

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



Granada

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

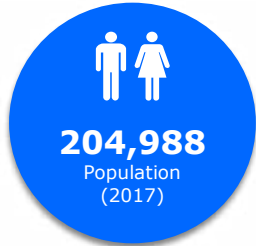
Department: Granada



Department Capital: Granada

Area: 1,040 km²

Granada is one of North America’s oldest cities and is the oldest city in Nicaragua. Located along the coast of Lake Nicaragua, Granada is known for colonial-era architecture, nature reserves, and its bewitched villages.



Municipality	Population
Diriá	7,144
Diriomo	27,593
Granada	129,217
Nandaime	41,034

Multi-Hazard Risk Rank: Medium (8 of 17)

Lack of Resilience Rank: Very Low (16 of 17)



RVA Component Scores

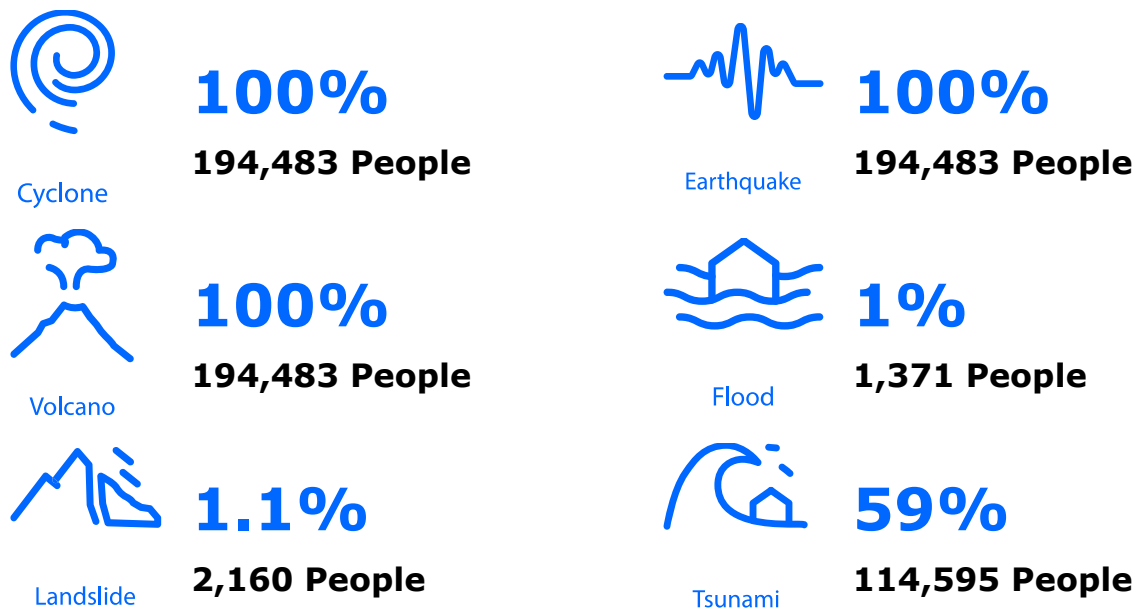
Table 1. Department scores and ranks (compared across departments) for each index

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Medium		Very Low		Very High		Low		Very High	
Score	Rank (of 17)	Score	Rank (of 17)	Score	Rank (of 17)	Score	Rank (of 17)	Score	Rank (of 17)
0.474	8	0.334	16	0.754	2	0.324	12	0.656	1

Multi-Hazard Exposure (MHE)

Multi-Hazard Exposure¹ Rank: 2 of 17 Departments (Score: 0.754)

Table 2. Estimated ambient population² exposed to each hazard

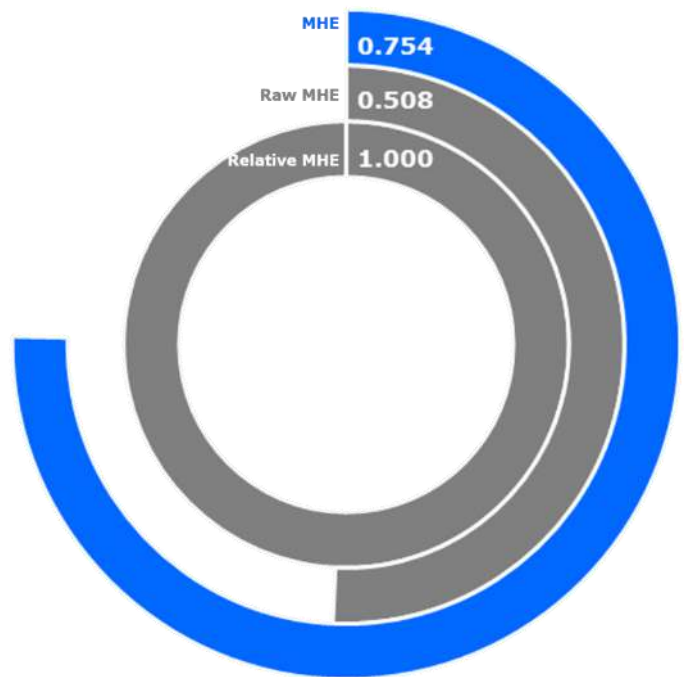


Case Study: Cocibolca Development Program

World Vision is working in Granada to improve the well-being of children using a long-term approach focused on the underlying causes of poverty. Activities within the program include:

- Growing community gardens;
- Educating parents on childhood illness;
- Tutoring primary school students; and
- Training community members on emergency preparedness and other response activities.

<https://www.ngoaidmap.org/projects/14755>



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: 12 of 17 Departments (Score: 0.324) Vulnerability in Granada is primarily driven by Population Pressures and Environmental Stress. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Vulnerability score.

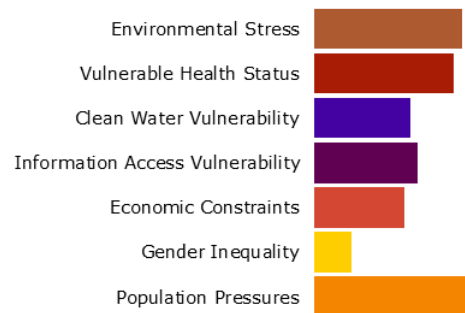


Table 3. Component scores for each vulnerability sub-component

	Environmental Stress	100% Province at Drought Risk	12.9% Erosion Risk	69.8 Livestock per km ²			
	Vulnerable Health Status	11.0 Infant Mortality Rate	24.4 Maternal Mortality Rate	76 yrs Average Life Expectancy	5.1% Acute Malnutrition (Children < 5)	1.7% Population Disabled	
	Clean Water Vulnerability	80.7% Households with Access to Improved Water	39.2% Households with Access to Flush Toilets				
	Information Access Vulnerability	16.3% Illiteracy	6.9 yrs Average Years of Schooling	86.0% Primary School Enrollment	91.0% Households without Internet	10.0% Households without TV	74.7% Households without Radio
	Economic Constraints	56.1 Economic Dependency Ratio	61.1% Population in Poverty				
	Gender Inequality	50.0% Female Seats in Government	1.17 Female to Male Secondary Education Enrollment	0.29 Female to Male Labor Ratio			
	Population Pressures	2.25% Average Annual Population Change	2.88% Average Annual Urban Population Change				

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: 1 of 17 Departments (Score: 0.656) Granada exhibits weaker Coping Capacity in the areas of Health Care Capacity and Governance. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.

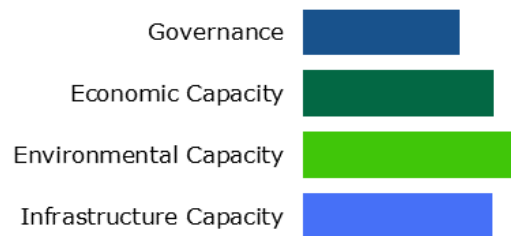


Table 4. Component scores for each coping capacity sub-component

	Economic Capacity	13.2% Households that Receive Remittances	79.3% Employment Rate (Male)	56.4% Employment Rate (Female)	26.4% Population in Highest Welfare Quintile	\$1,747 Annual Nominal Global Revenue per Capita	
	Governance	91.0% Crime Complaints Cleared	1881.0 Crime Rate per 100k Persons	47.9% Households without Garbage Collection	67.9% Voter Participation (2016 Election)		
	Environmental Capacity	42.8% Protected or Reforested Land					
	Infrastructure Capacity						
	Health Care Capacity		7.8 Hospital Beds per 10,000 Persons	13.8 Nurses per 10,000 Persons	10.1 Physicians per 10,000 Persons	11.9 km Average Distance to Nearest Hospital	88.3% Children Completed Immunization Schedule
	Communications Capacity		18.3% Households with Access to Fixed Phone Line	86.2% Households with Access to Mobile Phone			
	Transportation Capacity		19.4 km Average Distance to Nearest Port or Airport	0.50 km Total Length of Road per 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: 16 of 17 Departments (Score: 0.334)

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

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



Population Pressures



Governance



Health Care Capacity

Multi-Hazard Risk (MHR)

Multi-Hazard Risk⁶ Rank: 8 of 17 Departments (Score: 0.474)

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

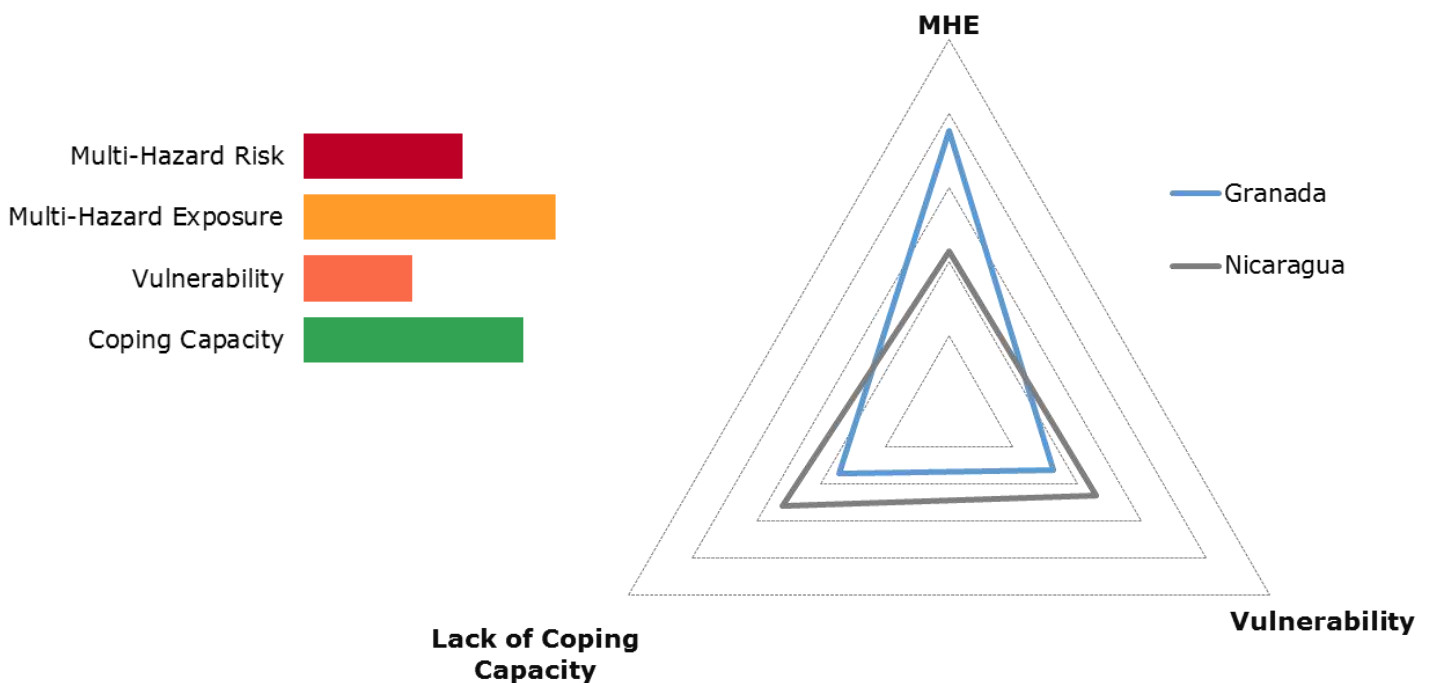


Figure 1. Department Multi-Hazard Risk component scores compared to overall average country scores

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



Highest coping capacity

Ranked 1 of 17 departments, high coping capacity indicates the department's ability, using existing skills and resources, to face and manage adverse conditions, emergencies, or disasters.



Very low gender inequality

Ranked 15 of 17 departments, low gender inequality indicates that vulnerable populations are more likely to have their needs met under 'normal' conditions and may be less susceptible during times of disaster.

Recommendations

01

Institutionalize multi-hazard planning and education

Like the departments of Managua and Chinandega, Multi-Hazard Risk in Granada is driven primarily by exposure. Develop a departmental multi-hazard mitigation plan to acknowledge exposure to multiple hazards. Engage the public in this process to promote an understanding of multi-hazard risk.

02

Invest in public safety and crime prevention

Provide additional support for local police, firefighters, and emergency medical resources to improve public safety and decrease crime rates.



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

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