



NDPBA

PANAMA PROVINCE RISK PROFILES

SUBNATIONAL ASSESSMENT RESULTS





PANAMÁ

BOCAS DEL TORO

**NDPBA PROVINCES AND INDIGENOUS COMARCAS
PROFILE**

PANAMÁ

BOCAS DEL TORO

CAPITAL: BOCAS DEL TORO

Area: 4,657 km²

The Bocas del Toro province is located in the western region of Panama. This Province is divided into 4 districts: Bocas del Toro (The Capital), Almirante, Changuinola and Chiriquí Grande. The province borders Caribbean Sea to the North, Costa Rica to the west, Chiriquí Province to the south, and Ngäbe Buglé. The main economic sources are cattle, banana and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - High
Score: 0.548 • Rank: 4/13



RESILIENCE (R) - Low
Score: 0.471 • Rank: 9/13



MULTI-HAZARD EXPOSURE (MHE) - Medium
Score: 0.586 • Rank: 6/13



VULNERABILITY (V) - Medium
Score: 0.510 • Rank: 5/13



COPING CAPACITY (CC) - Low
Score: 0.453 • Rank: 9/13



Population (2020 Estimate)
179,990



Population in poverty
43.8%



Average years in school
8.2



Households with access to improved water
8.4% households



Infant mortality rate (per 1,000 live births)
25

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 6 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.586



MHE
0.586

Raw MHE
0.581

Relative MHE
0.592

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

2.3%

3,602

-



Flood

32.3%

50,111

1.4 Billion



Landslide

0.2%

268

-



Storm Surge

2.6%

4,038

20.6 Million



Sea Level Rise

54.1%

83,983

1.9 Billion



Wildfire

-

0

-



Tsunami

0.7%

1,045

3.6 Thousand



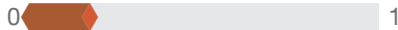
VULNERABILITY (V)

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.510

Vulnerability in Bocas del Toro is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



Environmental Stress SCORE: 0.177 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.06% Percent forest cover lost	48.71 Density of livestock per sq. km	33.8% Percent of freshwater consumption to production
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Vulnerable Health Status SCORE: 0.596 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



420.8 Dengue incidence per 100,000 persons	3 AIDS incidence per 100,000 persons	0.6 Malaria Incidence per 100,000 persons	82.1 TB incidence per 100,000 persons	27.7% Prevalence of stunting	2.8% Disability	67.46 Maternal Mortality Rate per 100,000 live births
24.51 Infant mortality per 1,000 live births	73.79 Life expectancy					



Clean Water Vulnerability SCORE: 0.629 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



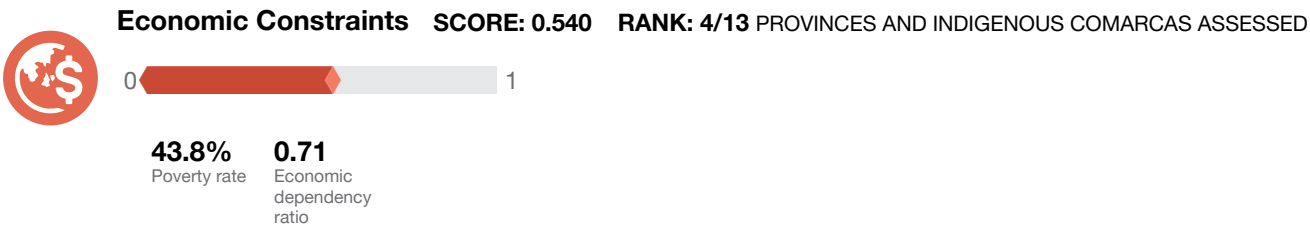
8.4% Households without access to improved drinking water	73.7% Households with access to improved sanitation
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Information Access Vulnerability SCORE: 0.521 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



49.2% Households with radio	77.9% Households with TV	52.9% Households with internet	76.8% School attendance rate	8.17 Average years of schooling	8.5% Illiteracy rate
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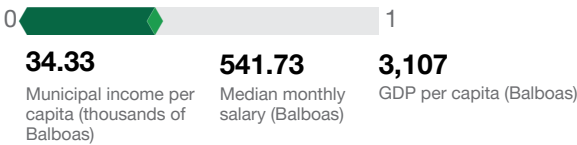
COPING CAPACITY (CC)

RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.453

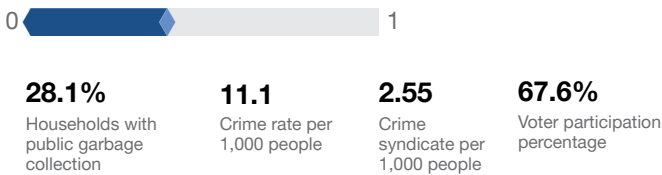
Bocas del Toro exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



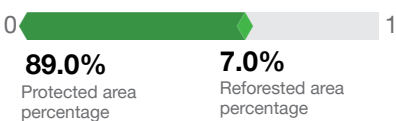
Economic Capacity SCORE: 0.371 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.396 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.633 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.532 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.435 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.522 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.555 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.614 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.471

Bocas del Toro's score and ranking are due to Medium Vulnerability combined with Low Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Population Pressures



Clean Water Access Vulnerability



Economic Capacity



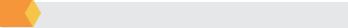
Governance



HAZARD-SPECIFIC RISK (HSR)



Earthquake



RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.096



Flood



RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.529



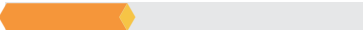
Sea Level Rise



RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.474



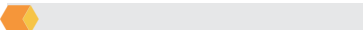
Storm Surge



RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.350



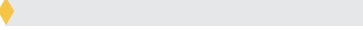
Landslide



RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.065



Wildfire



RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



Tsunami



RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.173



MULTI-HAZARD RISK (MHR)

4 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.548



Bocas del Toro's score and ranking are due to Medium Multi-hazard Exposure combined with Medium Vulnerability and Low Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

BOCAS DEL TORO SCORE
COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



BOCAS DEL TORO RECOMMENDATIONS



Population Pressures

Bocas del Toro ranks second in population pressures only behind Ngäbe Buglé and experiences a 5.19% annual population change. Population growth increases stress on public utilities, emergency services, and health care. An increase in these decreases the ability for governments to respond adequately to disasters and mass casualties with already limited resources. The migration of large populations leads to strain on social services, economic opportunities, and health care access. Lack of economic opportunity can potentially cause increased criminal activity, increased nutrition needs for vulnerable populations (i.e., elderly and adolescents), and lack of adequate shelter for individuals.

Given that Bocas del Toro ranks sixth highest in overall Multi-Hazard Exposure, monitor population growth to ensure policy, plans, and programs meet requirements to respond to mass casualties and disasters. Ensure population growth and migration remain at a stable and sustainable level. Identify causes and drivers of migration for large populations to address needs and limit forced migration. Ensure a comprehensive understanding of population change across the country to meet public safety needs and requirements.

BOCAS DEL TORO RECOMMENDATIONS

2

Clean Water Access Vulnerability

Bocas del Toro ranks fourth in Panama for Clean Water Access Vulnerability, with high access to improved sanitation. A lack of access to improved water sources and improved sanitation can lead to contracting enteric diseases from contaminated water supplies and increases the risk of the population facing an acute enteric disease outbreak. Water contamination and disease outbreaks exacerbate existing vulnerabilities and hazard exposures, and stress sometimes limits local health care resources. Lack of clean water in specific environments can quickly lead to a mass casualty situation needing national-level resources and external assistance to ensure a population has clean drinking water necessary for survival.

Invest in the development and water treatment and water distribution systems to ensure populations have access to clean water and adequate sanitation services. Develop an emergency action plan to identify and prevent acute enteric disease outbreaks can prevent community spread and isolate sources of contaminated water or inadequate sanitation.

BOCAS DEL TORO RECOMMENDATIONS

3

Economic Capacity

Bocas del Toro has the second lowest GDP per capita rankings when compared to the rest of Panama. The median salary of individuals in the province also ranks ninth in the country. Socioeconomic deprivation increases dependency on limited government resources and individuals and limits economic opportunity and mobility. A more consequential situation for socioeconomic deprivation is unchecked and forced migration of large populations, potentially creating immediate instability within civil society. As noted in the vulnerability results for Bocas del Toro, it ranks the highest in overall population pressures in Panama. Lack of economic capacity increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and the standing government.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and provide equal opportunity programs for disparate people to increase economic opportunity for all. Identify drivers of poverty and criminal activity to address opportunities for strained populations within civil society.

BOCAS DEL TORO RECOMMENDATIONS

4

Governance

Bocas del Toro ranks eighth in overall Governance. Voter participation is the lowest of all provinces in Panama, suggesting a possible challenge for governance and elections. Reduced governance can undermine stability for civil society creating further stress among disparate and disadvantaged populations. Provide financial and technical assistance to law enforcement to adequately address criminal activity. Identify underlying factors and drivers of illegal activity to ensure targeted actions with government resources are best utilized to reduce criminal activity.

Develop methods for measures of performance and measures of effectiveness to utilize limited government resources best. Identify feedback mechanisms for the public to best understand and identify issues of governance within civil society. Provide and integrate civic education to address government distrust and encourage participation in elections.

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PANAMÁ

CHIRIQUÍ

NDPBA PROVINCES AND INDIGENOUS COMARCAS PROFILE

PANAMÁ CHIRIQUÍ

CAPITAL: DAVID

Area: 6,491 km²

The Chiriquí province is located in the western region of Panama. This Province is divided into 13 districts: David (The Capital), Alanje, Barú, Boquerón, Boquete, Bugaba, Dolega, Gualaca, Remedios, Renacimiento, San Félix, San Lorenzo, Tierras Altas and Tolé. The province borders Bocas del Toro and Ngäbe Buglé to the west, Costa Rica to the North, Veraguas to the east and the Pacific Ocean to the south. The main economic sources are cattle, coffee, banana and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low
Score: 0.386 • Rank: 12/13



RESILIENCE (R) - Medium
Score: 0.573 • Rank: 5/13



MULTI-HAZARD EXPOSURE (MHE) - Very Low
Score: 0.303 • Rank: 12/13



VULNERABILITY (V) - Very Low
Score: 0.365 • Rank: 10/13



COPING CAPACITY (CC) - Medium
Score: 0.510 • Rank: 7/13



Population (2020 Estimate)
464,538



Population in poverty
20.0%



Average years in school
9.4



Households with access to improved water
4.8% households



Infant mortality rate (per 1,000 live births)
18

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: 12 / 13 PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.303



MHE
0.303

Raw MHE
0.553

Relative MHE
0.052

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

1.2%

5,660

-



Flood

-

0

-



Landslide

0.6%

3,013

77.1 Million



Storm Surge

0.3%

1,304

28.1 Million



Sea Level Rise

18.4%

85,591

1.8 Billion



Wildfire

9.1%

42,508

493.8 Million



Tsunami

1.6%

7,247

5.7 Thousand



VULNERABILITY (V)

RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.365

Vulnerability in Chiriquí is primarily driven by Gender Inequality and Environmental Stress. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



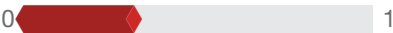
Environmental Stress SCORE: 0.584 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.09% Percent forest cover lost	113.54 Density of livestock per sq. km	57.6% Percent of freshwater consumption to production
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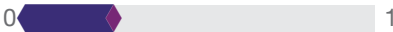
Vulnerable Health Status SCORE: 0.321 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



17.1 Dengue incidence per 100,000 persons	12.3 AIDS incidence per 100,000 persons	0.7 Malaria Incidence per 100,000 persons	23.2 TB incidence per 100,000 persons	11.0% Prevalence of stunting	3.6% Disability	11.54 Maternal Mortality Rate per 100,000 live births
17.88 Infant mortality per 1,000 live births	78.76 Life expectancy					



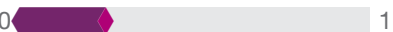
Clean Water Vulnerability SCORE: 0.257 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



4.8% Households without access to improved drinking water	99.1% Households with access to improved sanitation
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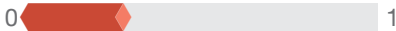
Information Access Vulnerability SCORE: 0.250 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



79.1% Households with radio	92.8% Households with TV	66.6% Households with internet	79.6% School attendance rate	9.39 Average years of schooling	4.7% Illiteracy rate
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Economic Constraints SCORE: 0.276 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



20.0% Poverty rate
0.61 Economic dependency ratio



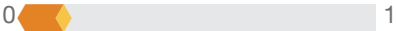
Gender Inequality SCORE: 0.756 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.18 Ratio female to male secondary enrollment
0.41 Ratio female to male labor
0.09 Proportion of female seats in local government



Population Pressures SCORE: 0.111 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



3.0% Average annual urban population change
0.7% Percent average population change



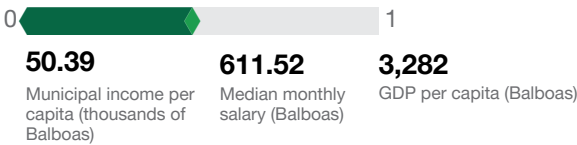
COPING CAPACITY (CC)

RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.510

Chiriquí exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



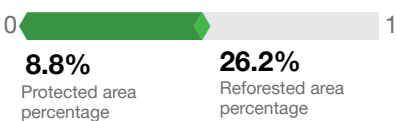
Economic Capacity SCORE: 0.48 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.314 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.509 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.737 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.713 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.69 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.656 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.891 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.573

Chiriquí's score and ranking are due to Very Low Vulnerability combined with Medium Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Gender Inequality



Environmental Stress



Governance



Economic Capacity



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.079



Flood

RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



Sea Level Rise

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.253



Storm Surge

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.223



Landslide

RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.174



Wildfire

RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.230



Tsunami

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.194



MULTI-HAZARD RISK (MHR)

12 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.386



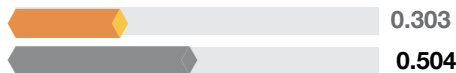
Chiriquí's score and ranking are due to Very Low Multi-hazard Exposure combined with Very Low Vulnerability and Medium Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

■ CHIRIQUÍ SCORE
■ COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



CHIRIQUÍ RECOMMENDATIONS



Gender Inequality

Chiriquí ranks 5th in overall Gender inequality, driven primarily by gender disparities in labor participation, and limited female representation in government.

Boost labor participation by promoting workforce opportunities for women that includes provisions for family support, such as quality, affordable childcare. Support equal pay for equal work to foster economic growth and reduce economic dependency.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

CHIRIQUÍ RECOMMENDATIONS

2

Environmental Stress

Climate change, freshwater withdrawals, and forest cover loss contribute to food insecurity, uninhabitable environments, internally displaced people, forced migration, and economic upheaval. Combined with a possible increased dependency due to gender inequality in Chiriquí, it can further poverty and disparity among citizens. High poverty rates and income inequality can further be exacerbated with inadequate planning and unchecked development. Environmental protection is vital to ensuring sustainable development within the country, and land management is essential to monitor ecological stress while balancing economic use closely. Food security and access to a clean water supply are highly dependent on land use governance, sustainable development, and planning.

Promoting sustainable agriculture and the development of long-term goals promotes stability within the agriculture industry and ensures stable economic opportunities for the workforce in agrarian societies. Early identification of future development of industrial areas or agricultural areas allows studies to understand the impact on populations dependent on clean water and food resources. Provide educational training to both private and public entities to educate on sustainable development and develop sustainable metrics, ensuring that overdevelopment does not occur and that populations continue to have their food and water needs met.

CHIRIQUÍ RECOMMENDATIONS

3

Governance

Chiriquí ranks third lowest in overall Governance, with a crime rate of approximately 11 per 1,000 people, and a voter participation rate of 73%. Limitations in governance undermine stability for civil society creating further stress among disparate and disadvantaged populations.

Provide financial and technical assistance to law enforcement to adequately address criminal activity. Identify underlying factors and drivers of illegal activity to ensure targeted actions with government resources are best utilized to reduce criminal activity to lower the crime rate per 1,000 people.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

CHIRIQUÍ RECOMMENDATIONS

4

Economic Capacity

Low median monthly salaries, low municipal income, low GDP per capita are drivers of low economic capacity in Chiriquí, contributing to socioeconomic deprivation to certain members of society. Socioeconomic deprivation increases dependency on limited government resources and individuals and limits economic opportunity and mobility. A more consequential situation for socioeconomic deprivation is unchecked and forced migration of large populations, potentially creating immediate instability within civil society. With Chiriquí already experiencing challenges in governance, limited economic capacity can worsen criminal activity and strain limited government resources. Lack of economic ability increases illegal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and the standing government.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and provide equal opportunity programs for disparate people to increase economic opportunity for all. Identify drivers of poverty and criminal activity to address opportunities for strained populations within civil society.

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PANAMÁ
COCLÉ

**NDPBA PROVINCES AND INDIGENOUS COMARCAS
PROFILE**

PANAMÁ COCLÉ

CAPITAL: PENONOMÉ

Area: 4,947 km²

The Coclé province is located in the central region of Panama. This Province is divided into 6 districts: Penonomé (The Capital), Aguadulce, Antón, La Pintada, Natá and Olá. The province borders Pacific Ocean and Herrera to the south, Colón to the north, Veraguas to the west and Panamá Oeste to the east. The main economic sources are cattle, coffee and banana.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low
Score: 0.434 • Rank: 9/13



RESILIENCE (R) - Medium
Score: 0.566 • Rank: 7/13



MULTI-HAZARD EXPOSURE (MHE) - Low
Score: 0.435 • Rank: 10/13



VULNERABILITY (V) - Low
Score: 0.385 • Rank: 9/13



COPING CAPACITY (CC) - Medium
Score: 0.518 • Rank: 6/13



Population (2020 Estimate)
266,969



Population in poverty
26.6%



Average years in school
8.8



Households with access to improved water
4.9% households



Infant mortality rate (per 1,000 live births)
13

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 10 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.435



MHE
0.435

Raw MHE
0.601

Relative MHE
0.269

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

-
0
-



Flood

1.6%
4,269
526.5 Million



Landslide

2.2%
5,833
42 Million



Storm Surge

0.3%
776
6.5 Million



Sea Level Rise

12.0%
31,607
1.5 Billion



Wildfire

26.0%
68,586
3.3 Billion



Tsunami

1.8%
4,725
-



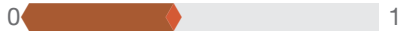
VULNERABILITY (V)

RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.385

Vulnerability in Coclé is primarily driven by Gender Inequality and Environmental Stress. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



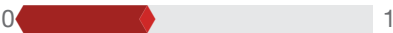
Environmental Stress SCORE: 0.420 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.15% Percent forest cover lost	57.26 Density of livestock per sq. km	90.2% Percent of freshwater consumption to production
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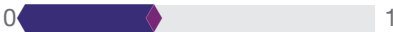
Vulnerable Health Status SCORE: 0.360 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



147.7 Dengue incidence per 100,000 persons	1.5 AIDS incidence per 100,000 persons	0 Malaria Incidence per 100,000 persons	10.7 TB incidence per 100,000 persons	9.9% Prevalence of stunting	3.6% Disability	46.26 Maternal Mortality Rate per 100,000 live births
13.19 Infant mortality per 1,000 live births	77.49 Life expectancy					



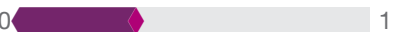
Clean Water Vulnerability SCORE: 0.374 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



4.9% Households without access to improved drinking water	96.1% Households with access to improved sanitation
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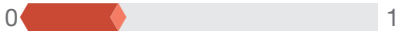
Information Access Vulnerability SCORE: 0.338 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



69.9% Households with radio	85.0% Households with TV	55.8% Households with internet	79.8% School attendance rate	8.75 Average years of schooling	2.8% Illiteracy rate
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Economic Constraints SCORE: 0.262 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



26.6% Poverty rate
0.56 Economic dependency ratio



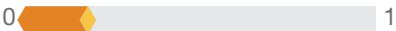
Gender Inequality SCORE: 0.761 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.25 Ratio female to male secondary enrollment
0.34 Ratio female to male labor
0.16 Proportion of female seats in local government



Population Pressures SCORE: 0.181 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



3.4% Average annual urban population change
0.9% Percent average population change



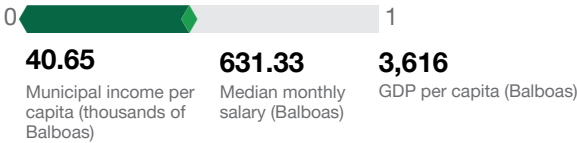
COPING CAPACITY (CC)

RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.518

Coclé exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



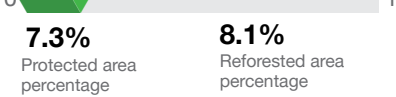
Economic Capacity SCORE: 0.471 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.564 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.155 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.639 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



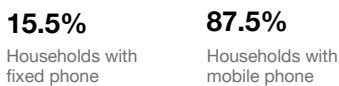
Health Care Capacity SCORE: 0.654 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.53 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.642 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.731 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

**RANK: 7 / 13 PROVINCES AND
INDIGENOUS COMARCAS ASSESSED**
SCORE: 0.566

Coclé's score and ranking are due to Low Vulnerability combined with Medium Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



**Gender
Inequality**



**Environmental
Stress**



Economic Capacity



**Transportation
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



Flood

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.215



Sea Level Rise

RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.211



Storm Surge

RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.190



Landslide

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.196



Wildfire

RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.367



Tsunami

RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.176



MULTI-HAZARD RISK (MHR)

9 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.434

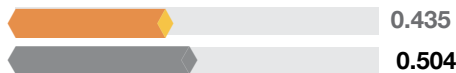


Coclé's score and ranking are due to Low Multi-hazard Exposure combined with Low Vulnerability and Medium Coping Capacity scores.

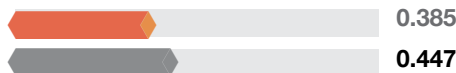
Multi-hazard risk component scores compared to overall average country scores:



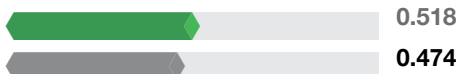
Multi-Hazard Exposure



Vulnerability



Coping Capacity



COCLÉ RECOMMENDATIONS



Gender Inequality

Coclé ranks seventh in overall Gender Inequality in Panama. Similar to other provinces across the country, a greater proportion of females than males attend secondary school (1.25 ratio of females to males), the rate of female participation in the labor force is lower than their male counterparts, and female representation in local government is limited.

Populations with women who are less economically active or economically dependent on men for livelihood exacerbate population pressures and create further strain in civil society. Population increases create additional competition in the workforce, and a lack of targeted interventions to ensure women's participation can increase gender inequality created a more significant disparity between women and men.

Create targeted interventions to increase workforce populations for females through training women with the necessary skills to participate in the economy. Explore incentive-based initiatives to encourage employers to hire women and other marginalized groups. Identify drivers that marginalize women and girls to create targeted interventions to reduce inequality and increase the quality of life for all.

COCLÉ RECOMMENDATIONS

2

Environmental Stress

Climate change, freshwater withdrawals, and forest cover loss contribute to food insecurity, uninhabitable environments, internally displaced people, forced migration, and economic upheaval. Coclé suffers from a higher-than-average loss of forest coverage contributing to high environmental stress. High poverty rates and income inequality can further be exacerbated with inadequate planning and unchecked development. Environmental protection is vital to ensuring sustainable development within the country, and land management is essential to monitor ecological stress while balancing economic use closely. Food security and access to the clean water supply are highly dependent on land use governance, sustainable development, and planning.

Promoting sustainable agriculture and the development of long-term goals promotes stability within the agriculture industry and ensures stable economic opportunities for the workforce in agrarian societies. Early identification of the future for the development of industrial or agricultural areas allows studies to understand the impact on populations dependent on clean water and food resources. Provide educational training to both private and public entities to educate on sustainable development and develop sustainable metrics, ensuring that overdevelopment does not occur and that populations continue to have their food and water needs met.

COCLÉ RECOMMENDATIONS

3

Economic Capacity

Socioeconomic deprivation increases dependency on limited government resources and individuals and limits economic opportunity and mobility. Gender inequality in Coclé can further stress the economic capacity of the province. Lack of economic ability increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and highlights relationships between individuals and civil society.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and provide equal opportunity programs for disparate people to increase economic opportunity for all.

Create targeted interventions to increase workforce populations for females through training women with the necessary skills to participate in the economy. Explore incentive-based initiatives to encourage employers to hire women and other marginalized groups. Identify drivers that marginalize women and girls to create targeted interventions to reduce inequality and increase the quality of life for all.

COCLÉ RECOMMENDATIONS

4

Transportation Capacity

Limited transportation capacity within a province limits the economic opportunity and mobility of society, and it limits the opportunity for individuals to attend higher education and find gainful employment. Reduced transportation capacity can also hamper emergency response activities and decrease public access to vital resources such as adequate healthcare and food.

Identify areas with limited transportation opportunities to identify the best project areas where increasing transportation capacity has the highest impact. Identify emergency routes and vital transportation routes that provide critical access to services to the population. Ensure new transportation routes are developed within sustainable development guidelines with proper materials.

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PANAMÁ COLÓN

NDPBA PROVINCES AND INDIGENOUS COMARCAS PROFILE

PANAMÁ COLÓN

CAPITAL: COLÓN

Area: 4,576 km²

The Colón province is located in the central region of Panama. This Province is divided into 6 districts: Colón (The Capital), Chagres, Donoso, Omar Torrijos Herrera, Portobelo and Santa Isabel. The province borders Atlantic Ocean to the north, Veraguas to the west, Coclé, Panamá Oeste and Panamá to the south and Kuna Yala to the east. The main economic sources are cattle and banana.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Medium

Score: 0.496 • Rank: 6/13



RESILIENCE (R) - High

Score: 0.593 • Rank: 4/13



MULTI-HAZARD EXPOSURE (MHE) - High

Score: 0.675 • Rank: 3/13



VULNERABILITY (V) - High

Score: 0.392 • Rank: 7/13



COPING CAPACITY (CC) - High

Score: 0.579 • Rank: 4/13



Population (2020 Estimate)

298,344



Population in poverty

14.6%



Average years in school

9.9



Households with access to improved water

5.6% households



Infant mortality rate (per 1,000 live births)

15

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 3 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.675



MHE
0.675

Raw MHE
0.746

Relative MHE
0.604

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

-
0
-



Flood

0.8%
2,300
-



Landslide

0.1%
248
3.7 Million



Storm Surge

1.0%
2,727
0 Million



Sea Level Rise

45.2%
123,967
5.5 Billion



Wildfire

32.1%
88,057
6.1 Billion



Tsunami

0.4%
1,129
-



VULNERABILITY (V)

RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.392

Vulnerability in Colón is primarily driven by Gender Inequality and Environmental Stress. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



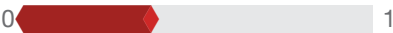
Environmental Stress SCORE: 0.562 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.17% Percent forest cover lost	68.2 Density of livestock per sq. km	140.2% Percent of freshwater consumption to production
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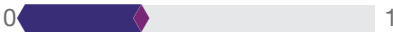
Vulnerable Health Status SCORE: 0.371 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



105.5 Dengue incidence per 100,000 persons	25.9 AIDS incidence per 100,000 persons	0.4 Malaria Incidence per 100,000 persons	42.7 TB incidence per 100,000 persons	9.3% Prevalence of stunting	1.9% Disability	36.81 Maternal Mortality Rate per 100,000 live births
14.54 Infant mortality per 1,000 live births	75.65 Life expectancy					



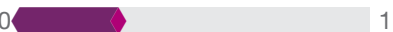
Clean Water Vulnerability SCORE: 0.337 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



5.6% Households without access to improved drinking water	97.9% Households with access to improved sanitation
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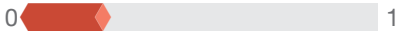
Information Access Vulnerability SCORE: 0.287 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



64.8% Households with radio	91.3% Households with TV	60.5% Households with internet	78.2% School attendance rate	9.88 Average years of schooling	1.5% Illiteracy rate
---------------------------------------	------------------------------------	--	--	---	--------------------------------



Economic Constraints SCORE: 0.217 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



14.6% Poverty rate
0.59 Economic dependency ratio



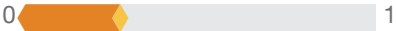
Gender Inequality SCORE: 0.698 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.25 Ratio female to male secondary enrollment
0.3 Ratio female to male labor
0.07 Proportion of female seats in local government



Population Pressures SCORE: 0.275 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



3.0% Average annual urban population change
1.6% Percent average population change



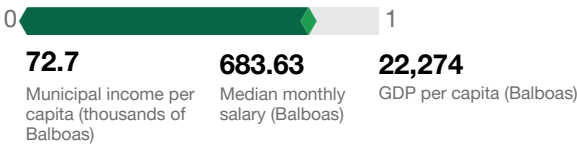
COPING CAPACITY (CC)

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.579

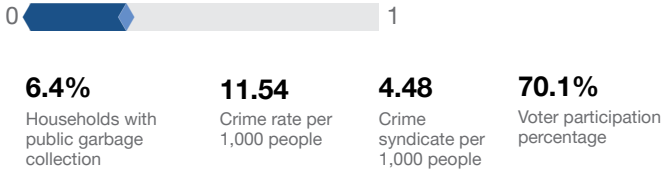
Colón exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



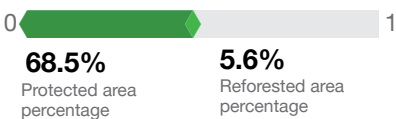
Economic Capacity SCORE: 0.818 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.277 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.482 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.673 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.494 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.477 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.785 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.936 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.593

Colón's score and ranking are due to High Vulnerability combined with High Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Gender Inequality



Environmental Stress



Governance



Transportation Capacity



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



Flood

RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.076



Sea Level Rise

RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.364



Storm Surge

RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.109



Landslide

RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.117



Wildfire

RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.396



Tsunami

RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.069



MULTI-HAZARD RISK (MHR)

6 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.496



Colón's score and ranking are due to High Multi-hazard Exposure combined with High Vulnerability and High Coping Capacity scores.

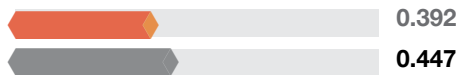
Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



COLÓN RECOMMENDATIONS



Gender Inequality

Colón ranks 4th in overall Gender Inequality in Panama. While a greater proportion of females than males attend secondary school (1.25 ratio of females to males), the rate of female participation in the labor force is far lower than their male counterparts.

Boost labor participation by promoting workforce opportunities for women that include provisions for family support, such as quality, affordable childcare. Support equal pay for equal work to foster economic growth and reduce economic dependency.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

COLÓN RECOMMENDATIONS

2

Environmental Stress

Climate change and unsustainable development contribute to increased hazard exposure, food insecurity, uninhabitable environments, internally displaced people, forced migration, and economic upheaval. High poverty rates and income inequality can further be exacerbated with inadequate planning and unchecked development. The province suffers from a high percentage of deforestation. Environmental protection is vital to ensuring sustainable development within the region and country. Land management use is essential to monitor ecological stress while balancing economic benefits closely. Food security and access to a clean water supply are highly dependent on land use governance, sustainable development, and planning. Given that Colón province has the third highest overall Multi-Hazard Exposure in the country, monitoring and reducing environmental stress represents a priority for mitigating disaster impacts.

Promoting sustainable agriculture and the development of long-term goals promotes stability within the agriculture industry and ensures stable economic opportunities for the workforce in agrarian societies. Early identification of the future for the development of industrial or agricultural areas allows studies to understand the impact on populations dependent on clean water and food resources. Provide educational training to both private and public entities to educate on sustainable development and develop sustainable metrics, ensuring that overdevelopment does not occur and that populations continue to have their food and water needs met.

COLÓN RECOMMENDATIONS

3

Governance

Colon ranks amongst the lowest in Panama for Governance with a crime rate of approximately 11 per 1,000 and a crime syndicate rate of 5 per 1,000. Also contributing to the low rank is a low rate of garbage collection. Challenges in governance can undermine stability for civil society creating further stress among disparate and disadvantaged populations.

Provide financial and technical assistance to law enforcement to adequately address criminal activity. Identify underlying factors and drivers of illegal activity to ensure targeted actions with government resources are best utilized to reduce criminal activity, especially within disparate populations- i.e., women and girls. Develop performance measures and effectiveness measures to use limited government resources best to reduce strain and increase governing ability. Identify feedback mechanisms for the public to best understand and identify issues of governance within civil society.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

COLÓN RECOMMENDATIONS

4

Transportation Capacity

Limited transportation capacity within a province limits the economic opportunity and mobility of society, and it limits the opportunity for individuals to attend higher education and find gainful employment. Reduced transportation capacity can also hamper emergency response activities and decrease public access to vital resources such as adequate healthcare and food.

Identify areas with limited transportation opportunities to identify the best project areas where increasing transportation capacity has the highest impact. Identify emergency routes and vital transportation routes that provide critical access to services to the population. Ensure new transportation routes are developed within sustainable development guidelines with proper materials.

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PANAMÁ

DARIÉN

NDPBA PROVINCES AND INDIGENOUS COMARCAS PROFILE

PANAMÁ DARIÉN

CAPITAL: LA PALMA

Area: 11,893 km²

The Darién province is located in the eastern region of Panama. This Province is divided into 3 districts: La Palma (The Capital), Chepigana, Pinogana and Santa Fe. The province borders Pacific Ocean to the south, Kuna Yala to the north, Panamá to the west and Colombia to the east. The main economic sources are cattle and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very High
Score: 0.613 • Rank: 2/13



RESILIENCE (R) - Low
Score: 0.402 • Rank: 10/13



MULTI-HAZARD EXPOSURE (MHE) - High
Score: 0.645 • Rank: 4/13



VULNERABILITY (V) - High
Score: 0.537 • Rank: 4/13



COPING CAPACITY (CC) - Very Low
Score: 0.342 • Rank: 11/13



Population (2020 Estimate)
57,818



Population in poverty
43.1%



Average years in school
7.1



Households with access to improved water
11.6% households



Infant mortality rate (per 1,000 live births)
20

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: 4 / 13 PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.645



MHE
0.645

Raw MHE
0.467

Relative MHE
0.822

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

70.2%

39,022

1.9 Billion



Flood

7.3%

4,035

49.1 Million



Landslide

0.3%

145

1 Million



Storm Surge

2.2%

1,229

24.5 Million



Sea Level Rise

19.5%

10,853

153.2 Million



Wildfire

15.0%

8,358

333.6 Million



Tsunami

7.2%

3,998

39 Thousand



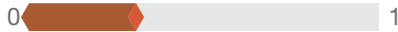
VULNERABILITY (V)

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.537

Vulnerability in Darién is primarily driven by Population Pressures and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



Environmental Stress SCORE: 0.311 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.08% Percent forest cover lost	64.8 Density of livestock per sq. km	45.1% Percent of freshwater consumption to production
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Vulnerable Health Status SCORE: 0.677 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



198.4 Dengue incidence per 100,000 persons	11.8 AIDS incidence per 100,000 persons	204.3 Malaria Incidence per 100,000 persons	32.3 TB incidence per 100,000 persons	22.2% Prevalence of stunting	4.6% Disability	95.42 Maternal Mortality Rate per 100,000 live births
20.04 Infant mortality per 1,000 live births	74.64 Life expectancy					



Clean Water Vulnerability SCORE: 0.629 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



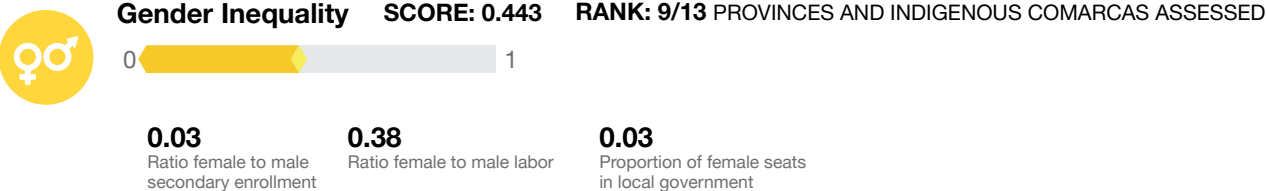
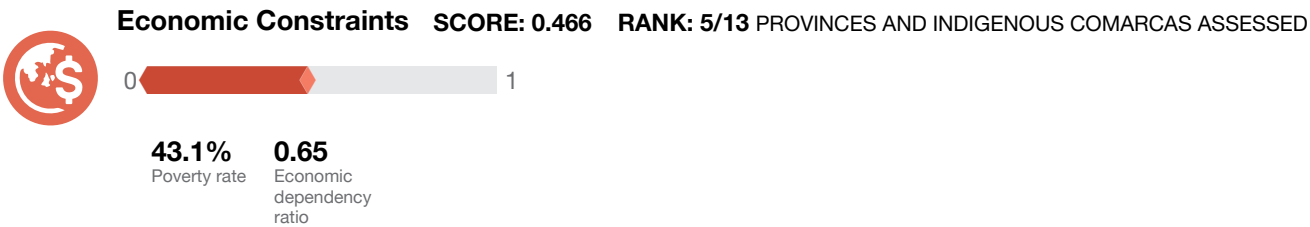
11.6% Households without access to improved drinking water	81.5% Households with access to improved sanitation
--	---



Information Access Vulnerability SCORE: 0.540 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



55.4% Households with radio	68.5% Households with TV	61.6% Households with internet	77.1% School attendance rate	7.1 Average years of schooling	11.4% Illiteracy rate
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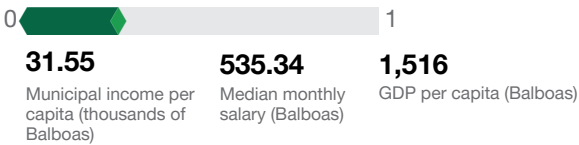
COPING CAPACITY (CC)

RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.342

Darién exhibits weaker Coping Capacity in the areas of Transportation Capacity and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



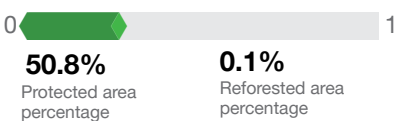
Economic Capacity SCORE: 0.265 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



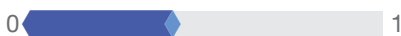
Governance SCORE: 0.373 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.267 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.414 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.411 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.22 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.458 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.566 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.402

Darién's score and ranking are due to High Vulnerability combined with Very Low Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Population Pressures



Vulnerable Health Status



Transportation Capacity



Economic Capacity



HAZARD-SPECIFIC RISK (HSR)



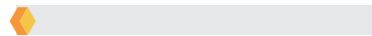
Earthquake



RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.563



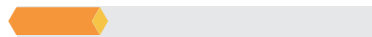
Flood



RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.290



Sea Level Rise



RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.242



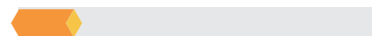
Storm Surge



RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.455



Landslide



RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.159



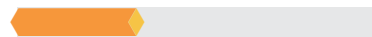
Wildfire



RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.362



Tsunami



RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.342



MULTI-HAZARD RISK (MHR)

2 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.613



Darién's score and ranking are due to High Multi-hazard Exposure combined with High Vulnerability and Very Low Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



DARIÉN RECOMMENDATIONS



Population Pressures

Darién ranks the highest in Panama for population pressures with an annual urban population change of 8.43%. Unplanned population change increases stress on public utilities, emergency services, and health care. An increase in these decreases the ability for governments to respond adequately to disasters and mass casualties with already limited resources. The migration of large populations leads to strain on social services, economic opportunities, and health care access. Lack of economic opportunity can potentially cause increased criminal activity, increased nutrition needs for vulnerable populations (i.e., elderly and adolescents), and lack of adequate shelter for individuals.

Given that Darién ranks fourth highest in overall Multi-Hazard Exposure, continue to monitor population growth to ensure policy, plans, and programs meet requirements to appropriately respond to mass casualties and disasters. Ensure population growth and migration remains at a stable and sustainable level. Identify causes and drivers of migration for large populations to address needs and limit forced migration. Ensure a comprehensive understanding of population change across the country to meet public safety needs and requirements.

DARIÉN RECOMMENDATIONS

2

Vulnerable Health Status

Lack of adequate health care, housing, nutrition, and sanitary conditions contributes to a high degree of infant mortality, maternal mortality, and inadequate health care access that disproportionately affects disparate populations such as women and children. Darién ranks are high in infant mortality, maternal mortality, disabilities, and diseases leading to the second-highest ranking of vulnerable health status.

Create healthier environments for all members of society and address needs for in-home care, sub-acute care, acute care, and clinical care. Limit exposure to environmental risks, infectious diseases, and provide critical medical intervention of communicable illnesses and emergent medical care. Create public health programs to educate populations on proper nutrition, adolescent, and elderly care, and preventing the spread of communicable diseases. Provide necessary prophylaxis through public health programs to prevent pathogenesis and spread of specific diseases like malaria, dengue fever, and AIDS.

DARIÉN RECOMMENDATIONS

3

Transportation Capacity

Limited transportation capacity within a province limits the economic opportunity and mobility of society. Darién ranks lowest in overall Transportation Capacity in the country. A high distance to ports means goods must travel longer to reach their destination increasing costs for goods and services. It limits the opportunity for individuals to attend higher education and find gainful employment. Reduced transportation capacity can also hamper emergency response activities and decrease public access to vital resources such as adequate healthcare and food.

Identify areas with limited transportation opportunities to identify project areas where increasing transportation capacity has the highest impact. Identify emergency routes and vital transportation routes that provide critical access to services to the population. Ensure new transportation routes are developed within sustainable development guidelines with proper materials. Identify alternate transit routes and methods to reduce the distance traveled for individuals and goods and services.

DARIÉN RECOMMENDATIONS

4

Economic Capacity

Socioeconomic deprivation increases dependency on limited government resources and individuals and limits economic opportunity and mobility. Darién ranks low in economic capacity with low median salaries, municipal income, and GDP per capita. Lack of economic ability increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and civil society.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and provide equal opportunity programs for disparate people to increase economic opportunity for all.

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PANAMÁ

EMBERÁ

NDPBA PROVINCES AND INDIGENOUS COMARCAS PROFILE

PANAMÁ EMBERÁ

CAPITAL: UNIÓN CHOCÓ

Area: 4,394 km²

Comarca Emberá Is located in the eastern region of Panama. This Province is divided into 2 districts: Unión Chocó (The Capital), Cémaco and Sambú. The comarca borders Kuna Yala to the north and Darién which surrounds the comarca boundary. The main economic source is cattle.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - High
Score: 0.589 • Rank: 3/13



RESILIENCE (R) - Very Low
Score: 0.374 • Rank: 11/13



MULTI-HAZARD EXPOSURE (MHE) - Low
Score: 0.513 • Rank: 8/13



VULNERABILITY (V) - Low
Score: 0.605 • Rank: 2/13



COPING CAPACITY (CC) - Low
Score: 0.352 • Rank: 10/13



Population (2020 Estimate)
13,016



Population in poverty
62.9%



Average years in school
5.6



Households with access to improved water
62.4% households



Infant mortality rate (per 1,000 live births)
18

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS
SCORE: 0.513



MHE
0.513

Raw MHE
0.1

Relative MHE
0.927

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

77.3%

8,898
374 Million



Flood

8.9%

1,020
30.5 Million



Landslide

0
-



Storm Surge

-
-



Sea Level Rise

17.3%

1,994
-



Wildfire

0
-



Tsunami

0.0%

0
8.9 Thousand



VULNERABILITY (V)

RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.605

Vulnerability in Emberá is primarily driven by Clean Water Access Vulnerability and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



Environmental Stress SCORE: 0.000 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.03% Percent forest cover lost	9.89 Density of livestock per sq. km	- Percent of freshwater consumption to production
---	--	---



Vulnerable Health Status SCORE: 0.849 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



198.4 Dengue incidence per 100,000 persons	11.8 AIDS incidence per 100,000 persons	204.3 Malaria Incidence per 100,000 persons	32.3 TB incidence per 100,000 persons	30.6% Prevalence of stunting	5.4% Disability	392.16 Maternal Mortality Rate per 100,000 live births
17.75 Infant mortality per 1,000 live births	71.03 Life expectancy					



Clean Water Vulnerability SCORE: 0.904 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



62.4% Households without access to improved drinking water	59.3% Households with access to improved sanitation
--	---



Information Access Vulnerability SCORE: 0.763 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



37.0% Households with radio	47.8% Households with TV	25.9% Households with internet	75.7% School attendance rate	5.61 Average years of schooling	14.1% Illiteracy rate
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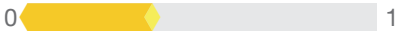
Economic Constraints SCORE: 0.702 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



62.9% Poverty rate
0.74 Economic dependency ratio



Gender Inequality SCORE: 0.363 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.05 Ratio female to male secondary enrollment
0.31 Ratio female to male labor
0 Proportion of female seats in local government



Population Pressures SCORE: 0.655 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



- Average annual urban population change
2.1% Percent average population change



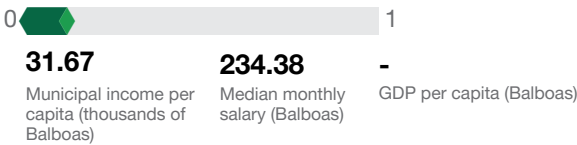
COPING CAPACITY (CC)

RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.352

Emberá exhibits weaker Coping Capacity in the areas of Economic Capacity and Health Care Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



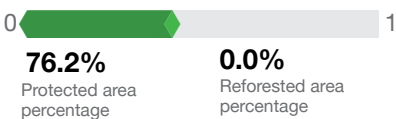
Economic Capacity SCORE: 0.116 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



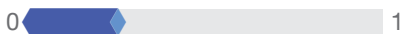
Governance SCORE: 0.663 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.422 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



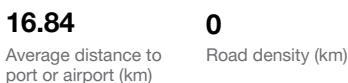
Infrastructure Capacity SCORE: 0.255 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.177 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.27 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.259 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.315 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.374

Emberá's score and ranking are due to Low Vulnerability combined with Low Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Clean Water Access Vulnerability



Vulnerable Health Status



Economic Capacity



Health Care Capacity



HAZARD-SPECIFIC RISK (HSR)



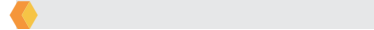
Earthquake



RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.573



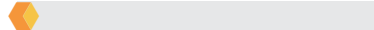
Flood



RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.350



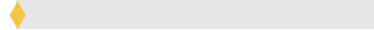
Sea Level Rise



RANK: 13 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.042



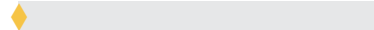
Storm Surge



RANK: 13 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



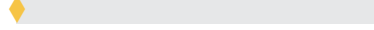
Landslide



RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



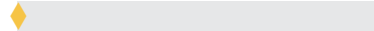
Wildfire



RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



Tsunami



RANK: 13 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



MULTI-HAZARD RISK (MHR)

3 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.589



Emberá's score and ranking are due to Low Multi-hazard Exposure combined with Low Vulnerability and Low Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

EMBERÁ SCORE
COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



EMBERÁ RECOMMENDATIONS



Clean Water Access Vulnerability

A lack of access to improved water sources and improved sanitation can lead to contracting enteric diseases from contaminated water supplies and increases the risk of the population facing an acute enteric disease outbreak. Emberá ranks the second highest in Panama for clean water vulnerability with elevated rates of unimproved water and sanitation. Acute enteric disease outbreaks from inadequate sanitation and contaminated water exacerbate existing vulnerabilities and stress local health care resources.

Investment in the development and water treatment and water distribution systems ensures populations have access to clean water and adequate sanitation services. Develop an emergency action plan to identify and prevent acute enteric disease outbreaks can prevent community spread and isolate sources of contaminated water or inadequate sanitation.

EMBERÁ RECOMMENDATIONS

2

Vulnerable Health Status

Lack of adequate health care contributes to a high degree of infant mortality, maternal mortality, and inadequate health care access that disproportionately affects disparate populations such as women and girls. Emberá ranks the highest in Panama in Vulnerable health status with high rates of prevalence of both Dengue Fever and Malaria. Exacerbating vulnerable health status is the lack of clean water access in Emberá, which can spread enteric disease and strain health care resources.

Create healthier environments for all members of society and address needs for in-home care, sub-acute care, acute care, and clinical care. Limit exposure to environmental risks, infectious diseases, and provide critical medical intervention of communicable illnesses and emergent medical care. Simultaneously address health issues and clean water access to reduce the spread of infectious disease. Create public health programs to educate populations on proper nutrition, adolescent, and elderly care, and preventing the spread of communicable diseases. Provide necessary prophylaxis through public health programs to avoid pathogenesis of specific diseases such as malaria, dengue fever, and AIDS.

EMBERÁ RECOMMENDATIONS

3

Economic Capacity

Socioeconomic deprivation increases dependency on limited both government resources and individuals and limits economic opportunity and mobility. Emberá has the lowest median monthly salary in Panama. Lack of economic capacity increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and civil society. Lack of income and currency can exacerbate health status and limit treatment options for individuals and families. Low income can also contribute to inadequate sanitation and access to clean water sources.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and provide equal opportunity programs for disparate people to increase economic opportunity for all. Create and implement health care programs to ensure all members of society receive adequate care and ensure all of society, regardless of income status, has sufficient access to clean water and sanitary conditions.

EMBERÁ RECOMMENDATIONS

4

Health Care Capacity

Inadequate health care capacity exacerbates other areas such as economic participation, dependency, and adolescent and elderly care. Emberá has one of the greatest distances for populations to reach a hospital in all of Panama and only 1.63 physicians per 10,000 persons and 0.8 nurses per 10,000 persons. Lack of skilled health care professionals and resources creates a limited resource, forcing triage of medical care to meet emergent medical needs. The triage of limited medical resources exacerbates mass casualties, disaster situations, and acute disease outbreaks.

Remove health care barriers to adequately address outpatient medical needs for all members of society, preventing medical conditions from turning into more difficult in-patient treatment situations, creating stress on medical systems. Create educational programs that address proper nutrition, exercise, vaccination, and safe sex to reduce behaviors that require medical intervention. Correctly identify hospitals and their respective trauma levels for pediatric and adult care for mass casualty situations. Ensure hospitals meet standards of care determined by the government. Create and build outpatient health clinics to address medical needs without a hospital. Identify a system of biosurveillance to provide early intervention of disease outbreaks.

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PANAMÁ

HERRERA

**NDPBA PROVINCES AND INDIGENOUS COMARCAS
PROFILE**

PANAMÁ HERRERA

CAPITAL: CHITRÉ

Area: 2,362 km²

The Herrera province is located in the central region of Panama. This Province is divided into 7 districts: Chitré (The Capital), Las Minas, Los Pozos, Océ, Parita, Pesé and Santa María. The province borders Veraguas to the west, Los Santos to the south, Coclé to the north and the Pacific Ocean to the west. The main economic sources are sugar cane, cattle and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low
Score: 0.383 • Rank: 13/13



RESILIENCE (R) - High
Score: 0.644 • Rank: 3/13



MULTI-HAZARD EXPOSURE (MHE) - Low
Score: 0.437 • Rank: 9/13



VULNERABILITY (V) - Low
Score: 0.351 • Rank: 11/13



COPING CAPACITY (CC) - Very High
Score: 0.638 • Rank: 1/13



Population (2020 Estimate)
118,982



Population in poverty
13.8%



Average years in school
9.1



Households with access to improved water
0.8% households



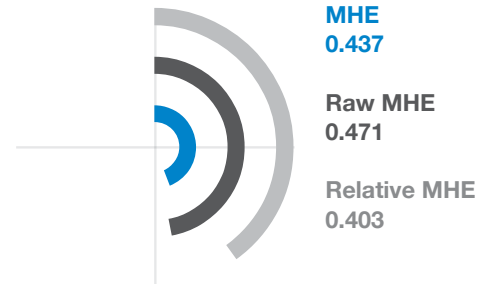
Infant mortality rate (per 1,000 live births)
8

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 9 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.437



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

37.6%
44,902
1.3 Billion



Flood

8.0%
9,512
83.7 Million



Landslide

0.2%
200
1.2 Million



Storm Surge

0.1%
137
1.3 Million



Sea Level Rise

22.6%
27,048
168.2 Million



Wildfire

14.0%
16,677
37.7 Million



Tsunami

1.0%
1,142
45 Thousand



VULNERABILITY (V)

RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.351

Vulnerability in Herrera is primarily driven by Gender Inequality and Environmental Stress. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



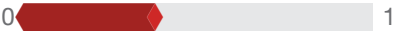
Environmental Stress SCORE: 0.620 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.08% Percent forest cover lost	96.91 Density of livestock per sq. km	98.8% Percent of freshwater consumption to production
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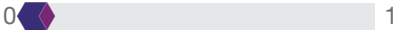
Vulnerable Health Status SCORE: 0.382 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



103.8 Dengue incidence per 100,000 persons	5.9 AIDS incidence per 100,000 persons	0 Malaria Incidence per 100,000 persons	9.3 TB incidence per 100,000 persons	4.0% Prevalence of stunting	4.6% Disability	124.15 Maternal Mortality Rate per 100,000 live births
7.5 Infant mortality per 1,000 live births	78.76 Life expectancy					



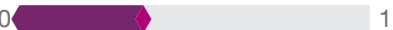
Clean Water Vulnerability SCORE: 0.063 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.8% Households without access to improved drinking water	98.9% Households with access to improved sanitation
---	---



Information Access Vulnerability SCORE: 0.360 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



72.8% Households with radio	89.7% Households with TV	56.3% Households with internet	75.4% School attendance rate	9.07 Average years of schooling	5.3% Illiteracy rate
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Economic Constraints SCORE: 0.129 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



13.8% Poverty rate
0.52 Economic dependency ratio



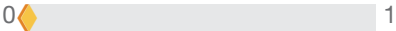
Gender Inequality SCORE: 0.891 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.25 Ratio female to male secondary enrollment
0.41 Ratio female to male labor
0.05 Proportion of female seats in local government



Population Pressures SCORE: 0.010 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



2.7% Average annual urban population change
0.2% Percent average population change



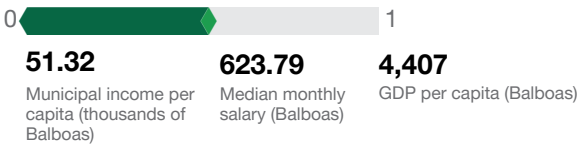
COPING CAPACITY (CC)

RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.638

Herrera exhibits weaker Coping Capacity in the areas of Economic Capacity and Governance. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



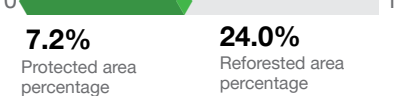
Economic Capacity SCORE: 0.527 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.612 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.457 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.836 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.866 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.788 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.776 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.914 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

**RANK: 3 / 13 PROVINCES AND
INDIGENOUS COMARCAS ASSESSED**
SCORE: 0.644

Herrera's score and ranking are due to Low Vulnerability combined with Very High Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



**Gender
Inequality**



**Environmental
Stress**



Economic Capacity



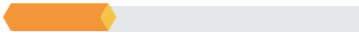
Governance



HAZARD-SPECIFIC RISK (HSR)



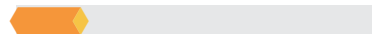
Earthquake



RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.283



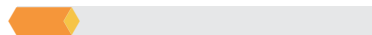
Flood



RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.183



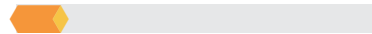
Sea Level Rise



RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.160



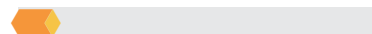
Storm Surge



RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.125



Landslide



RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.097



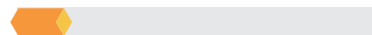
Wildfire



RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.180



Tsunami



RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.132



MULTI-HAZARD RISK (MHR)

13 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.383

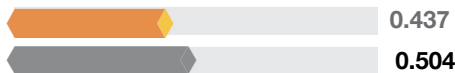


Herrera's score and ranking are due to Low Multi-hazard Exposure combined with Low Vulnerability and Very High Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



HERRERA RECOMMENDATIONS



Gender Inequality

Herrera province ranks highest in the country in overall Gender Inequality, driven by the combination of high gender disparities in secondary education enrollment rates, limited participation of women in the labor force, and female underrepresentation in local government.

Boost labor participation by promoting workforce opportunities for women that include provisions for family support, such as quality, affordable childcare. Support equal pay for equal work to foster economic growth and reduce economic dependency.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

HERRERA RECOMMENDATIONS

2

Environmental Stress

Climate change and unsustainable development contribute to food insecurity, uninhabitable environments, internally displaced people, forced migration, and economic upheaval. Herrera ranks 3rd in Panama for environmental stress. High poverty rates and income inequality can further be exacerbated with inadequate planning and unchecked development. Herrera also ranks low in overall Economic Capacity, which the drivers of environmental stress can aggravate.

Environmental protection is vital to ensuring sustainable development within the country, and land management is essential to monitor ecological stress while balancing economic use closely. Promote sustainable agriculture and develop long-term goals to promote stability within the agriculture industry and ensure stable workforce economic opportunities. Provide educational training to both private and public entities to educate on sustainable development and to develop sustainable metrics ensuring overdevelopment does not take place.

HERRERA RECOMMENDATIONS

3

Economic Capacity

Socioeconomic deprivation increases dependency on limited both government resources and individuals and limits economic opportunity and mobility. Lack of economic capacity increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and civil society.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and provide equal opportunity programs for disparate people to increase economic opportunity for all.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

HERRERA RECOMMENDATIONS

4

Governance

Challenges in governance can undermine stability for civil society creating further stress among disparate and disadvantaged populations. While Herrera ranks higher on governance than most provinces, the low economic capacity combined with high gender inequality and environmental stress can contribute to many correlated issues such as crime, employment, the disparity between females and males, and governance.

Provide financial and technical assistance to law enforcement to adequately address criminal activity. Identify underlying factors and drivers of illegal activity to ensure targeted actions with government resources are best utilized to reduce criminal activity. Develop methods for measures of performance and measures of effectiveness to use limited government resources best. Identify feedback mechanisms for the public to best understand and identify issues of governance within civil society.

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PANAMÁ

KUNA YALA

**NDPBA PROVINCES AND INDIGENOUS COMARCAS
PROFILE**

PANAMÁ

KUNA YALA

CAPITAL: EL PORVENIR

Area: 2,358 km²

Comarca Kuna Yala is located in the eastern region of Panama. This Province is divided into 4 districts: El Porvenir (The Capital), Narganá, Ailigandi, Dubwala and Puerto Obaldía. The comarca borders Atlantic Ocean to the north, Colombia to the east, Colón to the west and Panamá, Darién and Emberá to the south. The main economic sources are cattle and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Medium

Score: 0.458 • Rank: 7/13



RESILIENCE (R) - Very Low

Score: 0.368 • Rank: 12/13



MULTI-HAZARD EXPOSURE (MHE) - Very Low

Score: 0.110 • Rank: 13/13



VULNERABILITY (V) - Very Low

Score: 0.597 • Rank: 3/13



COPING CAPACITY (CC) - Very Low

Score: 0.333 • Rank: 12/13



Population (2020 Estimate)

47,341



Population in poverty

73.5%



Average years in school

4.9



Households with access to improved water

35.0% households



Infant mortality rate (per 1,000 live births)

10

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 13 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.110



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake
13.9%
4,329
108 Million



Flood
-
0
-



Landslide
-
0
-



Storm Surge
8.7%
2,714
0 Million



Sea Level Rise
13.3%
4,139
39.5 Million



Wildfire
-
0
-



Tsunami
0.8%
254
4.3 Thousand



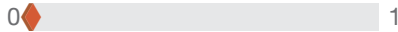
VULNERABILITY (V)

RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.597

Vulnerability in Kuna Yala is primarily driven by Information Access Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



Environmental Stress SCORE: 0.012 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.03% Percent forest cover lost	11.22 Density of livestock per sq. km	- Percent of freshwater consumption to production
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Vulnerable Health Status SCORE: 0.526 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



122.1 Dengue incidence per 100,000 persons	0.4 AIDS incidence per 100,000 persons	621.7 Malaria Incidence per 100,000 persons	153.7 TB incidence per 100,000 persons	61.4% Prevalence of stunting	1.8% Disability	339.56 Maternal Mortality Rate per 100,000 live births
9.89 Infant mortality per 1,000 live births	72.27 Life expectancy					



Clean Water Vulnerability SCORE: 0.934 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



35.0% Households without access to improved drinking water	0.4% Households with access to improved sanitation
--	--



Information Access Vulnerability SCORE: 0.987 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



29.8% Households with radio	34.8% Households with TV	7.2% Households with internet	57.2% School attendance rate	4.89 Average years of schooling	32.5% Illiteracy rate
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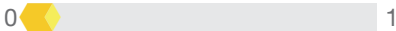
Economic Constraints SCORE: 0.944 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



73.5% Poverty rate
0.9 Economic dependency ratio



Gender Inequality SCORE: 0.073 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.05 Ratio female to male secondary enrollment
0.12 Ratio female to male labor
0.13 Proportion of female seats in local government



Population Pressures SCORE: 0.703 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



- Average annual urban population change
2.2% Percent average population change



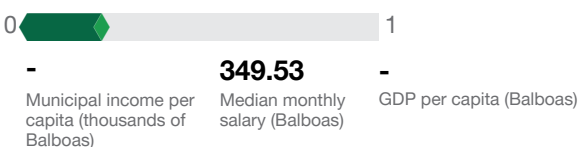
COPING CAPACITY (CC)

RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.333

Kuna Yala exhibits weaker Coping Capacity in the areas of Economic Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



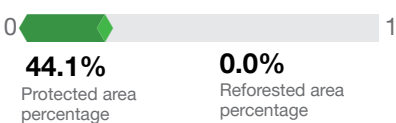
Economic Capacity SCORE: 0.216 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



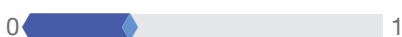
Governance SCORE: 0.530 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.226 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



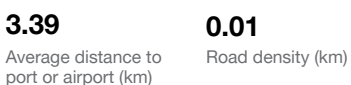
Infrastructure Capacity SCORE: 0.290 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.302 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.506 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.298 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.052 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

**RANK: 12 / 13 PROVINCES AND
INDIGENOUS COMARCAS ASSESSED**
SCORE: 0.368

Kuna Yala's score and ranking are due to Very Low Vulnerability combined with Very Low Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Information
Access
Vulnerability



Economic
Constraints



Economic Capacity



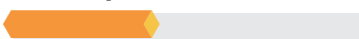
Communications
Capacity



HAZARD-SPECIFIC RISK (HSR)



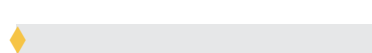
Earthquake



RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.409



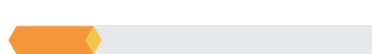
Flood



RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



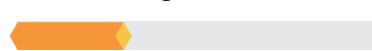
Sea Level Rise



RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.224



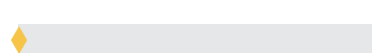
Storm Surge



RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.308



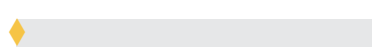
Landslide



RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



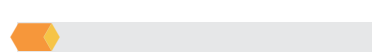
Wildfire



RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



Tsunami



RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.096



MULTI-HAZARD RISK (MHR)

7 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.458



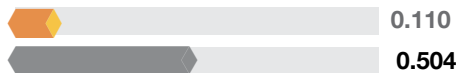
Kuna Yala's score and ranking are due to Very Low Multi-hazard Exposure combined with Very Low Vulnerability and Very Low Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

KUNA YALA SCORE
COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



KUNA YALA RECOMMENDATIONS



Information Access Vulnerability

Kuna Yala ranks the highest in access to information vulnerability in Panama. This high rank is driven the highest number of households without radios, the second highest without television, the highest homes without internet, and the highest illiteracy rate in Panama. This intensifies marginalization and population pressures by preventing entry into the workforce and disproportionately affects disparate populations such as women and girls.

Other issues such as food security and increases in criminal activity have been linked to information access vulnerability. Lack of ability to deliver critical messages related to education, health, and natural disasters affects society at all levels, especially parts of society without reliable communication in their homes.

Address barriers to education and the possible drivers (poverty, food insecurity) that limit individuals' opportunities for education. Ensure households have reliable access to communications within their home, such as radio, television, and phone line. Effective communication and warning systems significantly reduce risk and vulnerability.

KUNA YALA RECOMMENDATIONS

2

Economic Constraints

Dependency of individuals limits mobility for populations and increases vulnerability due to lack of opportunity. Kuna Yala ranks the second highest in Panama for economic constraints. Drivers contributing to this rank are the second-highest poverty in Panama and the highest economic dependency rank. Populations such as families with children or the elderly are more likely to be severely affected by natural disasters and face longer recovery times, significantly limiting mobility and employment options.

Assess disaster response and recovery plans to ensure that economically vulnerable populations are incorporated for long- and short-term recovery. Create public policies guaranteeing equal opportunity and fair wages for all.

KUNA YALA RECOMMENDATIONS

3

Economic Capacity

Socioeconomic deprivation increases dependency on limited both government resources and individuals and limits economic opportunity and mobility. Kuna Yala ranks low in economic capacity with a median monthly salary in the province at 349.53. Lack of economic capacity increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and civil society.

The high scores among drivers of Information Access Vulnerability and Economic Constraints are exacerbating limitations in economic capacity in Kuna Yala. Encourage programs to generate public revenue and create new job opportunities can address multiple drivers simultaneously. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and provide equal opportunity programs for disparate people to increase economic opportunity for all.

Address barriers to education and the possible drivers (poverty, food insecurity) that limit individuals' opportunities for education. Ensure households have reliable access to communications within their home, such as radio, television, and phone line. Effective communication and warning systems significantly reduce risk and vulnerability.

KUNA YALA RECOMMENDATIONS

4

Communications Capacity

Kuna Yala ranks among the lowest in the country for communications capacity. Unreliable communications and lack of access to communications infrastructure exacerbate information access vulnerability and hinder governments' ability to share critical information during disasters. Many households in this province lack access to fixed telephones and mobile phones. Lack of adequate communication can also contribute to limited access to public health, safety, and nutrition.

Expand communications infrastructure to ensure coverage, accessibility, and reliability of communications during disasters. Encourage telecommunication infrastructure development at a sustainable pace. Identify messages that can contribute to higher education on public health, safety, and nutrition. Create communications plans to share critical information with the public during disasters with primary, alternate, contingency, and emergency plans for communication.

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PANAMÁ

LOS SANTOS

**NDPBA PROVINCES AND INDIGENOUS COMARCAS
PROFILE**

PANAMÁ

LOS SANTOS

CAPITAL: LAS TABLAS

Area: 3,809 km²

The Los Santos province is located in the central region of Panama. This Province is divided into 7 districts: Las Tablas (The Capital), Los Santos, Macaracas, Pedasí, Pocrí and Tonosí. The province borders Pacific Ocean to the south and east, Veraguas to the west and Herrera to the north. The main economic sources are cattle, coffee, sugar cane and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low
Score: 0.431 • Rank: 10/13



RESILIENCE (R) - Very High
Score: 0.647 • Rank: 2/13



MULTI-HAZARD EXPOSURE (MHE) - Medium
Score: 0.587 • Rank: 5/13



VULNERABILITY (V) - Medium
Score: 0.297 • Rank: 12/13



COPING CAPACITY (CC) - High
Score: 0.591 • Rank: 3/13



Population (2020 Estimate)
95,557



Population in poverty
10.2%



Average years in school
9.1



Households with access to improved water
0.8% households



Infant mortality rate (per 1,000 live births)
12

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 5 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.587



MHE
0.587

Raw MHE
0.499

Relative MHE
0.674

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

64.6%

62,856
2.1 Billion



Flood

3.3%

3,173
15.3 Million



Landslide

0.3%

281
21.4 Million



Storm Surge

0.1%

96
13.1 Million



Sea Level Rise

14.0%

13,658
249.4 Million



Wildfire

0.8%

819
341.4 Million



Tsunami

1.7%

1,634
63 Thousand



VULNERABILITY (V)

RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.297

Vulnerability in Los Santos is primarily driven by Environmental Stress and Vulnerable Health Status. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



Environmental Stress SCORE: 0.714 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.01% Percent forest cover lost	119.54 Density of livestock per sq. km	94.3% Percent of freshwater consumption to production
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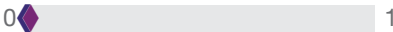
Vulnerable Health Status SCORE: 0.436 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



145.7 Dengue incidence per 100,000 persons	19.9 AIDS incidence per 100,000 persons	0 Malaria incidence per 100,000 persons	4.2 TB incidence per 100,000 persons	3.4% Prevalence of stunting	4.8% Disability	86.73 Maternal Mortality Rate per 100,000 live births
11.67 Infant mortality per 1,000 live births	79.07 Life expectancy					



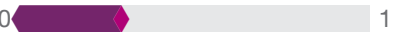
Clean Water Vulnerability SCORE: 0.016 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.8% Households without access to improved drinking water	99.6% Households with access to improved sanitation
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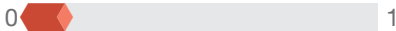
Information Access Vulnerability SCORE: 0.296 RANK: 9/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



73.9% Households with radio	91.3% Households with TV	58.3% Households with internet	80.8% School attendance rate	9.06 Average years of schooling	5.4% Illiteracy rate
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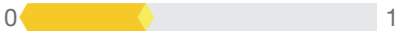
Economic Constraints SCORE: 0.107 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



10.2% Poverty rate
0.52 Economic dependency ratio



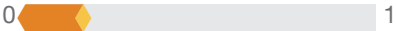
Gender Inequality SCORE: 0.344 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.01 Ratio female to male secondary enrollment
0.34 Ratio female to male labor
0.11 Proportion of female seats in local government



Population Pressures SCORE: 0.168 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



4.6% Average annual urban population change
0.2% Percent average population change



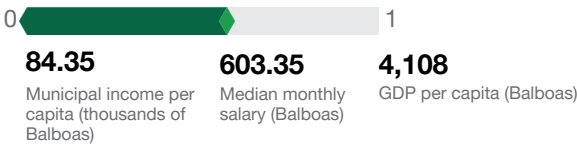
COPING CAPACITY (CC)

RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.591

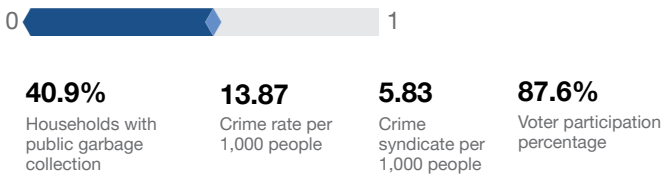
Los Santos exhibits weaker Coping Capacity in the areas of Governance and Economic Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



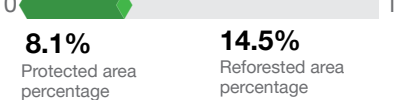
Economic Capacity SCORE: 0.581 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.530 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.282 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



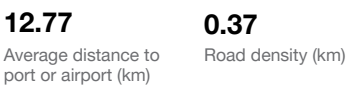
Infrastructure Capacity SCORE: 0.764 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



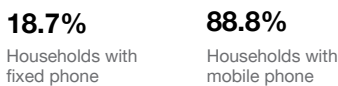
Health Care Capacity SCORE: 0.822 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.597 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.696 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.940 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.647

Los Santos's score and ranking are due to Medium Vulnerability combined with High Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Environmental Stress



Vulnerable Health Status



Governance



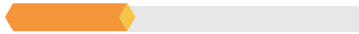
Economic Capacity



HAZARD-SPECIFIC RISK (HSR)



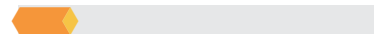
Earthquake



RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.332



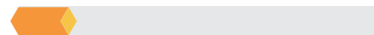
Flood



RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.147



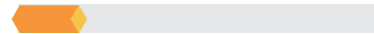
Sea Level Rise



RANK: 12 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.145



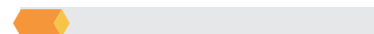
Storm Surge



RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.172



Landslide



RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.118



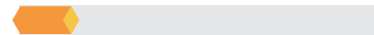
Wildfire



RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.154



Tsunami



RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.148



MULTI-HAZARD RISK (MHR)

10 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.431



Los Santos's score and ranking are due to Medium Multi-hazard Exposure combined with Medium Vulnerability and High Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

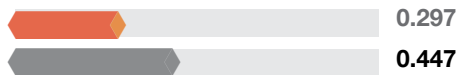
█ █ █ LOS SANTOS SCORE
█ COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



LOS SANTOS RECOMMENDATIONS



Environmental Stress

Climate change and unsustainable development contribute to food insecurity, uninhabitable environments, internally displaced people, forced migration, and economic upheaval. Los Santos ranks the second highest in environmental stress behind Panama Oeste. High poverty rates, income inequality, and food security can be further exacerbated by inadequate planning and unchecked development. Given that Los Santos province has the fifth highest overall Multi-Hazard Exposure in the country, monitoring and reducing environmental stress represents a priority for mitigating disaster impacts.

Environmental protection is vital to ensuring sustainable development within the country, and land management is essential to monitor ecological stress while balancing economic use closely. Promoting sustainable agriculture and the development of long-term goals promotes stability within the agriculture industry and ensures stable economic opportunities for the workforce. Provide educational training to both private and public entities to educate on sustainable development and to develop sustainable metrics ensuring overdevelopment does not take place.

LOS SANTOS RECOMMENDATIONS

2

Vulnerable Health Status

Lack of adequate health care contributes to a high degree of infant mortality, maternal mortality, and inadequate health care access that disproportionately affects disparate populations such as women and girls. Los Santos scores near the median for vulnerable health status but higher than average for AIDS prevalence across Panama.

Create healthier environments for all members of society and address needs for in-home care, sub-acute care, acute care, and clinical care. Limit exposure to environmental risks, infectious diseases, and provide critical medical intervention of communicable illnesses and emergent medical care. Create public health programs to educate populations on proper nutrition, adolescent, and elderly care, and preventing the spread of communicable diseases. Provide necessary prophylaxis education through public health programs to prevent the pathogenesis of HIV. Identify programs to assist with the treatment of HIV to prevent AIDS.

LOS SANTOS RECOMMENDATIONS

3

Governance

Challenges in governance can undermine stability for civil society creating further stress among disparate and disadvantaged populations. Los Santos has a much higher than average crime rate with 13.87 persons per 1,000. Also contributing to its governance rank is the lack of public garbage collection in the province. Lack of public garbage collection can cause an increase in enteric diseases due to contaminated water supplies, contaminated food supplies, and exposure to toxins.

Provide financial and technical assistance to law enforcement to adequately address criminal activity. Identify underlying factors and drivers of illegal activity to ensure targeted actions with government resources are best utilized to reduce criminal activity. Develop methods for measures of performance and measures of effectiveness to use limited government resources best. Identify feedback mechanisms for the public to best understand and identify issues of governance within civil society. Identify garbage collection mechanisms to reduce exposure to hazardous waste and potentially dangerous refuse.

LOS SANTOS RECOMMENDATIONS

4

Economic Capacity

Socioeconomic deprivation increases dependency on limited government resources and individuals and reduces economic opportunity and mobility. Lack of economic capacity increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and civil society.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and ensure equal opportunity programs for disparate people to increase economic opportunity for all. While developing opportunities, identify environmental stressors to simultaneously address multiple coping capacity and vulnerability drivers while ensuring that financial capability isn't increased at the cost of ecological capacity.

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PANAMÁ

NGÄBE BUGLÉ

NDPBA PROVINCES AND INDIGENOUS COMARCAS PROFILE

PANAMÁ NGÄBE BUGLÉ

CAPITAL: CHICHICA

Area: 6,814 km²

Comarca Ngäbe Buglé is located in the western region of Panama. This Province is divided into 9 districts: Buäbiti (The Capital), Besiko, Jirondai, Kankintú, Kusapín, Mirono, Münä, Nole, Duima, Nürün, Bledeshia. The comarca borders Atlantic Ocean to the north, Bocas del Toro to the west, Veraguas to the east and Chiriquí to the south. The main economic sources are cattle and coffee.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very High
Score: 0.693 • Rank: 1/13



RESILIENCE (R) - Very Low
Score: 0.241 • Rank: 13/13



MULTI-HAZARD EXPOSURE (MHE) - Medium
Score: 0.562 • Rank: 7/13



VULNERABILITY (V) - Medium
Score: 0.712 • Rank: 1/13



COPING CAPACITY (CC) - Very Low
Score: 0.194 • Rank: 13/13



Population (2020 Estimate)
224,823



Population in poverty
81.9%



Average years in school
5.3



Households with access to improved water
36.7% households



Infant mortality rate (per 1,000 live births)
17

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 7 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.562



MHE
0.562

Raw MHE
0.617

Relative MHE
0.508

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

53.7%
105,133
3.4 Billion



Flood

< 0.1%
8
2.7 Million



Landslide

7.8%
15,268
356.7 Million



Storm Surge

1.6%
3,053
0 Million



Sea Level Rise

7.4%
14,393
226 Million



Wildfire

8.4%
16,398
480.6 Million



Tsunami

0.0%
88
105 Thousand



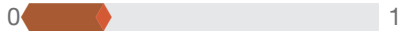
VULNERABILITY (V)

RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.712

Vulnerability in Ngäbe Buglé is primarily driven by Economic Constraints and Population Pressures. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



Environmental Stress SCORE: 0.217 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.23% Percent forest cover lost	33.72 Density of livestock per sq. km	- Percent of freshwater consumption to production
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Vulnerable Health Status SCORE: 0.586 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



1.4 Dengue incidence per 100,000 persons	149.2 AIDS incidence per 100,000 persons	36.9 Malaria Incidence per 100,000 persons	65.7 TB incidence per 100,000 persons	53.4% Prevalence of stunting	2.7% Disability	83.65 Maternal Mortality Rate per 100,000 live births
16.59 Infant mortality per 1,000 live births	71.03 Life expectancy					



Clean Water Vulnerability SCORE: 0.887 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



36.7% Households without access to improved drinking water	39.3% Households with access to improved sanitation
--	---



Information Access Vulnerability SCORE: 0.707 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



52.9% Households with radio	8.0% Households with TV	11.2% Households with internet	83.1% School attendance rate	5.34 Average years of schooling	24.6% Illiteracy rate
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Economic Constraints SCORE: 0.986 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



81.9% Poverty rate
0.88 Economic dependency ratio



Gender Inequality SCORE: 0.707 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.29 Ratio female to male secondary enrollment
0.25 Ratio female to male labor
0.11 Proportion of female seats in local government



Population Pressures SCORE: 0.894 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



- Average annual urban population change
2.8% Percent average population change



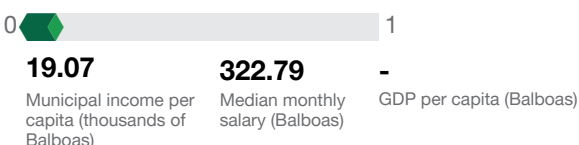
COPING CAPACITY (CC)

RANK: 13 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.194

Ngäbe Buglé exhibits weaker Coping Capacity in the areas of Communications Capacity and Health Care Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



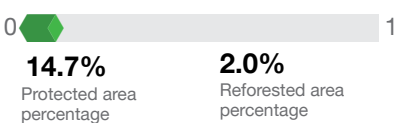
Economic Capacity SCORE: 0.083 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



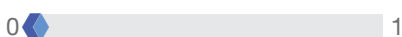
Governance SCORE: 0.505 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.083 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.031 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.055 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.067 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.002 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.000 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 13 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.241

Ngäbe Buglé's score and ranking are due to Medium Vulnerability combined with Very Low Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Economic Constraints



Population Pressures



Communications Capacity



Health Care Capacity



HAZARD-SPECIFIC RISK (HSR)



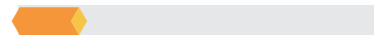
Earthquake



RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.683



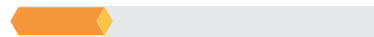
Flood



RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.172



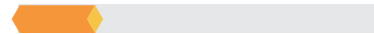
Sea Level Rise



RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.250



Storm Surge



RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.219



Landslide



RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.575



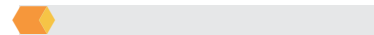
Wildfire



RANK: 1 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.400



Tsunami



RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.077



MULTI-HAZARD RISK (MHR)

1 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.693



Ngäbe Buglé's score and ranking are due to Medium Multi-hazard Exposure combined with Medium Vulnerability and Very Low Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

█ █ █ NGÄBE BUGLÉ SCORE
█ COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



NGÄBE BUGLÉ RECOMMENDATIONS



Economic Constraints

Ngäbe Buglé ranks the highest in economic constraints in all of Panama. Contributing to this high rank is the highest poverty ranking and the second-highest economic dependency rank in Panama. Dependency of individuals limits mobility for populations and increases vulnerability due to lack of opportunity. Populations such as families with children or the elderly are more likely to be severely affected by natural disasters and face longer recovery times.

Assess disaster response and recovery plans to ensure that economically vulnerable populations are incorporated for long- and short-term recovery. Create public policies guaranteeing equal opportunity and fair wages for all.

NGÄBE BUGLÉ RECOMMENDATIONS

2

Population Pressures

Ngäbe Buglé also ranks the highest in Panama for population pressures, with the second-highest rank in average population change in all of Panama. Population growth increases stress on public utilities, emergency services, and health care. An increase in these decreases the ability for governments to respond adequately to disasters and mass casualties with already limited resources. The migration of large populations leads to strain on social services, economic opportunities, and health care access. Lack of economic opportunity can potentially cause increased criminal activity, increased nutrition needs for vulnerable populations (i.e., elderly and adolescents), and lack of adequate shelter for individuals.

Continue to monitor population growth to ensure policy, plans, and programs meet requirements to appropriately respond to mass casualties and disasters. Ensure population growth and migration remains at a stable and sustainable level. Identify causes and drivers of migration for large populations to address needs and limit forced migration. Ensure a comprehensive understanding of population change across the country to meet public safety needs and requirements.

NGÄBE BUGLÉ RECOMMENDATIONS

3

Communications Capacity

Ngäbe Buglé ranks low in communication capacity with the lowest rates in mobile phone use and second lowest in fixed telephones available at the household level. Unreliable communications and lack of access to communications infrastructure exacerbate information access vulnerability and hinder governments' ability to share critical information during disasters. Lack of adequate communication can also contribute to limited access to public health, safety, and nutrition.

Expand communications infrastructure to ensure coverage, accessibility, and reliability of communications during disasters. Encourage telecommunication infrastructure development at a sustainable pace. Identify messages that can contribute to higher education on public health, safety, and nutrition. Create communications plans to share critical information with the public with primary, alternate, contingency, and emergency plans for communication.

NGÄBE BUGLÉ RECOMMENDATIONS

4

Health Care Capacity

Ngäbe Buglé ranks the lowest in Panama in health care capacity with 1.1 nurses per 10,000 persons and 1.39 physicians per 10,000 persons. Inadequate health care capacity exacerbates other areas such as economic participation, dependency, and adolescent and elderly care. Lack of skilled health care professionals and resources creates a limited resource, forcing care to be triaged to meet the emergent medical needs. This is only exacerbated in mass casualty, disaster situations, and acute disease outbreaks.

Remove health care barriers to adequately address outpatient medical needs for all members of society, preventing medical conditions from turning into more difficult in-patient treatment situations, creating stress on medical systems. Create educational programs that address proper nutrition, exercise, vaccination, and safe sex to reduce behaviors that require medical intervention. Correctly identify hospitals and their respective trauma levels for pediatric and adult care planning mass casualty situations. Ensure hospitals meet standards of care determined by the government. Create and build outpatient health clinics to address medical needs that can be met without a hospital.

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PANAMÁ

PANAMÁ

**NDPBA PROVINCES AND INDIGENOUS COMARCAS
PROFILE**

PANAMÁ PANAMÁ

CAPITAL: PANAMA CITY

Area: 8,409 km²

Located in the central region of Panama, the capital of the province of Panamá is Panamá City which also serves as the National Capital. The province is divided into 6 districts: Balboa, Chepo, Chirmán, San Miguelito and Taboga. The district borders Colón and Kuna Yala to the north, Panama Oeste to the westm Darién to the east and the Pacific Ocean to the south. The main economic sources are cattle, fishing, construction materials, power generating and meat and milk processing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low
Score: 0.442 • Rank: 8/13



RESILIENCE (R) - Very High
Score: 0.685 • Rank: 1/13



MULTI-HAZARD EXPOSURE (MHE) - Very High
Score: 0.697 • Rank: 1/13



VULNERABILITY (V) - Very High
Score: 0.266 • Rank: 13/13



COPING CAPACITY (CC) - Very High
Score: 0.636 • Rank: 2/13



Population (2020 Estimate)
1,656,339



Population in poverty
12.3%



Average years in school
10.8



Households with access to improved water
1.6% households



Infant mortality rate (per 1,000 live births)
13

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 1 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.697



MHE
0.697

Raw MHE
1

Relative MHE
0.394

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

1.2%

16,797

105.1 Million



Flood

0.2%

2,644

118.8 Million



Landslide

9.1%

132,850

6.1 Billion



Storm Surge

0.3%

3,885

91.9 Million



Sea Level Rise

26.7%

389,091

15 Billion



Wildfire

21.8%

317,703

7.6 Billion



Tsunami

5.5%

80,681

17 Thousand



VULNERABILITY (V)

RANK: 13 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.266

Vulnerability in Panamá is primarily driven by Environmental Stress and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



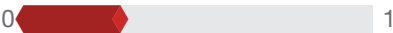
Environmental Stress SCORE: 0.461 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.08% Percent forest cover lost	84.92 Density of livestock per sq. km	60.0% Percent of freshwater consumption to production
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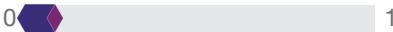
Vulnerable Health Status SCORE: 0.282 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



152.1 Dengue incidence per 100,000 persons	19.9 AIDS incidence per 100,000 persons	9 Malaria Incidence per 100,000 persons	53.95 TB incidence per 100,000 persons	6.6% Prevalence of stunting	2.4% Disability	34.35 Maternal Mortality Rate per 100,000 live births
12.63 Infant mortality per 1,000 live births	80.64 Life expectancy					



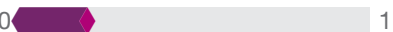
Clean Water Vulnerability SCORE: 0.086 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



1.6% Households without access to improved drinking water	99.7% Households with access to improved sanitation
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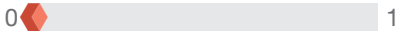
Information Access Vulnerability SCORE: 0.197 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



63.3% Households with radio	96.4% Households with TV	85.6% Households with internet	68.3% School attendance rate	10.78 Average years of schooling	1.6% Illiteracy rate
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Economic Constraints SCORE: 0.034 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



12.3% Poverty rate
0.44 Economic dependency ratio



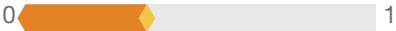
Gender Inequality SCORE: 0.445 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.15 Ratio female to male secondary enrollment
0.25 Ratio female to male labor
0.21 Proportion of female seats in local government



Population Pressures SCORE: 0.353 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



3.4% Average annual urban population change
1.9% Percent average population change



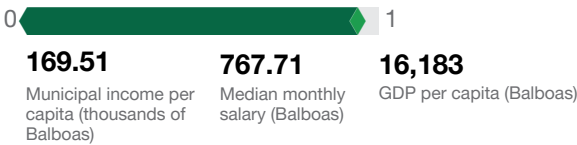
COPING CAPACITY (CC)

RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.636

Panamá exhibits weaker Coping Capacity in the areas of Governance and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



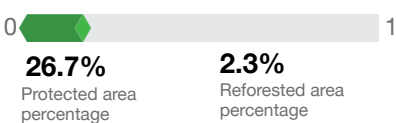
Economic Capacity SCORE: 0.96 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.327 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.162 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.779 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



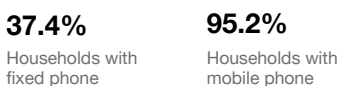
Health Care Capacity SCORE: 0.662 RANK: 4/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.454 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 1.000 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 1.000 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

**RANK: 1 / 13 PROVINCES AND
INDIGENOUS COMARCAS ASSESSED
SCORE: 0.685**

Panamá's score and ranking are due to Very High Vulnerability combined with Very High Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



**Environmental
Stress**



Gender Inequality



Governance



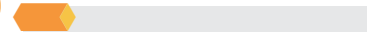
**Transportation
Capacity**



HAZARD-SPECIFIC RISK (HSR)



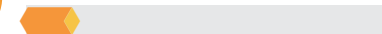
Earthquake



**RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.135**



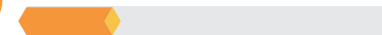
Flood



**RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.128**



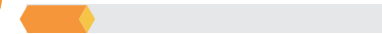
Sea Level Rise



**RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.250**



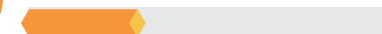
Storm Surge



**RANK: 9 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.172**



Landslide



**RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.315**



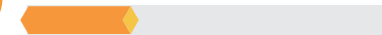
Wildfire



**RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.240**



Tsunami



**RANK: 2 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.297**



MULTI-HAZARD RISK (MHR)

8 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.442



Panamá's score and ranking are due to Very High Multi-hazard Exposure combined with Very High Vulnerability and Very High Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

PANAMÁ SCORE
COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



PANAMÁ RECOMMENDATIONS



Environmental Stress

Climate change and unsustainable development contribute to food insecurity, uninhabitable environments, internally displaced people, forced migration, and economic upheaval. High poverty rates and income inequality can further be exacerbated with inadequate planning and unchecked development. Given that Panamá province has the highest overall Multi-Hazard Exposure in the country, monitoring and reducing environmental stress represents a priority for mitigating disaster impacts.

Environmental protection is vital to ensuring sustainable development within the country, and land management is essential to monitor ecological stress while balancing economic use closely. Promoting sustainable agriculture and the development of long-term goals promotes stability within the agriculture industry and ensures stable economic opportunities for the workforce. Provide educational training to both private and public entities to educate on sustainable development and to develop sustainable metrics ensuring overdevelopment does not take place.

PANAMÁ RECOMMENDATIONS

2

Gender Inequality

Gender-based disparities in education and economic activity increase economic dependency and exacerbate population pressures, increasing strain in civil society. Population increases create additional competition in the workforce. A lack of targeted interventions to ensure women's participation in the labor force can increase gender inequality, creating a considerable disparity between women and men.

Create targeted interventions to increase workforce populations for females through training women with the necessary skills to participate in the economy. Explore incentive-based initiatives to encourage employers to hire women and other marginalized groups. Identify drivers that marginalize women and girls to create targeted interventions to reduce inequality and increase the quality of life for all.

PANAMÁ RECOMMENDATIONS

3

Governance

Challenges in governance can undermine stability for civil society creating further stress among disparate and disadvantaged populations. Panamá has a crime rate of 12.22 per 1,000 persons and a low voter percentage rank of just under 70 percent.

Provide financial and technical assistance to law enforcement to adequately address criminal activity. Identify underlying factors and drivers of illegal activity to ensure targeted actions with government resources are best utilized to reduce criminal activity. Develop methods for measures of performance and measures of effectiveness to use limited government resources best. Identify feedback mechanisms for the public to best understand and identify issues of governance within civil society. Encourage civic education to increase voter participation in the region and identify messaging to encourage trust and relationships between government and society.

PANAMÁ RECOMMENDATIONS

4

Transportation Capacity

Panamá has below average road density compared other provinces, leading to a lower overall Transportation Capacity rank. Reduced transportation capacity within a province limits the economic opportunity and mobility of society, and it limits the opportunity for individuals to attend higher education and find gainful employment. Limited transportation capacity can also hamper emergency response activities and decrease public access to vital resources such as adequate healthcare and food.

Identify areas with limited transportation opportunities to identify the best project areas where increasing transportation capacity has the highest impact. Identify emergency routes and vital transportation routes that provide critical access to services to the population. Ensure new transportation routes are developed within sustainable development guidelines with proper materials.

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PANAMÁ

PANAMÁ OESTE

**NDPBA PROVINCES AND INDIGENOUS COMARCAS
PROFILE**

PANAMÁ

PANAMÁ OESTE

CAPITAL: LA CHORRERA

Area: 2,880 km²

The Panamá Oeste province is located in the central region of Panama. This Province is divided into 5 districts: La Chorrera (The Capital), Arraiján, Capira, Chame and San Carlos. The province borders Pacific Ocean to the south, Colón to the north, Coclé to the west and Panamá to the east. The main economic sources are cattle and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low
Score: 0.410 • Rank: 11/13



RESILIENCE (R) - Low
Score: 0.538 • Rank: 8/13



MULTI-HAZARD EXPOSURE (MHE) - Very Low
Score: 0.305 • Rank: 11/13



VULNERABILITY (V) - Very Low
Score: 0.391 • Rank: 8/13



COPING CAPACITY (CC) - Low
Score: 0.467 • Rank: 8/13



Population (2020 Estimate)
606,458



Population in poverty
7.3%



Average years in school
9.8



Households with access to improved water
1.6% households



Infant mortality rate (per 1,000 live births)
12

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: 11 / 13 PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.305



MHE
0.305

Raw MHE
0.592

Relative MHE
0.019

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

-
0
-



Flood

0.1%
366
19.9 Million



Landslide

1.0%
5,305
26.3 Million



Storm Surge

0.1%
621
9.6 Million



Sea Level Rise

16.0%
86,679
3.9 Billion



Wildfire

3.4%
18,658
347.8 Million



Tsunami

2.8%
15,223
-



VULNERABILITY (V)

RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.391

Vulnerability in Panamá Oeste is primarily driven by Environmental Stress and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



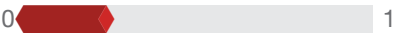
Environmental Stress SCORE: 0.842 RANK: 1/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.11% Percent forest cover lost	84.92 Density of livestock per sq. km	372.7% Percent of freshwater consumption to production
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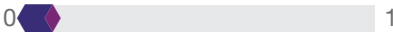
Vulnerable Health Status SCORE: 0.241 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



78.8 Dengue incidence per 100,000 persons	10.5 AIDS incidence per 100,000 persons	1.8 Malaria Incidence per 100,000 persons	28.3 TB incidence per 100,000 persons	6.6% Prevalence of stunting	2.7% Disability	18.28 Maternal Mortality Rate per 100,000 live births
12.06 Infant mortality per 1,000 live births	79.05 Life expectancy					



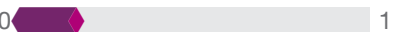
Clean Water Vulnerability SCORE: 0.080 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



1.6% Households without access to improved drinking water	99.7% Households with access to improved sanitation
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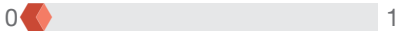
Information Access Vulnerability SCORE: 0.165 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



67.0% Households with radio	94.2% Households with TV	78.1% Households with internet	82.0% School attendance rate	9.84 Average years of schooling	1.3% Illiteracy rate
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Economic Constraints SCORE: 0.046 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



7.3% Poverty rate
0.48 Economic dependency ratio



Gender Inequality SCORE: 0.767 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.26 Ratio female to male secondary enrollment
0.33 Ratio female to male labor
0.25 Proportion of female seats in local government



Population Pressures SCORE: 0.594 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



5.3% Average annual urban population change
2.3% Percent average population change



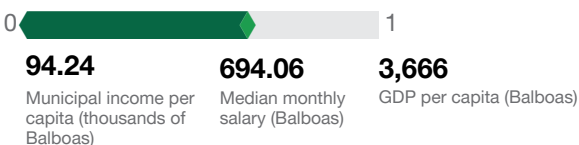
COPING CAPACITY (CC)

RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.467

Panamá Oeste exhibits weaker Coping Capacity in the areas of Governance and Health Care Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



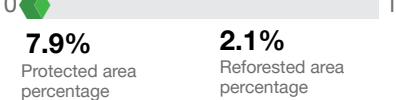
Economic Capacity SCORE: 0.641 RANK: 3/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.203 RANK: 13/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



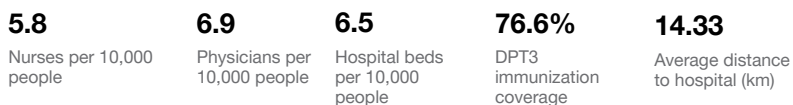
Environmental Capacity SCORE: 0.044 RANK: 11/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Infrastructure Capacity SCORE: 0.700 RANK: 5/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.308 RANK: 10/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.72 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.819 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.954 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.538

Panamá Oeste's score and ranking are due to Very Low Vulnerability combined with Low Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



Environmental Stress



Gender Inequality



Governance



Health Care Capacity



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 11 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.000



Flood

RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.156



Sea Level Rise

RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.289



Storm Surge

RANK: 7 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.199



Landslide

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.186



Wildfire

RANK: 8 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.210



Tsunami

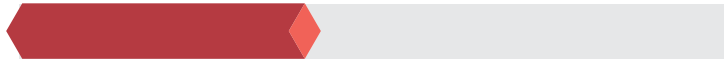
RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.241



MULTI-HAZARD RISK (MHR)

11 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.410



Panamá Oeste's score and ranking are due to Very Low Multi-hazard Exposure combined with Very Low Vulnerability and Low Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

█ █ PANAMÁ OESTE SCORE
█ COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



PANAMÁ OESTE RECOMMENDATIONS



Environmental Stress

Panamá Oeste ranks just above average in environmental stress. Climate change, freshwater withdrawals, and forest cover loss contribute to food insecurity, uninhabitable environments, internally displaced people, forced migration, and economic upheaval. High poverty rates and income inequality can further be exacerbated with inadequate planning and unchecked development.

Environmental protection is vital to ensuring sustainable development within the country, and land management is essential to monitor ecological stress while balancing economic use closely. Promoting sustainable agriculture and the development of long-term goals promotes stability within the agriculture industry and ensures stable economic opportunities for the workforce. Provide educational training to both private and public entities to educate on sustainable development and to develop sustainable metrics ensuring overdevelopment does not take place.

PANAMÁ OESTE RECOMMENDATIONS

2

Gender Inequality

Panamá Oeste has the third-highest gender inequality rank in Panama. Contributing to the high rank are gender-based disparities in secondary education enrollment and labor force participation. Provinces where women are less economically and politically active may represent economic dependence, putting additional strain on civil society. Population increases also create additional competition in the workforce. A lack of targeted interventions to ensure women's participation can increase gender inequality, creating a considerable disparity in incomes and livelihoods between women and men.

Boost labor participation by promoting workforce opportunities for women that include provisions for family support, such as quality, affordable childcare. Support equal pay for equal work to foster economic growth and reduce economic dependency.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

PANAMÁ OESTE RECOMMENDATIONS

3

Governance

Panamá Oeste ranks the lowest in governance in all of Panama. It has the highest crime rate at 14.16 per 1,000 persons and the highest rate of crime syndicates, at 8.48 per 1,000 persons. Challenges in governance can undermine stability for civil society creating further stress among disparate and disadvantaged populations.

Provide financial and technical assistance to law enforcement to adequately address criminal activity. Identify underlying factors and drivers of illegal activity to ensure targeted actions with government resources are best utilized to reduce criminal activity. Develop methods for measures of performance and measures of effectiveness to use limited government resources best. Identify feedback mechanisms for the public to best understand and identify issues of governance within civil society.

PANAMÁ OESTE RECOMMENDATIONS

4

Health Care Capacity

Panamá Oeste ranks third lowest in health care capacity in Panama. Contributing to the low rank is low rates of physician and nurses per 10,000, limited available hospital beds per 10,000, and reduced immunization coverage. Inadequate health care capacity exacerbates other areas such as economic participation, dependency, and adolescent and elderly care. Lack of skilled health care professionals and resources creates a limited resource, forcing care to be triaged to meet the emergent medical needs. This is only exacerbated in mass casualty, disaster situations, and acute disease outbreaks.

Remove health care barriers to adequately address outpatient medical needs for all members of society, preventing medical conditions from turning into more difficult in-patient treatment situations, creating stress on medical systems. Create educational programs that address proper nutrition, exercise, vaccination, and safe sex to reduce behaviors that require medical intervention. Correctly identify hospitals and their respective trauma levels for pediatric and adult care planning mass casualty situations. Ensure hospitals meet standards of care determined by the government.

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PANAMÁ

VERAGUAS

NDPBA PROVINCES AND INDIGENOUS COMARCAS PROFILE

PANAMÁ VERAGUAS

CAPITAL: SANTIAGO DE VERAGUAS

Area: 10,588 km²

The Veraguas province is located in the western region of Panama. This Province is divided into 12 districts: Santiago de Veraguas (The Capital), Atalaya, Calobre, Cañazas, La Mesa, Las Palmas, Mariato, Montijo, Río de Jesús, San Francisco, Santa Fe, Santiago and Soná. The province borders Atlantic Ocean to the north, Pacific Ocean to the south, Ngäbe Buglé and Chiriquí to the west and Colón, Coclé, Herrera and Los Santos to the east. The main economic sources are cattle, coffee and fishing.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Medium

Score: 0.516 • Rank: 5/13



RESILIENCE (R) - Medium

Score: 0.571 • Rank: 6/13



MULTI-HAZARD EXPOSURE (MHE) - Very High

Score: 0.691 • Rank: 2/13



VULNERABILITY (V) - Very High

Score: 0.406 • Rank: 6/13



COPING CAPACITY (CC) - Medium

Score: 0.549 • Rank: 5/13



Population (2020 Estimate)

248,325



Population in poverty

34.0%



Average years in school

8.3



Households with access to improved water

5.4% households



Infant mortality rate (per 1,000 live births)

7

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

**RANK: 2 / 13 PROVINCES AND
INDIGENOUS COMARCAS**
SCORE: 0.691



MHE
0.691

Raw MHE
0.698

Relative MHE
0.684

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake

64.5%
160,207
3.4 Billion



Flood

3.8%
9,387
319.9 Million



Landslide

1.6%
4,036
137.9 Million



Storm Surge

0.3%
803
15 Million



Sea Level Rise

6.2%
15,486
636.8 Million



Wildfire

22.6%
56,257
1.4 Billion



Tsunami

1.1%
2,671
160 Thousand



VULNERABILITY (V)

RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.406

Vulnerability in Veraguas is primarily driven by Gender Inequality and Information Access Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



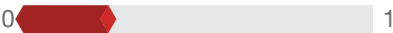
Environmental Stress SCORE: 0.434 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



0.12% Percent forest cover lost	63.8 Density of livestock per sq. km	83.5% Percent of freshwater consumption to production
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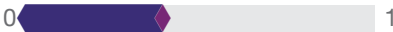
Vulnerable Health Status SCORE: 0.247 RANK: 12/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



34.5 Dengue incidence per 100,000 persons	0.5 AIDS incidence per 100,000 persons	0.4 Malaria incidence per 100,000 persons	18.3 TB incidence per 100,000 persons	14.5% Prevalence of stunting	3.6% Disability	24.85 Maternal Mortality Rate per 100,000 live births
6.8 Infant mortality per 1,000 live births	77.48 Life expectancy					



Clean Water Vulnerability SCORE: 0.399 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



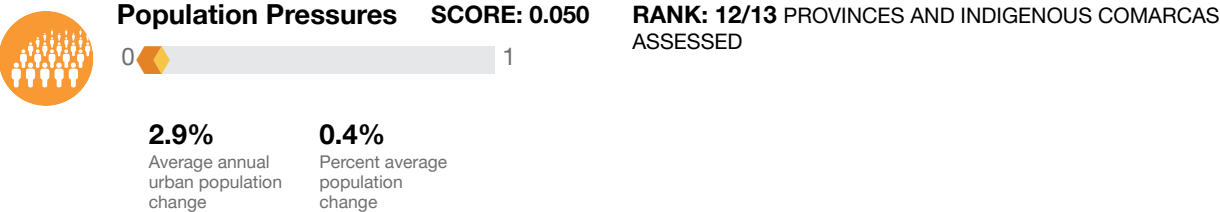
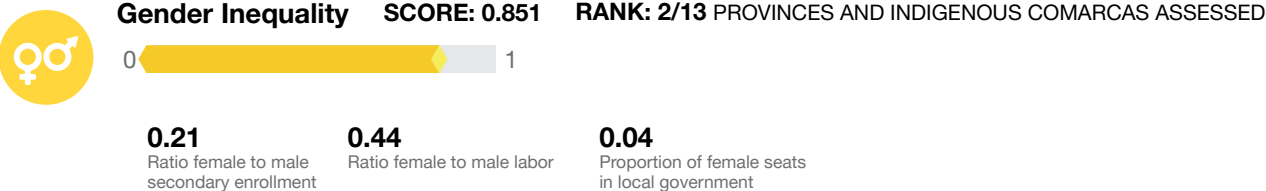
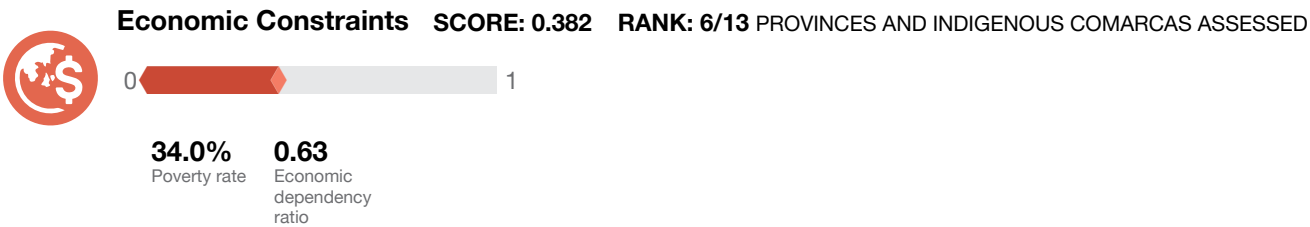
5.4% Households without access to improved drinking water	95.5% Households with access to improved sanitation
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Information Access Vulnerability SCORE: 0.478 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



71.3% Households with radio	75.4% Households with TV	49.4% Households with internet	71.8% School attendance rate	8.26 Average years of schooling	8.0% Illiteracy rate
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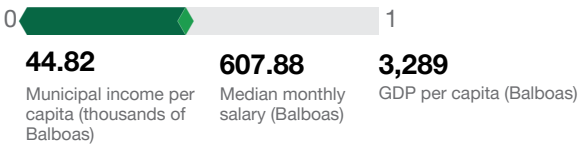
COPING CAPACITY (CC)

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.549

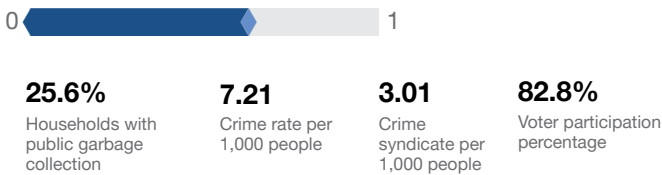
Veraguas exhibits weaker Coping Capacity in the areas of Economic Capacity and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



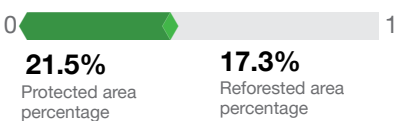
Economic Capacity SCORE: 0.460 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Governance SCORE: 0.633 RANK: 2/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Environmental Capacity SCORE: 0.416 RANK: 7/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



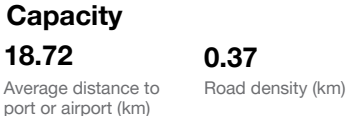
Infrastructure Capacity SCORE: 0.597 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Health Care Capacity SCORE: 0.598 RANK: 6/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Transportation Capacity SCORE: 0.5 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Communications Capacity SCORE: 0.624 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED



Energy Capacity SCORE: 0.666 RANK: 8/13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED





RESILIENCE (R)

**RANK: 6 / 13 PROVINCES AND
INDIGENOUS COMARCAS ASSESSED**
SCORE: 0.571

Veraguas's score and ranking are due to Very High Vulnerability combined with Medium Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



**Gender
Inequality**



**Information Access
Vulnerability**



Economic Capacity



**Transportation
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Earthquake

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.402



Flood

RANK: 4 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.224



Sea Level Rise

RANK: 10 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.161



Storm Surge

RANK: 6 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.210



Landslide

RANK: 3 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.205



Wildfire

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.322



Tsunami

RANK: 5 / 13 PROVINCES AND INDIGENOUS COMARCAS ASSESSED
SCORE: 0.190



MULTI-HAZARD RISK (MHR)

5 / 13

RANK WITHIN PROVINCES AND
INDIGENOUS COMARCAS
SCORE: 0.516



Veraguas's score and ranking are due to Very High Multi-hazard Exposure combined with Very High Vulnerability and Medium Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:

VERAGUAS SCORE
 COUNTRY SCORE



Multi-Hazard Exposure



Vulnerability



Coping Capacity



VERAGUAS RECOMMENDATIONS



Gender Inequality

Veraguas has the second-highest Gender Inequality rank in Panama. Contributing to the high rank are gender-based disparities in secondary education enrollment and labor force participation, in addition to limited female representation in local government. Provinces where women are less economically and politically active may represent economic dependence, putting additional strain on civil society. Population increases create additional competition in the workforce. A lack of targeted interventions to ensure women's participation can increase gender inequality, creating a considerable disparity in incomes and livelihoods between women and men.

Boost labor participation by promoting workforce opportunities for women that include provisions for family support, such as quality, affordable childcare. Support equal pay for equal work to foster economic growth and reduce economic dependency.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

VERAGUAS RECOMMENDATIONS

2

Information Access Vulnerability

Information access vulnerability intensifies marginalization and population pressures by preventing entry into the workforce and disproportionately affects disparate populations such as women and girls. Other issues such as food security and increases in criminal activity have also been linked to information access vulnerability. Lack of ability to deliver critical messages related to education, health, and natural disasters affects society at all levels, especially parts of society without reliable communication in their homes. Given that Veraguas has the second highest overall Multi-Hazard Exposure in Panama, information access represents a vital lifeline for communicating and reducing hazard impacts.

Address barriers to education and the possible drivers (poverty, food insecurity) that limit individuals' opportunities for education. Ensure households have reliable access to communications within their home, such as radio, television, and phone line. Effective communication and warning systems greatly reduce risk and vulnerability.

VERAGUAS RECOMMENDATIONS

3

Economic Capacity

Socioeconomic deprivation increases dependency on limited both government resources and individuals and limits economic opportunity and mobility. Lack of economic capacity increases criminal activity, provides opportunities for transnational criminal organizations to gain influence, and stresses relationships between individuals and civil society.

Encourage programs to generate public revenue and create new job opportunities. Address existing public policy to limit inflation and ensure equal employment opportunities, especially for marginalized populations. Expand and ensure equal opportunity programs for disparate people to increase economic opportunity for all.

Design and implement intervention strategies to promote and sustain engagement of both male and female students in secondary-level education and reduce dropout rates. Promote development and empowerment of young people through social support structures and employment opportunities including diverse school-to-work programs and leadership academies.

VERAGUAS RECOMMENDATIONS

4

Transportation Capacity

Limited transportation capacity within a province limits the economic opportunity and mobility of society, and it limits the opportunity for individuals to attend higher education and find gainful employment. Reduced transportation capacity can also hamper emergency response activities and decrease public access to vital resources such as adequate healthcare and food.

Identify areas with limited transportation opportunities to identify the best project areas where increasing transportation capacity has the highest impact. Identify emergency routes and vital transportation routes that provide critical access to services to the population. Ensure new transportation routes are developed within sustainable development guidelines with proper materials.

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NDPBA PROFILE

CAPITAL:

Area: km²

RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) -

Score: • Rank: /



RESILIENCE (R) -

Score: • Rank: /



MULTI-HAZARD EXPOSURE (MHE) -

Score: • Rank: /



VULNERABILITY (V) -

Score: • Rank: /



COPING CAPACITY (CC) -

Score: • Rank: /



Population (2020 Estimate)



Population in poverty



Average years in school



Households with access to improved water
households



Infant mortality rate
(per 1,000 live births)

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



MHE
Raw MHE
Relative MHE

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake



Flood



Landslide



Storm Surge



Sea Level Rise



Wildfire



Tsunami





VULNERABILITY (V)

RANK: / ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



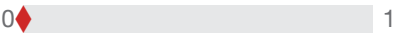
Environmental Stress SCORE: RANK: / ASSESSED



Percent forest cover lost Density of livestock per sq. km Percent of freshwater consumption to production



Vulnerable Health Status SCORE: RANK: / ASSESSED

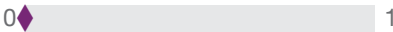


Dengue incidence per 100,000 persons AIDS incidence per 100,000 persons Malaria Incidence per 100,000 persons TB incidence per 100,000 persons Prevalence of stunting Disability Maternal Mortality Rate per 100,000 live births

Infant mortality per 1,000 live births Life expectancy



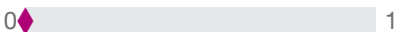
Clean Water Vulnerability SCORE: RANK: / ASSESSED



Households without access to improved drinking water Households with access to improved sanitation



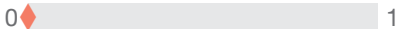
Information Access Vulnerability SCORE: RANK: / ASSESSED



Households with radio Households with TV Households with internet School attendance rate Average years of schooling Illiteracy rate



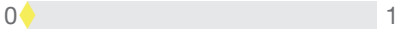
Economic Constraints SCORE: RANK: / ASSESSED



Poverty rate Economic dependency ratio



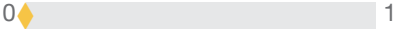
Gender Inequality SCORE: RANK: / ASSESSED



Ratio female to male secondary enrollment Ratio female to male labor Proportion of female seats in local government



Population Pressures SCORE: RANK: / ASSESSED



Average annual urban population change Percent average population change



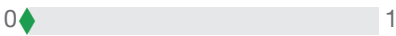
COPING CAPACITY (CC)

**RANK: / ASSESSED
SCORE:**

exhibits weaker Coping Capacity in the areas of and . The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



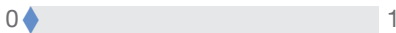
Economic Capacity SCORE: RANK: / ASSESSED



Municipal income per capita (thousands of Balboas) Median monthly salary (Balboas) GDP per capita (Balboas)



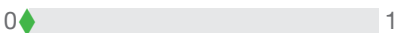
Governance SCORE: RANK: / ASSESSED



Households with public garbage collection Crime rate per 1,000 people Crime syndicate per 1,000 people Voter participation percentage



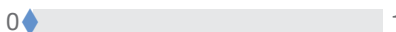
Environmental Capacity SCORE: RANK: / ASSESSED



Protected area percentage Reforested area percentage



Infrastructure Capacity SCORE: RANK: / ASSESSED



Health Care Capacity SCORE: RANK: / ASSESSED

Nurses per 10,000 people Physicians per 10,000 people Hospital beds per 10,000 people DPT3 immunization coverage Average distance to hospital (km)



Transportation Capacity SCORE: RANK: / ASSESSED

Average distance to port or airport (km) Road density (km)



Communications Capacity SCORE: RANK: / ASSESSED

Households with fixed phone Households with mobile phone



Energy Capacity SCORE: RANK: / ASSESSED

Percent household connected to public electricity grid



RESILIENCE (R)

RANK: / ASSESSED
SCORE:


's score and ranking are due to Vulnerability combined with Coping Capacity scores.


Below are the four thematic areas with the weakest relative scores:





HAZARD-SPECIFIC RISK (HSR)


 **Earthquake** RANK: / ASSESSED
SCORE:


 **Flood** RANK: / ASSESSED
SCORE:

 **Sea Level Rise** RANK: / ASSESSED
SCORE:

 **Storm Surge** RANK: / ASSESSED
SCORE:

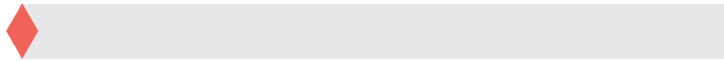
 **Landslide** RANK: / ASSESSED
SCORE:

 **Wildfire** RANK: / ASSESSED
SCORE:

 **Tsunami** RANK: / ASSESSED
SCORE:



MULTI-HAZARD RISK (MHR)



/
RANK WITHIN
SCORE:

's score and ranking are due to Multi-hazard Exposure combined with Vulnerability and Coping Capacity scores.

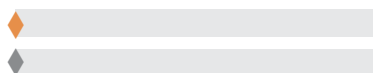
Multi-hazard risk component scores compared to overall average country scores:



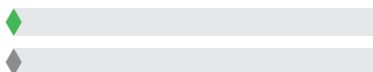
Multi-Hazard Exposure



Vulnerability



Coping Capacity



RECOMMENDATIONS

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NDPBA PROFILE

CAPITAL:

Area: km²

RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) -

Score: • Rank: /



RESILIENCE (R) -

Score: • Rank: /



MULTI-HAZARD EXPOSURE (MHE) -

Score: • Rank: /



VULNERABILITY (V) -

Score: • Rank: /



COPING CAPACITY (CC) -

Score: • Rank: /



Population (2020 Estimate)



Population in poverty



Average years in school



Households with access to improved water
households



Infant mortality rate
(per 1,000 live births)

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



MHE
Raw MHE
Relative MHE

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake



Flood



Landslide



Storm Surge



Sea Level Rise



Wildfire



Tsunami





VULNERABILITY (V)

RANK: / ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



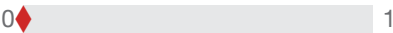
Environmental Stress SCORE: RANK: / ASSESSED



Percent forest cover lost Density of livestock per sq. km Percent of freshwater consumption to production



Vulnerable Health Status SCORE: RANK: / ASSESSED

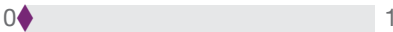


Dengue incidence per 100,000 persons AIDS incidence per 100,000 persons Malaria Incidence per 100,000 persons TB incidence per 100,000 persons Prevalence of stunting Disability Maternal Mortality Rate per 100,000 live births

Infant mortality per 1,000 live births Life expectancy



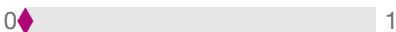
Clean Water Vulnerability SCORE: RANK: / ASSESSED



Households without access to improved drinking water Households with access to improved sanitation



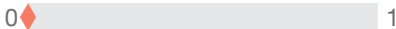
Information Access Vulnerability SCORE: RANK: / ASSESSED



Households with radio Households with TV Households with internet School attendance rate Average years of schooling Illiteracy rate



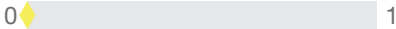
Economic Constraints SCORE: RANK: / ASSESSED



Poverty rate Economic dependency ratio



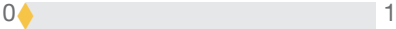
Gender Inequality SCORE: RANK: / ASSESSED



Ratio female to male secondary enrollment Ratio female to male labor Proportion of female seats in local government



Population Pressures SCORE: RANK: / ASSESSED



Average annual urban population change Percent average population change



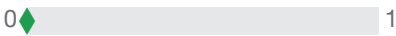
COPING CAPACITY (CC)

**RANK: / ASSESSED
SCORE:**

exhibits weaker Coping Capacity in the areas of and . The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



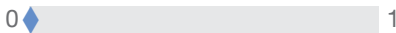
Economic Capacity SCORE: RANK: / ASSESSED



Municipal income per capita (thousands of Balboas) Median monthly salary (Balboas) GDP per capita (Balboas)



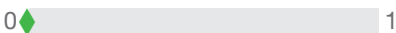
Governance SCORE: RANK: / ASSESSED



Households with public garbage collection Crime rate per 1,000 people Crime syndicate per 1,000 people Voter participation percentage



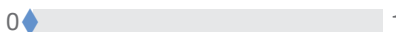
Environmental Capacity SCORE: RANK: / ASSESSED



Protected area percentage Reforested area percentage



Infrastructure Capacity SCORE: RANK: / ASSESSED



Health Care Capacity SCORE: RANK: / ASSESSED

Nurses per 10,000 people Physicians per 10,000 people Hospital beds per 10,000 people DPT3 immunization coverage Average distance to hospital (km)



Transportation Capacity SCORE: RANK: / ASSESSED

Average distance to port or airport (km) Road density (km)



Communications Capacity SCORE: RANK: / ASSESSED

Households with fixed phone Households with mobile phone



Energy Capacity SCORE: RANK: / ASSESSED

Percent household connected to public electricity grid



RESILIENCE (R)

RANK: / ASSESSED
SCORE:


's score and ranking are due to Vulnerability combined with Coping Capacity scores.


Below are the four thematic areas with the weakest relative scores:





HAZARD-SPECIFIC RISK (HSR)


 **Earthquake** RANK: / ASSESSED
SCORE:


 **Flood** RANK: / ASSESSED
SCORE:

 **Sea Level Rise** RANK: / ASSESSED
SCORE:

 **Storm Surge** RANK: / ASSESSED
SCORE:

 **Landslide** RANK: / ASSESSED
SCORE:

 **Wildfire** RANK: / ASSESSED
SCORE:

 **Tsunami** RANK: / ASSESSED
SCORE:



MULTI-HAZARD RISK (MHR)



/
RANK WITHIN
SCORE:

's score and ranking are due to Multi-hazard Exposure combined with Vulnerability and Coping Capacity scores.

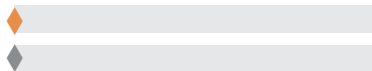
Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



RECOMMENDATIONS

1

RECOMMENDATIONS

2

RECOMMENDATIONS

3

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NDPBA PROFILE

CAPITAL:

Area: km²

RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) -

Score: • Rank: /



RESILIENCE (R) -

Score: • Rank: /



MULTI-HAZARD EXPOSURE (MHE) -

Score: • Rank: /



VULNERABILITY (V) -

Score: • Rank: /



COPING CAPACITY (CC) -

Score: • Rank: /



Population (2020 Estimate)



Population in poverty



Average years in school



Households with access to improved water
households



Infant mortality rate
(per 1,000 live births)

*For more information on data and components please visit: <https://bit.ly/2LqVoUO>



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



MHE
Raw MHE
Relative MHE

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Earthquake



Flood



Landslide



Storm Surge



Sea Level Rise



Wildfire



Tsunami





VULNERABILITY (V)

RANK: / ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



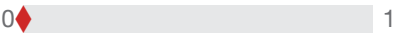
Environmental Stress SCORE: RANK: / ASSESSED



Percent forest cover lost Density of livestock per sq. km Percent of freshwater consumption to production



Vulnerable Health Status SCORE: RANK: / ASSESSED

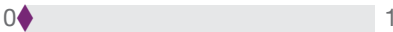


Dengue incidence per 100,000 persons AIDS incidence per 100,000 persons Malaria Incidence per 100,000 persons TB incidence per 100,000 persons Prevalence of stunting Disability Maternal Mortality Rate per 100,000 live births

Infant mortality per 1,000 live births Life expectancy



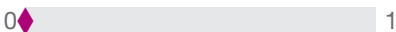
Clean Water Vulnerability SCORE: RANK: / ASSESSED



Households without access to improved drinking water Households with access to improved sanitation



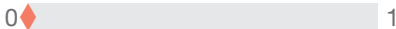
Information Access Vulnerability SCORE: RANK: / ASSESSED



Households with radio Households with TV Households with internet School attendance rate Average years of schooling Illiteracy rate



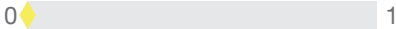
Economic Constraints SCORE: RANK: / ASSESSED



Poverty rate Economic dependency ratio



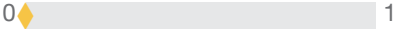
Gender Inequality SCORE: RANK: / ASSESSED



Ratio female to male secondary enrollment Ratio female to male labor Proportion of female seats in local government



Population Pressures SCORE: RANK: / ASSESSED



Average annual urban population change Percent average population change



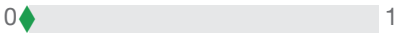
COPING CAPACITY (CC)

**RANK: / ASSESSED
SCORE:**

exhibits weaker Coping Capacity in the areas of and . The bar charts indicate the socioeconomic themes contributing to the overall Coping Capacity score.



Economic Capacity SCORE: RANK: / ASSESSED



Municipal income per capita (thousands of Balboas) Median monthly salary (Balboas) GDP per capita (Balboas)



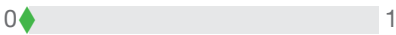
Governance SCORE: RANK: / ASSESSED



Households with public garbage collection Crime rate per 1,000 people Crime syndicate per 1,000 people Voter participation percentage



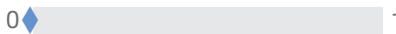
Environmental Capacity SCORE: RANK: / ASSESSED



Protected area percentage Reforested area percentage



Infrastructure Capacity SCORE: RANK: / ASSESSED



Health Care Capacity SCORE: RANK: / ASSESSED

Nurses per 10,000 people Physicians per 10,000 people Hospital beds per 10,000 people DPT3 immunization coverage Average distance to hospital (km)



Transportation Capacity SCORE: RANK: / ASSESSED

Average distance to port or airport (km) Road density (km)



Communications Capacity SCORE: RANK: / ASSESSED

Households with fixed phone Households with mobile phone



Energy Capacity SCORE: RANK: / ASSESSED

Percent household connected to public electricity grid



RESILIENCE (R)


RANK: / ASSESSED
SCORE:


's score and ranking are due to Vulnerability combined with Coping Capacity scores.


Below are the four thematic areas with the weakest relative scores:





HAZARD-SPECIFIC RISK (HSR)


 **Earthquake** RANK: / ASSESSED
SCORE:


 **Flood** RANK: / ASSESSED
SCORE:

 **Sea Level Rise** RANK: / ASSESSED
SCORE:

 **Storm Surge** RANK: / ASSESSED
SCORE:

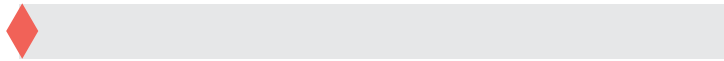
 **Landslide** RANK: / ASSESSED
SCORE:

 **Wildfire** RANK: / ASSESSED
SCORE:

 **Tsunami** RANK: / ASSESSED
SCORE:



MULTI-HAZARD RISK (MHR)



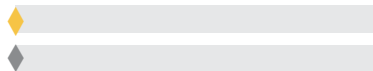
/
RANK WITHIN
SCORE:

's score and ranking are due to Multi-hazard Exposure combined with Vulnerability and Coping Capacity scores.

Multi-hazard risk component scores compared to overall average country scores:



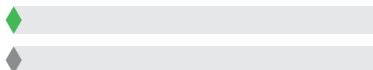
Multi-Hazard Exposure



Vulnerability



Coping Capacity



RECOMMENDATIONS

1

RECOMMENDATIONS

2

RECOMMENDATIONS

3

RECOMMENDATIONS

4

**Better solutions.
Fewer disasters.**

Safer world.

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