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# Guatemala: Alta Verapaz

National Disaster Preparedness Baseline Assessment –  
Department Profile



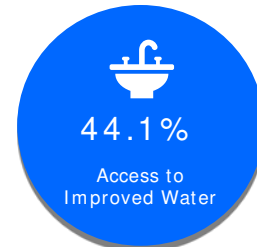
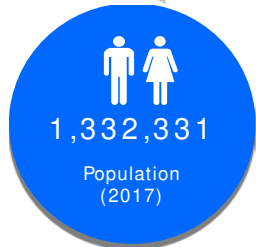
Department: Alta Verapaz



Department Capital: Cobán

Area: 8,686 km<sup>2</sup>

Alta Verapaz is located in north central Guatemala, just south of Petén. The department is one of the main palm oil export areas in the country and Central America. Alta Verapaz has the highest poverty rate in the country.



Municipality	Population
Cobán	279,372
San Pedro Carchá	257,136
Chisec	77,656
Fray Bartolomé de las Casas	73,879
Senahú	72,268
San Cristóbal Verapaz	68,867
Cahabon	67,745
San Juan Chamelco	67,223
Panzós	66,041
Santa Cruz Verapaz	47,808
Tucurú	47,705
La Tinta	44,089
Tactic	40,235
Raxruhá	38,735
Chahal	31,107
Lanquín	28,587
Tamahú	23,877



Multi-Hazard Risk Rank:  
Very High (4 of 22)

Lack of Resilience Rank:  
Very High (1 of 22)

RVA Component Scores

Table 24. Department scores and ranks (compared across departments) for each index

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Very High		Very High		Low		Very High		Very Low	
Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)
0.583	4	0.698	1	0.353	18	0.707	1	0.311	21

# NDPBA Guatemala Report: Department Profile

## Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure<sup>1</sup> Rank: 18 of 22 Departments (Score: 0.353)

Table 15. Estimated ambient population<sup>2</sup> exposed to each hazard



Cyclone

0%

0 People



Earthquake

100%

1,012,801  
People



Volcano

16%

157,122  
People



Flood

17%

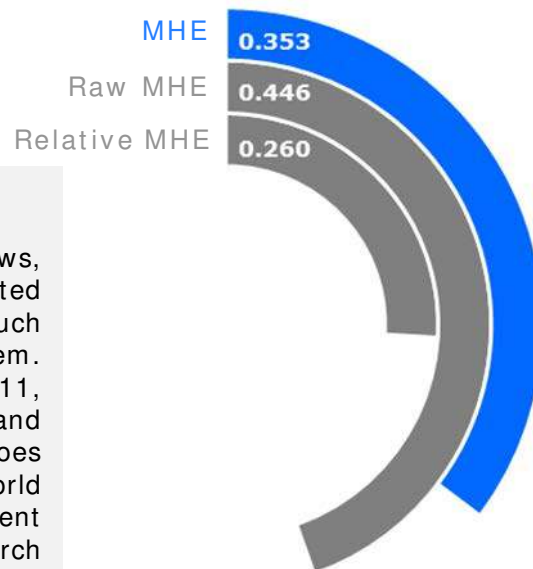
174,066  
People



Landslide

7%

69,332 People



### Gender Inequality

“Despite existing relevant international and national laws, discrimination against women is a common, deep-rooted issue especially in poor, rural, indigenous communities such as Alta Verapaz with a heavy-handed patriarchal system. Femicide is the most extreme, yet continual, result. In 2011, 20,389 cases of physical, sexual, psychological, and economical violence and femicide were reported; this does not include the many cases that are not reported. World Renew trained 150 participants from five different communities. These participants are respected church members from impacted communities of gender injustice. Training and activities include: Developing a process of sensitization around gender equality; Awareness and training of men and women about the issues of gender rights; Educating leaders and local authorities.”

<https://worldrenew.net/what-we-do/projects/gender-justice-guatemala>

<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: 1 of 22 Departments (Score: 0.707) Vulnerability in Alta Verapaz is primarily driven by Clean Water Vulnerability, Population Pressures, Gender Inequality and Information Access Vulnerability. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Vulnerability score.

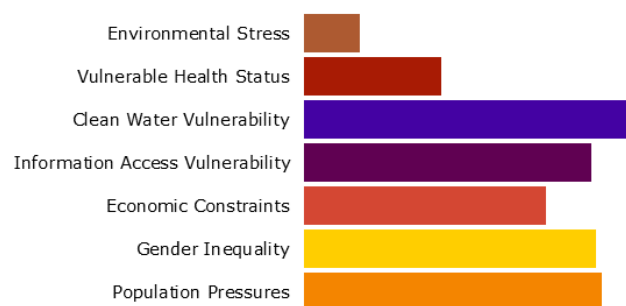









Table 26. Component scores for each Vulnerability sub-component

	<b>Environmental Stress</b>	0.4% Province at Drought Risk	0.2% Annual Forest Change					
	<b>Vulnerable Health Status</b>	29 Infant Mortality Rate	186.0 Maternal Mortality Ratio	0.7% Acute Malnutrition	1.0% Population Disabled	8.3 TB Incidence	4.3 Dengue Prevalence	6.4 Malaria Prevalence
	<b>Clean Water Vulnerability</b>	44.1% Households with Access to Improved Water	21.4% Households with Access to Improved Sanitation					
	<b>Information Access Vulnerability</b>	25.9% Adult Illiteracy	4.0 Average Years of Schooling	77.9% Primary School Enrollment	2.0% Households with Internet	14.1% Households with Cable TV	70.8% Households with Radio	89.7% Speak Indigenous Language
	<b>Economic Constraints</b>	0.91 Economic Dependency Ratio	83.1% Population in Poverty	0.50 GINI Coefficient				
	<b>Gender Inequality</b>	11.1% Female Seats in Congress	0.26 Ratio of Female to Male Secondary Education Enrollment	0.31 Ratio of Female to Male Economic Activity				
	<b>Population Pressures</b>	0.4% Province at Drought Risk	0.2% Annual Forest Change					

<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: 21 of 22 Departments (Score: 0.311) Alta Verapaz displays a very low level of Coping Capacity, which is attributable to very low Economic Capacity and Infrastructure Capacity. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.

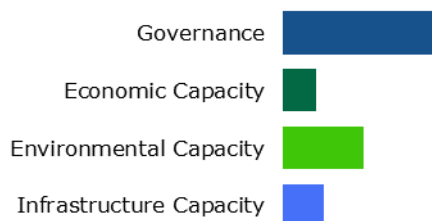









Table 2. Component scores for each Coping Capacity sub-component

	<b>Governance</b>	122.2 Crime Victims per 100K	7.3% Households with Garbage Collection				
	<b>Economic Capacity</b>	\$306.0 Remittances per Capita (USD)	6.04 Businesses per 1,000 persons	6,255 GDP per Capita (Quetzales)			
	<b>Environmental Capacity</b>	6.4% Protected Land	1.6% Reforested Area				
	<b>Infrastructure Capacity</b>						
	<b>Health Care Capacity</b>		13.9 Hospital Beds per 10,000 Persons	1.3 Nurses per 10,000 Persons	1.5 Physicians per 10,000 Persons	27.4 km Average Distance to Nearest Hospital	86.9% Children Completed Immunization Schedule
	<b>Communications Capacity</b>		3.14% Households with Access to Fixed Phone Line	81.6% Households with Access to Mobile Phone	44.1% Households with Access to Electricity		
	<b>Transportation Capacity</b>		23.6 km Average Distance to Nearest Port or Airport	9.1 km 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: 1 of 22 Departments (Score: 0.698)

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

Table 283. The 3 thematic areas with the weakest relative scores



Infrastructure  
Capacity



Economic  
Capacity



Clean Water  
Vulnerability

### Multi-Hazard Risk (MHR)

Multi-Hazard Risk<sup>6</sup> Rank: 4 of 22 Departments (Score: 0.583)

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

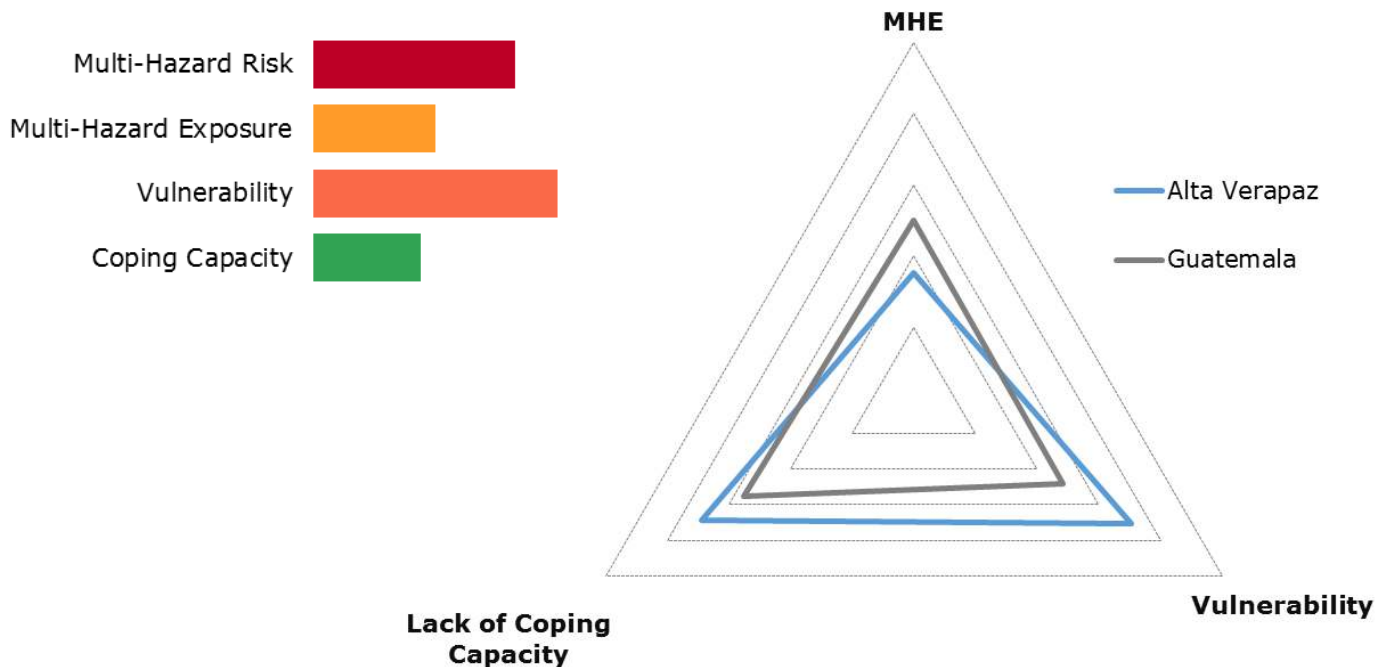


Figure 1. Department Multi-Hazard Risk Component scores compared to overall average country scores

<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 environmental stress

Ranked 22 of 22 departments, low environmental stress indicates that natural resources and agriculture will be more resilient to the effects of a disaster and may recover faster.



### High overall governance

Ranked 3 of 22 departments, high governance could facilitate the implementation of disaster management initiatives into departmental and municipal communities.

## Recommendations

01

### Invest in infrastructure

Invest in Health Care, Transportation and Communication Infrastructures to increase coping capacity and resiliency within the department.

02

### Increase water and sanitation services

Invest in public water and waste facilities to increase water quality and access and reduce the spread of disease.

03

### Provide opportunities for women

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



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