



THE PHILIPPINES

QUIRINO

NDPBA PROVINCE PROFILE

THE PHILIPPINES

QUIRINO

CAPITAL: CABARROGUIS

Area: 2,320 km²

Quirino is a landlocked province in the Philippines located in the Cagayan Valley region in Luzon. The Sierra Madre mountain range provides a natural barrier on the eastern and southern border. The economy of Quirino is largely based on agriculture with rice and corn being the major crops.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low
Score: 0.483 • Rank: 53/84



RESILIENCE (R) - Medium
Score: 0.566 • Rank: 42/84



MULTI-HAZARD EXPOSURE (MHE) - Low
Score: 0.581 • Rank: 51/84



VULNERABILITY (V) - Medium
Score: 0.417 • Rank: 50/84



COPING CAPACITY (CC) - Medium
Score: 0.550 • Rank: 48/84



Population (2018)
203,826



Population in Poverty
8.9%



Literate population
98.1%



Access to improved water
67.0%



Average life expectancy
68.3 years

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: 52 / 84 PROVINCES
SCORE: 0.581



MHE
0.581

Raw MHE
0.372

Relative MHE
0.791

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

100%

203,826

\$693.5 Million



Tsunami

-

-

-



Flood

25%

51,332

\$161.3 Million



Liquefaction

41%

83,029

\$309.4 Million



Landslide

20%

41,530

\$159.3 Million



Volcano

-

-

-



Drought

100%

203,826

\$693.5 Million



Wildfire

6%

11,494

\$58.9 Million



Storm Surge

-

-

-



Typhoon Winds

100%

203,826

\$693.5 Million



VULNERABILITY (V)

RANK: 50 / 84 PROVINCES ASSESSED
SCORE: 0.417

Vulnerability in Quirino is primarily driven by Environmental Stress and Gender Inequality. The bar chart indicates the socioeconomic themes contributing to the province's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.633** **RANK: 10/84 PROVINCES ASSESSED**

1.38 Livestock density	24.61 Barren land (per 10k hectares)	-9.25% Forest cover change
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Vulnerable Health Status

0 1 **SCORE: 0.237** **RANK: 82/84 PROVINCES ASSESSED**

3.8% Malnutrition among children (0 to 5 years old)	0 Infant mortality rate (per 1k live births)	0 Maternal mortality rate (per 100k live births)	68.33 Life expectancy	220 Disability (per 100k persons)
9.2 Tuberculosis mortality rate (per 100k persons)	0 HIV mortality rate (per 100k persons)	4.1 Intestinal disease mortality rate (per 100k persons)	0.5 Other arthropod-borne viral fevers and viral hemorrhagic fever mortality rate (per 100k persons)	



Clean Water Vulnerability

0 1 **SCORE: 0.488** **RANK: 30/84 PROVINCES ASSESSED**

67.0% Households with improved safe water source	93.1% Households with sanitary toilet facility
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Information Access Vulnerability

0 1 **SCORE: 0.452** **RANK: 47/84 PROVINCES ASSESSED**

98.08% Literacy rate (age 10 and older)	113.34% Gross primary school enrollment rate	2.17% Internet Access	75.58% Households with radio	60.09% Households with television
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Economic Constraints



SCORE: 0.267

RANK: 64/84 PROVINCES ASSESSED

0.58

Economic
dependency
ratio

8.85%

Poverty
incidence



Gender Inequality



SCORE: 0.51

RANK: 30/84 PROVINCES ASSESSED

1.13

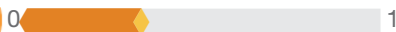
Female to male
secondary school
enrollment Rate

0.5

Labor force
participation ratio



Population Pressures



SCORE: 0.332

RANK: 66/84 PROVINCES ASSESSED

1.28

Population
growth rate
(2010-2015)

12.01

Average annual
urban population
growth rate

0.7%

Informal settlers




COPING CAPACITY (CC)

RANK: 48 / 84 PROVINCES ASSESSED
SCORE: 0.550

Quirino exhibits weaker Coping Capacity in the areas of Transportation Capacity and Governance. The bar chart indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.



Economic Capacity

0  1 **SCORE: 0.751** **RANK: 8/84 PROVINCES ASSESSED**

0.89

Purchasing power of the peso

71.57%


Labor force participation rate

4713.76

Local government annual regular income per capita (Philippine Peso)



Governance

0  1 **SCORE: 0.452** **RANK: 74/84 PROVINCES ASSESSED**

78.5%

Voter participation

6.17

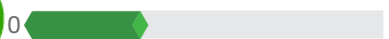
Organized violence (per 100k persons)

6.68%

Garbage pickup



Environmental Capacity

0  1 **SCORE: 0.315** **RANK: 58/84 PROVINCES ASSESSED**

0

Protected areas (per 1k ha)

17.2%

Forest reserves



Infrastructure Capacity

0  1 **SCORE: 0.526 RANK: 55/84 PROVINCES ASSESSED**



Health Care Capacity **SCORE: 0.536 RANK: 35/84 PROVINCES ASSESSED**

5.65	1.66	79.79%	6.5
Hopital beds (per 10k people)	Physicians per 10,000 people	Vaccination coverage	Average distance to nearest hospital (km)



Transportation Capacity **SCORE: 0.324 RANK: 70/84 PROVINCES ASSESSED**

0.38	24.55
Road density (km per sq. km)	Average distance to nearest port (km)



Communications Capacity **SCORE: 0.552 RANK: 59/84 PROVINCES ASSESSED**

0.6%	95.5%
Households with a landline	Mobile coverage



Energy Capacity **SCORE: 0.61 RANK: 46/84 PROVINCES ASSESSED**

73.3%	19.6%
Households with electricity	Households with gas



Emergency Services Capacity **SCORE: 0.606 RANK: 22/84 PROVINCES ASSESSED**

13.24	3.11	4.67
Evacuation centers (per 100k persons)	Fire Stations (per 100k persons)	Fire Trucks (per 100k persons)



RESILIENCE (R)

RANK: 42 / 84 PROVINCES ASSESSED
SCORE: 0.566

Quirino's score and ranking are due to Medium Vulnerability combined with Medium Coping Capacity scores.

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



Environmental Stress



Gender Inequality



Transportation Capacity



Governance



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 50 / 84 PROVINCES ASSESSED
SCORE: 0.248



Tsunami

RANK: 54 / 84 PROVINCES ASSESSED
SCORE: 0



Flood

RANK: 64 / 84 PROVINCES ASSESSED
SCORE: 0.081



Liquefaction

RANK: 54 / 84 PROVINCES ASSESSED
SCORE: 0.147



Landslide

RANK: 41 / 84 PROVINCES ASSESSED
SCORE: 0.220



Volcano

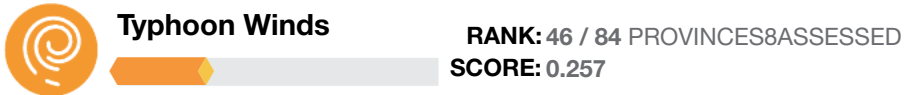
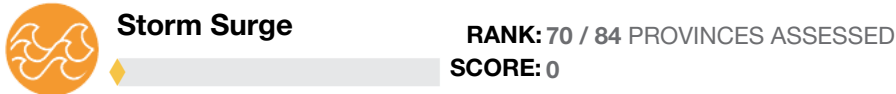
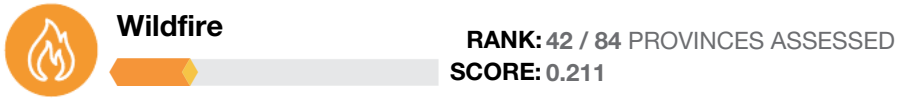
RANK: 68 / 84 PROVINCES ASSESSED
SCORE: 0



Drought

RANK: 18 / 84 PROVINCES ASSESSED
SCORE: 0.382

(HAZARD-SPECIFIC RISK CONTINUED)



MULTI-HAZARD RISK (MHR)

53 / 84

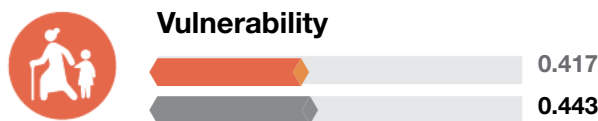
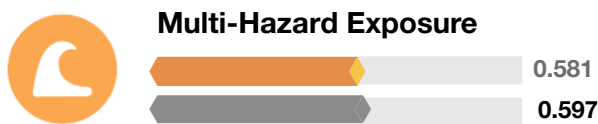
RANK WITHIN PROVINCES
Score: 0.483



Quirino's score and ranking are due to Low Multi-hazard exposure combined with Medium Vulnerability and Medium Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

PROVINCE SCORE
COUNTRY SCORE



QUIRINO RECOMMENDATIONS

1

Environmental Stress

- Continue efforts to increase forest cover, decrease areas classified as barren land and promoting sustainable agriculture.
- Findings show that the entire province is exposed to drought hazards. Rice and corn are major agricultural crops, which require large amounts of water to sustain. Efforts to conserve water and introduce drought resistant crops will benefit the province into the future.

2

Gender Inequality

- Continue efforts to monitor and reduce gender-based discrimination and bias. Focus efforts on enforcing equal employment opportunities and empowering women to continue their education. Build upon existing accomplishments, including the work related to the UN Sustainable Development Goals.
- Actively engage women and other marginalized groups in disaster management and community plans. Provide equal opportunities throughout society to reduce disparities and incorporate feedback mechanisms into policies and programs to ensure effective implementation.

3

Transportation Capacity

- Road density in Quirino is 0.38 kilometers per square kilometer, which is the 4th lowest in the Philippines. Limited road infrastructure greatly impacts transportation in Quirino, as it is a landlocked province. Continue airport and road enhancement projects through private-public partnerships. Advocate for transportation network projects through the Department of Public Works to increase evacuation and resource distribution routes, increase access to markets and enhance social connectivity.
- Civil planners should work with risk assessors to establish resilient transportation network plans. Incorporating environmental mitigation plans, equitable access for the population and hazard exposures.
- Ensure that emergency evacuation routes and plans include all transportation projects. Work with partners including HOTOSM and others to ensure mapping of new routes and resources are readily available in the event of a disaster.

4

Governance

- In Quirino only 7% of households reported having garbage collection services. Focus efforts on expanding public services especially in rural and remote areas.
- Expand government outreach to promote greater public participation, especially amongst marginalized groups such as women.

**Better solutions.
Fewer disasters.**

Safer world.

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