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Islas de la Bahía

Honduras National Disaster Preparedness Baseline Assessment
Department Profile

Department: Islas de la Bahía

Department Capital: Roatán
Area: 236 km^2

Islas de la Bahía is a group of bay islands off the Caribbean shore of Honduras. The bay islands serve as the anchor of Honduras' growing tourism industry. Tourism and fishing represent half of the gross island product. With dynamic expansion of the tourist and service industry, Islas de la Bahía exhibits ongoing rapid population growth.

69,493
Population (2017)

40.0%
Population in Poverty

4.2%
Illiterate Adult Population

77.6 yrs
Average Life Expectancy

94.3%
Household Access to Piped Water

Municipality	Population
Guanaja	5,663
José Santos Guardiola	11,823
Roatán	47,608
Utila	4,400

Multi-Hazard Risk Rank: Very Low (17 of 18)

Lack of Resilience Rank: Very Low (18 of 18)

RVA Component Scores

Table 1. Department scores and ranks (compared across departments) for each index.

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Very Low		Very Low		Moderate		Very Low		Very High	
Score	Rank (of 18)	Score	Rank (of 18)	Score	Rank (of 18)	Score	Rank (of 18)	Score	Rank (of 18)
0.333	17	0.277	18	0.444	10	0.280	17	0.726	1

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure[1] Rank: 10 of 18 Departments (Score: 0.444)

Table 2. Estimated ambient population[2] exposed to each hazard (2014).

100%
Cyclone
44,647 People

While all people in the department are subject to tropical cyclones, landfall is relatively infrequent and damage is limited by reefs and shallow waters.

68%
Seismic
30,144 People

0%
Drought
0 People

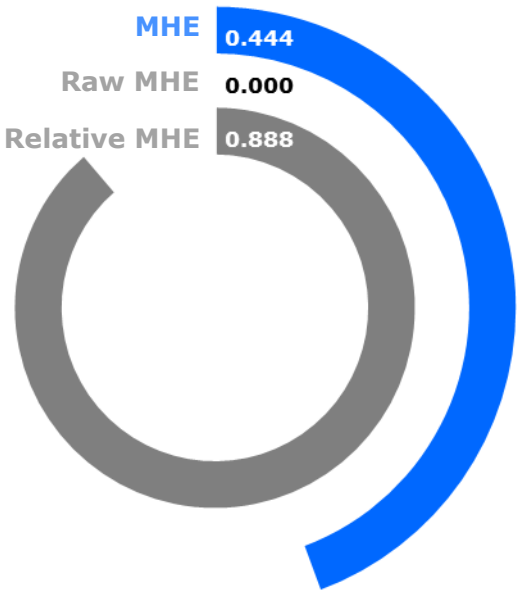
24%
Inland Flood
10,928 People

4%
Landslide
1,786 People

95%
Coastal Flood
42,349 People

Case Study: Hurricanes and Roatán

Despite its location in the Caribbean off the northern coast of Honduras, Roatán is not generally considered to have high tropical cyclone occurrence. From 1851-2010, there have been only 35 tropical cyclones to impact the island, including one Category 4 hurricane and one Category 5 hurricane (Mitch). Because the island is surrounded by reefs and shallow water, damage is usually limited when impact does occur.



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

[2] **Ambient Population**: 24-hour average estimate of the population in each department. Ambient population typically differs from census population.

Vulnerability (V)

Vulnerability[3] Rank: 17 of 18 Departments (Score: 0.280) Despite having low relatively vulnerability overall, Islas de la Bahía ranks 2nd in Population Pressures. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall score.

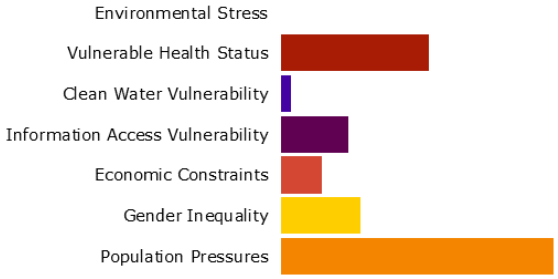


Table 3. Component scores for each vulnerability subcomponent

Environmental Stress	**0%** Forest Loss Due to Pine Beetle Plague	**0%** Water Shortage Area						
Vulnerable Health Status	**12.6** Infant Mortality Rate	**148.7** Maternal Mortality Ratio	**77.6** Life Expectancy (years)	**3.7%** Acute Malnutrition Rate	**2.6%** Population Disabled	**0.646** Communicable Disease Sub-Index[4]	**0.683** Non-Communicable Disease Sub-Index [4]	
Clean Water Vulnerability	**94.3%** Households Access to Piped Water	**89.9%** Households Connected to Sewer or Septic System						
Information Access Vulnerability	**4.2%** Adult Illiteracy	**7.0** Average Years of Schooling	**97.0%** Enrollment in Basic Education	**82.2%** Households without Internet	**19.3%** Households without TV	**43.0%** Households without Radio		
Economic Constraints	**0.64** Economic Dependency Ratio	**40.0%** Population in Poverty	**0.20** GINI Coefficient					
Gender Inequality	**0.77** Ratio of Female to Male Land Ownership Rate	**1.15** Ratio of Female to Male Home Ownership Rate	**0.48** Ratio Female to Male Economic Activity	**1.02** Ratio of Female to Male Secondary Enrollment				
Population Pressures	**5.4%** Average Annual Population Change	**10.6%** Average Annual Urban Population Change						

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

[4] **Sub-indices:** A combination of scaled indicators to represent a vulnerability theme (e.g. Communicable Disease). Values range from 0 (low) to 1 (high).

Coping Capacity (CC)

Coping Capacity[5] Rank: 1 of 18 Departments (Score: 0.726) Despite having the highest overall coping capacity in Honduras, Islas de la Bahía exhibits notable weakness in the area of Governance. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.

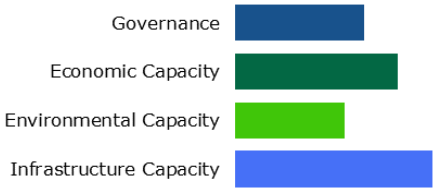


Table 4. Component scores for each coping capacity subcomponent

Governance	**13.7** Homicides per 100k Persons	**687.1** Sexual Violence and Assault per 100k Persons	**67.5%** Households with Public Garbage Collection	**55.2%** Voter Participation (2013 Election)		
Economic Capacity	**38.7%** Economic Activity Rate	**96.7%** Employment Rate	**31.4%** Population in Highest Wealth Quintile			
Environmental Capacity	**24.8%** Natural Protected Area					
Infrastructure Capacity						
Health Care Capacity	**6.7** Hospital Beds per 10,000 Persons	**6.3** Physicians per 10,000 Persons	**16.5** Nurses per 10,000 Persons	**29.1 km** Average Distance to Nearest Hospital	**80.4%** Children Completed Immunization Schedule
Communications Capacity	**22.9%** Households with Access to Fixed Phone Line	**79.1%** Households with Access to Mobile Phone			
Transportation Capacity	**10.3 km** Average Distance to Nearest Port or Airport	**42.6 km** Total Length of Road per km^2 (area)			

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

Lack of Resilience (LR)

Lack of Resilience[6] Rank: 18 of 18 Departments (Score: 0.277)

Islas de la Bahía's Lack of Resilience score and ranking are due to very low Vulnerability combined with very high Coping Capacity scores.

Table 5. The three thematic areas with the weakest relative scores.

Population Pressures	**Governance**	**Vulnerable Health Status**

Multi-Hazard Risk (MHR)

Multi-Hazard Risk[7] Rank: 17 of 18 Departments (Score: 0.333)

Islas de la Bahía's Multi-Hazard Risk score and ranking are due to moderate Multi-Hazard Exposure combined with very low Vulnerability and very high Coping Capacity scores.

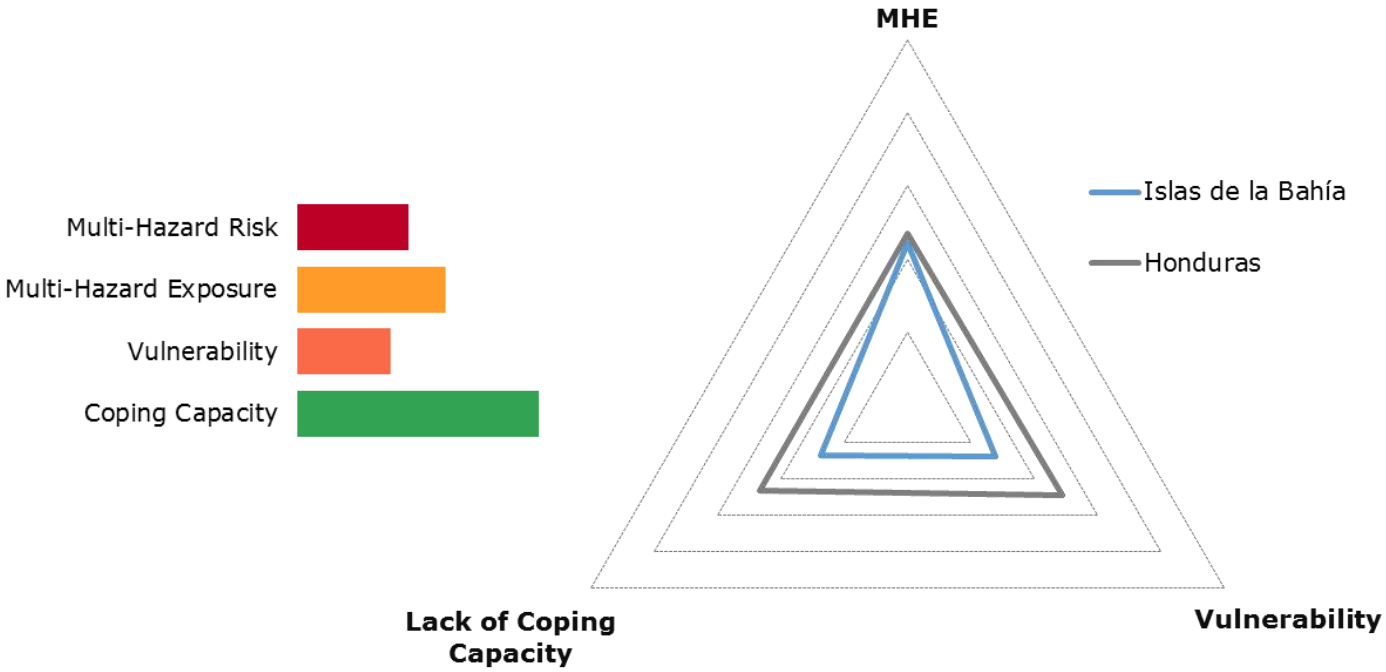


Figure 55. Department multi-hazard risk component scores compared to overall average country scores

[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 transportation capacity

Ranked 1 of 18 departments, well-developed transportation networks facilitate the movement of goods and services, decreasing wait times for response and relief supplies.

Lowest environmental stress

Ranked 17th (tied with Gracias a Dios), low environmental stress indicates that natural resources and agriculture will be more resilient to the effects of a disaster and may recover faster.

Low economic constraints

Ranked 17 of 18 departments, low economic constraints indicate that Islas de la Bahía may be able to invest in additional mitigation and preparedness measures at the local and community level.

Recommendations

01

Monitor and manage population influx

Invest in a program to manage population influx into the region. Islas de la Bahía's vast (protected) resources have caused an increase in corporate and individual farming and logging operations. Population-control measures must be enacted to control the influx in personnel as the infrastructure is not designed to handle it.

02

Increase government services

Investments in public services such as garbage collection, fire, and police will increase coping capacity and the department's ability to handle crises.

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