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Fewer disasters.
Safer world.



La Romana

Dominican Republic National Disaster Preparedness
Baseline Assessment
Province Profile

Findings: Risk and Vulnerability Assessment (RVA)

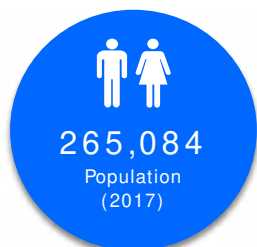
Province: La Romana

Province Capital: La Romana



Area: 728 km²

Located in the southeast of the country, La Romana produces coffee, tobacco, beeswax, cattle and hides. A coastal province, La Romana's port supports the transportation of agriculture outputs and fish.



Municipality	Population
La Romana	150,862
Guaymate	17,880
Villa Hermosa	96,342



0 7.5 15 Kilometers



Multi-Hazard Risk Rank:
Low (22 of 32)

Lack of Resilience Rank:
Low (23 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	
Low		Low		High		Medium		High	
Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)
0.497	22	0.442	23	0.608	13	0.412	18	0.528	8

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure¹ Rank: 13 of 32 Provinces (Score: 0.608)

Table 2. Estimated ambient population² exposed to each hazard



Cyclone

100%

265,549 People



Earthquake

100%

265,549 People



Landslide

64%

171,122 People



Flood

6%

15,690 People



Tsunami

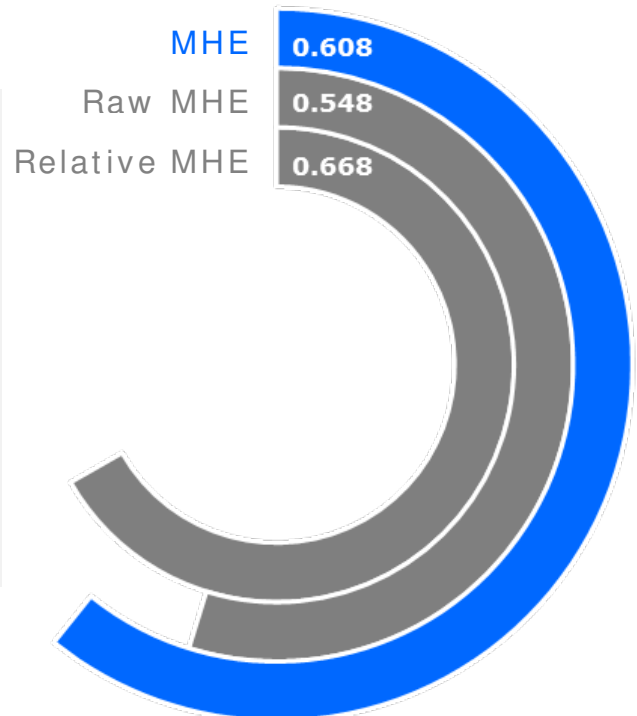
22%

59,710 People

Case Study: Red Alert in the Port of La Romana

Prior to impacts from Hurricane Maria, La Romana's port suspended operations as a result of a "red alert" for extreme weather conditions. La Romana was just one of several ports the Dominican Republic closed in advance of the deadly storm, which followed closely behind Hurricane Irma. With reports of extensive damage on neighboring Caribbean islands, the Dominican Republic proactively worked to prepare provinces like La Romana to ensure a minimal loss of life and property from Hurricane Maria.

"Ports Shut Down as Dominican Republic Braces for Deadly Hurricane Maria"
– Pam Wright, *The Weather Channel*, 20 September 2017



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: 18 of 32 Provinces (Score: 0.412) Vulnerability in La Romana is strongly influenced by Environmental Stress. The bar chart on the right indicates the socioeconomic themes contributing to the Province's overall Vulnerability score.

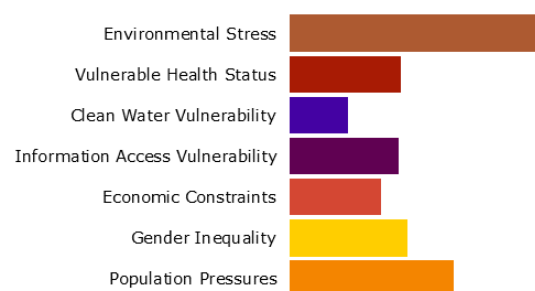









Table 3. Component Scores for each Vulnerability Sub-component

	Environmental Stress	100% Province Susceptible to Drought	-3.4% Average Annual Forest Change				
	Vulnerable Health Status	10.4 Infant Mortality Rate	175.5 Maternal Mortality Rate	8.1 Chronic Malnutrition	8.5% Population Disabled		
	Clean Water Vulnerability	11.6% Households without Access to Improved Water	4.9% Households without Access to Flush Toilets				
	Information Access Vulnerability	10.7% Illiteracy	88.7% Primary School Enrollment	88.6% Households without Internet	22.9% Households without TV	54.0% Households without Radio	6.8 Average years of Schooling
	Economic Constraints	56.7 Economic Dependency Ratio	45.0% Population in Poverty	31.1% CEP Beneficiaries			
	Gender Inequality	37.3% Female Seats in Government	1.1 Female to Male Years of Schooling	0.38 Female to Male Labor Ratio			
	Population Pressures	1.08% Average Annual Population Change	2.2% Average Annual Urban Population Change				

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

Findings: Risk and Vulnerability Assessment (RVA)

Coping Capacity (CC)

Coping Capacity⁴ Rank: 8 of 32 Provinces (Score: 0.528)
 The thematic areas with the weakest relative scores are Health Care Capacity and Economic Capacity. The bar chart on the right indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.

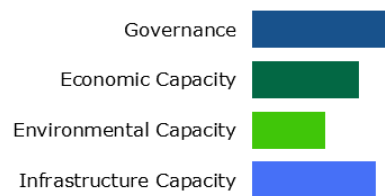


Table 4. Component Scores for each Coping Capacity Sub-component

	Economic Capacity	1.07 Debt to Service Ratio	92.4% Employment Rate (Male)	RD\$ 27,470 Average Annual Income per Capita			
	Governance	73.9% Registered Voter Participation (2016 Election)	16.7 Homicide Rate per 100k persons	81.0% Households with Garbage Collection			
	Environmental Capacity	22.4% Protected or Reforested Land					
	Infrastructure Capacity						
	Health Care Capacity		4.7 Hospital Beds per 10,000 Persons	4.7 Nurses per 10,000 Persons	9.3 Physicians per 10,000 Persons	3.8 km Average Distance to Nearest Hospital	0.88 Vaccination Index ⁵
	Communications Capacity		18.5% Households with Access to Fixed Phone Line	80.9% Households with Access to Mobile Phone			
	Transportation Capacity		12.5 km Average Distance to Nearest Port or Airport	0.76 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: 23 of 32 Provinces (Score: 0.442)

La Romana's score and ranking are due to moderate Vulnerability combined with high Coping Capacity scores. La Romana ranks 18th in Vulnerability and 8th in Coping Capacity.

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



Environmental Stress



Health Care Capacity



Environmental Capacity

Multi-Hazard Risk (MHR)

Multi-Hazard Risk⁷ Rank: 22 of 32 Provinces (Score: 0.497)

La Romana's score and ranking are due to moderate Multi-Hazard Exposure combined with moderate Vulnerability and high Coping Capacity

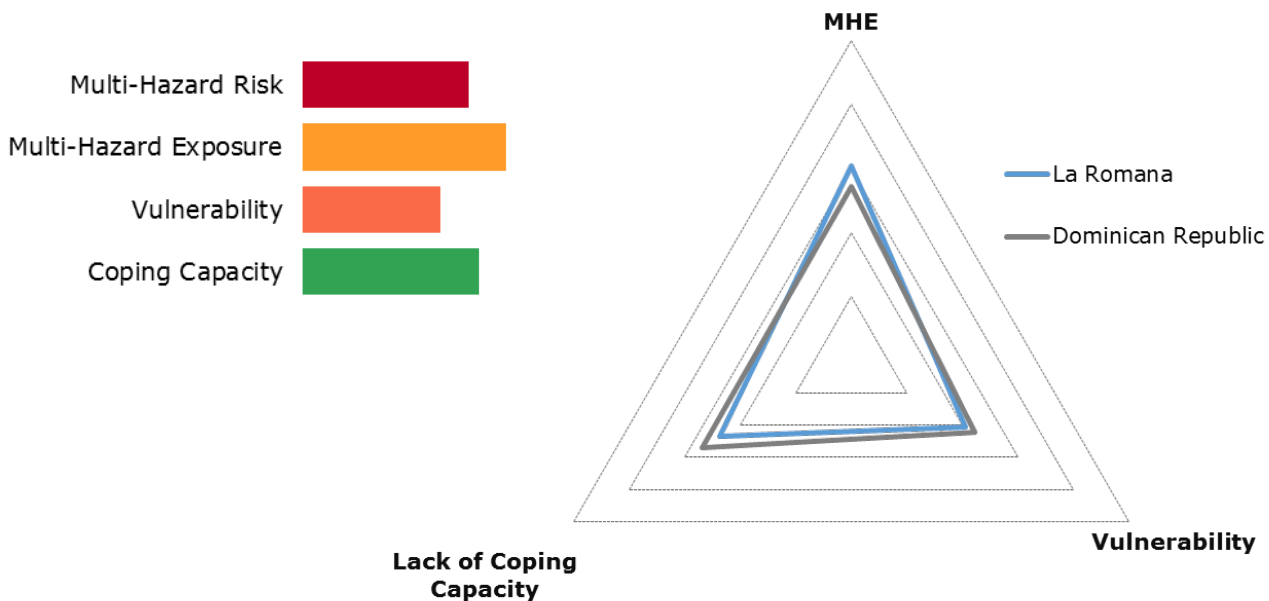


Figure 1. Province Multi-Hazard Risk Component Scores Compared to Overall Average Country Scores

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



Highest overall governance

Ranked 5 of 32 provinces, high governance could facilitate the implementation of disaster management initiatives into provincial and municipal communities.



Low gender inequality

Ranked 29 of 32 provinces, low gender inequality indicates that vulnerable populations are more likely to have their needs met under 'normal' conditions and may be less susceptible during times of disaster.



High information access

High information access indicates that the population has an increased ability to access and comprehend disaster-related information before, during, and after events.

Recommendations

01

Reduce environmental stress

Invest in drought and erosion mitigation projects to reduce environmental stress and degradation.

02

Increase health care availability

Increase clinics and medical personnel through incentivized programs and investments to increase the health resilience of the population.

03

Increase environmental programs

Invest in programs to provide protection for the environment, including protected lands and reforestation projects, to increase the ability of the environment to recover after a disaster.