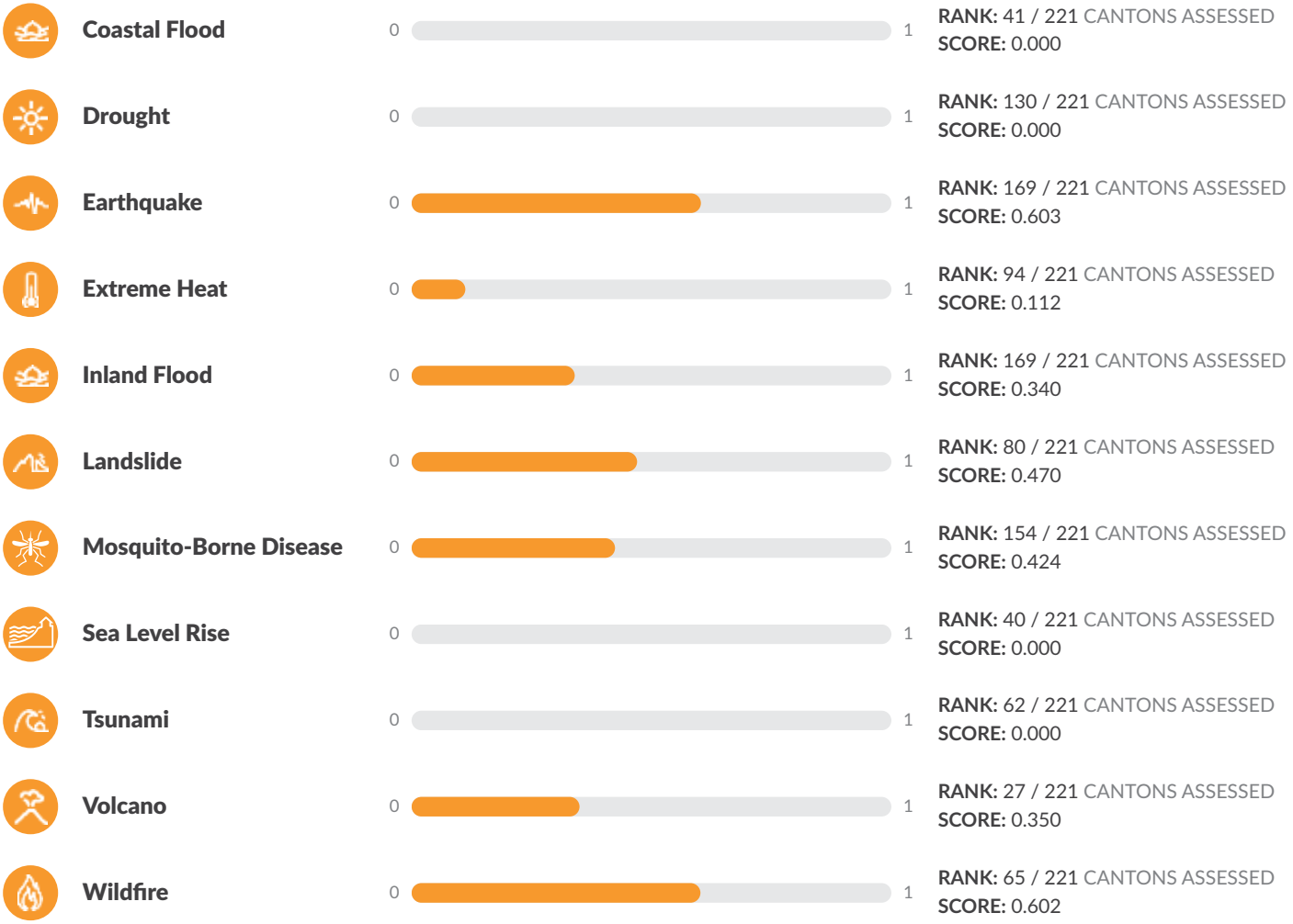
Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Vulnerable Health Status

A population's health status, and the status of mechanisms that support public health greatly influence short and long-term disaster outcomes. Poor health is often correlated with increased susceptibility to injury, disease, and stress associated with disasters and can limit response capacity (e.g., evacuation).

HAZARD-SPECIFIC RISK (HSR)



MULTI-HAZARD RISK (MHR)

RANKED
185 / 221
CANTONS ASSESSED
SCORE: 0.423

Tulcán's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:

CANTON SCORE
COUNTRY SCORE

SCORE

Multi-Hazard Exposure

0.448
0.453

0 1

Vulnerability

0.453
0.485

0 1

Coping Capacity

0.603
0.492

0 1

Disaster Management Capabilities

0.606
0.468

0 1

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URDANETA

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URDANETA

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.547 • RANK: 55/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.594 • RANK: 21/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.447 • RANK: 148/221 CANTONS ASSESSED

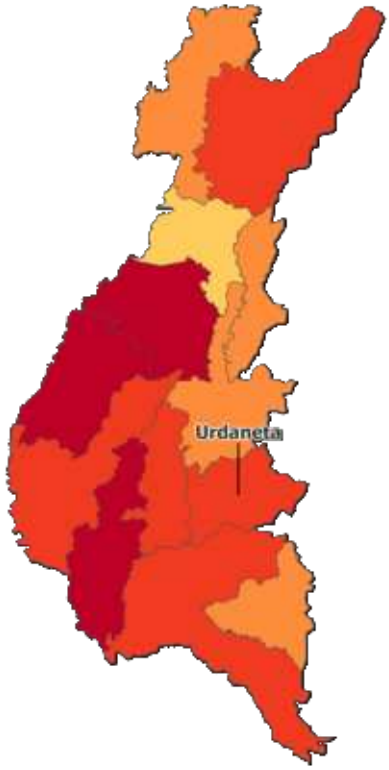
Coping Capacity (CC) - Moderate
SCORE: 0.487 • RANK: 107/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.531 • RANK: 69/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.450 • RANK: 121/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

URDANETA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	**0.547**
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 69 / 221 CANTONS ASSESSED
SCORE: 0.531



MHE
0.531

Raw MHE
0.519

Relative MHE
0.542

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
37,838 people exposed
10,762 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
68%
25,803 people exposed
7,480 structures exposed (70%)
Critical Infrastructure Exposed: 76%

Inland Flood
69%
26,182 people exposed
6,935 structures exposed (64%)
Critical Infrastructure Exposed: 45%

Landslide
8%
2,912 people exposed
775 structures exposed (7%)
Critical Infrastructure Exposed: 7%

Mosquito-Borne Disease
100%
37,814 people exposed
10,746 structures exposed (100%)
Critical Infrastructure Exposed: 99%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
55%
20,816 people exposed
5,726 structures exposed (53%)
Critical Infrastructure Exposed: 69%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
34%
13,025 people exposed
3,130 structures exposed (29%)
Critical Infrastructure Exposed: 26%

VULNERABILITY (V)

RANK: 21 / 221 CANTONS ASSESSED **SCORE: 0.594**

Vulnerability in Urdaneta is primarily driven by Clean Water Access Vulnerability and Marginalization. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.590

- **9.2** Average Years of Schooling
- **50.4%** Population (age 24 and over) with General Basic Education Schooling
- **7.3%** Population (age 24 and over) with No Schooling
- **5.9%** Adult Illiteracy Rate
- **64.5%** Households with No Internet Access
- **77.6%** Households with No Access to Television
- **89.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 15/221 CANTONS ASSESSED
SCORE: 0.749

- **43.6%** Homes with Access to Public Water Source
- **12%** Homes Connected to the Public Sewage System
- **57.9%** Homes without Piped Water
- **6.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 80/221 CANTONS ASSESSED
SCORE: 0.553

- **60.5** Age Dependency Ratio
- **13.9%** Unemployment Rate
- **76.1%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.683

- **8.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 18/221 CANTONS ASSESSED
SCORE: 0.730

- **0.6** Female to Male Labor Ratio (distance from parity)
- **61.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **7.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **90.9%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **77%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.516

- **10.4%** Prevalence of Disability (among persons age 5 and over)
- **8.2** Perinatal Mortality Rate (per 1,000 births)
- **7.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 101/221 CANTONS ASSESSED
SCORE: 0.372

- **14** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **16** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **1.3** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 169/221 CANTONS ASSESSED
SCORE: 0.418

48	15	15	47
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.681

22.9%	9.5%	26.5%	93.7%	10.7%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 123/221 CANTONS ASSESSED
SCORE: 0.460

86.2	1%	4.5	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 106/221 CANTONS ASSESSED
SCORE: 0.462

0.2	0.1	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 107 / 221 CANTONS ASSESSED **SCORE: 0.487**

Urdaneta exhibits weaker Coping Capacity in the areas of Communications Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.446

52.9%
Labor Force Participation

103,736
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.311

0%
Protected Area (% of land area)

-2,844.7
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.568

87.9%
Voter Participation

79.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 118/221 CANTONS ASSESSED
SCORE: 0.506

Communications Capacity

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.274

3.5%
Household Access to Fixed Phones

69.8%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.491

94.8%
Homes Served by the Public Electricity Network

69.7%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.552

12.7
Nurses and Midwives per 10,000 persons

29.3
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.708

10.4
Average Distance to Airport (km)

8.6
Average Distance to Sea or River Port (km)

1.1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 121 / 221 CANTONS ASSESSED **SCORE: 0.450**

Urdaneta exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.396

4.2	2%	0.8	46.5
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 111/221 CANTONS ASSESSED
SCORE: 0.503

8.2	6.7	3.8	7
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 148 / 221 CANTONS ASSESSED
SCORE: 0.447

Urdaneta's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Clean Water Access Vulnerability

Marginalization

Communications Capacity

Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

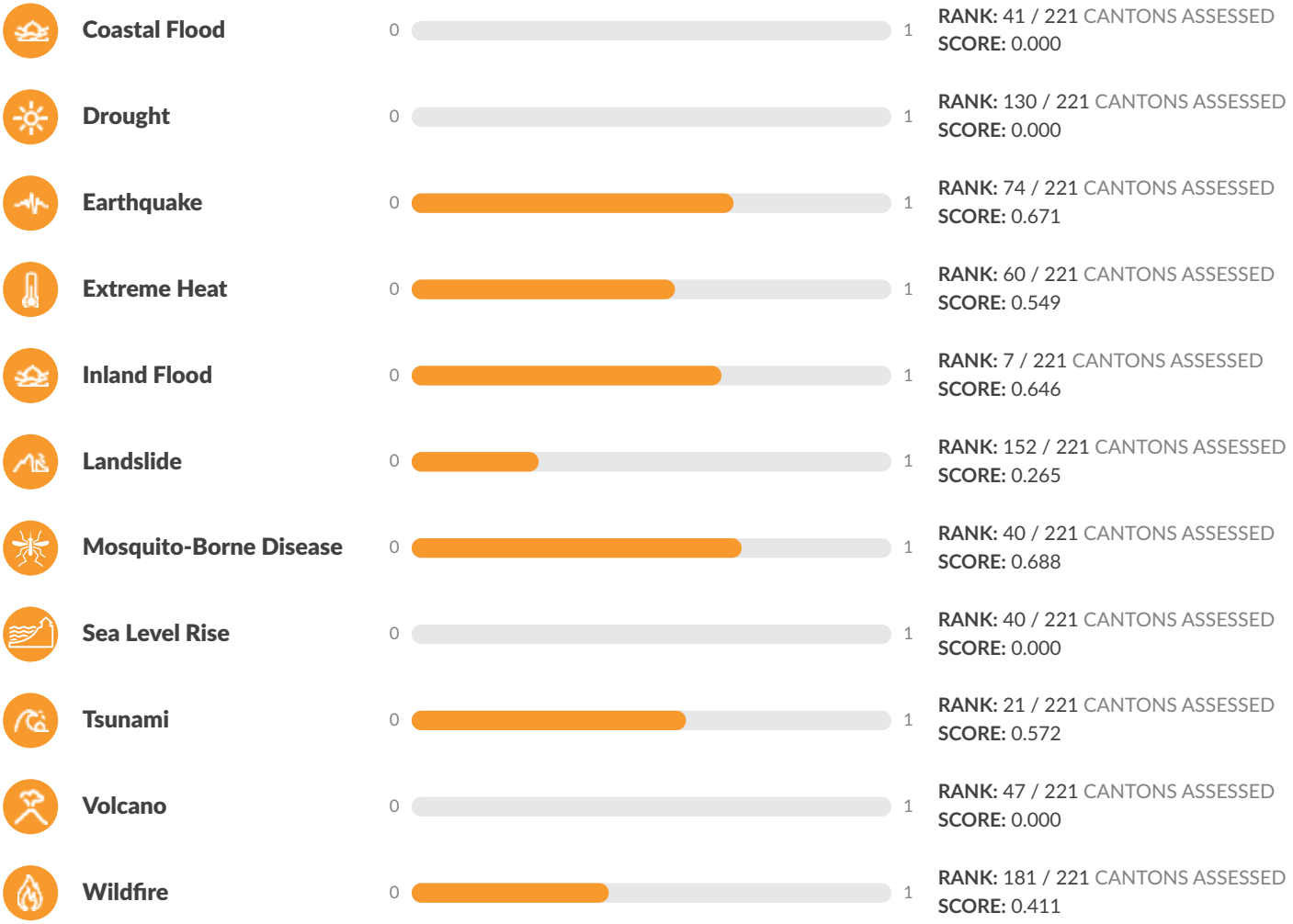
Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

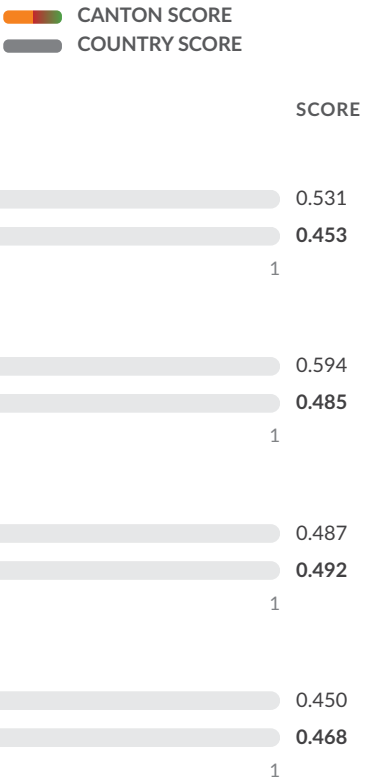


MULTI-HAZARD RISK (MHR)

RANKED
55 / 221
CANTONS ASSESSED
SCORE: 0.547

Urdaneta's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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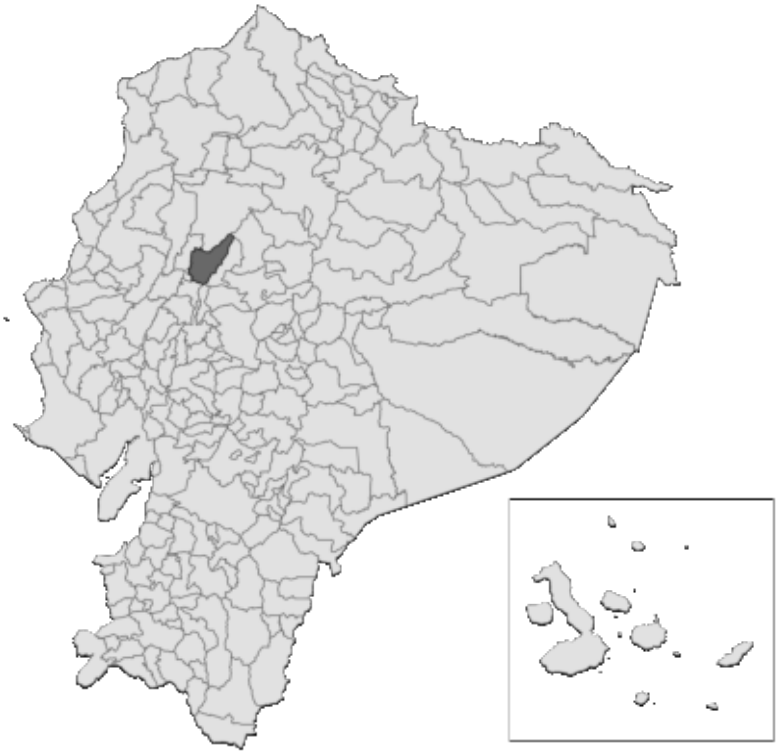
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VALENCIA

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.560 • RANK: 50/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.567 • RANK: 40/221 CANTONS ASSESSED

Resilience (R) - Low
SCORE: 0.415 • RANK: 176/221 CANTONS ASSESSED

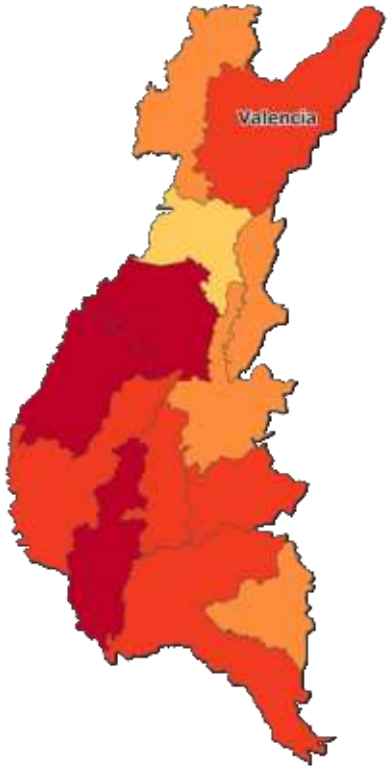
Coping Capacity (CC) - Moderate
SCORE: 0.507 • RANK: 96/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.484 • RANK: 85/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.304 • RANK: 204/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

VALENCIA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	**0.560**
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 85 / 221 CANTONS ASSESSED
SCORE: 0.484



MHE
0.484

Raw MHE
0.572

Relative MHE
0.396

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
51,328 people exposed
18,285 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
75%
38,339 people exposed
14,169 structures exposed (77%)
Critical Infrastructure Exposed: 81%

Inland Flood
37%
19,027 people exposed
6,671 structures exposed (36%)
Critical Infrastructure Exposed: 39%

Landslide
2%
1,218 people exposed
377 structures exposed (2%)
Critical Infrastructure Exposed: 1%

Mosquito-Borne Disease
100%
51,328 people exposed
18,275 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
60%
30,784 people exposed
11,332 structures exposed (62%)
Critical Infrastructure Exposed: 57%

VULNERABILITY (V)

RANK: 40 / 221 CANTONS ASSESSED **SCORE: 0.567**

Vulnerability in Valencia is primarily driven by Marginalization and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.600

- **9** Average Years of Schooling
- **53%** Population (age 24 and over) with General Basic Education Schooling
- **7.9%** Population (age 24 and over) with No Schooling
- **6.6%** Adult Illiteracy Rate
- **58.5%** Households with No Internet Access
- **80.3%** Households with No Access to Television
- **87.5%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 9/221 CANTONS ASSESSED
SCORE: 0.785

- **29.7%** Homes with Access to Public Water Source
- **8.1%** Homes Connected to the Public Sewage System
- **52.3%** Homes without Piped Water
- **7.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 98/221 CANTONS ASSESSED
SCORE: 0.528

- **59.1** Age Dependency Ratio
- **12.2%** Unemployment Rate
- **82.3%** Poverty Rate (based on UBN)
- **0.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 40/221 CANTONS ASSESSED
SCORE: 0.715

- **9.2%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.787

- **0.6** Female to Male Labor Ratio (distance from parity)
- **60.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **10.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **92.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **85%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.375

- **7.6%** Prevalence of Disability (among persons age 5 and over)
- **1.4** Perinatal Mortality Rate (per 1,000 births)
- **7%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.398

- **17.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **7.3** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.335

20 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**12** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**30** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**7** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.606

17.8% Homes with Exterior Walls in Poor Condition	**10.3%** Homes with Inadequate Materials Used in Outer Walls	**21.4%** Homes with Roofs in Poor Condition	**89.7%** Households with No Access to Vehicle for Private Use	**10.9%** Household Overcrowding

Population Pressures

0 — 1

RANK: 82/221 CANTONS ASSESSED
SCORE: 0.513

53.1 Population Density (persons per sq km)	**1.7%** Average Annual Population Change (2010-2022)	**6.3** Net Migration Rate (per 1,000 persons)	**0.31** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.317

0.2 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.1** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 96 / 221 CANTONS ASSESSED **SCORE: 0.507**

Valencia exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 60/221 CANTONS ASSESSED
SCORE: 0.577

55.3%
Labor Force Participation

389,368
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 217/221 CANTONS ASSESSED
SCORE: 0.123

0%
Protected Area (% of land area)

-16,347.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 33/221 CANTONS ASSESSED
SCORE: 0.640

89.7%
Voter Participation

83.8%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.433

Communications Capacity

0 — 1

RANK: 172/221 CANTONS ASSESSED
SCORE: 0.381

3.9%
Household Access to Fixed Phones

81.9%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.495

96%
Homes Served by the Public Electricity Network

65.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 205/221 CANTONS ASSESSED
SCORE: 0.204

5.6
Nurses and Midwives per 10,000 persons

7
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 38/221 CANTONS ASSESSED
SCORE: 0.653

6.8
Average Distance to Airport (km)

32.6
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 204 / 221 CANTONS ASSESSED **SCORE: 0.304**

Valencia exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 220/221 CANTONS ASSESSED
SCORE: 0.184

6.2	1.1%	0	93.4
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.424

15.4	6.9	3.9	10.6
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 176 / 221 CANTONS ASSESSED
SCORE: 0.415

Valencia's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Mass Care Support

Healthcare Capacity

Marginalization

Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE

Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

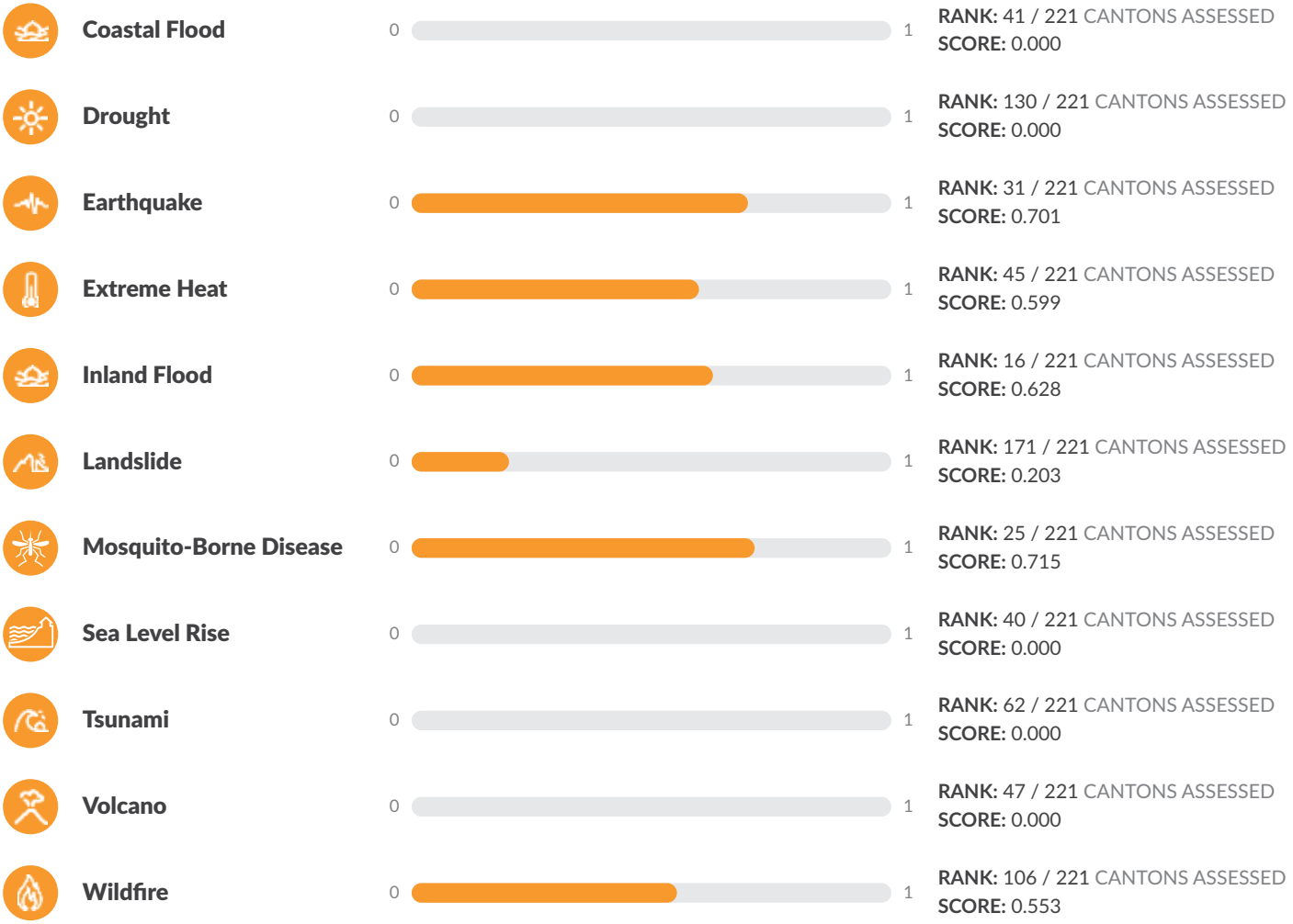
Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

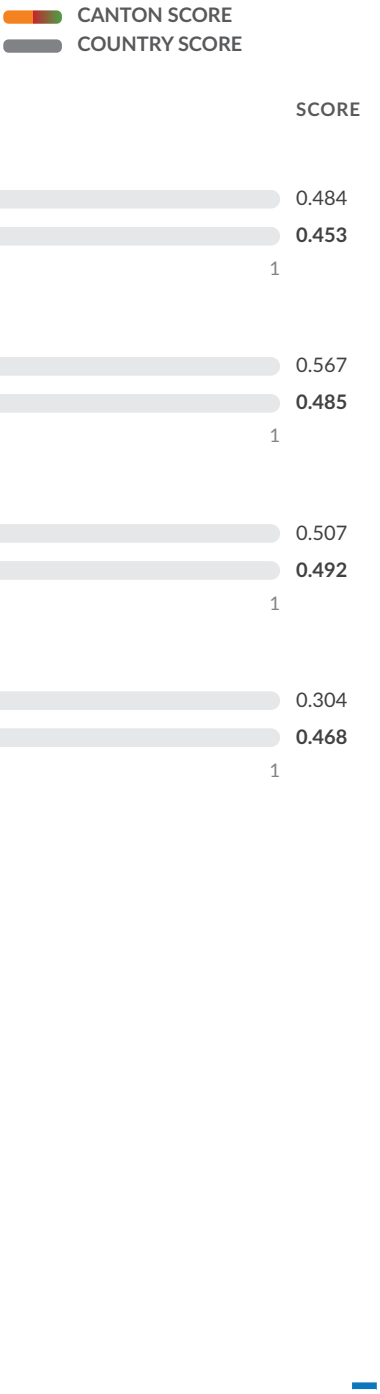


MULTI-HAZARD RISK (MHR)

RANKED
50 / 221
CANTONS ASSESSED
SCORE: 0.560

Valencia's score and ranking are due to High Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

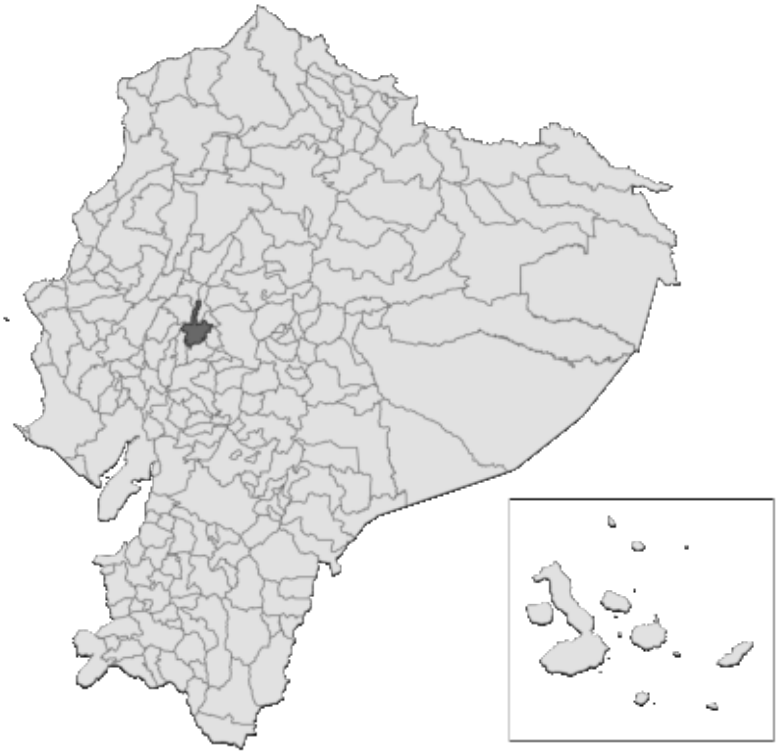
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VENTANAS

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Moderate
SCORE: 0.501 • RANK: 102/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.476 • RANK: 119/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.433 • RANK: 115/221 CANTONS ASSESSED

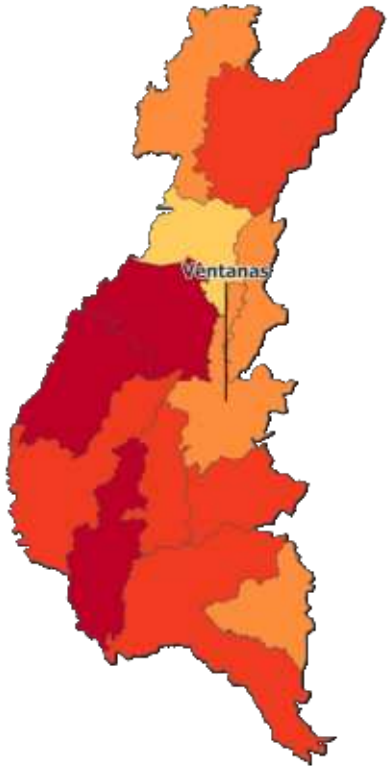
Vulnerability (V) - High
SCORE: 0.541 • RANK: 65/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.530 • RANK: 80/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Low
SCORE: 0.439 • RANK: 136/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

VENTANAS • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	0.566
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	**0.501**
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 115 / 221 CANTONS ASSESSED
SCORE: 0.433



MHE
0.433

Raw MHE
0.603

Relative MHE
0.264

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
79,825 people exposed
25,066 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
21%
16,669 people exposed
6,133 structures exposed (24%)
Critical Infrastructure Exposed: 17%

Inland Flood
20%
16,090 people exposed
4,290 structures exposed (17%)
Critical Infrastructure Exposed: 24%

Landslide
2%
1,903 people exposed
906 structures exposed (4%)
Critical Infrastructure Exposed: 4%

Mosquito-Borne Disease
99%
79,351 people exposed
24,971 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
2%
1,848 people exposed
387 structures exposed (2%)
Critical Infrastructure Exposed: 8%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
57%
45,259 people exposed
14,673 structures exposed (59%)
Critical Infrastructure Exposed: 63%

VULNERABILITY (V)

RANK: 65 / 221 CANTONS ASSESSED **SCORE: 0.541**

Vulnerability in Ventanas is primarily driven by Clean Water Access Vulnerability and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 115/221 CANTONS ASSESSED
SCORE: 0.503

- **10** Average Years of Schooling
- **46.1%** Population (age 24 and over) with General Basic Education Schooling
- **5.7%** Population (age 24 and over) with No Schooling
- **4.7%** Adult Illiteracy Rate
- **58%** Households with No Internet Access
- **72.6%** Households with No Access to Television
- **86%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 61/221 CANTONS ASSESSED
SCORE: 0.637

- **60.9%** Homes with Access to Public Water Source
- **29.4%** Homes Connected to the Public Sewage System
- **47.1%** Homes without Piped Water
- **5.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.541

- **57** Age Dependency Ratio
- **18.2%** Unemployment Rate
- **64.6%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 23/221 CANTONS ASSESSED
SCORE: 0.787

- **11.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 57/221 CANTONS ASSESSED
SCORE: 0.612

- **0.5** Female to Male Labor Ratio (distance from parity)
- **51.9** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **78.8%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **62.3%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.527

- **11.1%** Prevalence of Disability (among persons age 5 and over)
- **4.3** Perinatal Mortality Rate (per 1,000 births)
- **6.3%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 13/221 CANTONS ASSESSED
SCORE: 0.573

- **41.5** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **1.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **38.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.8** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 92/221 CANTONS ASSESSED
SCORE: 0.497

26	13	34	77
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.626

19.6%	9.4%	22.5%	91.1%	11%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 86/221 CANTONS ASSESSED
SCORE: 0.511

142.8	0.8%	9.5	0.3
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.330

0.2	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 80 / 221 CANTONS ASSESSED **SCORE: 0.530**

Ventanas exhibits weaker Coping Capacity in the areas of Healthcare Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.537

54.4%
Labor Force Participation

269,322
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.604

14.1%
Protected Area (% of land area)

-2,968.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 83/221 CANTONS ASSESSED
SCORE: 0.553

87.5%
Voter Participation

78.6%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 145/221 CANTONS ASSESSED
SCORE: 0.476

Communications Capacity

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.396

3.8%
Household Access to Fixed Phones

83.6%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 136/221 CANTONS ASSESSED
SCORE: 0.508

96.1%
Homes Served by the Public Electricity Network

67.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 163/221 CANTONS ASSESSED
SCORE: 0.333

9.7
Nurses and Midwives per 10,000 persons

10
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.667

11.5
Average Distance to Airport (km)

21.1
Average Distance to Sea or River Port (km)

1.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 136 / 221 CANTONS ASSESSED **SCORE: 0.439**

Ventanas exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.352

3.8	0.9%	0.6	55
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.527

8.9	6.2	3.5	5.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 119 / 221 CANTONS ASSESSED
SCORE: 0.476

Ventanas's score and ranking are due to High Vulnerability combined with High Coping Capacity and Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Healthcare Capacity



Mass Care Support



Clean Water Access Vulnerability



Housing and Transportation Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.



Mass Care Support

Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Clean Water Access Vulnerability

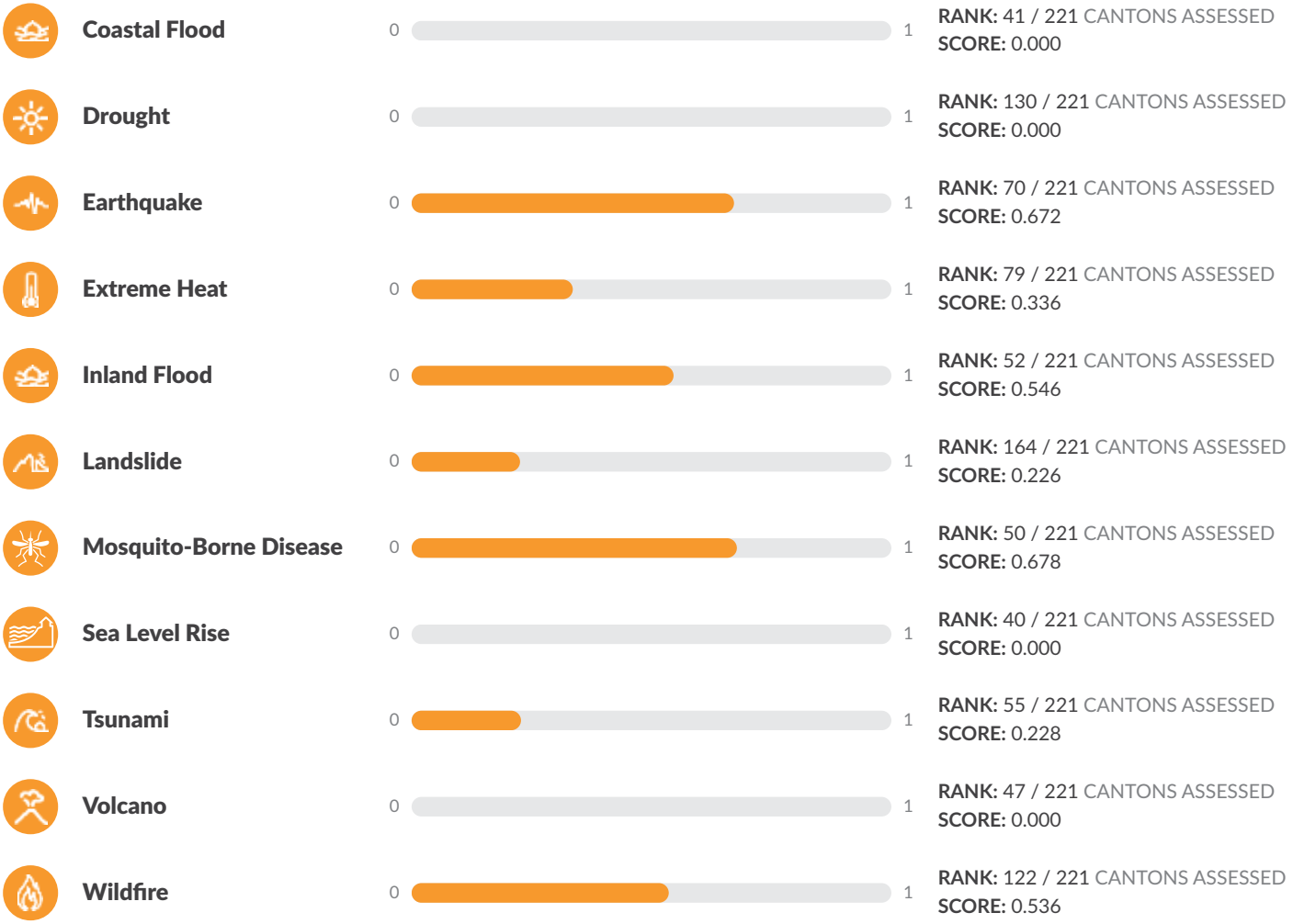
Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

HAZARD-SPECIFIC RISK (HSR)

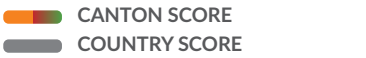


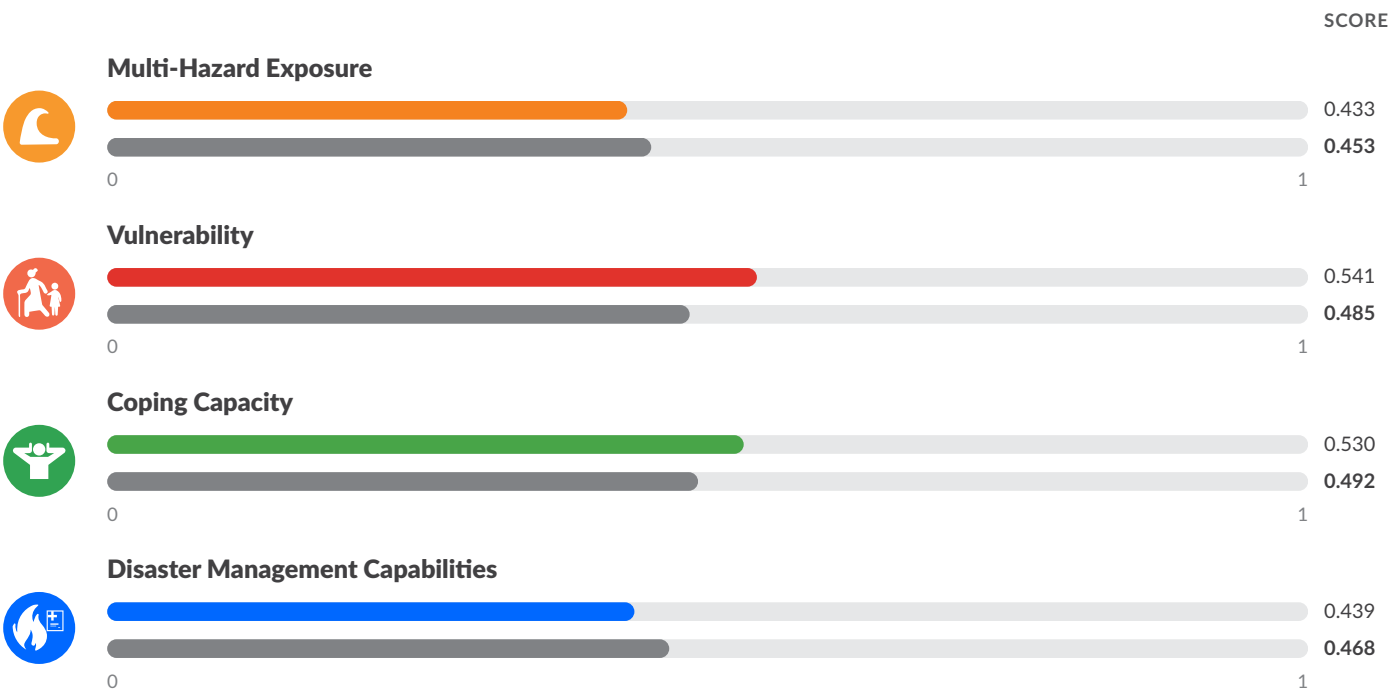
MULTI-HAZARD RISK (MHR)

RANKED
102 / 221
CANTONS ASSESSED
SCORE: 0.501

Ventanas's score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability, High Coping Capacity, and Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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VINCES

NDPBA SUBNATIONAL PROFILE

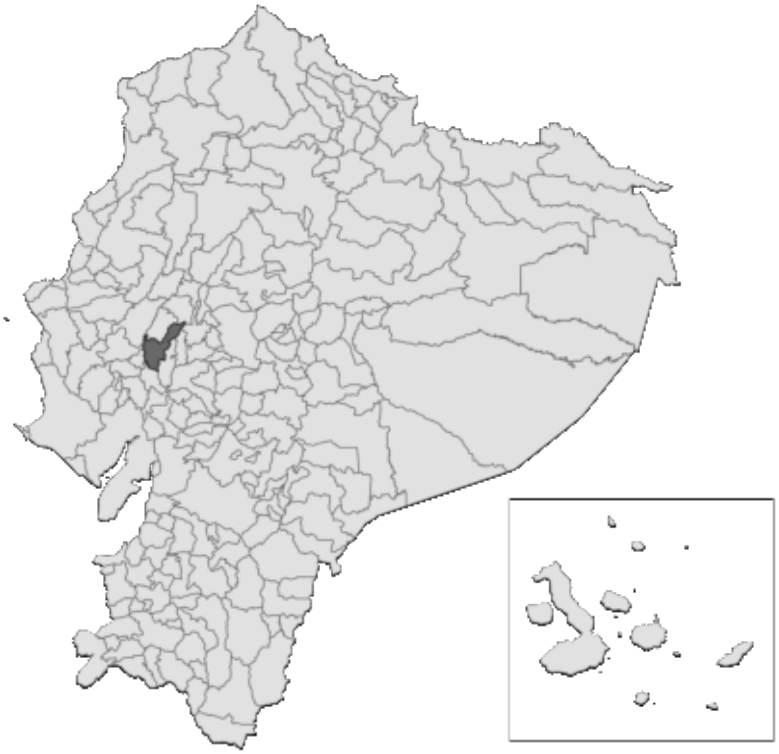
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VINCES

PROVINCE: LOS RÍOS



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very High
SCORE: 0.566 • RANK: 43/221 CANTONS ASSESSED

Vulnerability (V) - Very High
SCORE: 0.563 • RANK: 43/221 CANTONS ASSESSED

Resilience (R) - Moderate
SCORE: 0.469 • RANK: 133/221 CANTONS ASSESSED

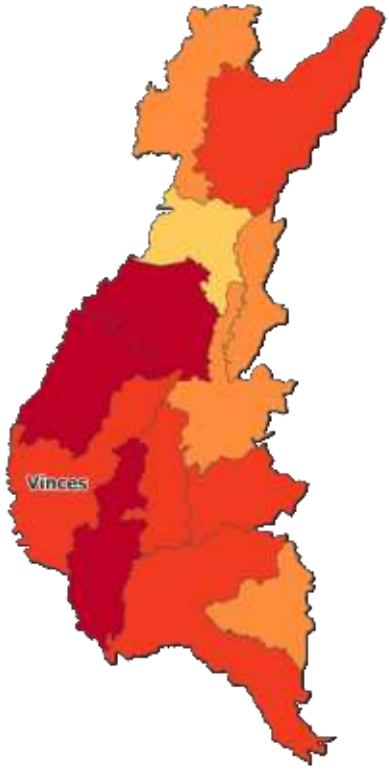
Coping Capacity (CC) - Moderate
SCORE: 0.494 • RANK: 103/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Very High
SCORE: 0.671 • RANK: 23/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Moderate
SCORE: 0.475 • RANK: 93/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOS RÍOS PROVINCE

VINCES • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Multi-Hazard Risk Index

- Very Low
- Low
- Moderate
- High
- Very High

Baba	0.577
Mocache	0.577
Palenque	0.575
Vinces	**0.566**
Valencia	0.560
Urdaneta	0.547
Puebloviejo	0.530
Babahoyo	0.525
Buena Fe	0.510
Montalvo	0.501
Ventanas	0.501
Quinsaloma	0.500
Quevedo	0.459

MULTI-HAZARD EXPOSURE (MHE)

RANK: 23 / 221 CANTONS ASSESSED
SCORE: 0.671



MHE
0.671

Raw MHE
0.731

Relative MHE
0.612

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
86,759 people exposed
40,388 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
100%
86,759 people exposed
40,388 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Inland Flood
26%
22,724 people exposed
10,883 structures exposed (27%)
Critical Infrastructure Exposed: 28%

Landslide
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Mosquito-Borne Disease
100%
86,427 people exposed
40,292 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
80%
69,500 people exposed
31,823 structures exposed (79%)
Critical Infrastructure Exposed: 81%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
49%
42,573 people exposed
23,547 structures exposed (58%)
Critical Infrastructure Exposed: 37%

VULNERABILITY (V)

RANK: 43 / 221 CANTONS ASSESSED **SCORE: 0.563**

Vulnerability in Vinces is primarily driven by Marginalization and Housing and Transportation Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 51/221 CANTONS ASSESSED
SCORE: 0.612

- **9.2** Average Years of Schooling
- **48.9%** Population (age 24 and over) with General Basic Education Schooling
- **8.4%** Population (age 24 and over) with No Schooling
- **6.9%** Adult Illiteracy Rate
- **64.5%** Households with No Internet Access
- **82.7%** Households with No Access to Television
- **89.7%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 50/221 CANTONS ASSESSED
SCORE: 0.663

- **49.1%** Homes with Access to Public Water Source
- **24.2%** Homes Connected to the Public Sewage System
- **53%** Homes without Piped Water
- **4.2%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 94/221 CANTONS ASSESSED
SCORE: 0.531

- **57.8** Age Dependency Ratio
- **16.5%** Unemployment Rate
- **68.4%** Poverty Rate (based on UBN)
- **0.3%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 58/221 CANTONS ASSESSED
SCORE: 0.656

- **7.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.689

- **0.6** Female to Male Labor Ratio (distance from parity)
- **57.2** Adolescent Birth Rate (among females age 15-19) per 1,000
- **6.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **84.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **67.9%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.486

- **9.3%** Prevalence of Disability (among persons age 5 and over)
- **3.5** Perinatal Mortality Rate (per 1,000 births)
- **9%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.373

- **6.4** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **10.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **2.9** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.495

33	15	33	58
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 26/221 CANTONS ASSESSED
SCORE: 0.683

22.6%	15.4%	24.6%	92.9%	10.9%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 113/221 CANTONS ASSESSED
SCORE: 0.472

113.7	1%	5.4	0.29
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 153/221 CANTONS ASSESSED
SCORE: 0.356

0.3	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 103 / 221 CANTONS ASSESSED **SCORE: 0.494**

Vinces exhibits weaker Coping Capacity in the areas of Communications Capacity and Healthcare Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 95/221 CANTONS ASSESSED
SCORE: 0.503

52.4%
Labor Force Participation

246,548
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 45/221 CANTONS ASSESSED
SCORE: 0.622

19.1%
Protected Area (% of land area)

-3,850.5
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.499

89.8%
Voter Participation

56.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 173/221 CANTONS ASSESSED
SCORE: 0.439

Communications Capacity

0 — 1

RANK: 190/221 CANTONS ASSESSED
SCORE: 0.327

3.4%
Household Access to Fixed Phones

78.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.462

95.7%
Homes Served by the Public Electricity Network

61.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 167/221 CANTONS ASSESSED
SCORE: 0.330

8.9
Nurses and Midwives per 10,000 persons

10.5
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 42/221 CANTONS ASSESSED
SCORE: 0.636

9.1
Average Distance to Airport (km)

31.6
Average Distance to Sea or River Port (km)

1
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 93 / 221 CANTONS ASSESSED **SCORE: 0.475**

Vinces exhibits weaker Disaster Management Capabilities in the area of Mass Care Support. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 147/221 CANTONS ASSESSED
SCORE: 0.378

3.8	1%	1.1	64.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.573

7	4.4	3	6.5
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 133 / 221 CANTONS ASSESSED
SCORE: 0.469

Vinces's score and ranking are due to Very High Vulnerability combined with Moderate Coping Capacity and Moderate Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Marginalization

Housing and Transportation Vulnerability

Communications Capacity

Healthcare Capacity

KEY FACTORS INFLUENCING RESILIENCE

Marginalization

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Group-based differences in access to resources, services, opportunities, and formal economic and political structures that favor some groups over others influence the disaster susceptibility of the groups and individuals affected. Identification of populations facing significant inequalities or marginalization can help anticipate where relief and mass care operations (e.g., sheltering, health care delivery) needs will be greatest.

Housing and Transportation Vulnerability

Unsound or poorly constructed homes are more susceptible to structural damage and losses due to hazard impacts. In addition, higher density living situations such as crowded households increase susceptibility to negative consequences resulting from hazard exposure. Mobility constraints due to limited transportation options may inhibit households from acting upon warning information in a timely manner or seeking emergency medical care.

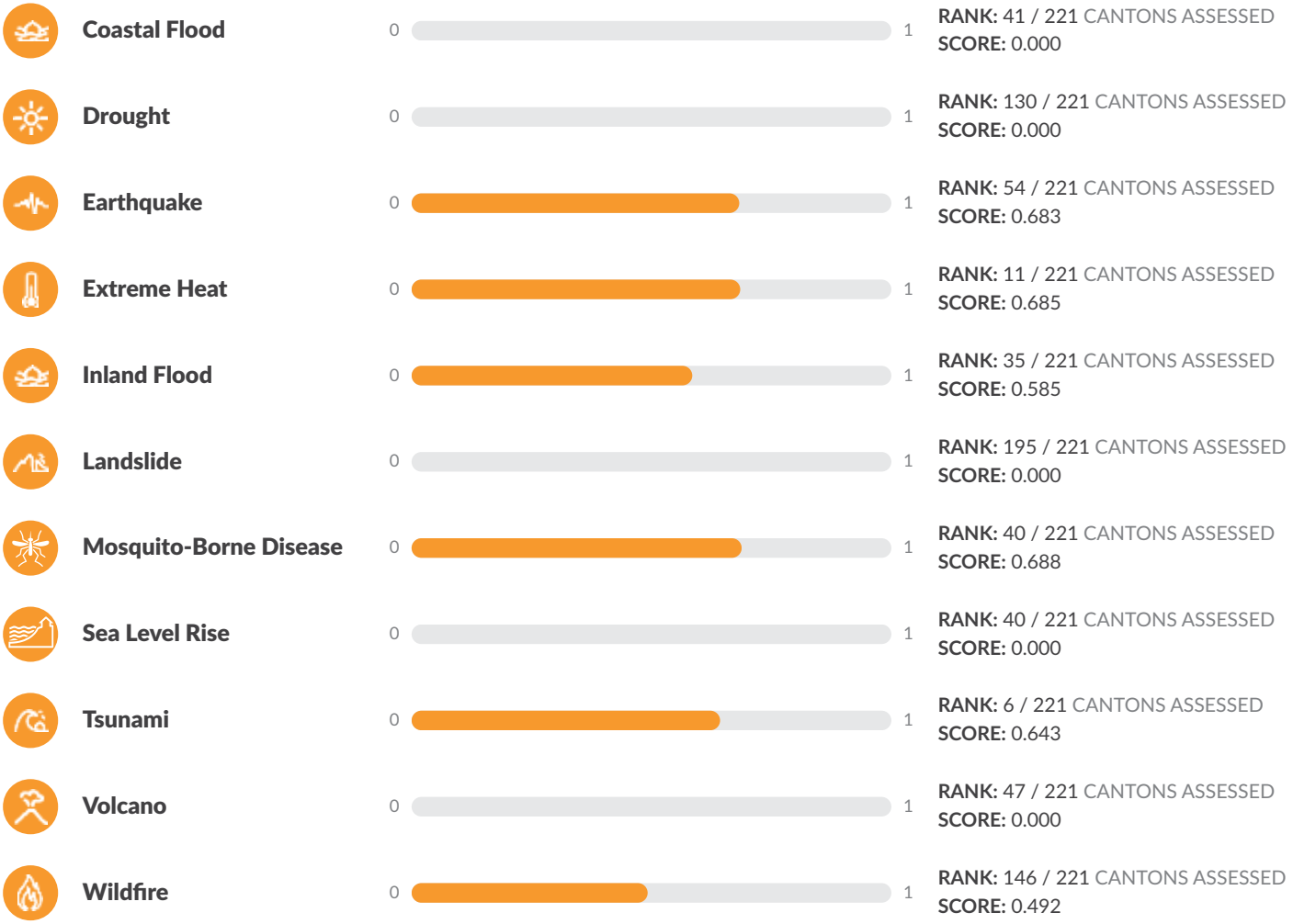
Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how subnational- and local-level populations are able to facilitate effective and coordinated communication.

Healthcare Capacity

Robust access to skilled caregivers and dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster-associated health and medical impacts may be addressed.

HAZARD-SPECIFIC RISK (HSR)

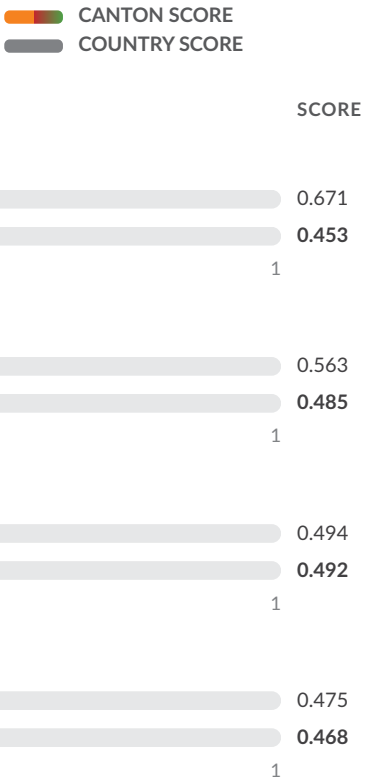


MULTI-HAZARD RISK (MHR)

RANKED
43 / 221
CANTONS ASSESSED
SCORE: 0.566

Vinces's score and ranking are due to Very High Multi-Hazard Exposure combined with Very High Vulnerability, Moderate Coping Capacity, and Moderate Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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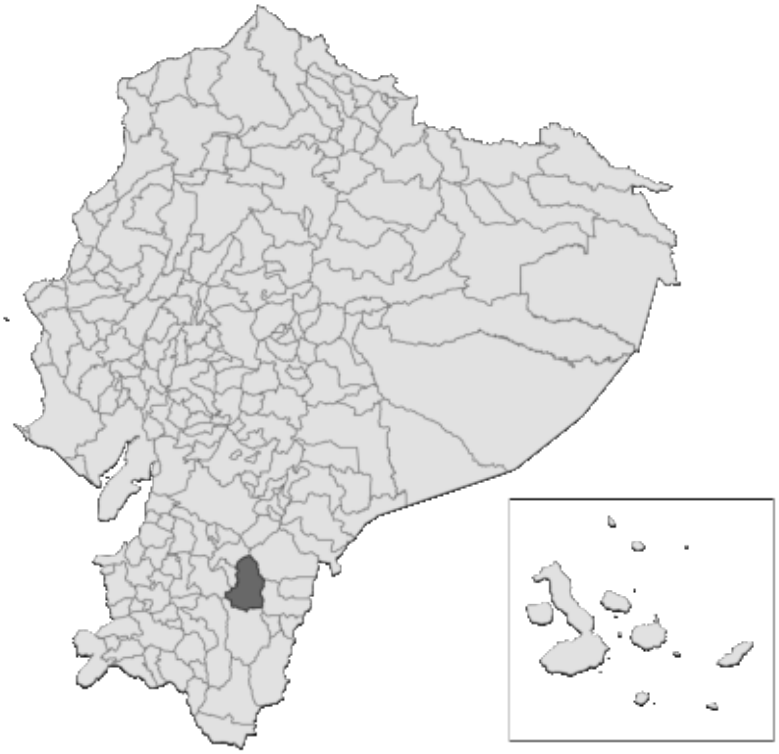
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ECUADOR

YACUAMBI

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.535 • RANK: 68/221 CANTONS ASSESSED

Vulnerability (V) - High
SCORE: 0.555 • RANK: 50/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.387 • RANK: 195/221 CANTONS ASSESSED

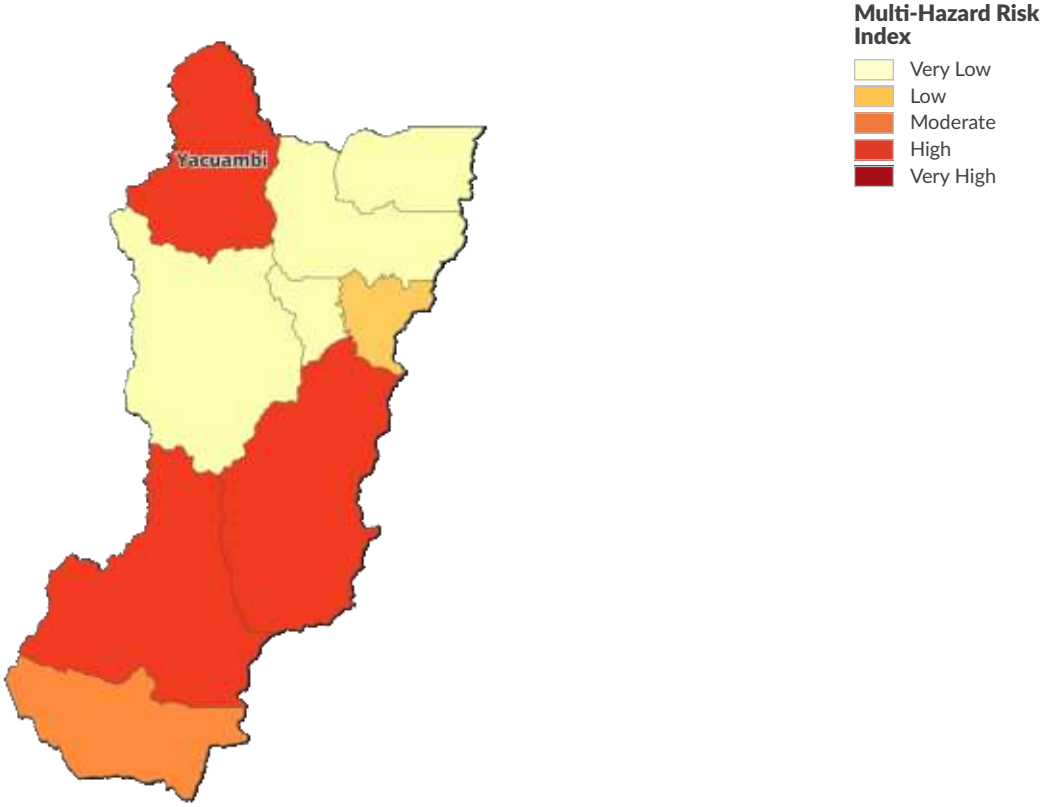
Coping Capacity (CC) - Very Low
SCORE: 0.348 • RANK: 203/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.302 • RANK: 174/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.369 • RANK: 181/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

YACUAMBI • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Palanda	0.535
Yacuambi	**0.535**
Nangaritza	0.524
Chinchipe	0.511
Paquisha	0.465
Centinela Del Cóndor	0.428
El Pangui	0.428
Zamora	0.419
Yantzaza	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 174 / 221 CANTONS ASSESSED
SCORE: 0.302



MHE
0.302

Raw MHE
0.277

Relative MHE
0.327

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Drought
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Earthquake
100%
- **7,062** people exposed
- **5,444** structures exposed (100%)

Critical Infrastructure Exposed: 100%

Extreme Heat
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Inland Flood
5%
- **318** people exposed
- **191** structures exposed (4%)

Critical Infrastructure Exposed: 4%

Landslide
98%
- **6,908** people exposed
- **5,304** structures exposed (97%)

Critical Infrastructure Exposed: 97%

Mosquito-Borne Disease
82%
- **5,819** people exposed
- **3,733** structures exposed (69%)

Critical Infrastructure Exposed: 93%

Sea Level Rise
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Tsunami
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Volcano
0%
- **0** people exposed
- **0** structures exposed (0%)

Critical Infrastructure Exposed: 0%

Wildfire
100%
- **7,062** people exposed
- **5,444** structures exposed (100%)

Critical Infrastructure Exposed: 100%

VULNERABILITY (V)

RANK: 50 / 221 CANTONS ASSESSED **SCORE: 0.555**

Vulnerability in Yacuambi is primarily driven by Economic Constraints and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 66/221 CANTONS ASSESSED
SCORE: 0.577

- **9.5** Average Years of Schooling
- **44.3%** Population (age 24 and over) with General Basic Education Schooling
- **8.4%** Population (age 24 and over) with No Schooling
- **7%** Adult Illiteracy Rate
- **52.2%** Households with No Internet Access
- **91.8%** Households with No Access to Television
- **81%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.691

- **69%** Homes with Access to Public Water Source
- **40.5%** Homes Connected to the Public Sewage System
- **48.3%** Homes without Piped Water
- **13.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 19/221 CANTONS ASSESSED
SCORE: 0.695

- **62.7** Age Dependency Ratio
- **18.8%** Unemployment Rate
- **68.9%** Poverty Rate (based on UBN)
- **3.2%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.374

- **2.4%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.550

- **0.5** Female to Male Labor Ratio (distance from parity)
- **52.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **3.1%** Prevalence of Child Marriage (among adolescents age 12-17)
- **73%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **63.2%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 213/221 CANTONS ASSESSED
SCORE: 0.256

- **6.9%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **4.4%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 122/221 CANTONS ASSESSED
SCORE: 0.336

- **6.1** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **18.2** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 210/221 CANTONS ASSESSED
SCORE: 0.298

15
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

3
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

15
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

61
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 32/221 CANTONS ASSESSED
SCORE: 0.675

24.5%
Homes with Exterior Walls in Poor Condition

1%
Homes with Inadequate Materials Used in Outer Walls

30.6%
Homes with Roofs in Poor Condition

90.7%
Households with No Access to Vehicle for Private Use

16.1%
Household Overcrowding

Population Pressures

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.395

5.1
Population Density (persons per sq km)

0.8%
Average Annual Population Change (2010-2022)

1.6
Net Migration Rate (per 1,000 persons)

0.33
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.635

0.1
Hazard Susceptibility (recent events 2015-2025)

0.4
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 203 / 221 CANTONS ASSESSED **SCORE: 0.348**

Yacuambi exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 214/221 CANTONS ASSESSED
SCORE: 0.162

43.2%
Labor Force Participation

11,913
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 53/221 CANTONS ASSESSED
SCORE: 0.600

25.5%
Protected Area (% of land area)

-7,370.2
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 165/221 CANTONS ASSESSED
SCORE: 0.390

78.9%
Voter Participation

76.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.407

Communications Capacity

0 — 1

RANK: 175/221 CANTONS ASSESSED
SCORE: 0.377

4.5%
Household Access to Fixed Phones

79.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.375

91.2%
Homes Served by the Public Electricity Network

62.1%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 91/221 CANTONS ASSESSED
SCORE: 0.520

14.1
Nurses and Midwives per 10,000 persons

21.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 195/221 CANTONS ASSESSED
SCORE: 0.358

37.3
Average Distance to Airport (km)

60.9
Average Distance to Sea or River Port (km)

0.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 181 / 221 CANTONS ASSESSED **SCORE: 0.369**

Yacuambi exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.462

2.8	22.4%	0	44.3
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.276

23.9	22	6.9	8.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 195 / 221 CANTONS ASSESSED
SCORE: 0.387

Yacuambi's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Economic Capacity



Emergency Services



Economic Constraints



Clean Water Access Vulnerability

KEY FACTORS INFLUENCING RESILIENCE



Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Economic Constraints

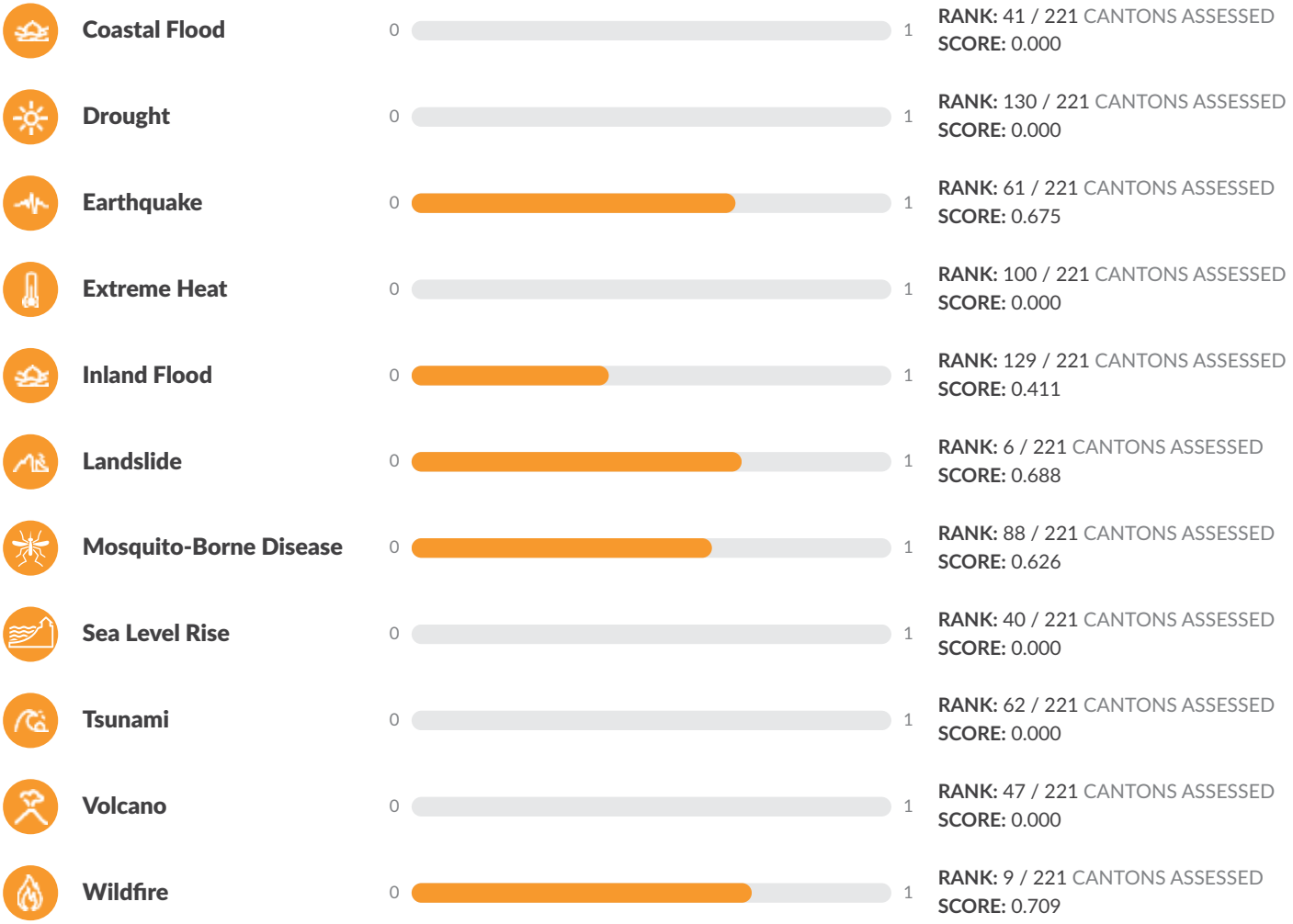
Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.

HAZARD-SPECIFIC RISK (HSR)

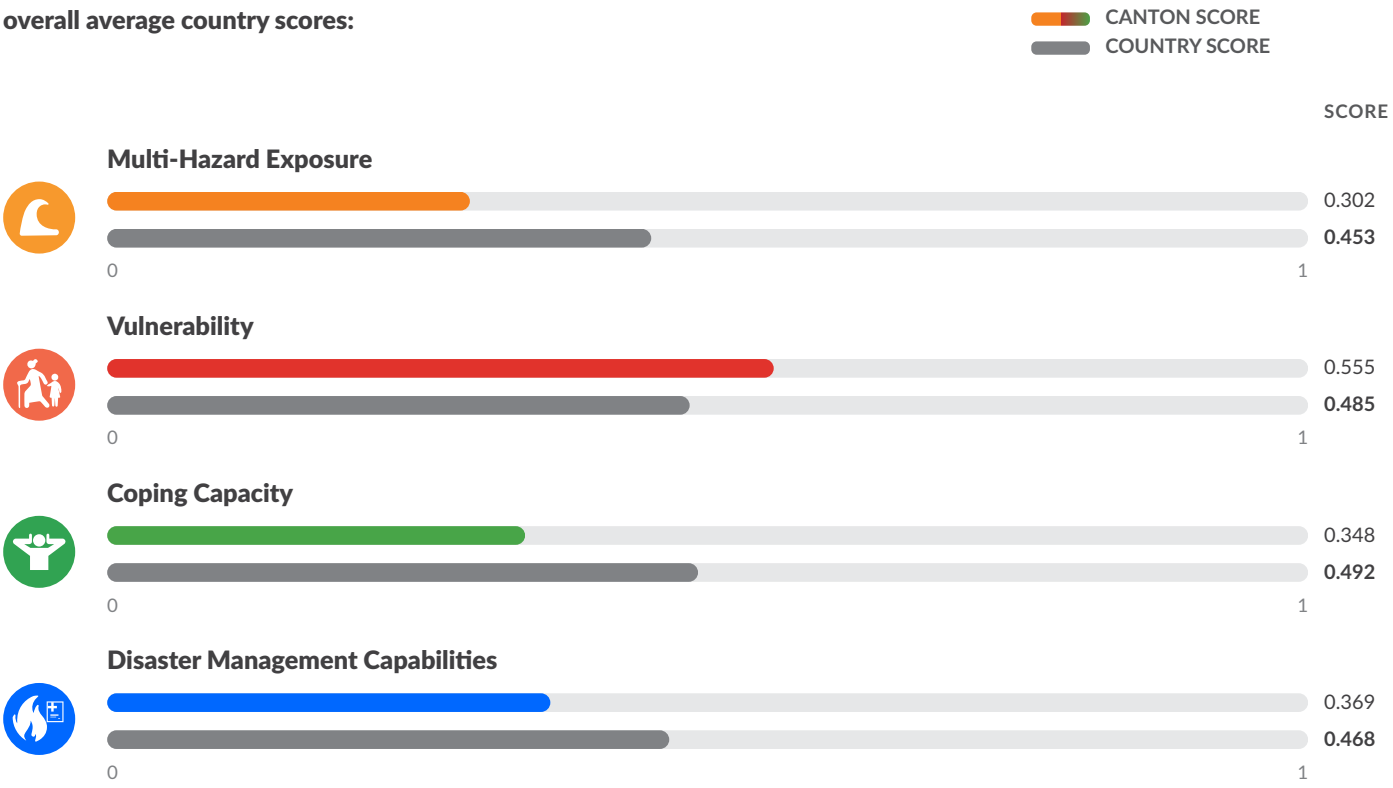


MULTI-HAZARD RISK (MHR)

RANKED
68 / 221
CANTONS ASSESSED
SCORE: 0.535

Yacuambi's score and ranking are due to Low Multi-Hazard Exposure combined with High Vulnerability, Very Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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NDPBA SUBNATIONAL PROFILE

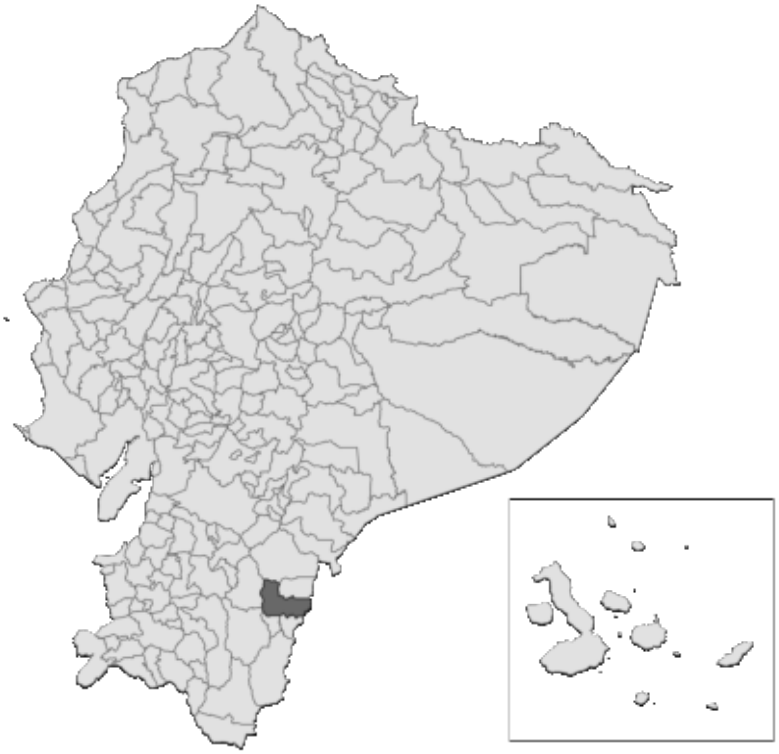
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ECUADOR

YANTZAZA

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.399 • RANK: 200/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.577 • RANK: 44/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Low
SCORE: 0.328 • RANK: 167/221 CANTONS ASSESSED

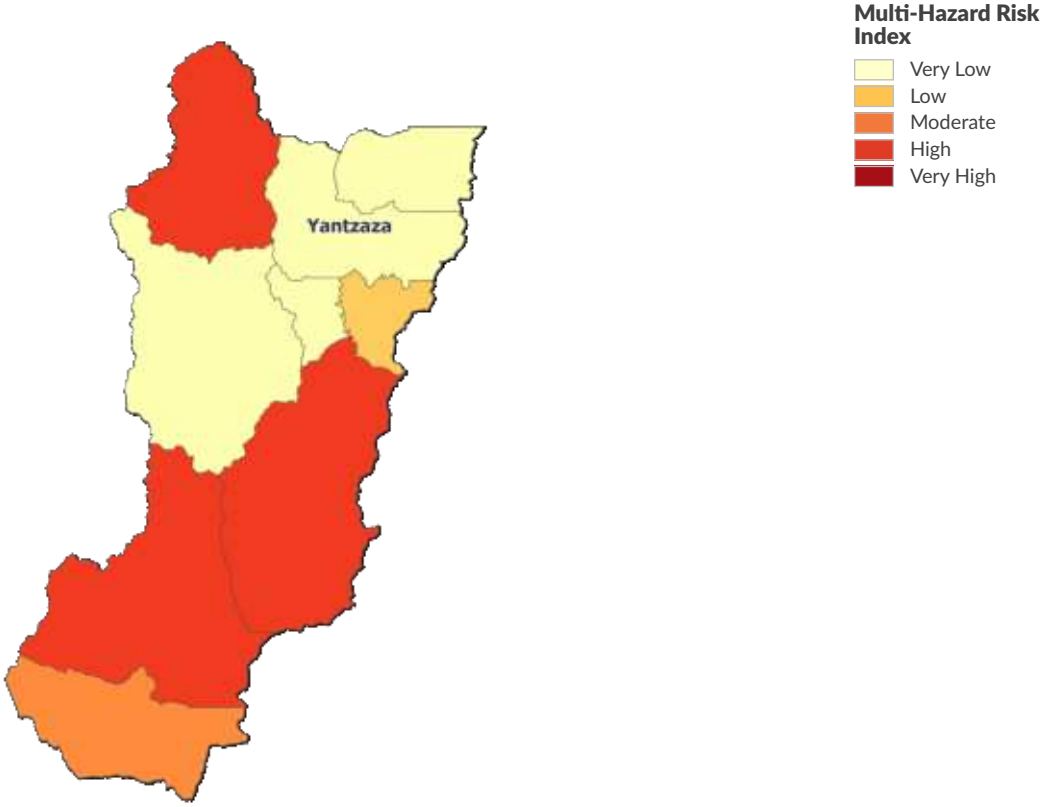
Vulnerability (V) - Low
SCORE: 0.433 • RANK: 157/221 CANTONS ASSESSED

Coping Capacity (CC) - High
SCORE: 0.587 • RANK: 46/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.578 • RANK: 43/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

YANTZAZA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Palanda	0.535
Yacuambi	0.535
Nangaritza	0.524
Chinchipe	0.511
Paquisha	0.465
Centinela Del Cóndor	0.428
El Pangui	0.428
Zamora	0.419
Yantzaza	**0.399**

MULTI-HAZARD EXPOSURE (MHE)

RANK: 167 / 221 CANTONS ASSESSED
SCORE: 0.328



MHE
0.328

Raw MHE
0.430

Relative MHE
0.225

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
22,678 people exposed
13,011 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
19%
4,208 people exposed
2,728 structures exposed (21%)
Critical Infrastructure Exposed: 14%

Landslide
72%
16,250 people exposed
9,536 structures exposed (73%)
Critical Infrastructure Exposed: 65%

Mosquito-Borne Disease
99%
22,444 people exposed
12,631 structures exposed (97%)
Critical Infrastructure Exposed: 100%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
17%
3,892 people exposed
3,096 structures exposed (24%)
Critical Infrastructure Exposed: 22%

VULNERABILITY (V)

RANK: 157 / 221 CANTONS ASSESSED **SCORE: 0.433**

Vulnerability in Yantzaza is primarily driven by Population Pressures and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.362

- **11** Average Years of Schooling
- **38.8%** Population (age 24 and over) with General Basic Education Schooling
- **3.9%** Population (age 24 and over) with No Schooling
- **2.7%** Adult Illiteracy Rate
- **34.1%** Households with No Internet Access
- **81.8%** Households with No Access to Television
- **68.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.479

- **84.4%** Homes with Access to Public Water Source
- **65.2%** Homes Connected to the Public Sewage System
- **23.8%** Homes without Piped Water
- **10.6%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 120/221 CANTONS ASSESSED
SCORE: 0.495

- **59** Age Dependency Ratio
- **14%** Unemployment Rate
- **47.2%** Poverty Rate (based on UBN)
- **0.7%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.479

- **3.8%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 129/221 CANTONS ASSESSED
SCORE: 0.446

- **0.3** Female to Male Labor Ratio (distance from parity)
- **51.5** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.8%** Prevalence of Child Marriage (among adolescents age 12-17)
- **74.3%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **40.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.341

- **6.8%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.8%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 41/221 CANTONS ASSESSED
SCORE: 0.504

- **27.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.1** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **44.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0.7** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 161/221 CANTONS ASSESSED
SCORE: 0.427

16
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

25
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

26
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

24
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.380

10.6%
Homes with Exterior Walls in Poor Condition

0.3%
Homes with Inadequate Materials Used in Outer Walls

12.9%
Homes with Roofs in Poor Condition

82.3%
Households with No Access to Vehicle for Private Use

8.8%
Household Overcrowding

Population Pressures

0 — 1

RANK: 54/221 CANTONS ASSESSED
SCORE: 0.547

23.1
Population Density (persons per sq km)

1.9%
Average Annual Population Change (2010-2022)

19.8
Net Migration Rate (per 1,000 persons)

0.31
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 130/221 CANTONS ASSESSED
SCORE: 0.404

0.2
Hazard Susceptibility (recent events 2015-2025)

0.1
Disaster Loss Ratio (recent events 2015-2025)

0.1
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 46 / 221 CANTONS ASSESSED **SCORE: 0.587**

Yantzaza exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 30/221 CANTONS ASSESSED
SCORE: 0.689

60.7%
Labor Force Participation

548,874
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.466

3.6%
Protected Area (% of land area)

-3,594.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 140/221 CANTONS ASSESSED
SCORE: 0.445

79.1%
Voter Participation

84.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 21/221 CANTONS ASSESSED
SCORE: 0.666

Communications Capacity

0 — 1

RANK: 46/221 CANTONS ASSESSED
SCORE: 0.673

12.7%
Household Access to Fixed Phones

90.5%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.726

97.9%
Homes Served by the Public Electricity Network

84%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 7/221 CANTONS ASSESSED
SCORE: 0.808

35.9
Nurses and Midwives per 10,000 persons

43.2
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.456

30.4
Average Distance to Airport (km)

41.7
Average Distance to Sea or River Port (km)

0.5
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 43 / 221 CANTONS ASSESSED **SCORE: 0.578**

Yantzaza exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 11/221 CANTONS ASSESSED
SCORE: 0.620

2.3	4.3%	2.9	40.2
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.536

7.6	7.1	3.5	5.2
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 44 / 221 CANTONS ASSESSED
SCORE: 0.577

Yantzaza's score and ranking are due to Low Vulnerability combined with High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Governance

Population Pressures

Transportation Capacity

Economic Constraints

KEY FACTORS INFLUENCING RESILIENCE

Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

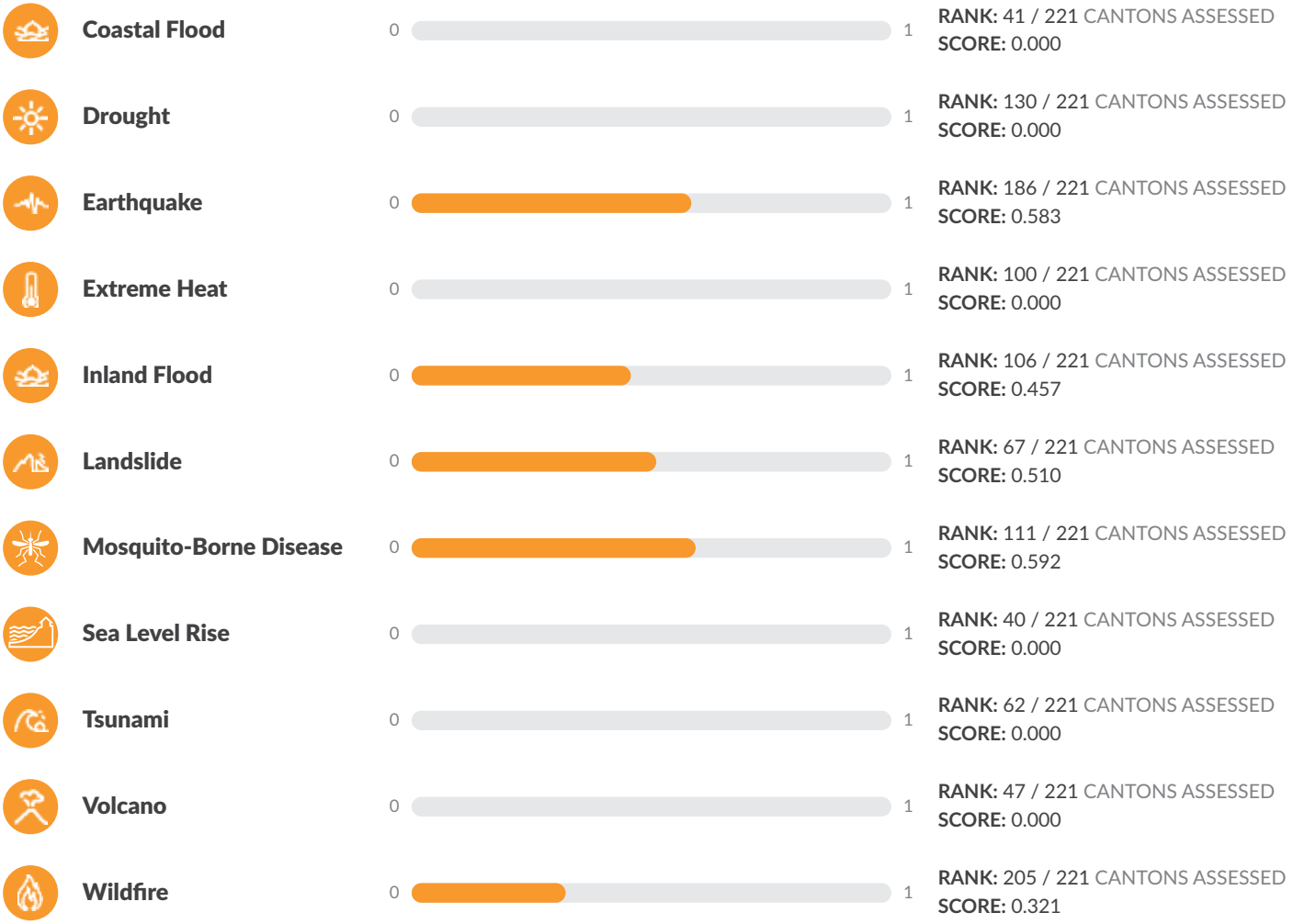
Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.

HAZARD-SPECIFIC RISK (HSR)

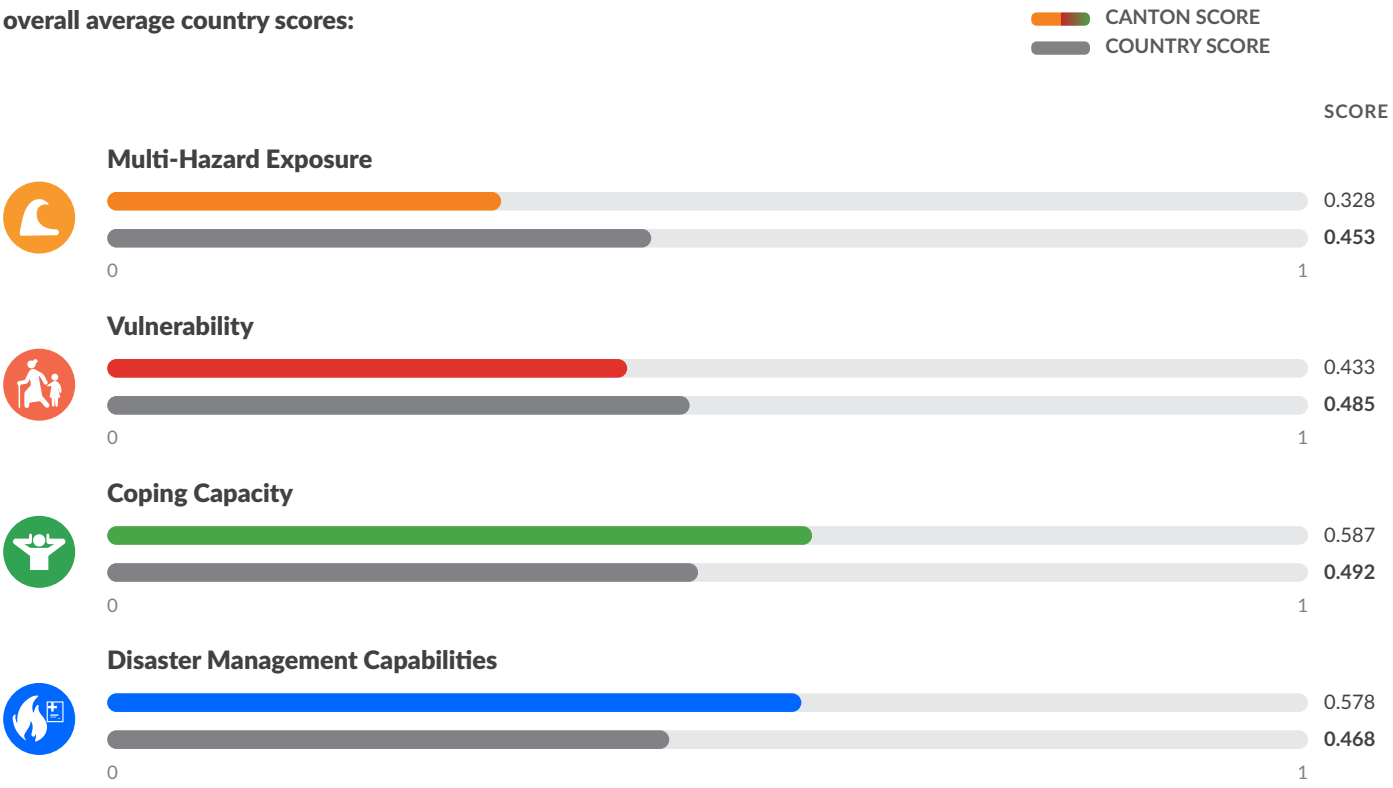


MULTI-HAZARD RISK (MHR)

RANKED
200 / 221
CANTONS ASSESSED
SCORE: 0.399

Yantzaza's score and ranking are due to Low Multi-Hazard Exposure combined with Low Vulnerability, High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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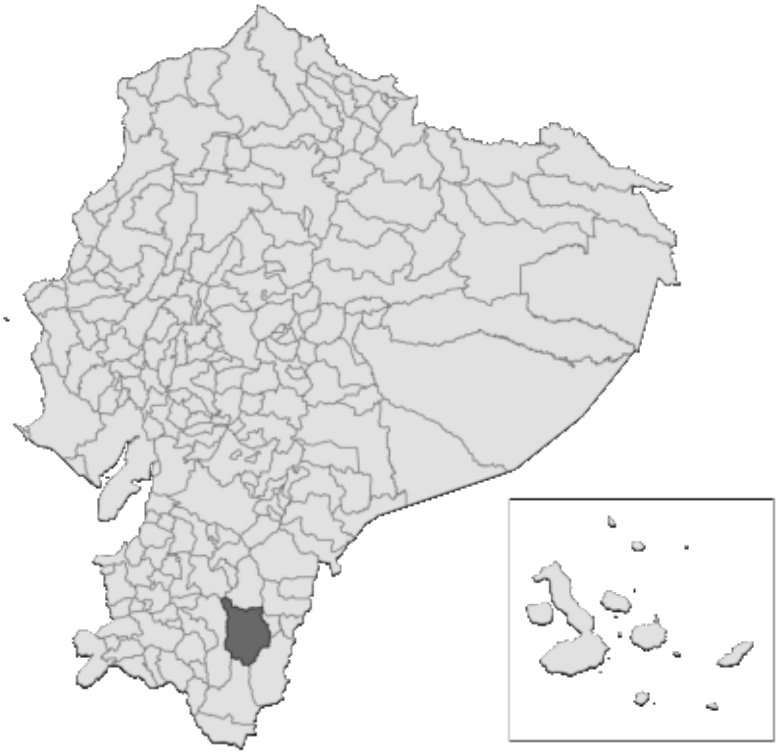
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ZAMORA

PROVINCE: ZAMORA CHINCHIPE



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Very Low
SCORE: 0.419 • RANK: 189/221 CANTONS ASSESSED

Resilience (R) - Very High
SCORE: 0.600 • RANK: 28/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - High
SCORE: 0.478 • RANK: 88/221 CANTONS ASSESSED

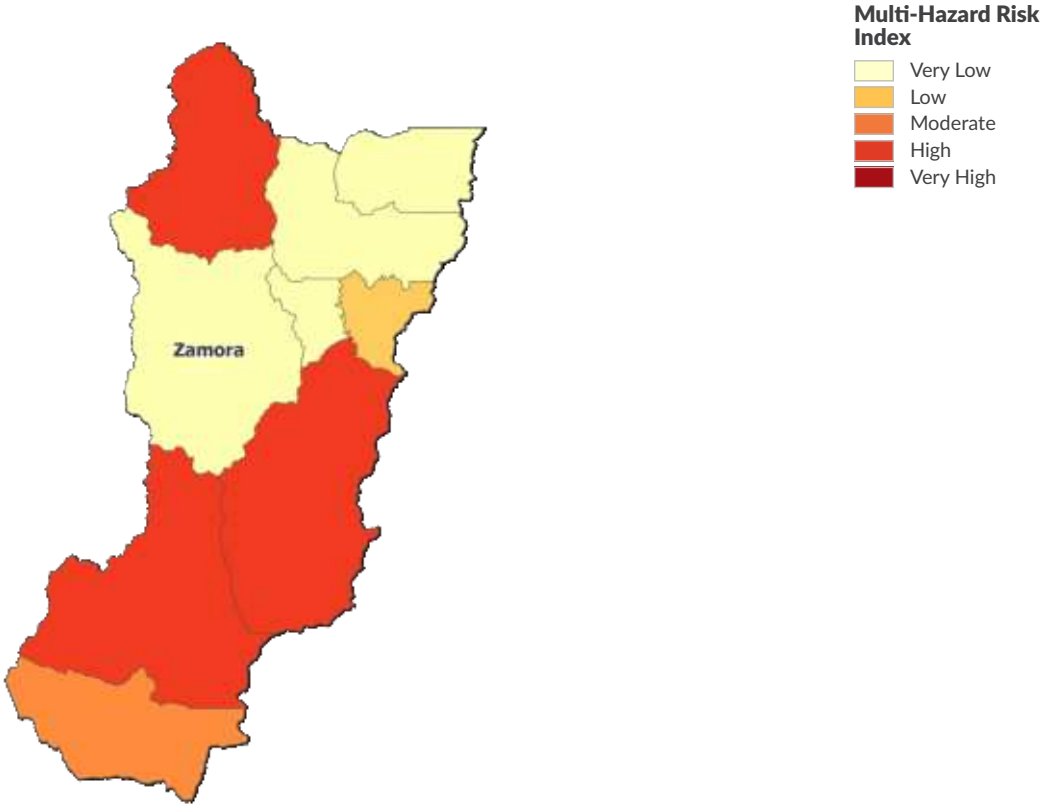
Vulnerability (V) - Very Low
SCORE: 0.398 • RANK: 188/221 CANTONS ASSESSED

Coping Capacity (CC) - Very High
SCORE: 0.606 • RANK: 34/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very High
SCORE: 0.592 • RANK: 33/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN ZAMORA CHINCHIPE PROVINCE

ZAMORA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Palanda	0.535
Yacuambi	0.535
Nangaritza	0.524
Chinchipe	0.511
Paquisha	0.465
Centinela Del Cóndor	0.428
El Pangui	0.428
Zamora	**0.419**
Yantzaza	0.399

MULTI-HAZARD EXPOSURE (MHE)

RANK: 88 / 221 CANTONS ASSESSED
SCORE: 0.478



MHE
0.478

Raw MHE
0.518

Relative MHE
0.438

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Earthquake
100%
30,958 people exposed
17,960 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
4%
1,187 people exposed
930 structures exposed (5%)
Critical Infrastructure Exposed: 12%

Landslide
97%
29,908 people exposed
17,177 structures exposed (96%)
Critical Infrastructure Exposed: 98%

Mosquito-Borne Disease
91%
28,061 people exposed
14,683 structures exposed (82%)
Critical Infrastructure Exposed: 94%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
72%
22,164 people exposed
15,272 structures exposed (85%)
Critical Infrastructure Exposed: 69%

VULNERABILITY (V)

RANK: 188 / 221 CANTONS ASSESSED **SCORE: 0.398**

Vulnerability in Zamora is primarily driven by Disaster Impacts and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 207/221 CANTONS ASSESSED
SCORE: 0.251

- **12.1** Average Years of Schooling
- **31.1%** Population (age 24 and over) with General Basic Education Schooling
- **3.4%** Population (age 24 and over) with No Schooling
- **2.4%** Adult Illiteracy Rate
- **28.7%** Households with No Internet Access
- **68.6%** Households with No Access to Television
- **57.9%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 159/221 CANTONS ASSESSED
SCORE: 0.405

- **82.2%** Homes with Access to Public Water Source
- **76%** Homes Connected to the Public Sewage System
- **20.3%** Homes without Piped Water
- **7.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 170/221 CANTONS ASSESSED
SCORE: 0.412

- **53.5** Age Dependency Ratio
- **12.7%** Unemployment Rate
- **36.2%** Poverty Rate (based on UBN)
- **0.6%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 184/221 CANTONS ASSESSED
SCORE: 0.326

- **1.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 158/221 CANTONS ASSESSED
SCORE: 0.395

- **0.3** Female to Male Labor Ratio (distance from parity)
- **35.1** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.6%** Prevalence of Child Marriage (among adolescents age 12-17)
- **66.7%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **48.7%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.284

- **6.1%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **6.6%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 162/221 CANTONS ASSESSED
SCORE: 0.255

- **4.8** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **0.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **22.1** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.457

43
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)

11
Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)

30
Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)

42
Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 187/221 CANTONS ASSESSED
SCORE: 0.316

8.9%
Homes with Exterior Walls in Poor Condition

0.7%
Homes with Inadequate Materials Used in Outer Walls

11.6%
Homes with Roofs in Poor Condition

75.4%
Households with No Access to Vehicle for Private Use

5.6%
Household Overcrowding

Population Pressures

0 — 1

RANK: 135/221 CANTONS ASSESSED
SCORE: 0.446

15.9
Population Density (persons per sq km)

1.5%
Average Annual Population Change (2010-2022)

14.9
Net Migration Rate (per 1,000 persons)

0.28
Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 16/221 CANTONS ASSESSED
SCORE: 0.688

0.5
Hazard Susceptibility (recent events 2015-2025)

0.3
Disaster Loss Ratio (recent events 2015-2025)

0.2
Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 34 / 221 CANTONS ASSESSED **SCORE: 0.606**

Zamora exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 48/221 CANTONS ASSESSED
SCORE: 0.608

62.2%
Labor Force Participation

120,673
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 63/221 CANTONS ASSESSED
SCORE: 0.565

24%
Protected Area (% of land area)

-9,433.3
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 90/221 CANTONS ASSESSED
SCORE: 0.544

81.4%
Voter Participation

91.4%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 17/221 CANTONS ASSESSED
SCORE: 0.681

Communications Capacity

0 — 1

RANK: 35/221 CANTONS ASSESSED
SCORE: 0.703

22.9%
Household Access to Fixed Phones

87.4%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 65/221 CANTONS ASSESSED
SCORE: 0.689

97.1%
Homes Served by the Public Electricity Network

84%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 10/221 CANTONS ASSESSED
SCORE: 0.778

30.5
Nurses and Midwives per 10,000 persons

44.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 84/221 CANTONS ASSESSED
SCORE: 0.555

10.8
Average Distance to Airport (km)

36.1
Average Distance to Sea or River Port (km)

0.4
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 33 / 221 CANTONS ASSESSED **SCORE: 0.592**

Zamora exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 5/221 CANTONS ASSESSED
SCORE: 0.678

2.1	7.2%	1.9	10.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 105/221 CANTONS ASSESSED
SCORE: 0.507

9.5	8.4	2.4	7.8
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 28 / 221 CANTONS ASSESSED
SCORE: 0.600

Zamora's score and ranking are due to Very Low Vulnerability combined with Very High Coping Capacity and Very High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:


Disaster Impacts


Emergency Services


Governance


Population Pressures

KEY FACTORS INFLUENCING RESILIENCE



Disaster Impacts

Communities that have recently been affected by a disaster may still be recovering and therefore be more susceptible to additional stressors. A recent disaster experience can leave direct and indirect impacts on the physical and mental health of a population, and disrupt economies, investments, and households. The long-term recovery of an area can be hampered by funding constraints, lack of materials and labor, and local or national laws that inhibit quick advances. Pre-disaster planning for post-disaster recovery and promoting adaptation strategies for long-term disaster recovery can help communities cope with repeated events and avoid lingering post-disaster consequences



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Governance

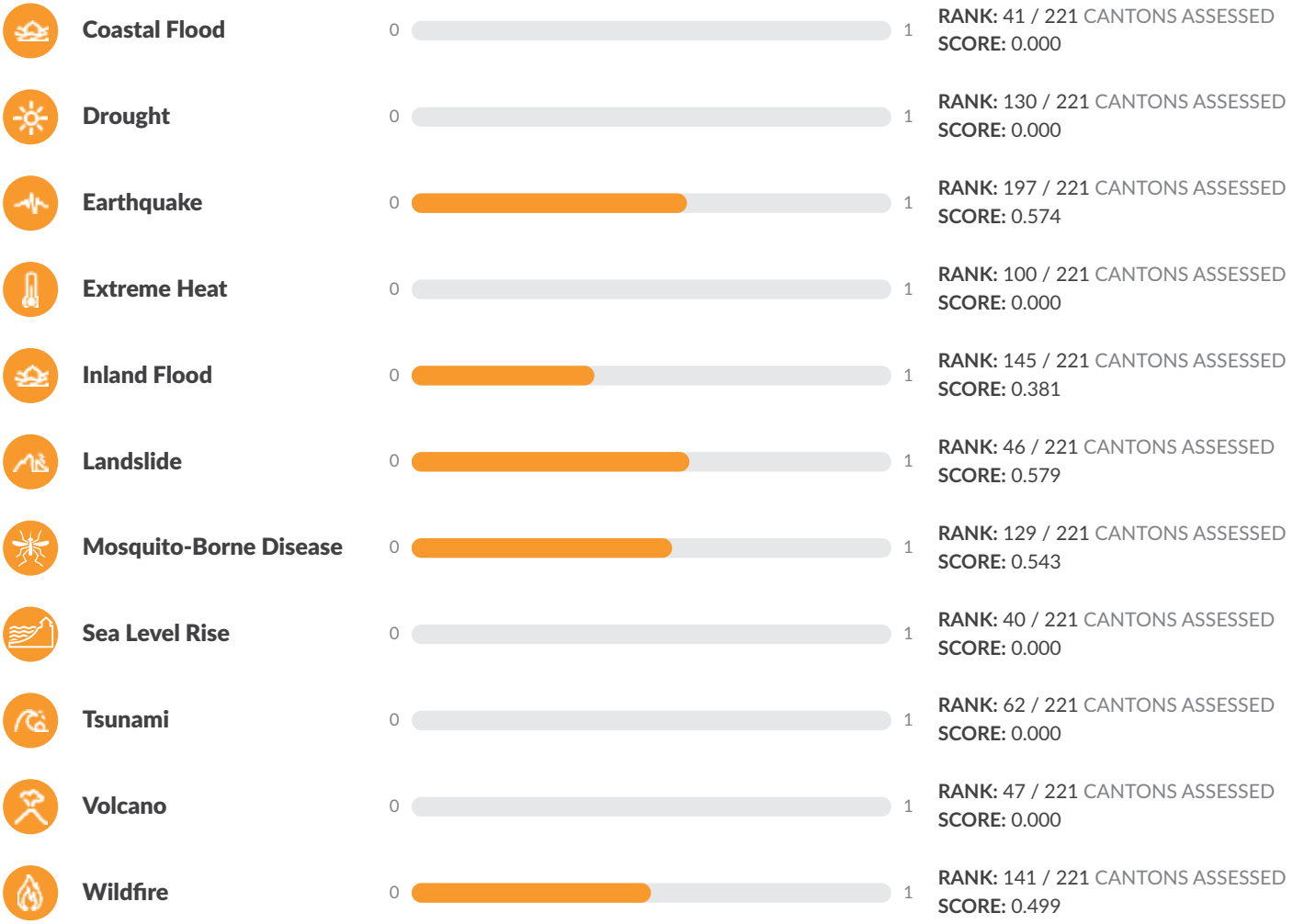
The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

HAZARD-SPECIFIC RISK (HSR)

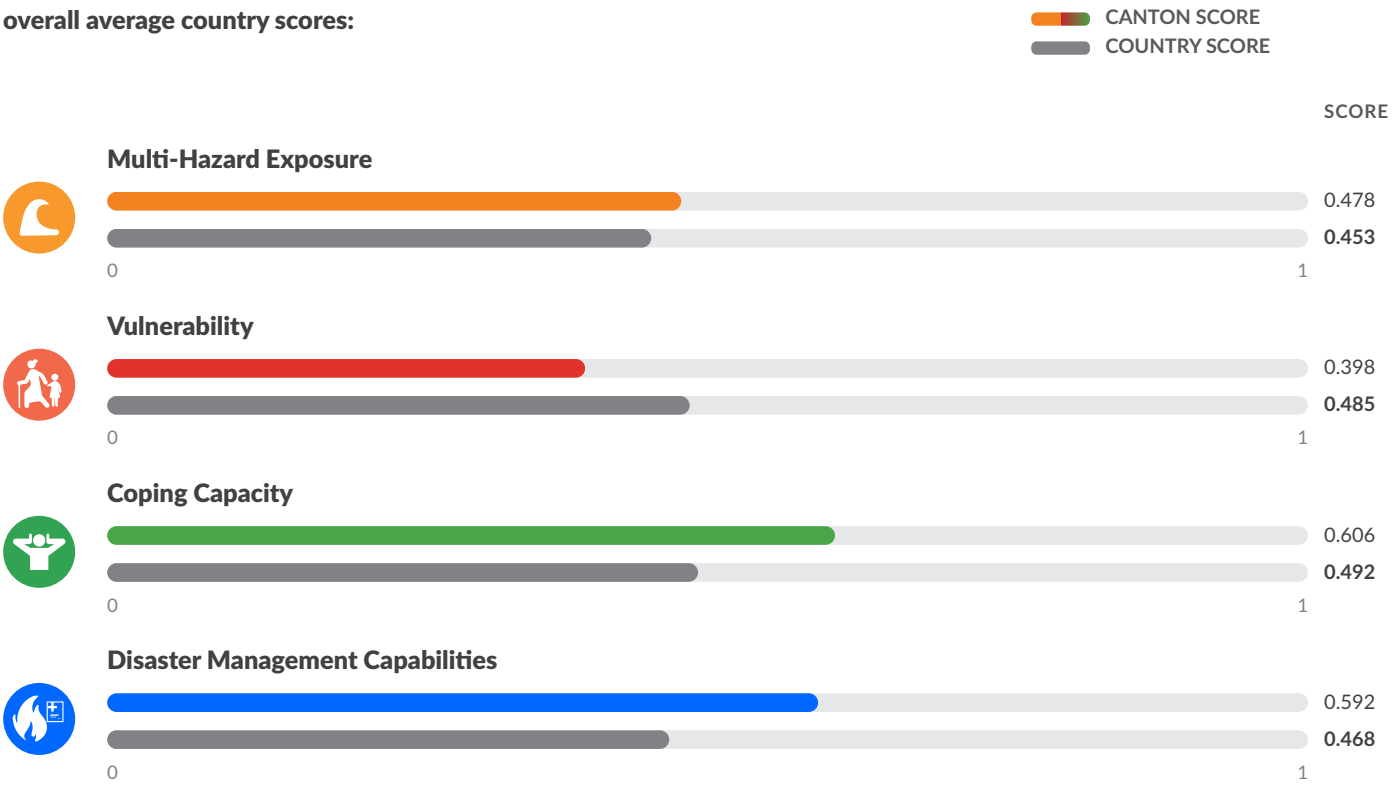


MULTI-HAZARD RISK (MHR)

RANKED
189 / 221
CANTONS ASSESSED
SCORE: 0.419

Zamora's score and ranking are due to High Multi-Hazard Exposure combined with Very Low Vulnerability, Very High Coping Capacity, and Very High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ZAPOTILLO

NDPBA SUBNATIONAL PROFILE

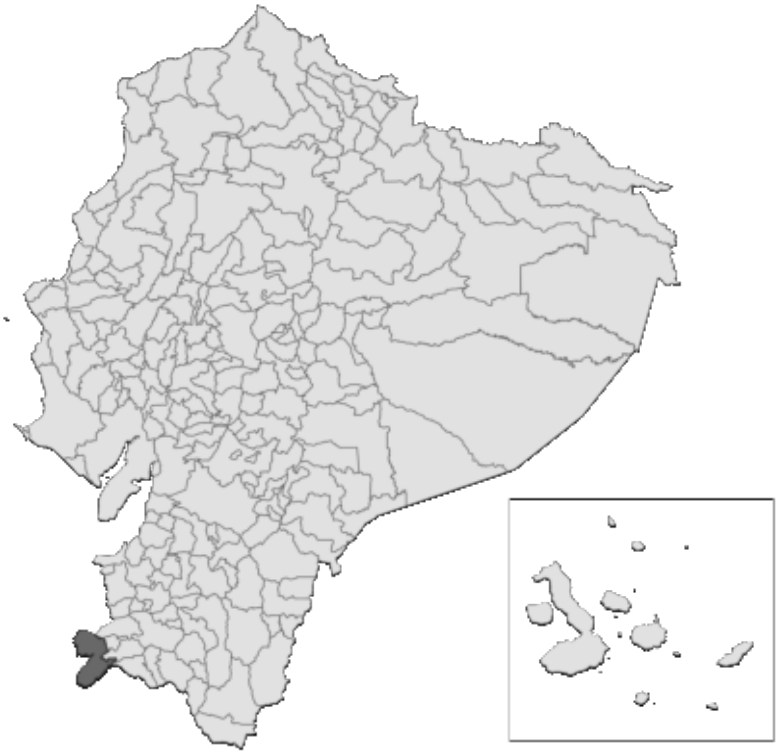
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ZAPOTILLO

PROVINCE: LOJA



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - High
SCORE: 0.546 • RANK: 56/221 CANTONS ASSESSED

Vulnerability (V) - Moderate
SCORE: 0.497 • RANK: 99/221 CANTONS ASSESSED

Resilience (R) - Very Low
SCORE: 0.402 • RANK: 184/221 CANTONS ASSESSED

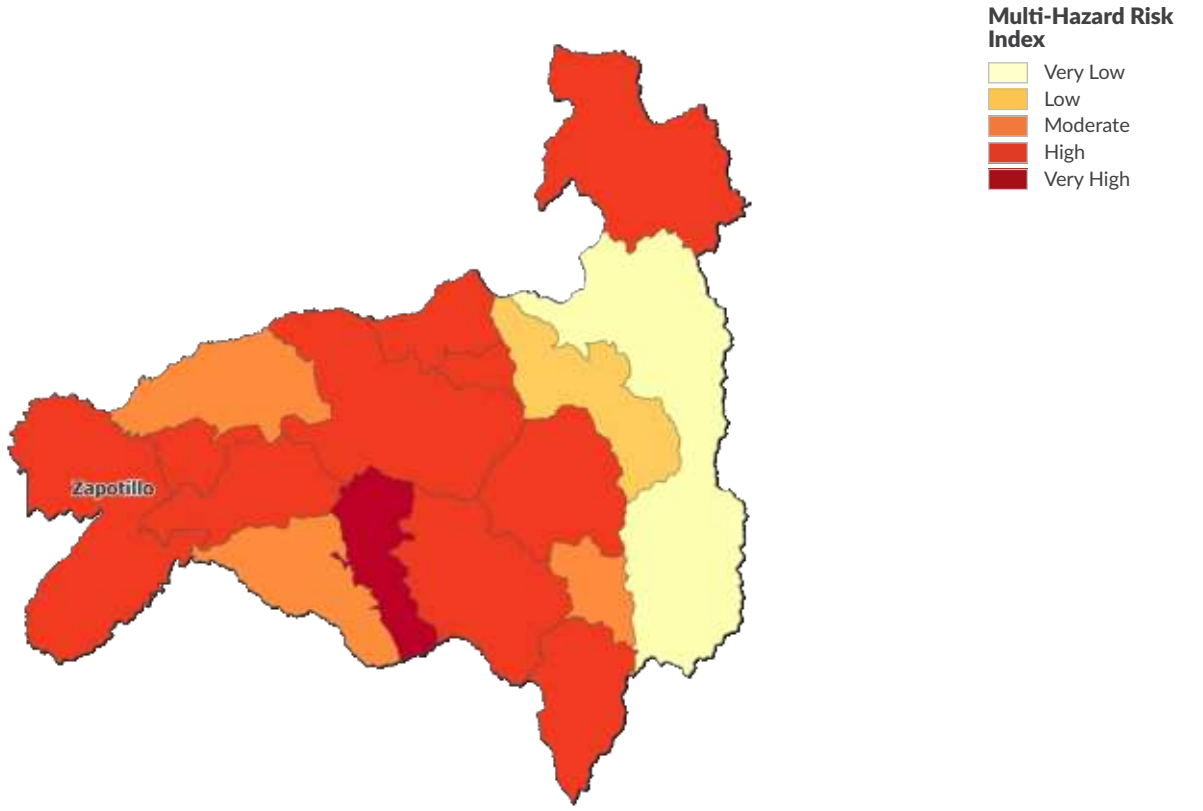
Coping Capacity (CC) - Low
SCORE: 0.417 • RANK: 163/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.392 • RANK: 132/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - Very Low
SCORE: 0.285 • RANK: 211/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN LOJA PROVINCE

ZAPOTILLO • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



Sozoranga	0.590	Chaguarpamba	0.524
Espíndola	0.548	Olmedo	0.521
Saraguro	0.548	Celica	0.520
Zapotillo	**0.546**	Quilanga	0.494
Gonzanamá	0.544	Puyango	0.493
Calvas	0.536	Macará	0.492
Paltas	0.532	Catamayo	0.467
Pindal	0.528	Loja	0.383

MULTI-HAZARD EXPOSURE (MHE)

RANK: 132 / 221 CANTONS ASSESSED
SCORE: 0.392



MHE
0.392

Raw MHE
0.415

Relative MHE
0.369

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
100%
13,874 people exposed
11,835 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Earthquake
100%
13,874 people exposed
11,835 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
7%
994 people exposed
897 structures exposed (8%)
Critical Infrastructure Exposed: 7%

Landslide
11%
1,477 people exposed
1,295 structures exposed (11%)
Critical Infrastructure Exposed: 8%

Mosquito-Borne Disease
87%
12,021 people exposed
10,034 structures exposed (85%)
Critical Infrastructure Exposed: 87%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
80%
11,153 people exposed
9,433 structures exposed (80%)
Critical Infrastructure Exposed: 80%

VULNERABILITY (V)

RANK: 99 / 221 CANTONS ASSESSED **SCORE: 0.497**

Vulnerability in Zapotillo is primarily driven by Information Access Vulnerability and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 49/221 CANTONS ASSESSED
SCORE: 0.615

- **8.7** Average Years of Schooling
- **59%** Population (age 24 and over) with General Basic Education Schooling
- **7%** Population (age 24 and over) with No Schooling
- **6.2%** Adult Illiteracy Rate
- **54.6%** Households with No Internet Access
- **83.3%** Households with No Access to Television
- **84.4%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 81/221 CANTONS ASSESSED
SCORE: 0.586

- **85.7%** Homes with Access to Public Water Source
- **28.2%** Homes Connected to the Public Sewage System
- **38.1%** Homes without Piped Water
- **8.5%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 79/221 CANTONS ASSESSED
SCORE: 0.567

- **60.3** Age Dependency Ratio
- **17.4%** Unemployment Rate
- **59.1%** Poverty Rate (based on UBN)
- **0.8%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.543

- **4.9%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.490

- **0.5** Female to Male Labor Ratio (distance from parity)
- **54** Adolescent Birth Rate (among females age 15-19) per 1,000
- **5.7%** Prevalence of Child Marriage (among adolescents age 12-17)
- **42.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **34.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.363

- **8.6%** Prevalence of Disability (among persons age 5 and over)
- **0** Perinatal Mortality Rate (per 1,000 births)
- **5.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.541

- **3.7** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **3.7** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **16.6** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **5.5** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 141/221 CANTONS ASSESSED
SCORE: 0.453

39	6	31	74
Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 73/221 CANTONS ASSESSED
SCORE: 0.547

13.9%	14.6%	14.4%	89.1%	10.1%
Homes with Exterior Walls in Poor Condition	Homes with Inadequate Materials Used in Outer Walls	Homes with Roofs in Poor Condition	Households with No Access to Vehicle for Private Use	Household Overcrowding

Population Pressures

0 — 1

RANK: 76/221 CANTONS ASSESSED
SCORE: 0.520

12	1.4%	37.1	0.28
Population Density (persons per sq km)	Average Annual Population Change (2010-2022)	Net Migration Rate (per 1,000 persons)	Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 194/221 CANTONS ASSESSED
SCORE: 0.277

0.3	0	0.1
Hazard Susceptibility (recent events 2015-2025)	Disaster Loss Ratio (recent events 2015-2025)	Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 163 / 221 CANTONS ASSESSED **SCORE: 0.417**

Zapotillo exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 146/221 CANTONS ASSESSED
SCORE: 0.405

56%
Labor Force Participation

30,686
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 89/221 CANTONS ASSESSED
SCORE: 0.417

4.1%
Protected Area (% of land area)

-7,579.4
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 174/221 CANTONS ASSESSED
SCORE: 0.363

83.5%
Voter Participation

54.3%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 138/221 CANTONS ASSESSED
SCORE: 0.484

Communications Capacity

0 — 1

RANK: 137/221 CANTONS ASSESSED
SCORE: 0.479

13.9%
Household Access to Fixed Phones

71.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.567

95.6%
Homes Served by the Public Electricity Network

76.6%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 72/221 CANTONS ASSESSED
SCORE: 0.563

15.8
Nurses and Midwives per 10,000 persons

25.4
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 204/221 CANTONS ASSESSED
SCORE: 0.326

43.9
Average Distance to Airport (km)

101.3
Average Distance to Sea or River Port (km)

0.8
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 211 / 221 CANTONS ASSESSED **SCORE: 0.285**

Zapotillo exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 183/221 CANTONS ASSESSED
SCORE: 0.327

4.3	22%	0	117.9
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 209/221 CANTONS ASSESSED
SCORE: 0.244

37.6	15.5	5.4	15.4
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 184 / 221 CANTONS ASSESSED
SCORE: 0.402

Zapotillo's score and ranking are due to Moderate Vulnerability combined with Low Coping Capacity and Very Low Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:



Emergency Services



Transportation Capacity



Mass Care Support



Governance

KEY FACTORS INFLUENCING RESILIENCE



Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.



Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.



Mass Care Support

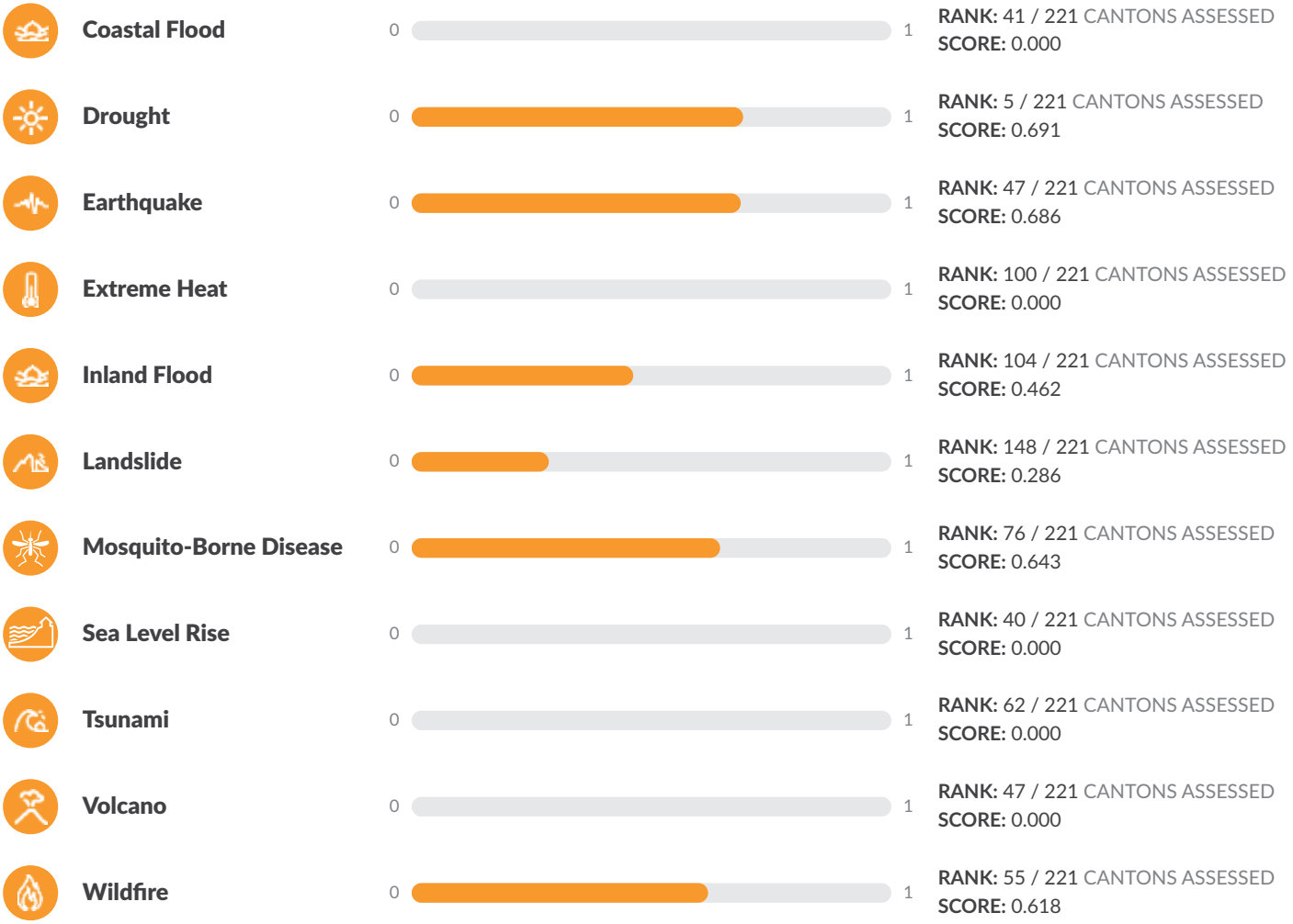
Establishing and maintaining a broad range of systems and resources, including skilled personnel and dedicated facilities, to support emergency services and the treatment of injury and disease during non-disaster times, will greatly enhance the capacity for disaster management and response, and improve the ability of societies to shelter and address the needs of disaster-affected populations.



Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

HAZARD-SPECIFIC RISK (HSR)

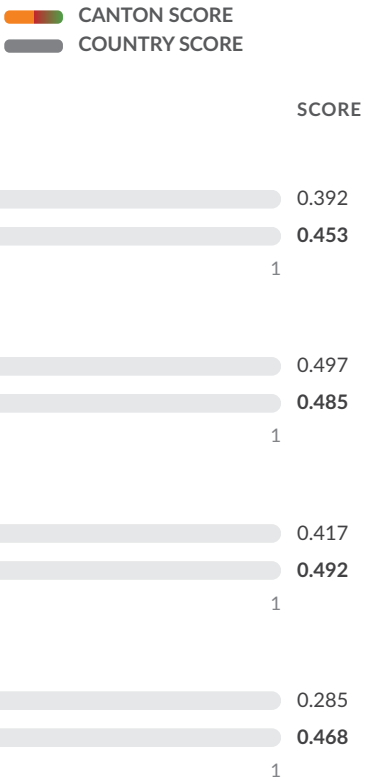


MULTI-HAZARD RISK (MHR)

RANKED
56 / 221
CANTONS ASSESSED
SCORE: 0.546

Zapotillo's score and ranking are due to Moderate Multi-Hazard Exposure combined with Moderate Vulnerability, Low Coping Capacity, and Very Low Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:



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ECUADOR

ZARUMA

NDPBA SUBNATIONAL PROFILE

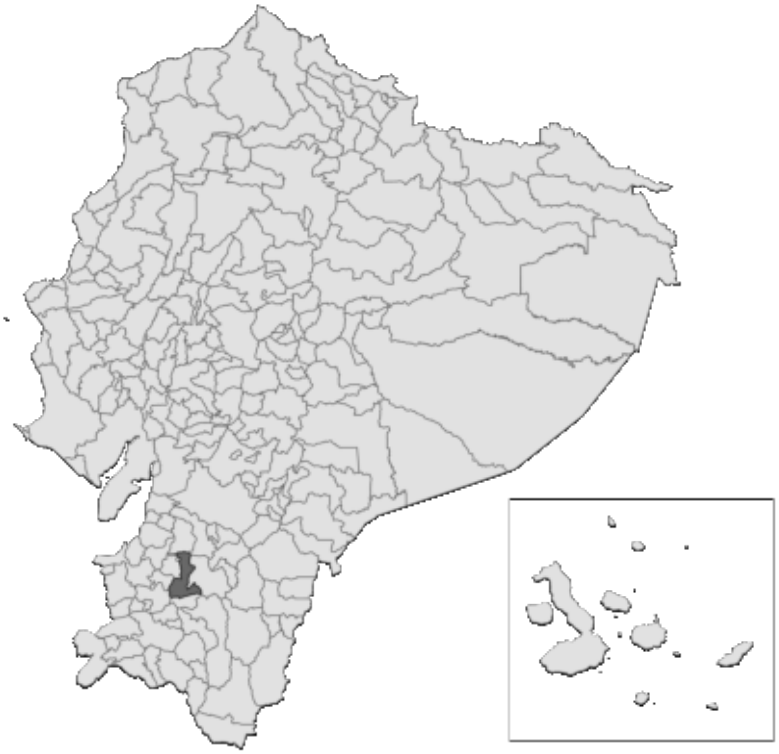
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ECUADOR

ZARUMA

PROVINCE: EL ORO



RISK AND VULNERABILITY

COMPONENT SCORES

Multi-Hazard Risk (MHR) - Low
SCORE: 0.440 • RANK: 165/221 CANTONS ASSESSED

Vulnerability (V) - Very Low
SCORE: 0.389 • RANK: 192/221 CANTONS ASSESSED

Resilience (R) - High
SCORE: 0.557 • RANK: 55/221 CANTONS ASSESSED

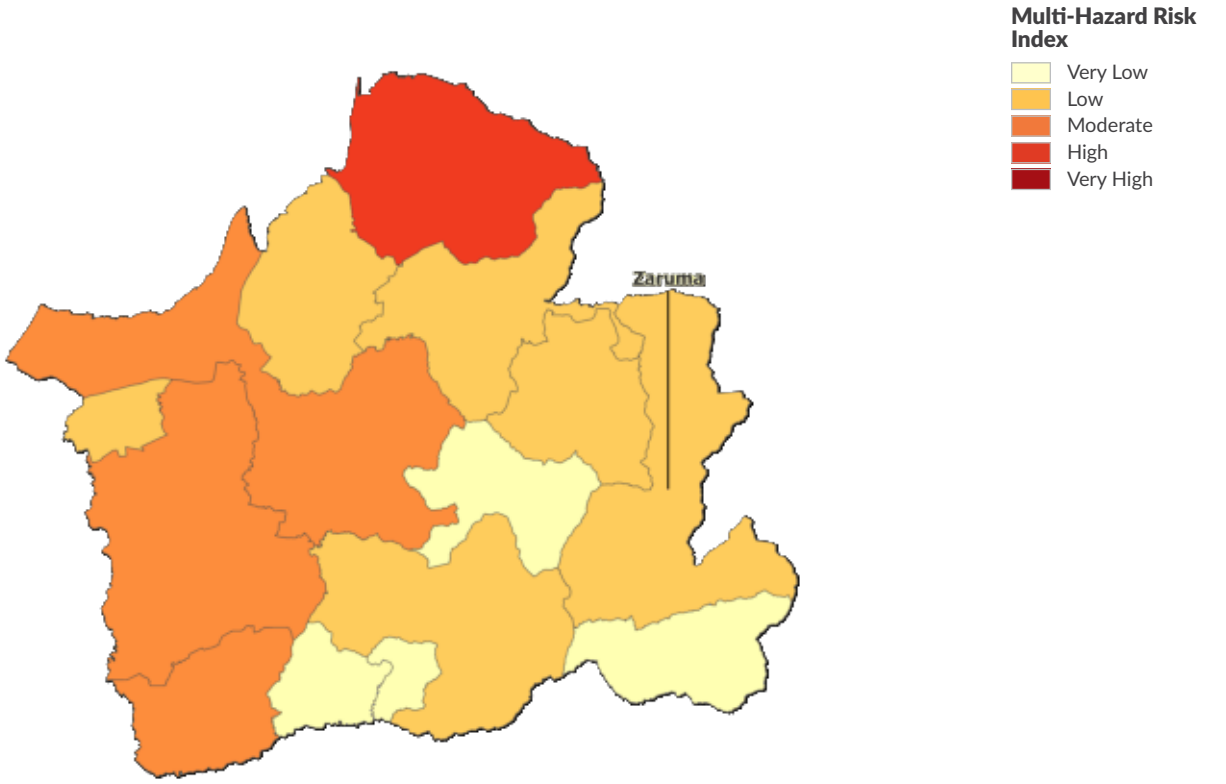
Coping Capacity (CC) - High
SCORE: 0.525 • RANK: 82/221 CANTONS ASSESSED

Multi-Hazard Exposure (MHE) - Moderate
SCORE: 0.430 • RANK: 118/221 CANTONS ASSESSED

Disaster Management Capabilities (DMC) - High
SCORE: 0.535 • RANK: 66/221 CANTONS ASSESSED

MULTI-HAZARD RISK IN EL ORO PROVINCE

ZARUMA • SHOWN IN RELATION TO OTHER CANTONS IN THE PROVINCE



El Guabo	0.521
Santa Rosa	0.502
Arenillas	0.496
Las Lajas	0.485
Machala	0.469
Pasaje	0.454
Chilla	0.453
Piñas	0.440
Zaruma	**0.440**
Huaquillas	0.435
Portovelo	0.424
Balsas	0.420
Marcabelí	0.394
Atahualpa	0.366

MULTI-HAZARD EXPOSURE (MHE)

RANK: 118 / 221 CANTONS ASSESSED
SCORE: 0.430



MHE
0.430

Raw MHE
0.479

Relative MHE
0.381

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flood
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Drought
14%
4,094 people exposed
2,027 structures exposed (16%)
Critical Infrastructure Exposed: 13%

Earthquake
100%
28,694 people exposed
12,690 structures exposed (100%)
Critical Infrastructure Exposed: 100%

Extreme Heat
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Inland Flood
<1%
117 people exposed
75 structures exposed (<1%)
Critical Infrastructure Exposed: 5%

Landslide
99%
28,352 people exposed
12,446 structures exposed (98%)
Critical Infrastructure Exposed: 99%

Mosquito-Borne Disease
73%
20,873 people exposed
8,255 structures exposed (65%)
Critical Infrastructure Exposed: 84%

Sea Level Rise
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Tsunami
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Volcano
0%
0 people exposed
0 structures exposed (0%)
Critical Infrastructure Exposed: 0%

Wildfire
82%
23,523 people exposed
10,587 structures exposed (83%)
Critical Infrastructure Exposed: 82%

VULNERABILITY (V)

RANK: 192 / 221 CANTONS ASSESSED **SCORE: 0.389**

Vulnerability in Zaruma is primarily driven by Disaster Impacts and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.

Information Access Vulnerability

0 — 1

RANK: 177/221 CANTONS ASSESSED
SCORE: 0.380

- **10.2** Average Years of Schooling
- **46.2%** Population (age 24 and over) with General Basic Education Schooling
- **4.2%** Population (age 24 and over) with No Schooling
- **4%** Adult Illiteracy Rate
- **37.7%** Households with No Internet Access
- **64.8%** Households with No Access to Television
- **66.3%** Households with No Access to Computer

Clean Water Access Vulnerability

0 — 1

RANK: 168/221 CANTONS ASSESSED
SCORE: 0.377

- **73.1%** Homes with Access to Public Water Source
- **61.8%** Homes Connected to the Public Sewage System
- **19.5%** Homes without Piped Water
- **2.4%** Households with Shared Toilets

Economic Constraints

0 — 1

RANK: 193/221 CANTONS ASSESSED
SCORE: 0.367

- **54.9** Age Dependency Ratio
- **8.1%** Unemployment Rate
- **43.1%** Poverty Rate (based on UBN)
- **0.4%** Child Labor (children ages 5-14)

Environmental Stress

0 — 1

RANK: 176/221 CANTONS ASSESSED
SCORE: 0.364

- **2.3%** Tree Cover Loss (2001-2024)

Marginalization

0 — 1

RANK: 171/221 CANTONS ASSESSED
SCORE: 0.368

- **0.4** Female to Male Labor Ratio (distance from parity)
- **25.6** Adolescent Birth Rate (among females age 15-19) per 1,000
- **2.3%** Prevalence of Child Marriage (among adolescents age 12-17)
- **49.1%** Population with Unmet Basic Needs (UBN) that is Indigenous
- **37.1%** Population with Unmet Basic Needs (UBN) that is Afro-Ecuadorian

Vulnerable Health Status

0 — 1

RANK: 107/221 CANTONS ASSESSED
SCORE: 0.459

- **8.9%** Prevalence of Disability (among persons age 5 and over)
- **3.5** Perinatal Mortality Rate (per 1,000 births)
- **6.2%** Children of Low Birth Weight

Communicable Disease

0 — 1

RANK: 124/221 CANTONS ASSESSED
SCORE: 0.330

- **3.3** Prevalence of Dengue Among Hospital Admissions (cases per 1,000 admissions)
- **2.6** Prevalence of Tuberculosis Among Hospital Admissions (cases per 1,000 admissions)
- **24.7** Prevalence of Diarrheal Diseases Among Hospital Admissions (cases per 1,000 admissions)
- **0** Prevalence of HIV/AIDS Among Hospital Admissions (cases per 1,000 admissions)

Non-Communicable Disease

0 — 1

RANK: 28/221 CANTONS ASSESSED
SCORE: 0.586

66 Prevalence of Cancer Among Hospital Admissions (cases per 1,000 admissions)	**12** Prevalence of Diabetes Among Hospital Admissions (cases per 1,000 admissions)	**38** Prevalence of Heart Disease Among Hospital Admissions (cases per 1,000 admissions)	**111** Prevalence of Nutritional Deficiencies Among Hospital Admissions (cases per 1,000 admissions)

Housing and Transportation Vulnerability

0 — 1

RANK: 186/221 CANTONS ASSESSED
SCORE: 0.330

11.3% Homes with Exterior Walls in Poor Condition	**0.7%** Homes with Inadequate Materials Used in Outer Walls	**14.2%** Homes with Roofs in Poor Condition	**75.6%** Households with No Access to Vehicle for Private Use	**4.4%** Household Overcrowding

Population Pressures

0 — 1

RANK: 189/221 CANTONS ASSESSED
SCORE: 0.357

37.4 Population Density (persons per sq km)	**0.1%** Average Annual Population Change (2010-2022)	**13.7** Net Migration Rate (per 1,000 persons)	**0.25** Youth Bulge (ratio of youth ages 15-24 to the working-age population ages 15-64)

Disaster Impacts

0 — 1

RANK: 100/221 CANTONS ASSESSED
SCORE: 0.476

0.3 Hazard Susceptibility (recent events 2015-2025)	**0** Disaster Loss Ratio (recent events 2015-2025)	**0.2** Demographic Fragility (recent events 2015-2025)

COPING CAPACITY (CC)

RANK: 82 / 221 CANTONS ASSESSED **SCORE: 0.525**

Zaruma exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.

Economic Capacity

0 — 1

RANK: 87/221 CANTONS ASSESSED
SCORE: 0.518

55.3%
Labor Force Participation

168,019
Gross Value Added (USD thousands)

Environmental Capacity

0 — 1

RANK: 198/221 CANTONS ASSESSED
SCORE: 0.259

0%
Protected Area (% of land area)

-6,304.8
Average Annual Net Carbon Flux (metric tons)

Governance

0 — 1

RANK: 108/221 CANTONS ASSESSED
SCORE: 0.510

83.5%
Voter Participation

83.5%
Homes with Public Garbage Collection Service

Infrastructure

0 — 1

RANK: 27/221 CANTONS ASSESSED
SCORE: 0.637

Communications Capacity

0 — 1

RANK: 43/221 CANTONS ASSESSED
SCORE: 0.693

19.4%
Household Access to Fixed Phones

88.3%
Household Access to Mobile Phones

Energy Capacity

0 — 1

RANK: 56/221 CANTONS ASSESSED
SCORE: 0.709

98.4%
Homes Served by the Public Electricity Network

80.4%
Households Using Gas Cooking Fuel

Healthcare Capacity

0 — 1

RANK: 22/221 CANTONS ASSESSED
SCORE: 0.688

22.6
Nurses and Midwives per 10,000 persons

36.9
Physicians per 10,000 persons

Transportation Capacity

0 — 1

RANK: 134/221 CANTONS ASSESSED
SCORE: 0.456

38.5
Average Distance to Airport (km)

53.3
Average Distance to Sea or River Port (km)

1.2
Road Density (km of road per sq km)

DISASTER MANAGEMENT CAPABILITIES (DMC)

RANK: 66 / 221 CANTONS ASSESSED **SCORE: 0.535**

Zaruma exhibits weaker Disaster Management Capabilities in the area of Emergency Services. The bar charts indicate the themes contributing to the overall Disaster Management Capabilities score.

Mass Care Support

0 — 1

RANK: 24/221 CANTONS ASSESSED
SCORE: 0.572

1.4	10.7%	1	54.6
Average Distance to Shelter (km)	Shelter Capacity as a Percent of Population	Hospital Beds per 1,000 Persons	Average Distance to Warehouse (km)

Emergency Services

0 — 1

RANK: 114/221 CANTONS ASSESSED
SCORE: 0.498

11.3	6.2	3.5	6.9
Average Distance to Hospital (km)	Average Distance to Fire Station (km)	Average Distance to Police Station (km)	Average Distance to Ambulance Unit (km)

RESILIENCE (R)

RANK: 55 / 221 CANTONS ASSESSED
SCORE: 0.557

Zaruma's score and ranking are due to Very Low Vulnerability combined with High Coping Capacity and High Disaster Management Capabilities scores.

Below are the four thematic areas with the weakest relative scores:

Transportation Capacity

Emergency Services

Governance

Economic Capacity

KEY FACTORS INFLUENCING RESILIENCE

Transportation Capacity

Transportation Capacity represents the ability to ensure efficient movement and delivery of resources key to effective humanitarian assistance and disaster relief operations, including the provision of health services.

Emergency Services

Societies establish capabilities to manage emergencies that scale from day-to-day events up to catastrophes that impact all of society. Establishing and maintaining a broad range of systems and resources to support emergency services will increase the capacity for disaster management and response.

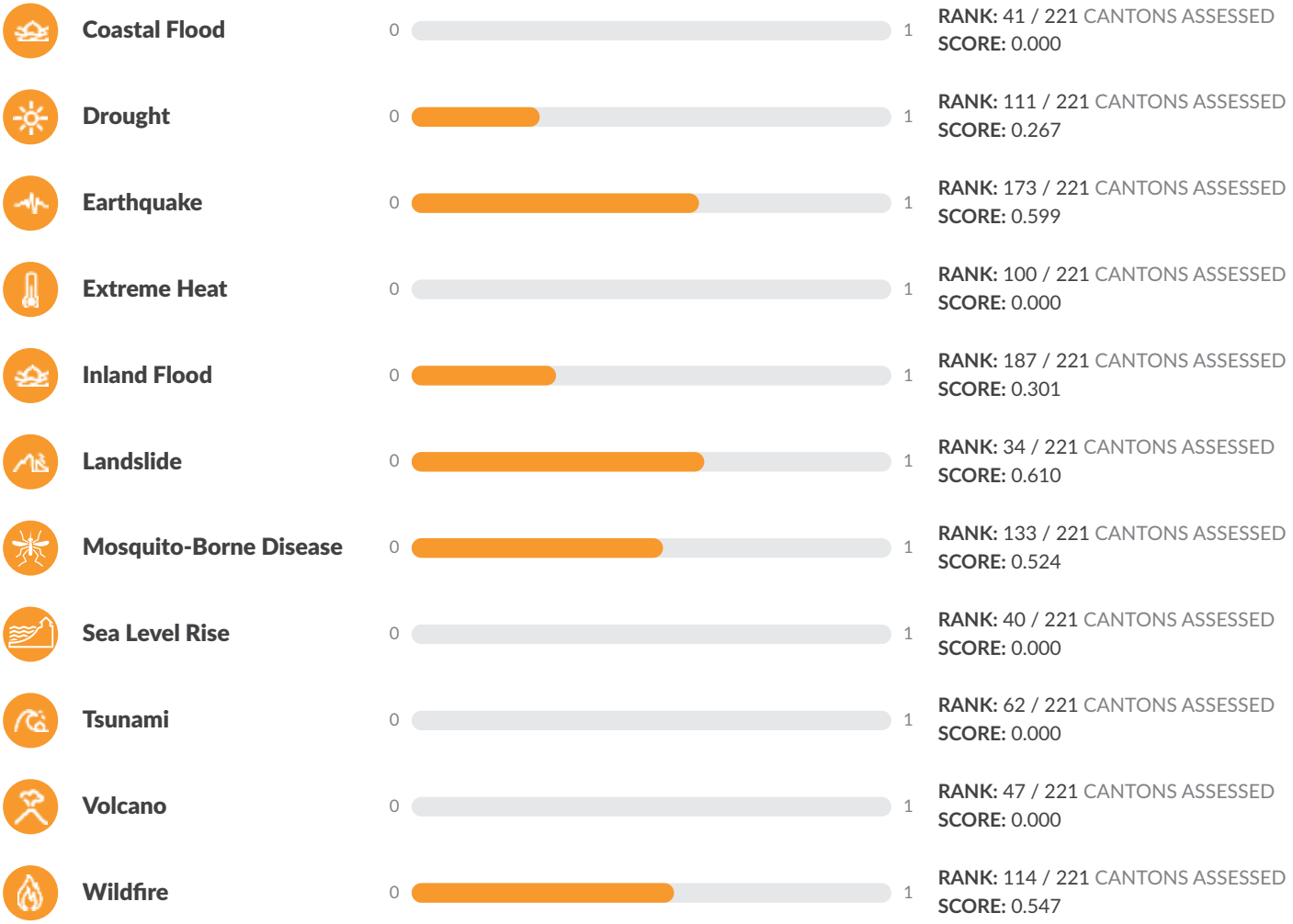
Governance

The stability and effectiveness of institutional structures and services, trust in government, and rule of law is an indication of a government's ability to successfully mitigate and cope with hazards. Instability of institutional structures can increase susceptibility to the negative effects of a disaster event.

Economic Capacity

A strong economic foundation provides an indication of a region's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Limited economic capacity correlates to disproportionate disaster impacts.

HAZARD-SPECIFIC RISK (HSR)

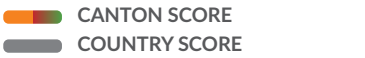


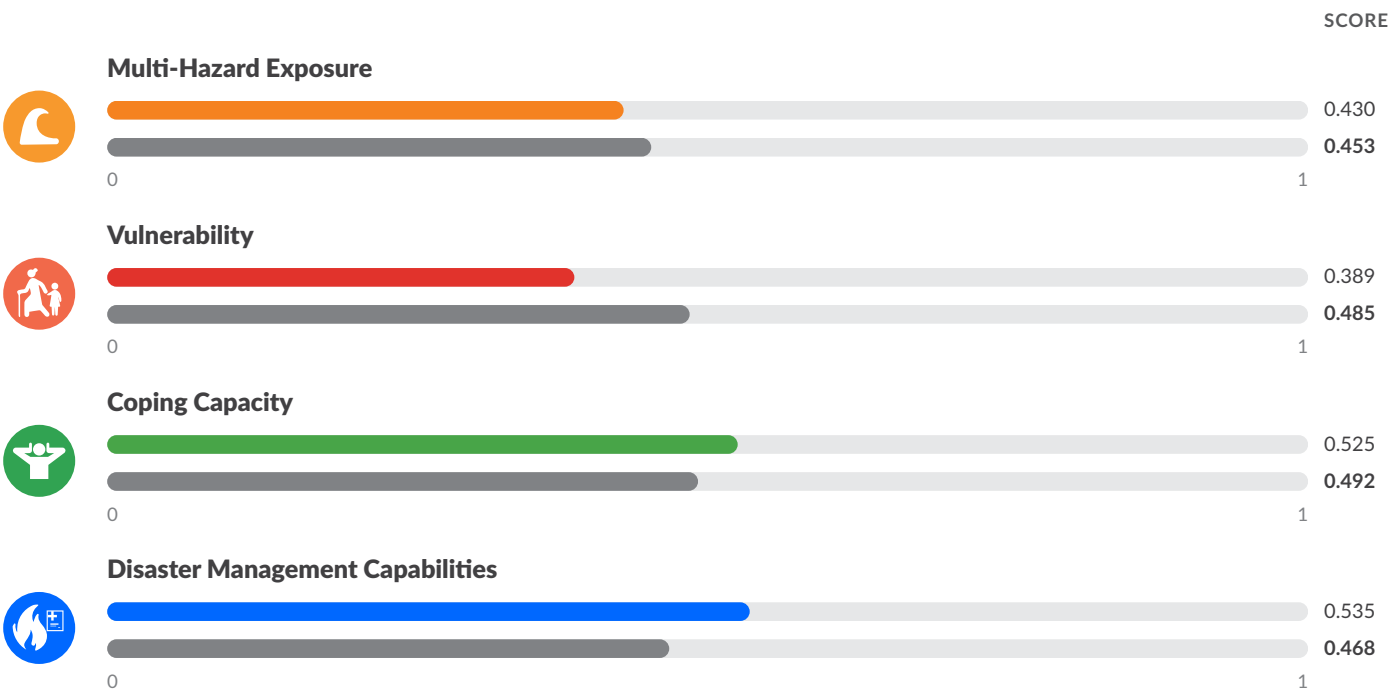
MULTI-HAZARD RISK (MHR)

RANKED
165 / 221
CANTONS ASSESSED
SCORE: 0.440

Zaruma's score and ranking are due to Moderate Multi-Hazard Exposure combined with Very Low Vulnerability, High Coping Capacity, and High Disaster Management Capabilities scores.

Multi-Hazard Risk component scores compared to overall average country scores:





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