

Better solutions.
Fewer disasters.
Safer world.



El Seibo

Dominican Republic National Disaster Preparedness
Baseline Assessment
Province Profile

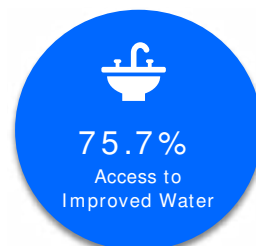
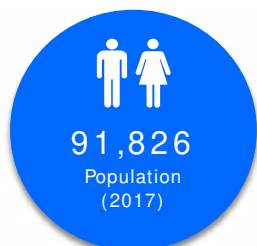
Findings: Risk and Vulnerability Assessment (RVA)

Province: El Seibo

Province Capital: Santa Cruz de El Seibo

Area: 2,008 km²

El Seibo is located in the east of the country. The region yields cacao, coffee, sugarcane and corn crops in addition to beeswax and livestock.



Municipality	Population
El Seibo	70,026
Miches	21,800

**Multi-Hazard Risk Rank:
Very High (2 of 32)**

**Lack of Resilience Rank:
Very High (3 of 32)**



RVA Component Scores

Table 1. Province Scores and Ranks (compared across Provinces) for each Index

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Very High		Very High		Low		Very High		Very Low	
Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)
0.584	2	0.648	3	0.458	22	0.601	5	0.305	31

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure¹ Rank: 22 of 32 Provinces (Score: 0.458)

Table 2. Estimated ambient population² exposed to each hazard



Cyclone

100%

108,184 People



Earthquake

100%

108,184 People



Landslide

57%

61,165 People



Flood

13%

13,603 People



Tsunami

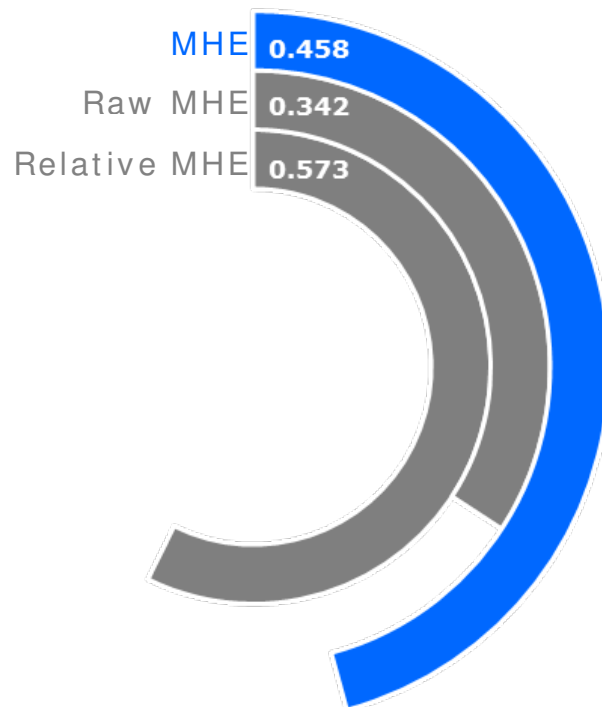
7%

7,251 People

Case Study: Community Preparedness in El Seibo

In 2008, El Seibo collaborated with World Vision to implement a Disaster Risk Reduction and Disaster Preparedness project in the province. This led to the development of Community Disaster Preparedness and Response Committees which enhanced the province's capacity to respond to disasters at both the local level and across borders. In 2010, these Committees actively coordinated to bring aid to neighboring Haiti after the devastating earthquake. Communication and coordination mechanisms were strengthened across the province as a result of these Committees.

"Dominican Republic: World Vision Disaster Preparedness Committees Help Haiti" – World Vision International, 3 February 2010



¹ Multi-Hazard Exposure: Average exposure of the population to hazards.

² Ambient Population: 24-hour average estimate of the population in each province. Ambient population typically differs from census population.

Findings: Risk and Vulnerability Assessment (RVA)

Vulnerability (V)

Vulnerability³ Rank: 5 of 32 Provinces (Score: 0.601) Vulnerability in El Seibo is strongly influenced by Gender Inequality, Information Access Vulnerability, and Clean Water Vulnerability. The bar chart on the right indicates the socioeconomic themes contributing to the Province's overall Vulnerability score.

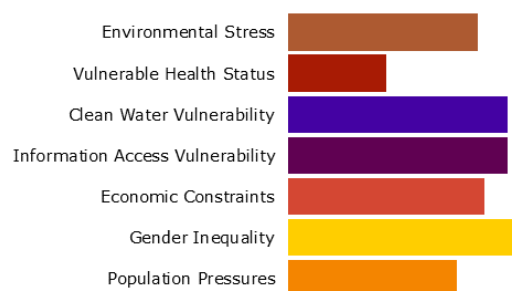









Table 3. Component Scores for each Vulnerability Sub-component

	Environmental Stress	20.1% Province Susceptible to Drought	-15.8% Average Annual Forest Change				
	Vulnerable Health Status	6.1 Infant Mortality Rate	101.9 Maternal Mortality Rate	11.1 Chronic Malnutrition	9.1% Population Disabled		
	Clean Water Vulnerability	24.3% Households without Access to Improved Water	22.4% Households without Access to Flush Toilets				
	Information Access Vulnerability	20.4% Illiteracy	83.7% Primary School Enrollment	96.5% Households without Internet	44.1% Households without TV	59.6% Households without Radio	5.1 Average years of Schooling
	Economic Constraints	66.7 Economic Dependency Ratio	69.1% Population in Poverty	38.9% CEP Beneficiaries			
	Gender Inequality	36.7% Female Seats in Government	1.2 Female to Male Years of Schooling	0.58 Female to Male Labor Ratio			
	Population Pressures	0.62% Average Annual Population Change	4.2% Average Annual Urban Population Change				

³ Vulnerability: The socioeconomic conditions that are associated with the susceptibility to disruptions in a country's normal functions.

Coping Capacity (CC)

Coping Capacity⁴ Rank: 31 of 32 Provinces (Score: 0.305) El Seibo ranks very low across many thematic areas in with its weakest relative scores in Environmental Capacity, Governance and Infrastructure. The bar chart on the right indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.

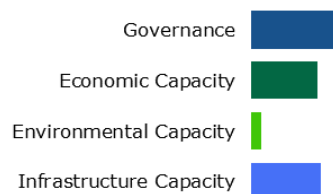









Table 4. Component Scores for each Coping Capacity Sub-component

	Economic Capacity	1.02 Debt to Service Ratio	90.9% Employment Rate (Male)	RD\$ 19,967 Average Annual Income per Capita			
	Governance	77.4% Registered Voter Participation (2016 Election)	21.1 Homicide Rate per 100k persons	50.1% Households with Garbage Collection			
	Environmental Capacity	3.3% Protected or Reforested Land					
	Infrastructure Capacity						
	Health Care Capacity		10.6 Hospital Beds per 10,000 Persons	15.5 Nurses per 10,000 Persons	16.1 Physicians per 10,000 Persons	4.1 km Average Distance to Nearest Hospital	0.31 Vaccination Index ⁵
	Communications Capacity		8.3% Households with Access to Fixed Phone Line	59.8% Households with Access to Mobile Phone			
	Transportation Capacity		37.7 km Average Distance to Nearest Port or Airport	0.47 km Total Length of Road per km ² (area)			

⁴ Coping Capacity: The systems, means, and abilities of a country to absorb and respond to events that could potentially disrupt normal function.

⁵ Vaccination Coverage Index: Coverage of DPT (diphtheria, pertussis, and tetanus), Polio, Tuberculosis, and Measles vaccinations. Index values range from 0 to 1, with 1 indicating higher coverage.

Lack of Resilience (LR)

Lack of Resilience⁶ Rank: 3 of 32 Provinces (Score: 0.648)

El Seibo's score and ranking are due to very high Vulnerability combined with very low Coping Capacity scores. El Seibo ranks 5th in Vulnerability and 31st in Coping Capacity.

Table 5. The 3 Thematic areas with the Weakest Relative Scores



Environmental Capacity



Gender Inequality



Governance

Multi-Hazard Risk (MHR)

Multi-Hazard Risk⁷ Rank: 2 of 32 Provinces (Score: 0.584)

El Seibo's score and ranking are a product of low Multi-Hazard Exposure combined with very high Vulnerability and very low Coping Capacity.

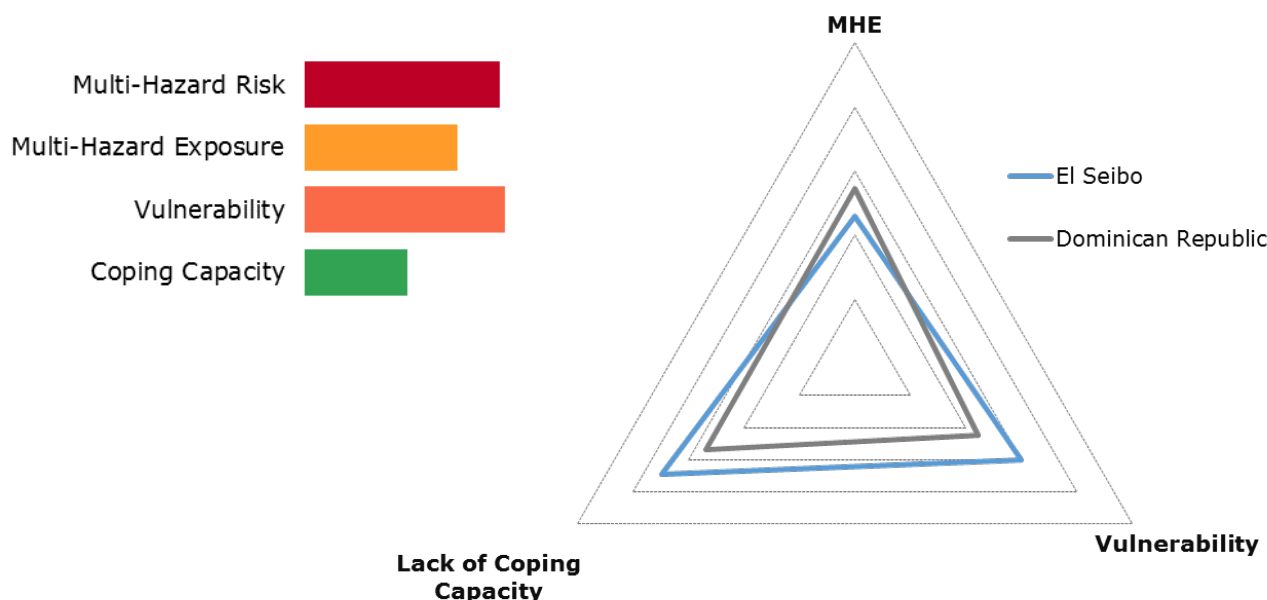


Figure 1. Province Multi-Hazard Risk Component Scores Compared to Overall Average Country Scores

⁶ Lack of Resilience: The susceptibility to impact from the short-term inability to absorb, respond to, and recover from disruptions to a country's normal function. This index provides a hazard-independent look at current socio-economic conditions.

⁷ Multi-Hazard Risk: The likelihood of losses or disruptions to a country's normal function due to interaction between multi-hazard exposure, socioeconomic vulnerability, and coping capacity.

Successes



Low vulnerable health status

Ranked 26 of 32 provinces, low health vulnerability could indicate a population that will be more resilient to the negative health impacts associated with major disaster events.

Recommendations

01

Improve environmental capacity

Invest in protected areas to reduce environmental stress and degradation.

02

Promote gender equality

Reduce inequality, ensuring that vulnerable populations have their needs met under 'normal' conditions and are less susceptible to disaster impacts.

03

Improve governance

Provide additional support for local police, firefighters, and emergency medical resources to improve public safety and reduce crime rates. In addition, seek partnerships with the private sector to increase the provision of services, such as garbage collection.