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Fewer disasters.  
Safer world.



# Dajabón

Dominican Republic National Disaster Preparedness  
Baseline Assessment  
Province Profile

## Findings: Risk and Vulnerability Assessment (RVA)

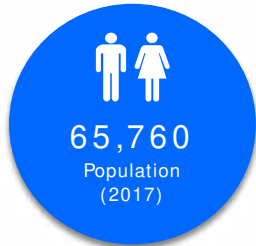
### Province: Dajabón

Province Capital: Dajabón



Area: 1,153 km<sup>2</sup>

Dajabón is located in the northwest of the country and serves as a trade center for the hides, timber, bananas, coffee and honey produced in the region.



Municipality	Population
Dajabón	28,865
Loma De Cabrera	16,067
Partido	7,146
Restauración	7,478
El Pino	6,204



**Multi-Hazard Risk Rank:  
Very Low (27 of 32)**

**Lack of Resilience Rank:  
High (13 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 Low		High		Very Low		Medium		Low	
Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)
0.457	27	0.508	13	0.355	29	0.44	17	0.424	22

## Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure<sup>1</sup> Rank: 29 of 32 Provinces (Score: 0.355)

Table 2. Estimated ambient population<sup>2</sup> exposed to each hazard



Cyclone

100%

101,793 People



Earthquake

100%

101,793 People



Landslide

46%

46,796 People



Flood

0%

46 People



Tsunami

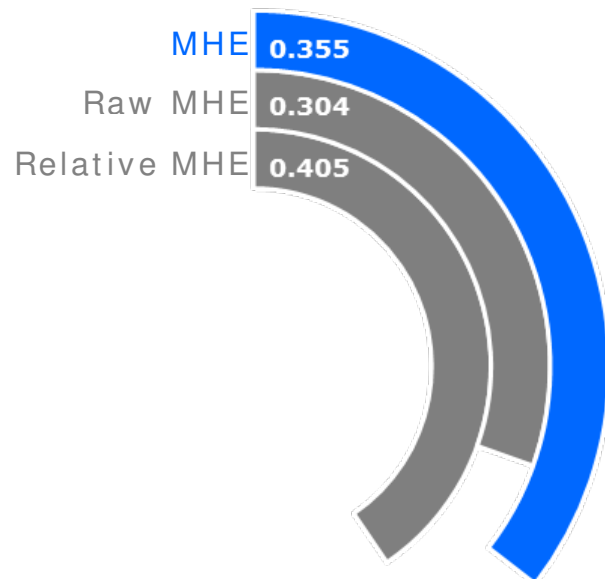
0%

0 People

### Case Study: Early Warning Systems in Dajabón

During the 2017 hurricane season, the Dominican Republic was impacted by Hurricanes Irma and Maria in rapid succession. The country's Provincial and Municipal *Prevention, Mitigation and Response Committees (CPMRs)* were required to activate their Early Warning Systems and emergency plans in order to prevent loss of life among the population. Dajabón's Provincial Committee exhibited exemplary planning and coordination, with its CPMR performing "efficiently and effectively" in the activation of its emergency plans and Early Warning Systems.

*"Effectiveness of Disaster Risk Reduction (DRR) Programs Funded by ECHO in the Caribbean - Evidence Collected After Hurricanes Irma and Maria" - DIPECHO*



<sup>1</sup> Multi-Hazard Exposure: Average exposure of the population to hazards.

<sup>2</sup> 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)

Vulnerability<sup>3</sup> Rank: 17 of 32 Provinces (Score: 0.440) Vulnerability in Dajabón is influenced primarily by Vulnerable Health Status, Economic Constraints, and Population Pressures. The bar chart on the right indicates the socioeconomic themes contributing to the Province's overall Vulnerability score.

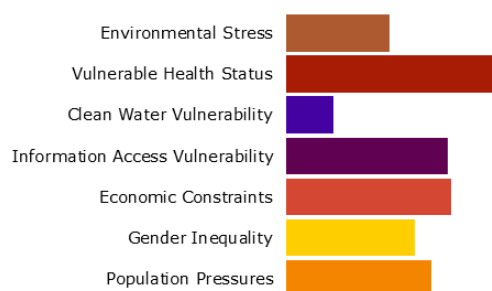









Table 3. Component Scores for each Vulnerability Sub-component

	<b>Environmental Stress</b>	<b>24.7%</b> Province Susceptible to Drought	<b>-0.2%</b> Average Annual Forest Change				
	<b>Vulnerable Health Status</b>	<b>20.6</b> Infant Mortality Rate	<b>258.0</b> Maternal Mortality Rate	<b>16.2</b> Chronic Malnutrition	<b>6.6%</b> Population Disabled		
	<b>Clean Water Vulnerability</b>	<b>6.4%</b> Households without Access to Improved Water	<b>6.3%</b> Households without Access to Flush Toilets				
	<b>Information Access Vulnerability</b>	<b>16.8%</b> Illiteracy	<b>88.6%</b> Primary School Enrollment	<b>94.7%</b> Households without Internet	<b>33.3%</b> Households without TV	<b>52.7%</b> Households without Radio	<b>5.9</b> Average years of Schooling
	<b>Economic Constraints</b>	<b>63.7</b> Economic Dependency Ratio	<b>53.7%</b> Population in Poverty	<b>41.9%</b> CEP Beneficiaries			
	<b>Gender Inequality</b>	<b>46.0%</b> Female Seats in Government	<b>1.1</b> Female to Male Years of Schooling	<b>0.50</b> Female to Male Labor Ratio			
	<b>Population Pressures</b>	<b>0.35%</b> Average Annual Population Change	<b>3.9%</b> Average Annual Urban Population Change				

<sup>3</sup> 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 Capacity<sup>4</sup> Rank: 22 of 32 Provinces (Score: 0.424) The thematic areas with the weakest relative scores are Environmental Capacity and Economic Capacity. The bar chart on the right indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.

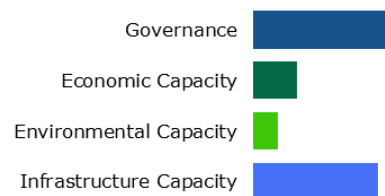


Table 4. Component Scores for each Coping Capacity Sub-component

	<b>Economic Capacity</b>	1.1 Debt to Service Ratio	90.9% Employment Rate (Male)	RD\$ 18,753 Average Annual Income per Capita			
	<b>Governance</b>	81.4% Registered Voter Participation (2016 Election)	16.9 Homicide Rate per 100k persons	61.5% Households with Garbage Collection			
	<b>Environmental Capacity</b>	7.7% Protected or Reforested Land					
	<b>Infrastructure Capacity</b>						
	<b>Health Care Capacity</b>		21.7 Hospital Beds per 10,000 Persons	31.8 Nurses per 10,000 Persons	20.6 Physicians per 10,000 Persons	3.1 km Average Distance to Nearest Hospital	0.86 Vaccination Index <sup>5</sup>
	<b>Communications Capacity</b>		10.7% Households with Access to Fixed Phone Line	76.4% Households with Access to Mobile Phone			
	<b>Transportation Capacity</b>		32.9 km Average Distance to Nearest Port or Airport	0.49 km Total Length of Road per km <sup>2</sup> (area)			

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

<sup>5</sup> 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 Resilience<sup>6</sup> Rank: 13 of 32 Provinces (Score: 0.508)

Dajabón's score and ranking are due to moderate Vulnerability (17th) combined with low Coping Capacity (22nd) scores.

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



Environmental Capacity



Economic Capacity



Vulnerable Health Status

## Multi-Hazard Risk (MHR)

Multi-Hazard Risk<sup>7</sup> Rank: 27 of 32 Provinces (Score: 0.457)

Dajabón's score and ranking are due to very low Multi-Hazard Exposure combined with moderate Vulnerability and low Coping Capacity scores.

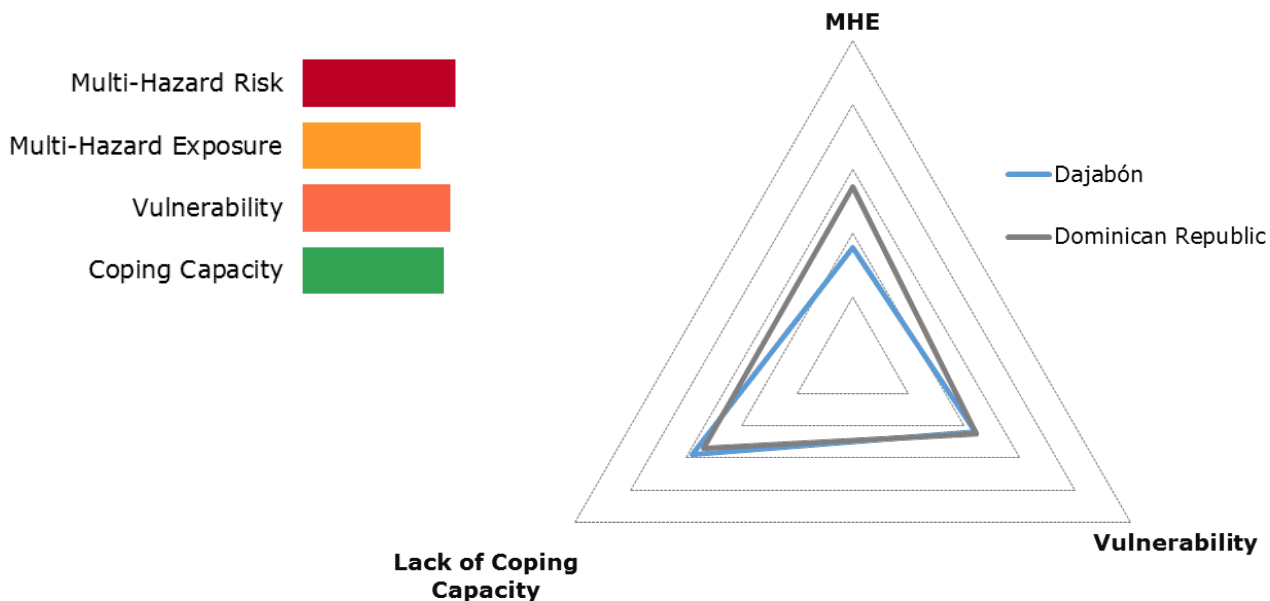


Figure 1. Province Multi-Hazard Risk Component Scores Compared to Overall Average Country Scores

<sup>6</sup> 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.

<sup>7</sup> 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 clean water vulnerability

Ranking 28 of 32 provinces, low clean water vulnerability indicates that a population has access to high water quality and good containment systems, reducing susceptibility to disaster.



### Low gender inequality

Ranked 28 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.

## Recommendations

01

### Reduce vulnerable health status

Invest in public welfare services to decrease malnutrition, support the disabled population, and decrease infant and maternal mortality.

02

### Increase economic capacity

Foster small-business development and invest in business education and human capital to raise economic stability and increase employment.

03

### Improve environmental capacity

Invest in protected areas to reduce environmental stress and degradation.