

Better solutions.
Fewer disasters.
Safer world.



Guatemala: El Progreso

National Disaster Preparedness Baseline Assessment –
Department Profile

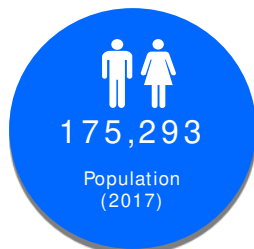
Department: El Progreso



Department Capital: Guastatoya

Area: 1,922 km²

El Progreso is in eastern Guatemala, and lies between the hot lowlands and cooler Guatemalan Highlands. Approximately 98% of the population is non-indigenous.



Municipality	Population
San Agustín Acasagustlán	43,974
Sanarate	41,995
Guastatoya	25,277
San Antonio la Paz	19,499
Morazán	12,944
Sansare	12,570
El Júcaro	11,392
San Cristobal Acasagustlán	7,641



**Multi-Hazard Risk Rank:
Very Low (21 of 22)**

**Lack of Resilience Rank:
Low (18 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		Low		Very Low		Low		Very High	
Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)	Score	Rank (of 22)
0.360	21	0.411	18	0.257	19	0.421	16	0.598	4

NDPBA Guatemala Report: Department Profile

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure¹ Rank: 19 of 22 Departments (Score: 0.257)

Table 2. Estimated ambient population² exposed to each hazard



46%

83,320 People

Cyclone



100%

182,505 People

Earthquake



37%

66,775 People

Volcano



10%

18,688 People

Flood



1%

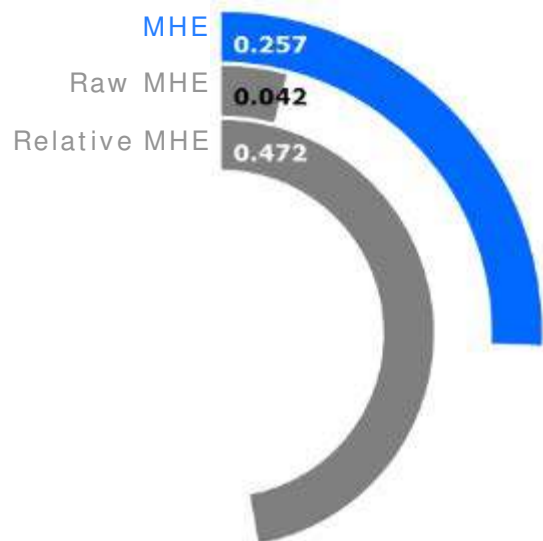
2,660 People

Landslide

Case Study: 'Yo Me Adapto'

A Pan American Development Foundation (PADF) program designed to decrease food instability in the region, "Yo Me Adapto" is designed to teach farmers climate-smart agriculture to adapt to changes in climate and maximize crop yields. With funding from USAID/OFDA, and in partnership with the Universidad del Valle de Guatemala and the Ministry of Agriculture, Livestock and Food, PADF established a demonstration farm to train 1,500 farming families. The center teaches climate-smart agricultural practices such as greenhouses, as well as rain catchment and efficient irrigation systems. Farmers learn how to determine the best varieties of crops to plant, including beans, corn, and sorghum. They also learn methods of soil conservation and the benefits of crop diversification.

<https://www.padf.org/news/2016/5/4/climate-smart-agriculture-program-guatemala>



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.

NDPBA Guatemala Report: Department Profile

Vulnerability (V)

Vulnerability³ Rank: 16 of 22 Departments (Score: 0.421) Vulnerability in El Progreso is primarily driven by Environmental Stress, Vulnerable Health Status, and Gender Inequality. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Vulnerability score.

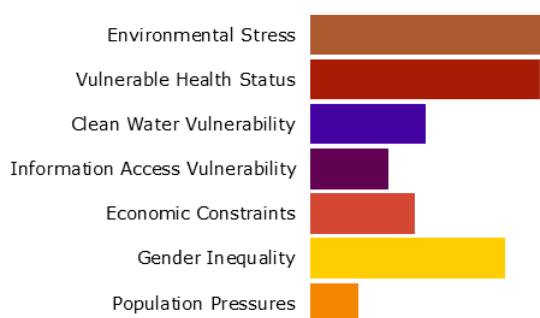









Table 3. Component scores for each Vulnerability sub-component

	Environmental Stress	85.9% Province at Drought Risk	-1.3% Annual Forest Change					
	Vulnerable Health Status	30 Infant Mortality Rate	120.0 Maternal Mortality Ratio	1.6% Acute Malnutrition	1.7% Population Disabled	2.4 TB Incidence	13.2 Dengue Prevalence	45.4 Malaria Prevalence
	Clean Water Vulnerability	80.9% Households with Access to Improved Water	64.8% Households with Access to Improved Sanitation					
	Information Access Vulnerability	4.9% Adult Illiteracy	6.0 Average Years of Schooling	88.4% Primary School Enrollment	5.2% Households with Internet	48.2% Households with Cable TV	81.5% Households with Radio	1.8% Speak Indigenous Language
	Economic Constraints	0.75 Economic Dependency Ratio	53.2% Population in Poverty	0.42 GINI Coefficient				
	Gender Inequality	0.0% Female Seats in Congress	0.01 Ratio of Female to Male Secondary Education Enrollment	0.25 Ratio of Female to Male Economic Activity				
	Population Pressures	1.6% Average Annual Population Change	0.6% Average Annual Urban Population Change	37.4% Food Insecurity				

³ **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 Capacity⁴ Rank: 4 of 22 Departments (Score: 0.598) El Progreso displays a very high level of Coping Capacity, which is attributable to very high Economic Capacity and Infrastructure Capacity. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.

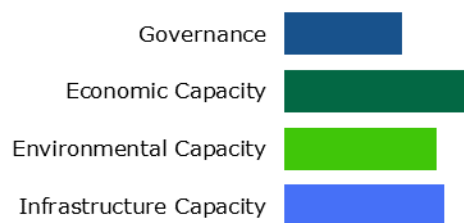


Table 4. Component scores for each Coping Capacity sub-component

	Governance	262.6 Crime Victims per 100K	31.9% Households with Garbage Collection				
	Economic Capacity	\$949.6 Remittances per Capita (USD)	13.3 Businesses per 1,000 persons	15,139 GDP per Capita (Quetzales)			
	Environmental Capacity	19.3% Protected Land	3.0% Reforested Area				
	Infrastructure Capacity						
	Health Care Capacity		11.7 Hospital Beds per 10,000 Persons	2.2 Nurses per 10,000 Persons	3.3 Physicians per 10,000 Persons	16.4 km Average Distance to Nearest Hospital	98.3% Children Completed Immunization Schedule
	Communications Capacity		8.5% Households with Access to Fixed Phone Line	86.7% Households with Access to Mobile Phone	99.4% Households with Access to Electricity		
	Transportation Capacity		47.6 km Average Distance to Nearest Port or Airport	17.2 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.

NDPBA Guatemala Report: Department Profile

Lack of Resilience (LR)

Lack of Resilience⁵ Rank: 18 of 22 Departments (Score: 0.411)

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

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



Vulnerable
Health Status



Environmental
Stress



Gender
Inequality

Multi-Hazard Risk (MHR)

Multi-Hazard Risk⁶ Rank: 21 of 22 Departments (Score: 0.360)

El Progreso's very low Multi-Hazard Risk is a result of very low Multi-Hazard Exposure combined with low Vulnerability and very high Coping Capacity.

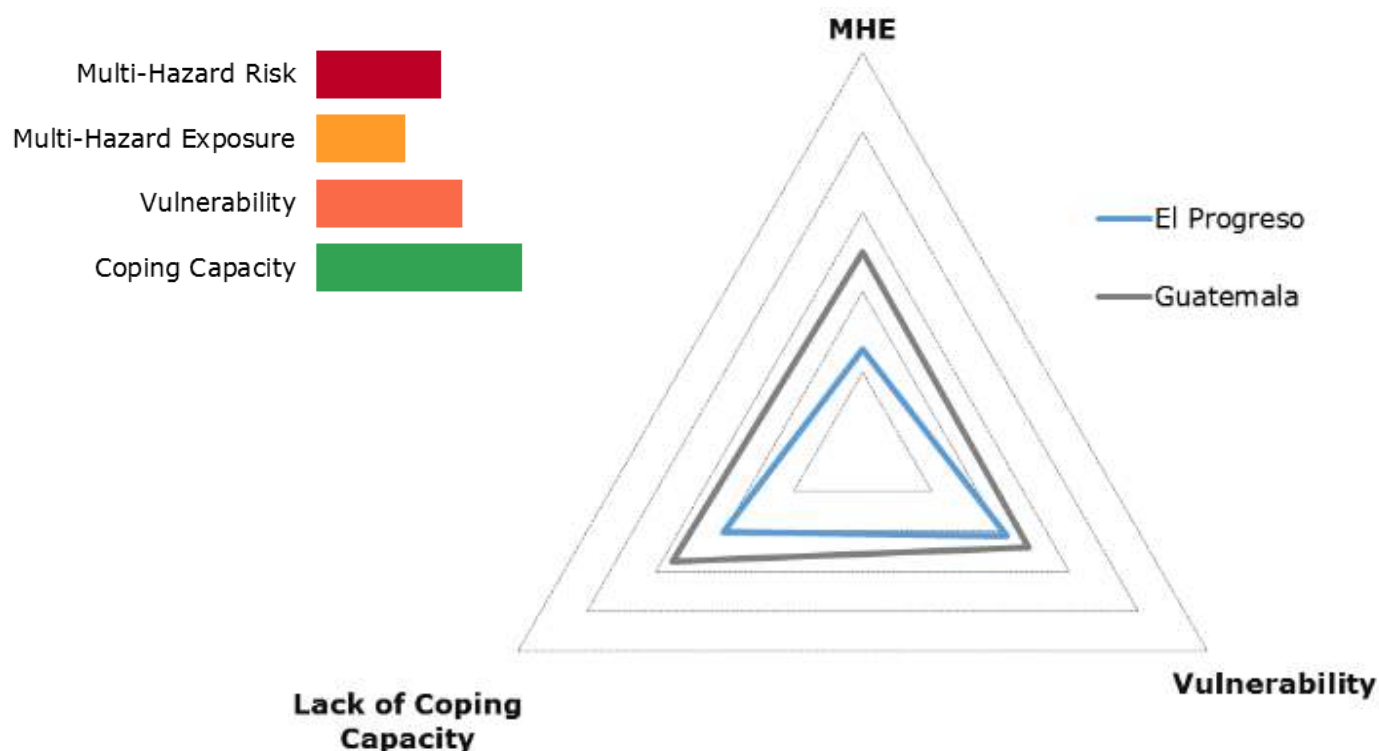


Figure 1. Department Multi-Hazard Risk component scores compared to overall average country scores

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 population pressures

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



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.



High economic capacity

Ranked 2 of 22 departments, high environmental capacity indicates that natural resources and agriculture will be more resilient to the effects of a disaster and may recover faster.

Recommendations

01

Provide health education and access

Increased early health education and access for special-needs populations and new/expectant mothers can decrease health vulnerability. Additional health-care infrastructure (doctors and nurses) will increase access to critical services before, during, and after disaster events.

02

Promote drought-resistant farming methods

A high percentage of the department is at risk of drought. Programs that promote drought-resistant crops and farming methods will decrease vulnerability to drought in the department.

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 resilience and decrease vulnerability.



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