

Better solutions.
Fewer disasters.
Safer world.



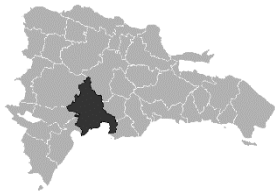
Azua

Dominican Republic National Disaster Preparedness
Baseline Assessment
Province Profile

Findings: Risk and Vulnerability Assessment (RVA)

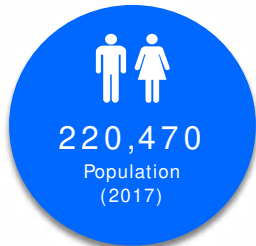
Province: Azua

Province Capital: Azua



Area: 3,001 km²

Azua's economy is based on coffee, sugar and tobacco plantations. It is also supported by cereal, rice, vegetables, and corn crops. The city of Azua is rich in monuments and buildings with historical, social or religious value.



Municipality	Population
Azua	93,969
Estebanía	5,804
Guayabal	5,415
Las Charcas	11,566
Las Yayas de Viajama	18,126
Padre las Casas	20,615
Peralta	15,695
Pueblo Viejo	11,559
Sabana Yegua	19,567
Tábara Arriba	18,154



Multi-Hazard Risk Rank:
Low (25 of 32)

Lack of Resilience Rank:
High (9 of 32)

RVA Component Scores

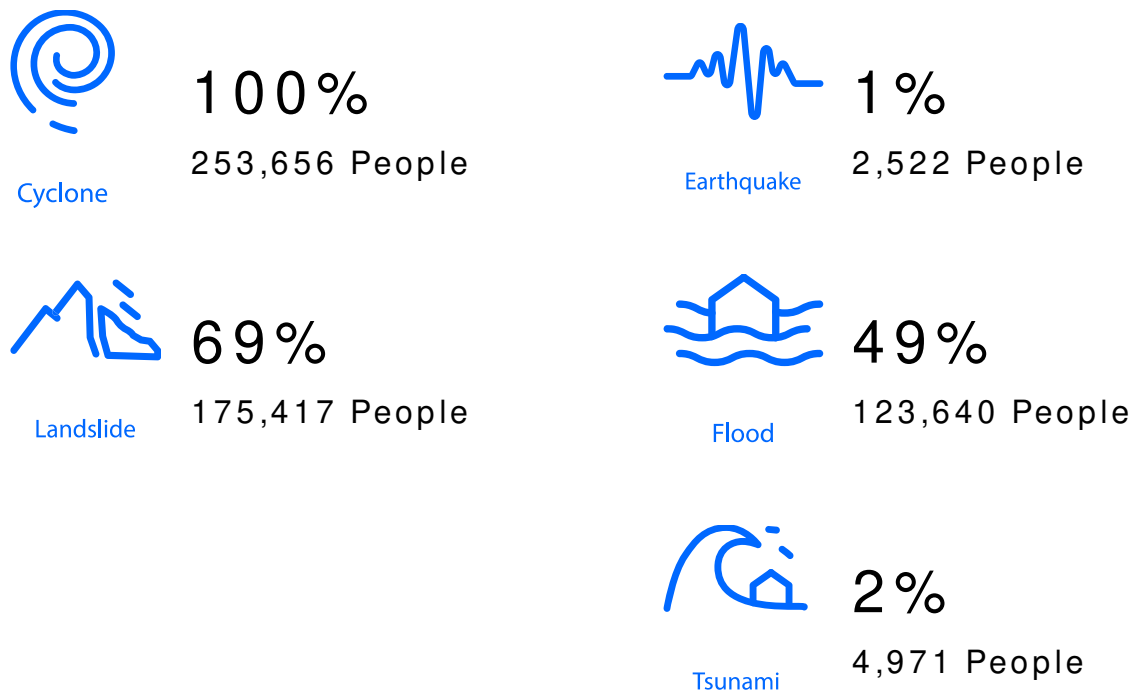
Table 1. Province Scores and Ranks (compared across Provinces) for each Index

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Low		High		Low		Very High		Very High	
Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)	Score	Rank (of 32)
0.473	25	0.525	9	0.370	26	0.585	6	0.536	7

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure¹ Rank: 26 of 32 Provinces (Score: 0.370)

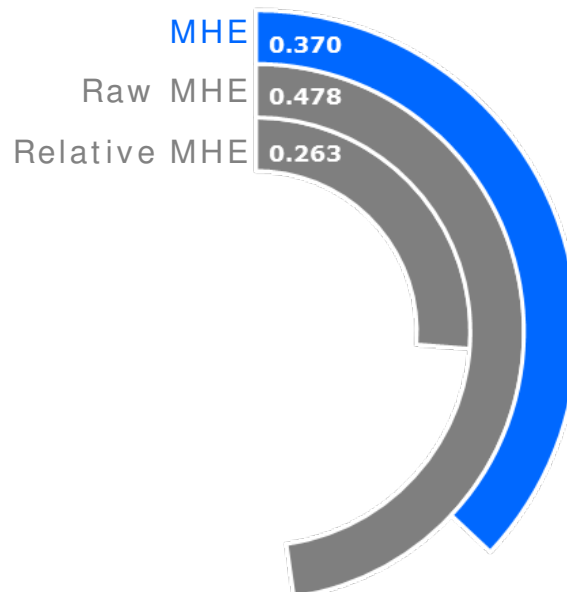
Table 2. Estimated ambient population² exposed to each hazard



Case Study: Disaster Risk Reduction in Las Terreras, Azua

After Hurricane Sandy decimated a significant portion of the Dominican Republic in 2012, including coastal communities in Azua, NGOs and the European Commission’s Humanitarian Aid and Civil Protection Department (ECHO) partnered to implement disaster risk reduction programs in impacted areas. With the aim of building resilience in communities affected by major weather events on a routine basis, ECHO and NGOs supported the construction of livestock shelters for the protection of farmers’ livelihoods. Communities were also educated in the country’s alert levels and how to ensure their safety at each level of alert.

“The Dominican Republic Prepares for Future Hurricanes and Floods” – European Commission, 14 October 2015



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: 6 of 32 Provinces (Score: 0.585) Vulnerability in Azua is primarily influenced by Gender Inequality, Environmental Stress and Information Access Vulnerability. The bar chart on the right indicates the socioeconomic themes contributing to the Province's overall Vulnerability score.

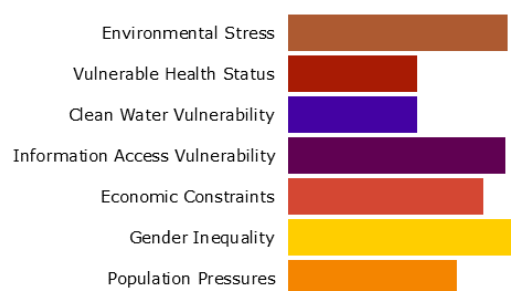









Table 3. Component Scores for each Vulnerability Sub-component

	Environmental Stress	90% Province Susceptible to Drought	-1.4% Average Annual Forest Change				
	Vulnerable Health Status	14.8 Infant Mortality Rate	102.7 Maternal Mortality Rate	13.5 Chronic Malnutrition	7.1% Population Disabled		
	Clean Water Vulnerability	11.3% Households without Access to Improved Water	15.9% Households without Access to Flush Toilets				
	Information Access Vulnerability	24.3% Illiteracy	85.3% Primary School Enrollment	95.9% Households without Internet	37.3% Households without TV	63.7% Households without Radio	5.4 Average years of Schooling
	Economic Constraints	62.4 Economic Dependency Ratio	65.1% Population in Poverty	47.0% CEP Beneficiaries			
	Gender Inequality	34.1% Female Seats in Government	1.2 Female to Male Years of Schooling	0.54 Female to Male Labor Ratio			
	Population Pressures	0.37% Average Annual Population Change	5.6% 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: 7 of 32 Provinces (Score: 0.536)
 The thematic areas with the weakest relative scores are Economic Capacity and Infrastructure (Communications). The bar chart on the right indicates the socioeconomic themes contributing to the province's overall Coping Capacity score.

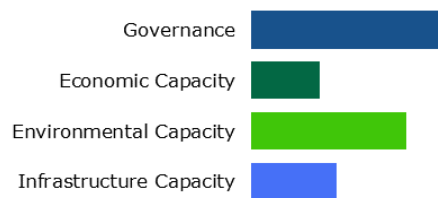


Table 4. Component Scores for each Coping Capacity Sub-component

	Economic Capacity	0.98 Debt to Service Ratio	91.7% Employment Rate (Male)	RD\$ 15,330 Average Annual Income per Capita			
	Governance	82.1% Registered Voter Participation (2016 Election)	11.4 Homicide Rate per 100k persons	80.5% Households with Garbage Collection			
	Environmental Capacity	47.2% Protected or Reforested Land					
	Infrastructure Capacity						
	Health Care Capacity		14.1 Hospital Beds per 10,000 Persons	15.2 Nurses per 10,000 Persons	14.4 Physicians per 10,000 Persons	4.5 km Average Distance to Nearest Hospital	0.78 Vaccination Index ⁵
	Communications Capacity		9.7% Households with Access to Fixed Phone Line	62.1% Households with Access to Mobile Phone			
	Transportation Capacity		21.9 km Average Distance to Nearest Port or Airport	0.35 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: 9 of 32 Provinces (Score: 0.525)

Azua's score and ranking are due to very high Vulnerability combined with high Coping Capacity scores. Azua has the 6th highest Vulnerability and the 7th highest Coping Capacity.

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



Gender Inequality



Environmental Stress



Communications Infrastructure Capacity

Multi-Hazard Risk (MHR)

Multi-Hazard Risk⁷ Rank: 25 of 32 Provinces (Score: 0.473)

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

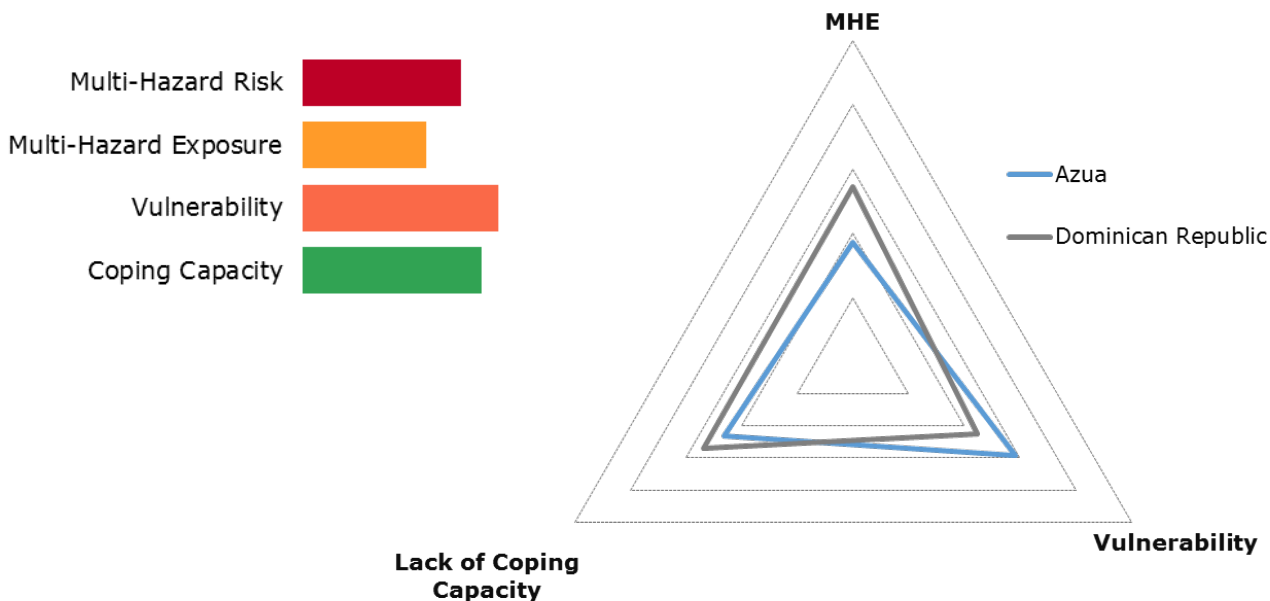


Figure 1. Province Multi-Hazard Risk Component Scores Compared to Overall Average Country Scores

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



High coping capacity

Ranked 7 of 32 provinces, high coping capacity indicates the province's ability, using existing skills and resources, to face and manage adverse conditions, emergencies, or disasters.



Highest overall governance

Ranked 1 of 32 provinces, high governance could facilitate the implementation of disaster management initiatives into provincial and municipal communities.

Recommendations

01

Promote gender equality

Support equal-educational enrollment at all levels; access to the labor market, wages, and credit; and political representation to reduce vulnerability.

02

Reduce environmental stress

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

03

Increase information access

Invest in educational programs, including non-traditional, community-based approaches to increase educational attainment and adult literacy. Support comprehensive efforts to increase access to information mediums (phone, internet, TV, radio) and distribute disaster-preparedness and hazard-warning information in multiple formats and across multiple platforms, ensuring that vulnerable communities receive easily understandable and actionable disaster-related information.