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Fewer disasters.  
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# Guatemala: Guatemala

National Disaster Preparedness Baseline Assessment –  
Department Profile

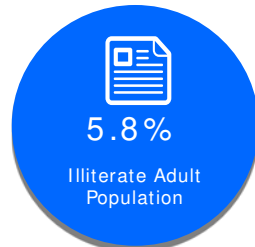
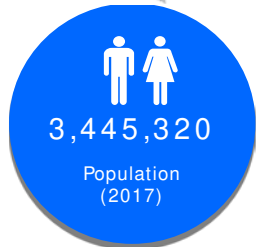
Department: Guatemala



Department Capital: Guatemala City

Area: 2,126 km<sup>2</sup>

As the nation's capital, Guatemala City, houses the majority of the federal offices, and accounts for more than half of the industrial establishments and production of the republic.



Municipality

Municipality	Population
Guatemala	994,604
Villa Nueva	587,563
Mixco	501,017
San Juan Sacatepéquez	247,173
Petapa	201,384
Villa Canales	165,698
Chinuautila	139,701
Amatitlán	121,953
Santa Catarina Pinula	101,096
San Pedro Ayampuc	85,693
San José Pinula	83,433
Palencia	65,079
Fraijanes	51,570
San Pedro Sacatepéquez	46,109
San Raimundo	33,099
Chuarrancho	14,090
San José del Golfo	6,057



Multi-Hazard Risk Rank:  
High (8 of 22)

Lack of Resilience Rank:  
Very Low (21 of 22)

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	
High		Very Low		Very High		Very Low		High	
Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)
0.557	8	0.379	21	0.913	1	0.300	22	0.541	5

# NDPBA Guatemala Report: Department Profile

## Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure<sup>1</sup> Rank: 1 of 22 Departments (Score: 0.913)

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



100%

3,311,036 People

Cyclone



100%

3,311,036 People

Earthquake



75%

2,485,338 People

Volcano



4%

126,912 People

Flood



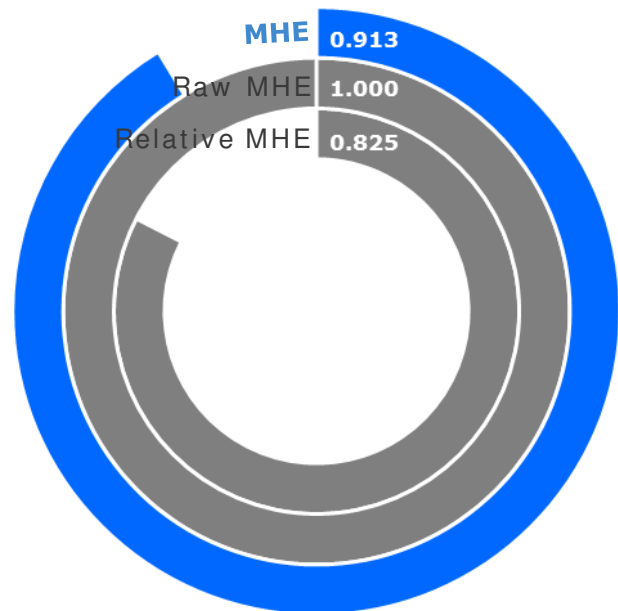
5%

178,896 People

Landslide

### El Cambray Dos Landslide

On October 1, 2015, one of the worst landslides in history devastated the village of El Cambray Dos in the municipality of Santa Catarina Pinula with a death toll near 300. Preceded by days of heavy rains during the Guatemala rainy season, the hillside gave way and buried over 100 homes, some in over 15m of debris. Occurring at night, the disaster hit while most people were in the homes unaware of the pending danger. Government officials had issued warnings to residents regarding the instability of the region and urged families to relocate.



<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 department. Ambient population typically differs from census population.

# NDPBA Guatemala Report: Department Profile

## Vulnerability (V)

Vulnerability<sup>3</sup> Rank: 22 of 22 Departments (Score: 0.300) Very low Vulnerability in Guatemala is primarily driven by very low Information Access and Clean Water Vulnerabilities. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Vulnerability score.

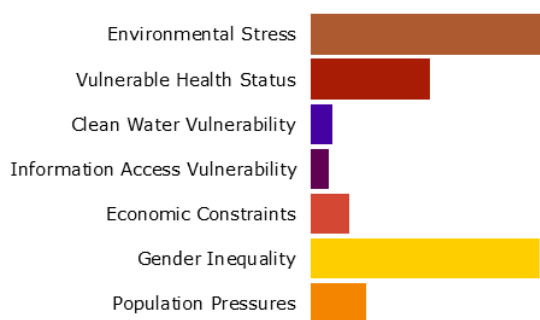









Table 3. Component scores for each Vulnerability sub-component

	<b>Environmental Stress</b>	70.3% Province at Drought Risk	-2.5% Annual Forest Change					
	<b>Vulnerable Health Status</b>	24 Infant Mortality Rate	24.5 Maternal Mortality Ratio	1.0% Acute Malnutrition	4.3% Population Disabled	16.3 TB Incidence	16.6 Dengue Prevalence	2.3 Malaria Prevalence
	<b>Clean Water Vulnerability</b>	90.5% Households with Access to Improved Water	89.7% Households with Access to Improved Sanitation					
	<b>Information Access Vulnerability</b>	5.8% Adult Illiteracy	7.6 Average Years of Schooling	92.9% Primary School Enrollment	19.6% Households with Internet	60.9% Households with Cable TV	91.1% Households with Radio	14.2% Speak Indigenous Language
	<b>Economic Constraints</b>	0.56 Economic Dependency Ratio	33.3% Population in Poverty	0.47 GINI Coefficient				
	<b>Gender Inequality</b>	15.6% Female Seats in Congress	0.07 Ratio of Female to Male Secondary Education Enrollment	0.31 Ratio of Female to Male Economic Activity				
	<b>Population Pressures</b>	2.5% Average Annual Population Change	1.4% Average Annual Urban Population Change	29.1% Food Insecurity				

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

## NDPBA Guatemala Report: Department Profile

### Coping Capacity (CC)

Coping Capacity<sup>4</sup> Rank: 5 of 22 Departments (Score: 0.541) Guatemala displays a high level of Coping Capacity, which is attributable to high Economic and Infrastructure Capacities. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.

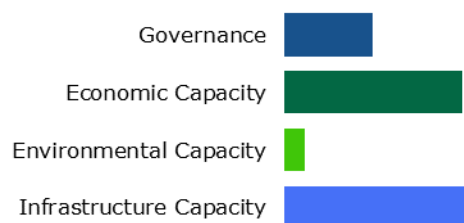









Table 4. Component scores for each Coping Capacity sub-component

	<b>Governance</b>	486.6 Crime Victims per 100K	29.5% Households with Garbage Collection				
	<b>Economic Capacity</b>	\$270.8 Remittances per Capita (USD)	25.9 Businesses per 1,000 Persons	29,869 GDP per Capita (Quetzales)			
	<b>Environmental Capacity</b>	2.5% Protected Land	0.2% Reforested Area				
	<b>Infrastructure Capacity</b>						
	<b>Health Care Capacity</b>	16.4 Hospital Beds per 10,000 Persons	15.9 Nurses per 10,000 Persons	11.9 Physicians per 10,000 Persons	13.8 km Average Distance to Nearest Hospital	91.5% Children Completed Immunization Schedule	
	<b>Communications Capacity</b>	21.8% Households with Access to Fixed Phone Line	91.5% Households with Access to Mobile Phone	99.9% Households with Access to Electricity			
	<b>Transportation Capacity</b>	20.2km Average Distance to Nearest Port or Airport	40.3km Total Length of Road per 100 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.

## NDPBA Guatemala Report: Department Profile

### Lack of Resilience (LR)

Lack of Resilience<sup>5</sup> Rank: 21 of 22 Departments (Score: 0.379)

Guatemala's score and ranking are due to very low Vulnerability combined with high Coping Capacity scores.

Table 5. The 3 thematic areas with the weakest relative scores



Gender  
Inequality



Environmental  
Stress



Governance

### Multi-Hazard Risk (MHR)

Multi-Hazard Risk<sup>6</sup> Rank: 8 of 22 Departments (Score: 0.557)

Guatemala's Multi-Hazard Risk score and ranking are driven primarily by its very high Multi-Hazard Exposure combined with very low Vulnerability, and high Coping Capacity scores.

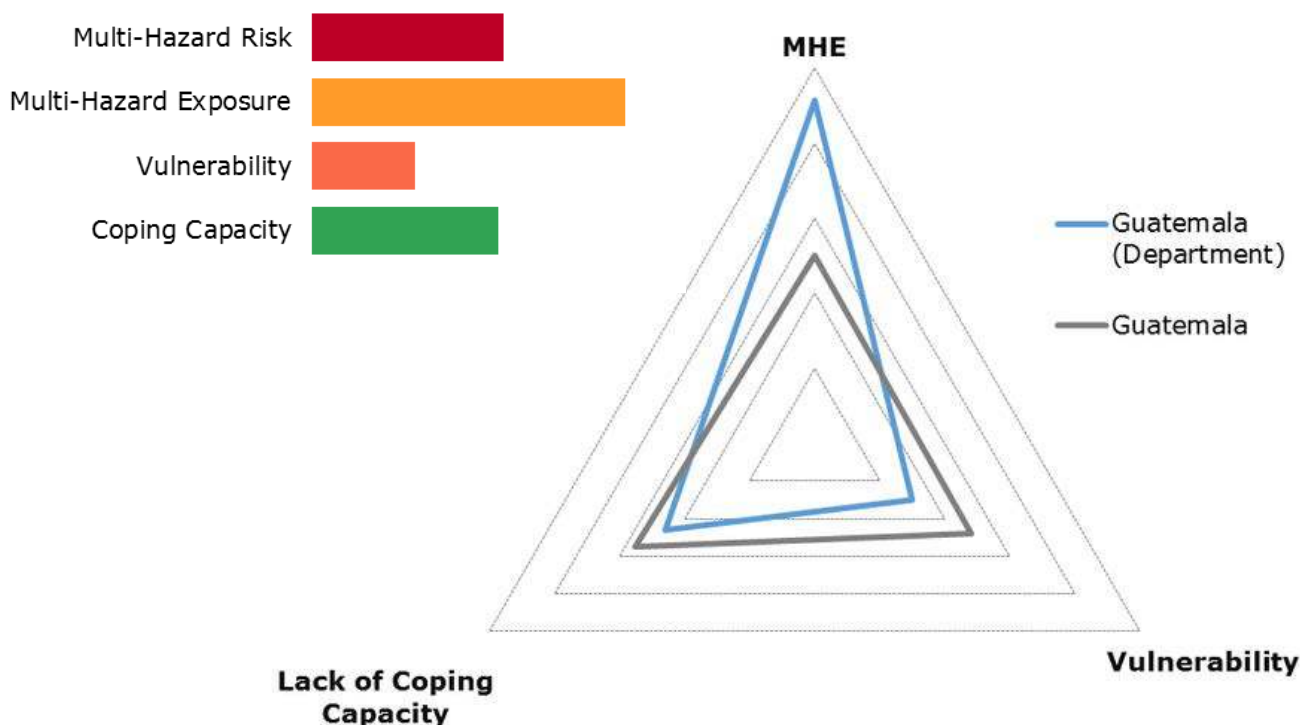


Figure 1. Department Multi-Hazard Risk component scores compared to overall average country scores

<sup>5</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 socioeconomic conditions.

<sup>6</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



### Lowest overall vulnerability

Ranked 22 of 22 departments, low overall vulnerability indicates that Guatemala department is less susceptible to the negative impacts of a disaster and will likely recover faster after an event.



### Lowest poverty rate

Ranked 22 of 22 departments (33.3% Poverty Rate), low poverty rates indicate an increased ability to invest in mitigation and preparedness measures at the individual, household, and department level.



### Highest infrastructure capacity

Ranked 1 of 22 departments, well developed infrastructure – communication, health care, transportation - facilitates the exchange of information, and physical distribution of goods and services to the population.

## Recommendations

01

### Provide increased opportunities for women

Public education and awareness programs that focus on increasing the role of women in the workplace and the society will improve resilience and decrease vulnerability.

02

### Increase governance

High crime rates in the capital city result in low governance scores. Youth-education programs, increased law enforcement, and personal safety-education messages can decrease crime and increase coping capacity.

03

### Introduce environmental programs

While environmental programs are not weighted heavily in the analysis, an increased emphasis on land preservation, reforestation, and drought-resistant farming can decrease vulnerability and increase coping capacity.



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