

**Better solutions.
Fewer disasters.
Safer world.**



Guatemala: Zacapa

Image: Google

**National Disaster Preparedness Baseline Assessment –
Department Profile**

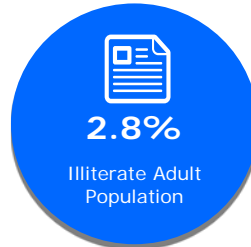
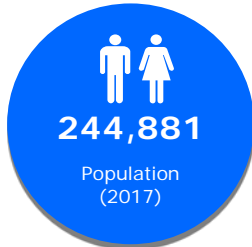
Department: Zacapa



Department Capital: Zacapa

Area: 2,691 km²

Zacapa is in eastern Guatemala and borders Honduras to the southeast. Excluding the highlands, the majority of the department's climate is semi-arid, often going two months without rain. Crops include tomatoes, cantaloupe, tobacco, and sugar cane.



Municipality Population

Zacapa	77,092
Gualán	42,130
La Unión	34,345
Teculután	19,376
Río Hondo	18,768
Estanzuela	12,444
Usumatlán	12,248
Cabañas	11,635
Huité	10,660
San Diego	6,183



**Multi-Hazard Risk Rank:
Very Low (22 of 22)**

**Lack of Resilience Rank:
Very Low (20 of 22)**

RVA Component Scores

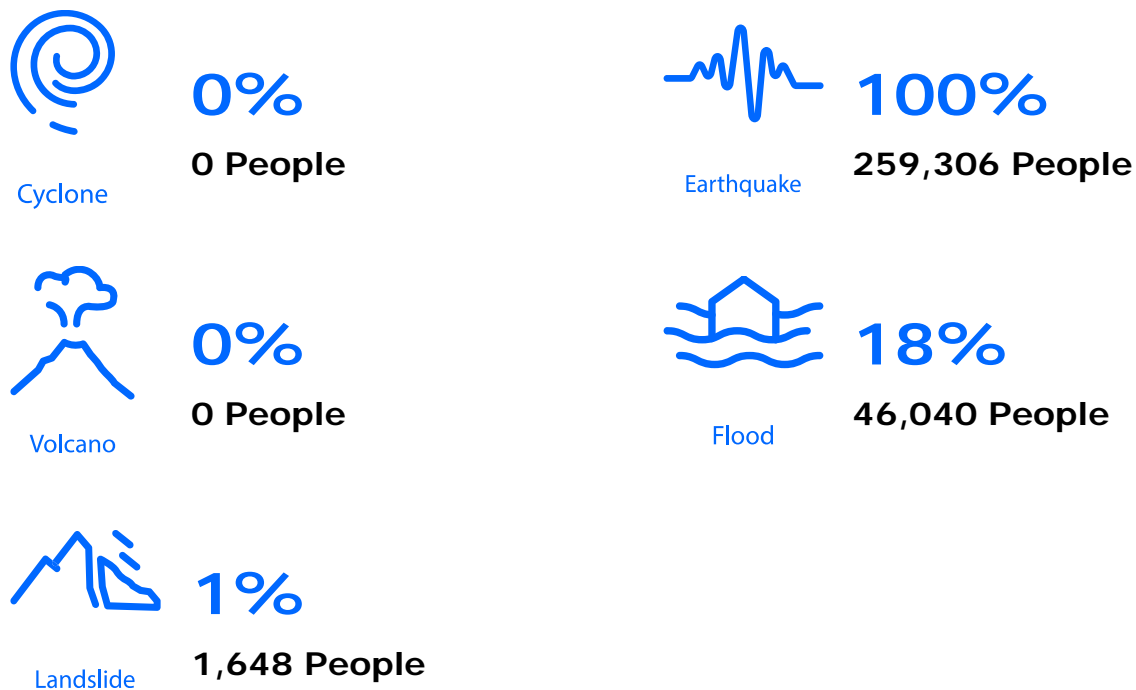
Table 1. Department scores and ranks (compared across departments) for each index

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Very Low		Very Low		Very Low		Very Low		Very High	
Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)
0.293	22	0.395	20	0.089	21	0.396	20	0.607	3

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure¹ Rank: 21 of 22 Departments (Score: 0.089)

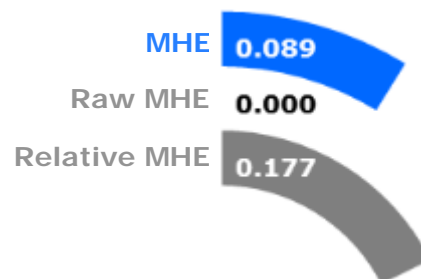
Table 2. Estimated ambient population² exposed to each hazard



The Dry Corridor

Located in Guatemala's "Dry Corridor," Zacapa department experiences extreme dry seasons, often going months without rain. The climate is semi-arid and very warm, with highs in excess of 45°C. The Motagua River flows through the center of the department making fertile land for production of sugar cane, tomatoes, and tobacco. Marble and jade is also mined in the area.

<https://www.revolvy.com/topic/Zacapa%20Department>



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)

Vulnerability³ Rank: 20 of 22 Departments (Score: 0.396) Vulnerability in Zacapa is primarily driven by Gender Inequality and Environmental Stress. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Vulnerability score.

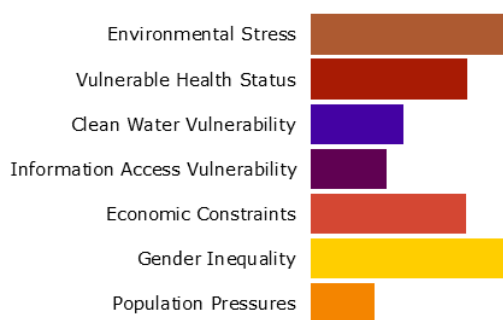









Table 3. Component scores for each Vulnerability sub-component

	Environmental Stress	72.6% Province at Drought Risk	-0.6% Annual Forest Change					
	Vulnerable Health Status	20 Infant Mortality Rate	19.7 Maternal Mortality Ratio	0.5% Acute Malnutrition	2.72% Population Disabled	13.6 TB Incidence	11.8 Dengue Prevalence	32.4 Malaria Prevalence
	Clean Water Vulnerability	84.9% Households with Access to Improved Water	68.7% Households with Access to Improved Sanitation					
	Information Access Vulnerability	2.8% Adult Illiteracy	5.5 Average Years of Schooling	90.5% Primary School Enrollment	8.5% Households with Internet	49.4% Households with Cable TV	73.7% Households with Radio	1.0% Speak Indigenous Language
	Economic Constraints	0.75 Economic Dependency Ratio	55.9% Population in Poverty	0.51 GINI Coefficient				
	Gender Inequality	0.0% Female Seats in Congress	0.08 Ratio of Female to Male Secondary Education Enrollment	0.12 Ratio of Female to Male Economic Activity				
	Population Pressures	1.4% Average Annual Population Change	1.5% Average Annual Urban Population Change	40.0% Food Insecurity				

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: 3 of 22 Departments (Score: 0.607) Zacapa displays a very high level of Coping Capacity, which is attributable to very high Environmental and Economic Capacities. The bar chart on the right indicates the socioeconomic themes contributing to the department’s overall Coping Capacity score.

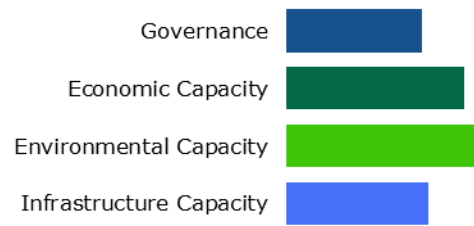


Table 4. Component scores for each Coping Capacity sub-component

	Governance	345.1 Crime Victims per 100K	40.8% Households with Garbage Collection				
	Economic Capacity	\$775.3 Remittances per Capita (USD)	16.3 Businesses per 1,000 persons	15,697 GDP per Capita (Quetzales)			
	Environmental Capacity	26.9% Protected Land	4.0% Reforested Area				
	Infrastructure Capacity						
	Health Care Capacity	12.4 Hospital Beds per 10,000 Persons	5.5 Nurses per 10,000 Persons	6.2 Physicians per 10,000 Persons	16.9 km Average Distance to Nearest Hospital	90.8% Children Completed Immunization Schedule	
	Communications Capacity	11.6% Households with Access to Fixed Phone Line	79.0% Households with Access to Mobile Phone	96.9% Households with Access to Electricity			
	Transportation Capacity	21.4 km Average Distance to Nearest Port or Airport	23.5 km Total Length of Road per 100 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.

Lack of Resilience (LR)

Lack of Resilience⁵ Rank: 20 of 22 Departments (Score: 0.395)

Zacapa's score and ranking are due to very low Vulnerability combined with very 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 Risk⁶ Rank: 22 of 22 Departments (Score: 0.293)

Zacapa has the lowest Multi-Hazard Risk in the country, which is attributable to very low Multi-Hazard Exposure combined with very low Vulnerability and very high Coping Capacity scores

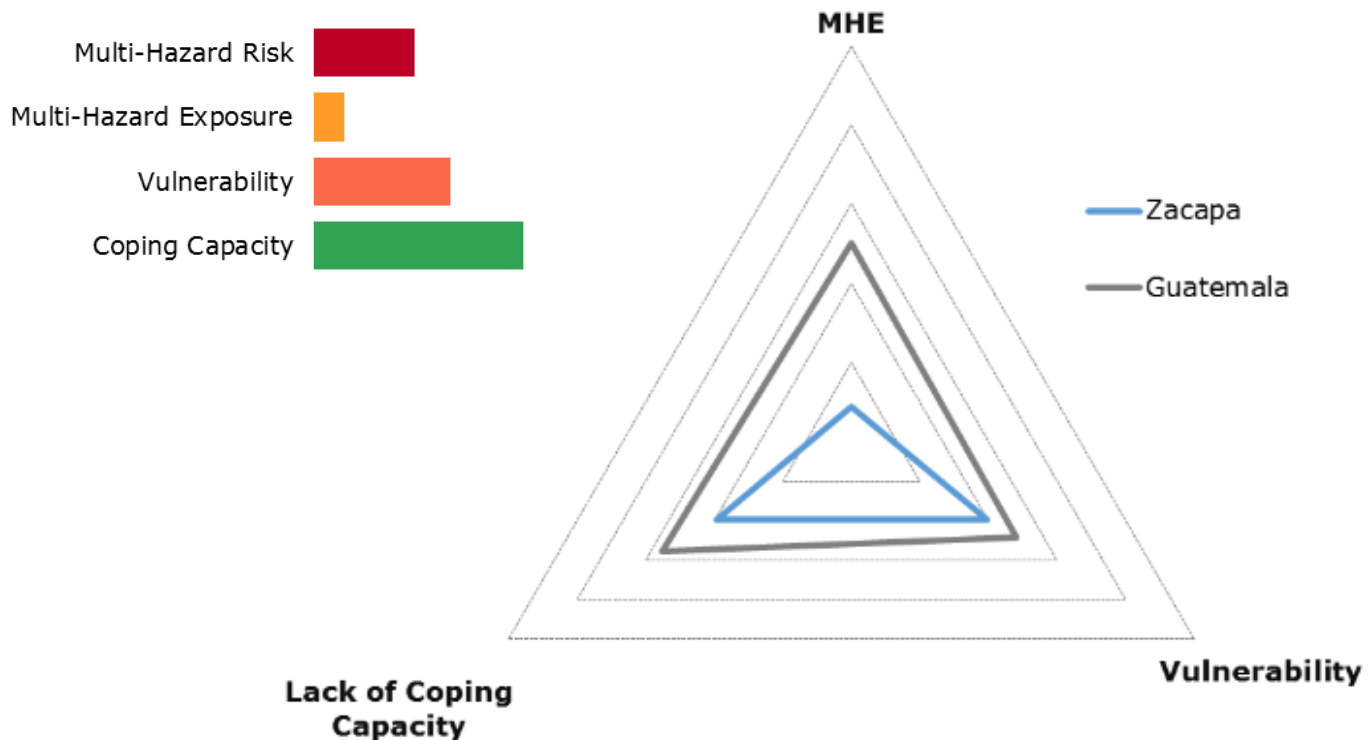


Figure 1. Department Multi-Hazard Risk component scores compared to overall average country scores

⁵ **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.

⁶ **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 multi-hazard risk

Ranked 21st in Multi-Hazard Exposure, 20th in Vulnerability, and 3rd in Coping Capacity. Low multi-hazard risk indicates a low susceptibility to impact and the ability to absorb, respond to, and recover from negative impacts that occur over the short term (Coping Capacity).



High information access

High information access indicates that the population has an increased ability to access and comprehend disaster-related information before, during, and after events.



Low population pressures

Ranked 20 of 22 departments, limited population change allows disaster managers to form accurate evacuation, sheltering, and resource plans.

Recommendations

01

Provide opportunities for women

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

02

Increase environmental programs

Invest in drought-education programs promoting drought-resistant crops and vegetation. Additionally, foster environmental-protection programs to preserve land and vegetation, increasing resiliency and coping capacity.

03

Increase governance

Invest in government-provided services such as garbage collection, police, and fire. Increased capability in these areas will decrease vulnerability in the department.



Better solutions.
Fewer disasters.
Safer world.

NDPBA Guatemala Report
1305 N. Holocono Street, Suite 2
Kihei, Hawaii, 96753
Phone: (808) 891-0525 | Fax: (808) 891-0526
ndpba@pdc.org | www.pdc.org

© 2018 Pacific Disaster Center

