

Better solutions.
Fewer disasters.
Safer world.



Independencia

Dominican Republic National Disaster Preparedness
Baseline Assessment
Province Profile

Findings: Risk and Vulnerability Assessment (RVA)

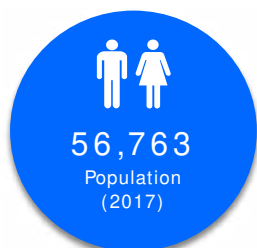
Province: Independencia

Province Capital: Jimaní

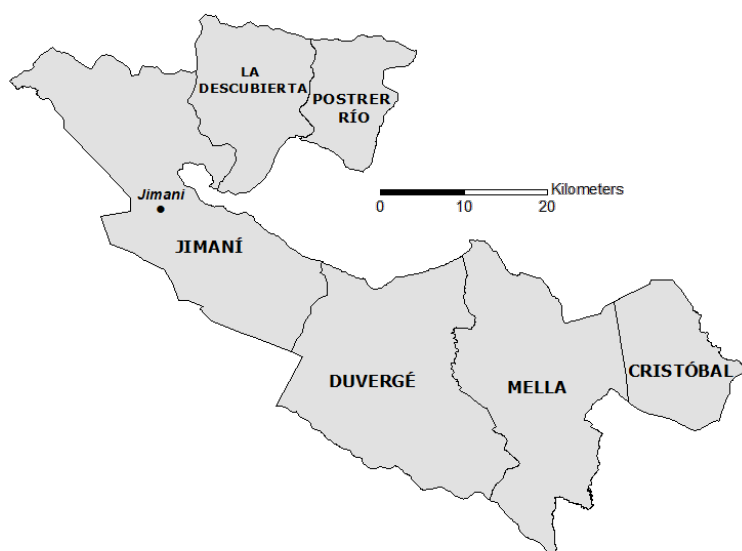


Area: 1,975 km²

Independencia is located in western Dominican Republic near the border with Haiti and is known for its mountains, import/export with Haiti, and agriculture.



Municipality	Population
Jimaní	17,829
Duvergé	12,984
La Descubierta	8,965
Postrer Río	6,116
Cristóbal	6,942
Mella	3,927



**Multi-Hazard Risk Rank:
High (12 of 32)**

**Lack of Resilience Rank:
Very High (4 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	
High		Very High		Very 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)
0.531	12	0.618	4	0.356	27	0.635	2	0.399	27

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure¹ Rank: 27 of 32 Provinces (Score: 0.356)

Table 2. Estimated ambient population² exposed to each hazard



100%

66,594 People

Cyclone



66%

44,027 People

Earthquake



57%

38,236 People

Landslide



37%

24,613 People

Flood



0%

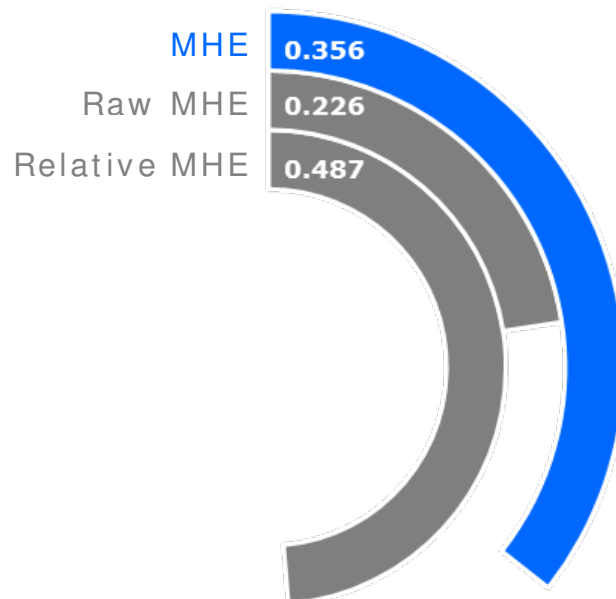
0 People

Tsunami

Case Study: Flooding in Independencia

The province of Independencia experienced a significant flooding event in May of 2004 which resulted in devastating losses. Independencia's town of Jimaní, located on the border with Haiti, suffered the deaths of nearly four hundred people after the disaster event. "Many of the affected persons in the border region...were Haitian immigrants, most undocumented." Impacts were equally devastating on the Haitian side of the border. Relief efforts were "well-orchestrated and swift," and required effective coordination to manage response operations in both Haiti and the Dominican Republic.

"Dominican Republic & Haiti: Floods" – IFRC, 28 February 2005



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: 2 of 32 Provinces (Score: 0.635) Vulnerability in Independencia is strongly influenced by Information Access Vulnerability, Economic Constraints, and Environmental Stress. The bar chart on the right indicates the socioeconomic themes contributing to the Province's overall Vulnerability score.

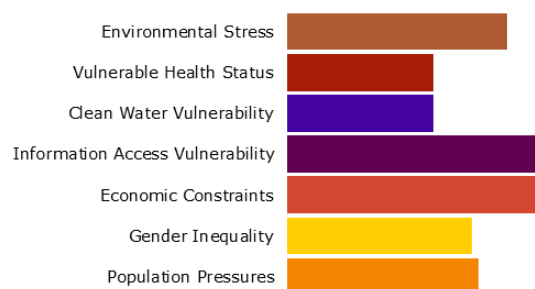









Table 3. Component Scores for each Vulnerability Sub-component

	Environmental Stress	88.2% Province Susceptible to Drought	- 1.8% Average Annual Forest Change				
	Vulnerable Health Status	10.2 Infant Mortality Rate	272.5 Maternal Mortality Rate	11.3 Chronic Malnutrition	7.1% Population Disabled		
	Clean Water Vulnerability	9.1% Households without Access to Improved Water	19.9% Households without Access to Flush Toilets				
	Information Access Vulnerability	25.9% Illiteracy	74.5% Primary School Enrollment	97.9% Households without Internet	39.3% Households without TV	65.5% Households without Radio	5.2 Average years of Schooling
	Economic Constraints	76.5 Economic Dependency Ratio	73.3% Population in Poverty	41.2% CEP Beneficiaries			
	Gender Inequality	35.6% Female Seats in Government	1.1 Female to Male Years of Schooling	0.46 Female to Male Labor Ratio			
	Population Pressures	1.1 % Average Annual Population Change	4.1% 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: 27 of 32 Provinces (Score: 0.399) The thematic areas with the weakest relative scores are Economic Capacity and Infrastructure (Transportation and Communications). The bar chart on the right indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.

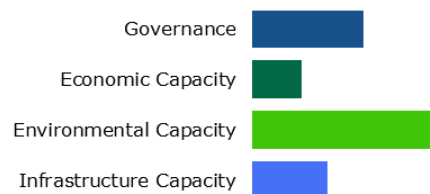









Table 4. Component Scores for each Coping Capacity Sub-component

	Economic Capacity	0.99 Debt to Service Ratio	91.0% Employment Rate (Male)	RD\$ 13,047 Average Annual Income per Capita			
	Governance	84.0% Registered Voter Participation (2016 Election)	34.5 Homicide Rate per 100k persons	65.4% Households with Garbage Collection			
	Environmental Capacity	57.6% Protected or Reforested Land					
	Infrastructure Capacity						
	Health Care Capacity		21.6 Hospital Beds per 10,000 Persons	39.4 Nurses per 10,000 Persons	16.5 Physicians per 10,000 Persons	4.4 km Average Distance to Nearest Hospital	0.95 Vaccination Index ⁵
	Communications Capacity		5.5% Households with Access to Fixed Phone Line	55.2% Households with Access to Mobile Phone			
	Transportation Capacity		44.8 km Average Distance to Nearest Port or Airport	0.28 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.

Findings: Risk and Vulnerability Assessment (RVA)

Lack of Resilience (LR)

Lack of Resilience⁶ Rank: 4 of 32 Provinces (Score: 0.618)

Independencia's score and ranking are due to very high Vulnerability combined with very low Coping Capacity scores. Independencia ranks 2nd in Vulnerability and 27th in Coping Capacity.

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



Communications
Infrastructure
Capacity



Information
Access
Vulnerability



Economic
Constraints

Multi-Hazard Risk (MHR)

Multi-Hazard Risk⁷ Rank: 12 of 32 Provinces (Score: 0.531)

Independencia's score and ranking are driven primarily by a combination of very high Vulnerability with very low Coping Capacity.

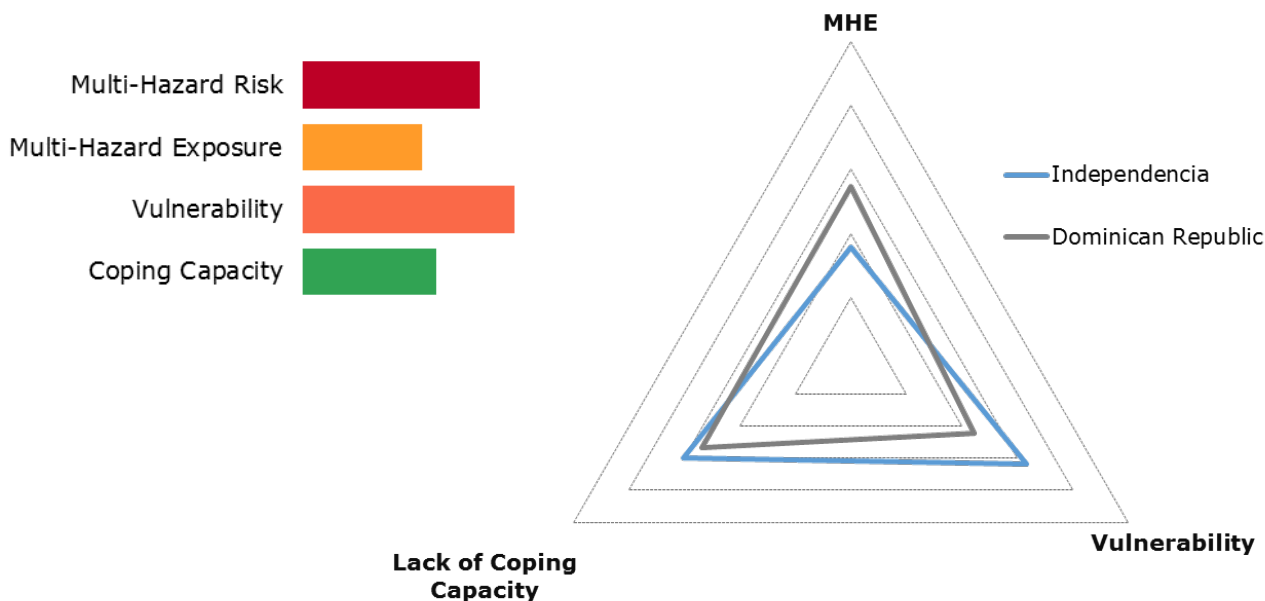


Figure 1. Province Multi-Hazard Risk Component Scores Compared to Overall Average Country Scores

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



High environmental capacity

Ranked 2 of 32 provinces, high environmental capacity indicates that natural resources and agriculture will be more resilient to the effects of a disaster and may recover faster.

Recommendations

01

Invest in communication infrastructure

Invest in communication infrastructure to allow for easier access to information and education material, increasing literacy and situational awareness of the population.

02

Increase economic capacity

Encourage business development and education programs to increase economic opportunities in the region.