



NDPBA

PARAGUAY DEPARTMENT RISK PROFILES

SUBNATIONAL ASSESSMENT RESULTS





PARAGUAY

ALTO PARAGUAY

NDPBA DEPARTMENT PROFILE

PARAGUAY

ALTO PARAGUAY

CAPITAL: FUERTE OLIMPO

Area: 90,131 (km²)

The Alto Paraguay department is located in the Western region of Paraguay. This department is divided into 5 districts: Fuerte Olimpo (The Capital), Bahia Negra, Carmelo Peralta, Mayor Pablo Lagerenza and Puerto Casado. The department borders Bolivia, Brazil, and the departments of Presidente Hayes, Boquerón, and Concepcion. The main economic sources are livestock and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low

Score: 0.449 • Rank: 15/18



RESILIENCE (R) - Very Low

Score: 0.326 • Rank: 18/18



MULTI-HAZARD EXPOSURE (MHE) - Very Low

Score: 0.000 • Rank: 18/18



VULNERABILITY (V) - Very High

Score: 0.749 • Rank: 1/18



COPING CAPACITY (CC) - Very Low

Score: 0.401 • Rank: 17/18



Population (2015)

17,548



Infant Mortality Rate

33.7



Illiterate population

14.9%



Access to improved water

78.3%



Average life expectancy

69.6 years

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



MULTI-HAZARD EXPOSURE (MHE)


RANK: 18 / 18 DEPARTMENT
SCORE: 0.000



MHE Index values of 0.000 indicate that Alto Paraguay has the lowest cumulative exposure in comparison to all other departments in Paraguay. Zero values do not indicate “No Exposure” to hazards.


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




22%
 2,550
 \$44.6 Million

Wildfire




41%
 4,699
 \$50.3 Million

Water Deficit




28%
 3,246
 \$23.9 Million

Drought



-
 -
 -

Extreme Cold



1%
 156
 \$1.1 Million

Storm



-
 -
 -



VULNERABILITY (V)

RANK: 1 / 18 DEPARTMENTS ASSESSED
SCORE: 0.749

Vulnerability in Alto Paraguay is primarily driven by Information Access Vulnerability and Gender Inequality. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress



-4.79% **22.70%**
 Cultivated Area Change Deforestation



Vulnerable Health Status



69.58 **33.7** **280.9** **46.73** **34.3%** **37.5%**
 Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability



78.29% **26.55%**
 Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability



14.9% **6.2** **7.34%** **75.41%** **75.0%**
 Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints



61.88 **46.47%** **0.5**
 Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality



0.54 **0.40** **0.44**
 Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures



1.98%
 Average Annual Population Change



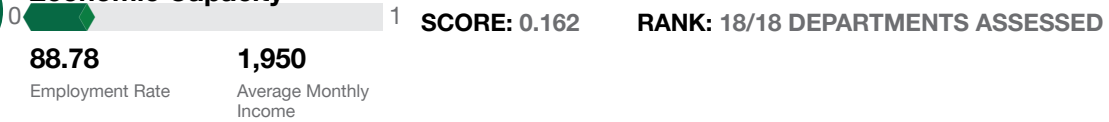
COPING CAPACITY (CC)

RANK: 17 / 18 DEPARTMENTS ASSESSED
SCORE: 0.401

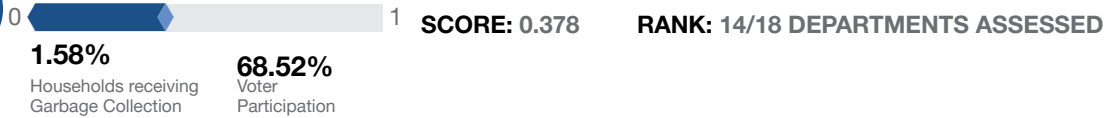
Alto Paraguay exhibits weaker Coping Capacity in the areas of Transportation Capacity and Communications Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity



Governance



Crime Governance



Environmental Capacity



(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.368** **RANK: 16/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.666** **RANK: 2/18 DEPARTMENTS ASSESSED**

21.49 Hospital Beds per 10,000 People	27.88 Physicians per 10,000 People	29.62 Nurses per 10,000 People	46,736.98 Average Distance to Nearest Hospital (km ²)	92.03% Vaccination Coverage	87.39% Access to Healthcare
--	---	---	--	--	--



Transportation Capacity **SCORE: 0.000** **RANK: 18/18 DEPARTMENTS ASSESSED**

0.09 Road Density (km per sq. km)	131.13 Distance to Airport or Seaport (km)
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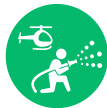
Communications Capacity **SCORE: 0.269** **RANK: 17/18 DEPARTMENTS ASSESSED**

93.3% Households with Mobile Phone	3.44% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.536** **RANK: 16/18 DEPARTMENTS ASSESSED**

94.16%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.412** **RANK: 17/18 DEPARTMENTS ASSESSED**

40.65 Ambulances per 100,000 People	534.29 Distance to Fire Station	135.97 Distance to Warehouse
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RESILIENCE (R) **RANK: 18 / 18 DEPARTMENTS**
SCORE: 0.326

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

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



**Information
Access
Vulnerability**



Gender Inequality



**Transportation
Capacity**



**Communications
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 13
SCORE: 0.138



Drought

RANK: 18
SCORE: 0.000



Wildfire

RANK: 17
SCORE: 0.066



Extreme Cold

RANK: 8
SCORE: 0.142



Water Deficit

RANK: 14
SCORE: 0.086



Storm

RANK: 12
SCORE: 0.000



MULTI-HAZARD RISK (MHR)



15 / 18

Rank within departments
Score: 0.449

Alto Paraguay's score and ranking are due to Very Low Multi-hazard exposure combined with Very 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



Department score
 Country score

ALTO PARAGUAY RECOMMENDATIONS



Information Access Vulnerability

Limitations in information access can impede a population's ability to receive, understand, and take action. Emergency messages must take into account the unique information access constraints of the district. Emergency messages presented to the population of Alto Paraguay must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.

Alto Paraguay is ranked highest in the country for Access to Information Vulnerability. Findings show that only 7% of households have internet, which is the lowest in the country. Furthermore, only about 75% of households have televisions and/or radios. With limited economic capacity in the department, focus should be on bringing in NGO and private sector partnerships to establish lines of communication in advance of disasters. Emergency plans should be reviewed and incorporate alternative means of broadcasting information including sirens.

The illiteracy rate in Alto Paraguay is 14.9%, the highest percentage in the country. Additionally, the average years of schooling is 6.23, which ranked as the lowest in Paraguay. Educational initiatives should be focused in Alto Paraguay to increase the number of years students stay in school and to improve literacy rates. Invest in infrastructure and focus public awareness programs on increasing educational attainment of the population. Looking specifically at the location of schools in relation to populated areas, there is a clear gap in education facilities in the central and northern parts of Alto Paraguay. The data from Secretaría de Emergencia Nacional show that most of the schools in the department are located near the eastern and southeastern parts of the department.

ALTO PARAGUAY RECOMMENDATIONS

2

Gender Inequality

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Increase gender-based inclusion in all phases of DM, ensuring the implementation at the district and local levels. Course of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.

The findings show that gender inequality is evident in both economic and educational achievements. The ratio of female to male income is 0.44 and the economic activity ratio is similarly 0.4, demonstrating that women on average make less and participate in the economy in a lesser extent than men. Focus efforts on empowering women to pursue gainful work. Continue to provide programs that equip women with the skills and knowledge they need to be able to obtain jobs that will allow for upward mobility. Investing in women to be a larger part of the workforce can help increase local revenue and boost economic capacity.

Access to information is also identified as a driver of vulnerability in Alto Paraguay, so increased efforts to provide equal opportunities in education is vital. The secondary enrollment ratio was ranked as the highest the country, which shows a high level of educational inequality. Fund programs to encourage young women to continue their education and to monitor the progress of student enrollment rates.

ALTO PARAGUAY RECOMMENDATIONS

3

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Alto Paraguay's ability to distribute resources before, during, and after a disaster.

Alto Paraguay is ranked as the lowest department in Paraguay for Transportation Capacity. Road density is 0.09 kilometers per square kilometer of territory, which is the lowest in the country. Although Alto Paraguay is sparsely populated, limited transportation capacity may hamper emergency response activities and decrease public access to resources. Focus on ensuring transportation projects target areas that have the most limited transportation networks, including the northern and western areas.

Increased transportation networks can also bring economic benefits by enhancing access to markets. Economic benefits and enhanced emergency response operations should be the focus of enhancements to the transportation network in Alto Paraguay. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented. Additionally, all construction projects need to be balanced with research and planners to ensure environmental impacts are mitigated.

ALTO PARAGUAY RECOMMENDATIONS

4

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how department- and local-level populations able to facilitate effective and coordinated communication.

Continue to encourage programs that diversify the economy in Alto Paraguay to generate public revenue and create new job opportunities. Pursue policies that balance inflation rates and create equal opportunities for employment. Focus on ensuring that incomes grow equitably across the department and mirror achievements in economic growth.

Invest in programs to ensure marginalized groups, including women, are given equal opportunities to join the workforce and paid fair wages. By expanding advantageous job opportunities for women, the economy will benefit by boosting overall incomes and employment rates.

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Fewer disasters.**

Safer world.

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Felipe Méndez Photo

PARAGUAY

ALTO PARANÁ

NDPBA DEPARTMENT PROFILE

PARAGUAY

ALTO PARANÁ

CAPITAL: CIUDAD DEL ESTE

Area: 17,486 (km²)

The Alto Paraná department is located in the Eastern region of Paraguay. This department is divided into 22 districts: Ciudad del Este (The Capital), Presidente Franco, Domingo Martínez de Irala, Dr. Juan León Mallorquín, Hernandarias, Itakyry, Juan E. O’Leary, Ñacunday, Yguazú, Los Cedrales, Minga Guazú, San Cristóbal, Santa Rita, Naranjal, Santa Rosa del Monday, Minga Porá, Mbaracayú, San Alberto, Iruña, Santa Fé del Paraná, Tavapy, Dr. Raúl Peña. The department borders Argentina, Brazil, and the departments of Itapúa, Caazapá, Caaguazú and Canindeyú. The main economic sources are agriculture and lumber.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very High

Score: 0.610 • Rank: 3/18



RESILIENCE (R) - Moderate

Score: 0.544 • Rank: 7/18



MULTI-HAZARD EXPOSURE (MHE) - Very High

Score: 0.917 • Rank: 1/18



VULNERABILITY (V) - Low

Score: 0.437 • Rank: 11/18



COPING CAPACITY (CC) - Moderate

Score: 0.525 • Rank: 8/18



Population (2015)

808,172



Infant Mortality Rate

16.4



Illiterate population

6.3%



Access to improved water

55.1%



Average life expectancy

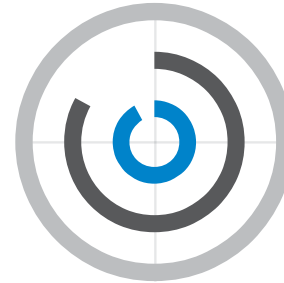
74.4 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 1 / 18 DEPARTMENT
SCORE: 0.917




MHE
0.917

Raw MHE
0.834

Relative MHE
1.000


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




28%
 219,193
\$6.3 Billion

Wildfire




94%
 743,461
\$11.5 Billion

Water Deficit




26%
 207,349
\$2.7 Billion

Drought




100%
 794,320
\$12.1 Billion

Extreme Cold



2%
 15,073
\$139.8 Million

Storm



100%
 794,320
\$12.1 Billion



VULNERABILITY (V)

RANK: 11 / 18 DEPARTMENTS ASSESSED
SCORE: 0.437

Vulnerability in Alto Paraná is primarily driven by Population Pressures and Clean Water Access Vulnerability. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0  1 **SCORE: 0.495** **RANK: 7/18 DEPARTMENTS ASSESSED**

2.51% Cultivated Area Change
20.59% Deforestation



Vulnerable Health Status

0  1 **SCORE: 0.325** **RANK: 16/18 DEPARTMENTS ASSESSED**

74.43 Life Expectancy (years)
16.4 Infant Mortality Rate (per 1,000 live births)
58.2 Maternal Mortality Ratio
33.03 Adult Malnutrition
24.8% Population with Disability
44.5% Population Reporting Illness or Injury



Clean Water Vulnerability

0  1 **SCORE: 0.553** **RANK: 3/18 DEPARTMENTS ASSESSED**

55.10% Households with Improved Water Source
89.00% Households with Improved Sanitation



Information Access Vulnerability

0  1 **SCORE: 0.330** **RANK: 16/18 DEPARTMENTS ASSESSED**

6.3% Illiteracy Rate (Age 10+)
9.1 Average Years of Schooling
20.74% Households with Internet
93.67% Households with Television
80.5% Households with Radio



Economic Constraints

0  1 **SCORE: 0.323** **RANK: 14/18 DEPARTMENTS ASSESSED**

54.62 Economic Dependency Ratio
21.36% Poverty Rate
0.47 Income Inequality (GINI)



Gender Inequality

0  1 **SCORE: 0.372** **RANK: 15/18 DEPARTMENTS ASSESSED**

0.00 Female to Male Secondary Education*
0.36 Female to Male Economic Activity*
0.30 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0  1 **SCORE: 0.660** **RANK: 7/18 DEPARTMENTS ASSESSED**

1.61% Average Annual Population Change



COPING CAPACITY (CC)

RANK: 8 / 18 DEPARTMENTS ASSESSED
SCORE: 0.525

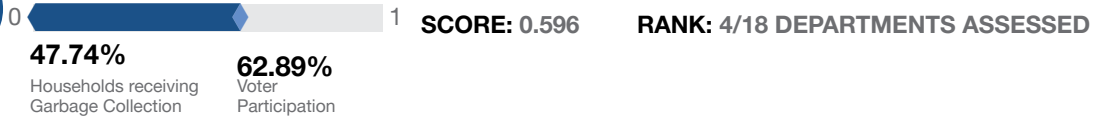
Alto Paraná exhibits weaker Coping Capacity in the areas of Health Care Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



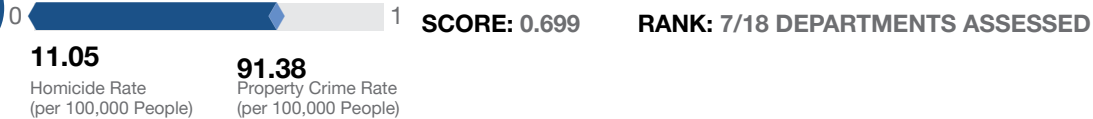
Economic Capacity



Governance



Crime Governance



Environmental Capacity



(COPING CAPACITY CONTINUED)



Infrastructure Capacity



Health Care Capacity **SCORE: 0.313** **RANK: 16/18 DEPARTMENTS ASSESSED**

3.77 Hospital Beds per 10,000 People	6.3 Physicians per 10,000 People	7.38 Nurses per 10,000 People	7,652.28 Average Distance to Nearest Hospital (km ²)	85.60% Vaccination Coverage	67.80% Access to Healthcare
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Transportation Capacity **SCORE: 0.563** **RANK: 5/18 DEPARTMENTS ASSESSED**

1.26 Road Density (km per sq. km)	58.73 Distance to Airport or Seaport (km)
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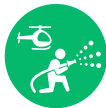
Communications Capacity **SCORE: 0.746** **RANK: 4/18 DEPARTMENTS ASSESSED**

98.7% Households with Mobile Phone	8.24% Households with Fixed Phone
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Energy Capacity **SCORE: 0.998** **RANK: 2/18 DEPARTMENTS ASSESSED**

99.90% Households Connected to Electric Grid



Disaster Management Capacity



1.88 Ambulances per 100,000 People	37.75 Distance to Fire Station	176.1 Distance to Warehouse
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RESILIENCE (R)

RANK: 7 / 18 DEPARTMENTS
SCORE: 0.544

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

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



Population Pressures



Clean Water Access Vulnerability



Health Care Capacity



Transportation Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 3
SCORE: 0.350



Drought

RANK: 4
SCORE: 0.391



Wildfire

RANK: 4
SCORE: 0.407



Extreme Cold

RANK: 7
SCORE: 0.206



Water Deficit

RANK: 6
SCORE: 0.234



Storm

RANK: 4
SCORE: 0.456



MULTI-HAZARD RISK (MHR)



3 / 18

Rank within departments
Score: 0.610

Alto Paraná's score and ranking are due to Very High Multi-hazard exposure combined with Low Vulnerability and Moderate Coping Capacity scores.

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



Multi-Hazard Exposure



Vulnerability



Coping Capacity



█ Department score

█ Country score

ALTO PARANÁ RECOMMENDATIONS



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Findings show that the average annual total population change is 1.61%, which is the 7th highest out of the 18 departments in Paraguay. As the population grows so do the risks associated with disasters due to urbanization and expanded public needs. Increases in the demands for health care and emergency services will strain the already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly.

Alto Paraná is ranked 1st in Multi-Hazard Exposure and investing in resilient infrastructure needs to be a priority. Access to clean water and healthcare resources should be the primary areas of investment, along with increased transportation infrastructure. Seek public-private partnerships to help fund projects to increase access to critical infrastructure. Ensure that infrastructure projects are distributed equitably across the population and are sustainable.

ALTO PARANÁ RECOMMENDATIONS

2

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation in Alto Paraná improves health outcomes and frees up resources to decrease further susceptibility to impacts.

In Alto Paraná, only 55.1% of households have access to improved water sources. Invest in water delivery infrastructure and ensure that sources are sustainable, as well as reliable. Water stress and droughts are already impacting the population, and this year insufficient rains are causing food insecurities throughout the country. Develop partnerships to invest in water treatment and distribution systems as the growing population and climate change will only exacerbate the already existing vulnerabilities.

The population is highly exposed to hazards, being ranked highest for Multi-Hazard Exposure. The findings also show that the average distance to a warehouse with disaster management supplies is 176.1 square kilometers. Investing in improved water sources will increase the ability of the population to access clean water and reduce reliance on transporting resources long distances in the case of an emergency.

ALTO PARANÁ RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Invest in health care capacity to increase resilience in Alto Paraná. Population pressures and low access to improved water sources increase the likelihood waterborne disease outbreaks. With low access to healthcare, limited hospital beds and medical staff, the department is not equipped to handle large scale outbreaks.

Allocate funds, partner with private hospitals and NGOs to increase the number of hospital beds and medical staff available in the case of an emergency event. Ensure that access to care is equitable and continues to expand to keep up with the demands of the growing population.

ALTO PARANÁ RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Alto Paraná's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the hazards including water deficit and floods that impact Alto Paraná. In addition, the growing population will likely change urbanization dynamics, requiring coordination with land use planners.

Closely monitor hotspots of population growth and ensure emergency plans from evacuation and resource transportation routes are updated.

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Fewer disasters.**

Safer world.

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Ina Diarte Photography

PARAGUAY

AMAMBAY

NDPBA DEPARTMENT PROFILE

PARAGUAY

AMAMBAY

CAPITAL: PEDRO JUAN CABALLERO

Area: 14,853 (km²)

The Amambay department is located in the Eastern region of Paraguay. This department is divided into 5 districts: Pedro Juan Caballero (The Capital), Bella Vista, Capitán Bado, Zanja Pytã, Karapaí. The department borders Brazil, and the departments of Canindeyú, San Pedro and Concepción. The main economic sources are agriculture and commercial activities with the border of Brazil.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Moderate

Score: 0.536 • Rank: 10/18



RESILIENCE (R) - Moderate

Score: 0.534 • Rank: 8/18



MULTI-HAZARD EXPOSURE (MHE) - Moderate

Score: 0.676 • Rank: 8/18



VULNERABILITY (V) - Moderate

Score: 0.471 • Rank: 9/18



COPING CAPACITY (CC) - High

Score: 0.538 • Rank: 5/18



Population (2015)

167,050



Infant Mortality Rate

14.9



Illiterate population

12.1%



Access to improved water

84.4%



Average life expectancy

74.1 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 8 / 18 DEPARTMENT
SCORE: 0.676




MHE
0.676

Raw MHE
0.398

Relative MHE
0.954


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




25%
 45,412
 \$1.6 Billion

Wildfire




76%
 138,259
 \$1.9 Billion

Water Deficit



43%
 78,523
 \$832.9 Million

Drought




93%
 168,817
 \$2.4 Billion

Extreme Cold



-
 -
 -

Storm



97%
 174,990
 \$2.4 Billion



VULNERABILITY (V)

RANK: 9 / 18 DEPARTMENTS ASSESSED
SCORE: 0.471

Vulnerability in Amambay is primarily driven by Population Pressures and Environmental Stress. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.675** **RANK: 3/18 DEPARTMENTS ASSESSED**

5.96% Cultivated Area Change
26.24% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.453** **RANK: 8/18 DEPARTMENTS ASSESSED**

74.05 Life Expectancy (years)
14.9 Infant Mortality Rate (per 1,000 live births)
152 Maternal Mortality Ratio
52.26 Adult Malnutrition
24.5% Population with Disability
42.8% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.210** **RANK: 14/18 DEPARTMENTS ASSESSED**

84.37% Households with Improved Water Source
91.12% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.469** **RANK: 12/18 DEPARTMENTS ASSESSED**

12.1% Illiteracy Rate (Age 10+)
8.6 Average Years of Schooling
18.60% Households with Internet
89.39% Households with Television
82.5% Households with Radio



Economic Constraints

0 1 **SCORE: 0.301** **RANK: 16/18 DEPARTMENTS ASSESSED**

58.77 Economic Dependency Ratio
15.24% Poverty Rate
0.43 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.476** **RANK: 8/18 DEPARTMENTS ASSESSED**

0.20 Female to Male Secondary Education*
0.27 Female to Male Economic Activity*
0.25 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.714** **RANK: 6/18 DEPARTMENTS ASSESSED**

1.72% Average Annual Population Change



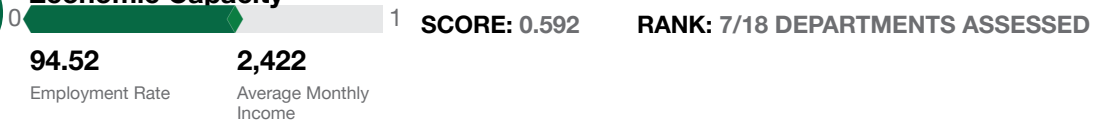
COPING CAPACITY (CC)

RANK: 5 / 18 DEPARTMENTS ASSESSED
SCORE: 0.538

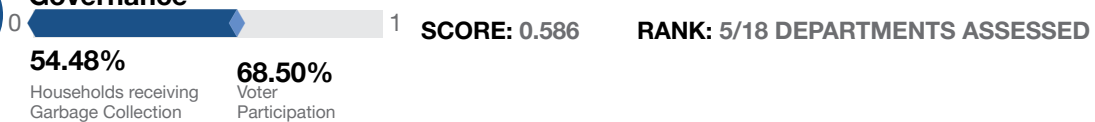
Amambay exhibits weaker Coping Capacity in the areas of Health Care Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



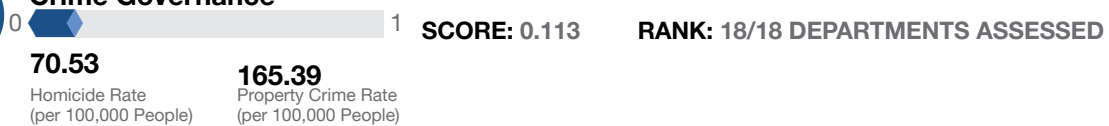
Economic Capacity



Governance



Crime Governance



Environmental Capacity



(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.648** **RANK: 4/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.356** **RANK: 14/18 DEPARTMENTS ASSESSED**

5.96 Hospital Beds per 10,000 People	10.46 Physicians per 10,000 People	10.22 Nurses per 10,000 People	16,392.99 Average Distance to Nearest Hospital (km ²)	91.33% Vaccination Coverage	62.72% Access to Healthcare
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Transportation Capacity **SCORE: 0.499** **RANK: 7/18 DEPARTMENTS ASSESSED**

0.49 Road Density (km per sq. km)	50.48 Distance to Airport or Seaport (km)
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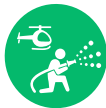
Communications Capacity **SCORE: 0.846** **RANK: 3/18 DEPARTMENTS ASSESSED**

98.5% Households with Mobile Phone	11.45% Households with Fixed Phone
--	--



Energy Capacity **SCORE: 0.889** **RANK: 11/18 DEPARTMENTS ASSESSED**

98.54%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.489** **RANK: 15/18 DEPARTMENTS ASSESSED**

4.26 Ambulances per 100,000 People	200.7 Distance to Fire Station	135.7 Distance to Warehouse
---	--	---------------------------------------



RESILIENCE (R)

RANK: 8 / 18 DEPARTMENTS
SCORE: 0.534

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

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



Population Pressures



Environmental Stress



Health Care Capacity



Transportation Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 9
SCORE: 0.266



Drought

RANK: 12
SCORE: 0.315



Wildfire

RANK: 13
SCORE: 0.292



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 10
SCORE: 0.153



Storm

RANK: 5
SCORE: 0.424



MULTI-HAZARD RISK (MHR)



10 / 18

Rank within departments
Score: 0.536

Amambay's score and ranking are due to Moderate Multi-hazard exposure combined with Moderate Vulnerability and High Coping Capacity scores.

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



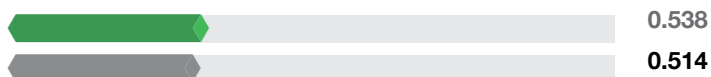
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

AMAMBAY RECOMMENDATIONS



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Findings show that the average annual total population change is 1.72%, which is the 6th highest in Paraguay. As the population grows so do the risks associated with disasters due to urbanization and expanded public needs. Increases in demands on health care, emergency services, and public programs will strain the already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly.

Investing in resilient and eco-conscious infrastructure also needs to be a priority, as environmental stress is another major driver of vulnerability in Amambay. Infrastructure projects should ensure construction efficiently use resources, focus on renewable and local materials, and implement proper mitigation techniques. Access to healthcare should be one of the primary areas of investment. Seek public-private partnerships to help fund projects to increase access to critical infrastructure. Ensure that distribution of infrastructure projects is equitable and sustainable for disaster risk reduction into the future.

AMAMBAY RECOMMENDATIONS

2

Environmental Stress

Environmental stressors such as the depletion, degradation, or contamination of natural resources can exacerbate natural hazards and negatively impact the health, safety, and economic security of Amambay's population.

In Amambay, increases in cultivated area are ranked as the 3rd highest in Paraguay. Similarly, deforestation is estimated at 26.24%, which ranks as the 4th highest in the country. With climate change and growing population pressures the need to put in place environmental protections is vital to ensuring sustainable development.

Forest management and sustainable development need to be carefully monitored to that ensure critical ecosystems are protected. Promote sustainable agricultural practices by providing trainings and incentives where possible. Focus areas can include the use of drought resistant crops, organic practices, as well as other methods to reduce environmental impacts of agriculture.

AMAMBAY RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

The population in Amambay is growing and so will the need to expand health care capacity. Findings show that there are only 5.96 hospital beds per 10,000 persons. Invest in increased inpatient capacity by acquiring more hospital beds. Additionally, there are only 10.46 physicians per 10,000 persons. Work with NGOs and other partners to increase the number of medical workers available.

The average distance between hospitals and populated places is 16,393 square kilometers. Removing barriers such as distance could improve overall utilization of services and increase the health of the population. Providing incentives to work in the health care sector, especially within rural communities will ensure enhanced and equitable access to health care.

AMAMBAY RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Amambay's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the environmental stresses and hazards that impact Amambay. Additionally, the growing population should be a primary focus when planning transportation projects, to reduce bottlenecks and increase evacuation routes.

Increased transportation networks can also bring economic benefits by enhancing access to markets. Increased access to health care and other critical infrastructure should be the focus of enhancements to the transportation network. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented.

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PARAGUAY

ASUNCIÓN

NDPBA DEPARTMENT PROFILE

PARAGUAY ASUNCIÓN

CAPITAL: ASUNCIÓN

Area: 157 (km²)

Located in the Eastern region of Paraguay, Asunción is the Capital District and it is not part of any department. The area called Gran Asunción includes the municipalities of San Lorenzo, Fernando de la Mora, Lambaré, Luque, Mariano Roque Alonso, Ñemby, San Antonio, Limpio, Capiatá and Villa Elisa which are part of the Central department and has around 2 Million habitants. The district borders Argentina and the Central Department. The main economic sources are banks and commercial activities such as malls.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low

Score: 0.283 • Rank: 18/18



RESILIENCE (R) - Very High

Score: 0.831 • Rank: 1/18



MULTI-HAZARD EXPOSURE (MHE) - Low

Score: 0.511 • Rank: 12/18



VULNERABILITY (V) - Very Low

Score: 0.150 • Rank: 18/18



COPING CAPACITY (CC) - Very High

Score: 0.812 • Rank: 1/18



Population (2015)

523,184



Infant Mortality Rate

10



Illiterate population

2.4%



Access to improved water

99.7%



Average life expectancy

74.3 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 12 / 18 DEPARTMENT
SCORE: 0.511




MHE
0.511

Raw MHE
0.635

Relative MHE
0.388


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




0%
 1,257
\$39.6 Million

Wildfire




99%
 728,636
\$13.1 Billion

Water Deficit



-
 -
 -

Drought



100%
 739,064
\$13.4 Billion

Extreme Cold



-
 -
 -

Storm



-
 -
 -



VULNERABILITY (V)

RANK: 18 / 18 DEPARTMENTS ASSESSED
SCORE: 0.150

Vulnerability in Asunción is primarily driven by Economic Constraints and Vulnerable Health Status. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.194** **RANK: 17/18 DEPARTMENTS ASSESSED**

0.00% Cultivated Area Change
5.41% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.255** **RANK: 17/18 DEPARTMENTS ASSESSED**

74.34 Life Expectancy (years)
10 Infant Mortality Rate (per 1,000 live births)
33 Maternal Mortality Ratio
61.89 Adult Malnutrition
26.1% Population with Disability
35.0% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.028** **RANK: 18/18 DEPARTMENTS ASSESSED**

99.70% Households with Improved Water Source
92.41% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.032** **RANK: 18/18 DEPARTMENTS ASSESSED**

2.4% Illiteracy Rate (Age 10+)
11.6 Average Years of Schooling
46.05% Households with Internet
95.50% Households with Television
87.5% Households with Radio



Economic Constraints

0 1 **SCORE: 0.401** **RANK: 13/18 DEPARTMENTS ASSESSED**

53.95 Economic Dependency Ratio
11.59% Poverty Rate
0.59 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.140** **RANK: 17/18 DEPARTMENTS ASSESSED**

0.06 Female to Male Secondary Education*
0.25 Female to Male Economic Activity*
0.17 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.000** **RANK: 18/18 DEPARTMENTS ASSESSED**

-0.20% Average Annual Population Change



COPING CAPACITY (CC)

RANK: 1 / 18 DEPARTMENTS ASSESSED
SCORE: 0.812

Asunción exhibits weaker Coping Capacity in the areas of Environmental Capacity and Governance. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE: 0.814** **RANK: 1/18 DEPARTMENTS ASSESSED**

94.20 **4,173**
Employment Rate Average Monthly Income



Governance

0 1 **SCORE: 0.782** **RANK: 1/18 DEPARTMENTS ASSESSED**

83.32% **67.47%**
Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE: 0.434** **RANK: 16/18 DEPARTMENTS ASSESSED**

8.39 **406.91**
Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE: 0.348** **RANK: 9/18 DEPARTMENTS ASSESSED**

5.98%
Protected Area

(COPING CAPACITY CONTINUED)

 **Infrastructure Capacity**  **SCORE: 0.987** **RANK: 1/18 DEPARTMENTS ASSESSED**

 **Health Care Capacity** **SCORE: 0.957** **RANK: 1/18 DEPARTMENTS ASSESSED**

22.32 Hospital Beds per 10,000 People	56.53 Physicians per 10,000 People	49.71 Nurses per 10,000 People	555.25 Average Distance to Nearest Hospital (km ²)	100.00% Vaccination Coverage	80.97% Access to Healthcare
--	---	---	---	---	--

 **Transportation Capacity** **SCORE: 1.000** **RANK: 1/18 DEPARTMENTS ASSESSED**

11.85 Road Density (km per sq. km)	7.54 Distance to Airport or Seaport (km)
--	--

 **Communications Capacity** **SCORE: 0.992** **RANK: 1/18 DEPARTMENTS ASSESSED**

98.5% Households with Mobile Phone	34.84% Households with Fixed Phone
--	--

 **Energy Capacity** **SCORE: 1.000** **RANK: 1/18 DEPARTMENTS ASSESSED**

99.92% Households Connected to Electric Grid

 **Disaster Management Capacity**  **SCORE: 0.810** **RANK: 2/18 DEPARTMENTS ASSESSED**

5.72 Ambulances per 100,000 People	3.03 Distance to Fire Station	5.37 Distance to Warehouse
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 **RESILIENCE (R)** **RANK: 1 / 18 DEPARTMENTS**
SCORE: 0.831

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

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


**Economic
Constraints**


**Vulnerable Health
Status**


**Environmental
Capacity**


Governance



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 18
SCORE: 0.000



Drought

RANK: 16
SCORE: 0.145



Wildfire

RANK: 16
SCORE: 0.156



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 18
SCORE: 0.000

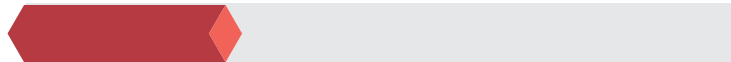


Storm

RANK: 12
SCORE: 0.000



MULTI-HAZARD RISK (MHR)



18 / 18

Rank within departments
Score: 0.283

Asunción's score and ranking are due to Low Multi-hazard exposure combined with Very 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



Department score
 Country score

ASUNCIÓN RECOMMENDATIONS



Economic Constraints

Economic constraints have individual, household, community, and district-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit Asunción's ability to facilitate short- and long-term recovery.

Although Asunción's poverty rate is among the lowest in Paraguay, the high Gini coefficient shows that income inequality does impact the population. Focus efforts on pursuing policies that ensure equal opportunity for employment and fair wages. Malnutrition impacts about 61.89% of adults, underscoring the need to provide interventions targeting income inequalities and ensuring access to resources. Assess disaster response and recovery plans to ensure that economically vulnerable populations are prioritized.

ASUNCIÓN RECOMMENDATIONS

2

Vulnerable Health Status

A population with a compromised health status will have a greatly reduced ability to manage short- and long-term disaster outcomes. Improving health is often correlated with decreased susceptibility to injury, disease, and stress associated with disasters. Acute or prolonged vulnerable health status limits the basic capacity of response functions.

In Asunción, the malnutrition rate was found to be 61.89%, which is the 2nd highest in Paraguay. Focus efforts on providing public assistance, as well as monitoring and regulating market prices. Ensure access to goods even in rural communities through incentives and direct support for underserved communities. Continue to monitor the health of the community and promote healthy lifestyles.

Additionally, drought risk in Asunción is ranked second highest in Paraguay and can further impact the health of the population if not properly mitigated. Enforce environmental protections and promote environmental stewardship to increase resilience in Asunción.

ASUNCIÓN RECOMMENDATIONS

3

Environmental Capacity

Properly managed environments sustain populations by providing food, water, and even economic benefits from industries such as tourism. Increasing protected areas can also serve as additional buffers between the population and impacted area.

Increase the protection of natural areas and incorporate sustainable development plans for new construction projects. The built environment can greatly impact the health of the population from exposures to toxic pollutants to influencing unhealthy lifestyles. Use eco-conscious approaches when developing areas and ensure continued efforts to preserve natural areas where feasible.

ASUNCIÓN RECOMMENDATIONS

4

Governance

Instability of institutional structures can make a department more susceptible to the negative effects of a disaster event. Increasing stability in Asunción increases the likelihood that emergencies can be better managed at the local level and supports a quick return to normal functions.

Findings show that there are 8.39 homicides per 100,000 persons and 406.91 property crimes per 100,000 persons in Asunción. Property crime rates are the highest in the country, which undermines stability in the department. Provide financial and technical assistance to law enforcement so that they are able to properly manage criminal activity throughout Asunción. In addition, develop policies to target underlying factors of criminal activity.

With high income inequality in the department, focus public policies on balancing income gaps. Ensure all policies have feedback mechanisms in place to track impacts and ways to better serve the public.

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PARAGUAY

BOQUERÓN

NDPBA DEPARTMENT PROFILE

PARAGUAY BOQUERÓN

CAPITAL: FILADELFIA

Area: 103,050 (km²)

The Boquerón department is located in the Western region of Paraguay. This department is divided into 3 districts: Filadelfia (The Capital), Mariscal José Félix Estigarribia and Loma Plata. The department borders Argentina, Bolivia, and the departments of Presidente Hayes and Alto Paraguay. The main economic sources are livestock and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Moderate

Score: 0.566 • Rank: 7/18



RESILIENCE (R) - Very Low

Score: 0.375 • Rank: 16/18



MULTI-HAZARD EXPOSURE (MHE) - Low

Score: 0.447 • Rank: 14/18



VULNERABILITY (V) - Very High

Score: 0.699 • Rank: 2/18



COPING CAPACITY (CC) - Low

Score: 0.448 • Rank: 14/18



Population (2015)

64,298



Infant Mortality Rate

20.7



Illiterate population

11.8%



Access to improved water

88.1%



Average life expectancy

73.2 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 14 / 18 DEPARTMENT
SCORE: 0.447





MHE
0.447


Raw MHE
0.196


Relative MHE
0.698


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

 Inland Flood
27%
👤 17,596
\$375.2 Million

 Wildfire
74%
👤 48,484
\$626.4 Million

 Water Deficit
97%
👤 63,105
\$758.6 Million

 Drought
4%
👤 2,888
\$21 Million

 Extreme Cold
65%
👤 42,224
\$496.3 Million

 Storm
-
👤 -
-



VULNERABILITY (V)

RANK: 2 / 18 DEPARTMENTS ASSESSED
SCORE: 0.699

Vulnerability in Boquerón is primarily driven by Population Pressures and Gender Inequality. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.659** **RANK: 5/18 DEPARTMENTS ASSESSED**

1.11% Cultivated Area Change
33.79% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.530** **RANK: 6/18 DEPARTMENTS ASSESSED**

73.23 Life Expectancy (years)
20.7 Infant Mortality Rate (per 1,000 live births)
125.5 Maternal Mortality Ratio
41.99 Adult Malnutrition
29.0% Population with Disability
36.7% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.474** **RANK: 4/18 DEPARTMENTS ASSESSED**

88.12% Households with Improved Water Source
48.38% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.728** **RANK: 4/18 DEPARTMENTS ASSESSED**

11.8% Illiteracy Rate (Age 10+)
7.1 Average Years of Schooling
25.44% Households with Internet
69.73% Households with Television
71.5% Households with Radio



Economic Constraints

0 1 **SCORE: 0.575** **RANK: 8/18 DEPARTMENTS ASSESSED**

57.78 Economic Dependency Ratio
21.46% Poverty Rate
0.59 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.935** **RANK: 1/18 DEPARTMENTS ASSESSED**

0.23 Female to Male Secondary Education*
0.44 Female to Male Economic Activity*
0.41 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.993** **RANK: 2/18 DEPARTMENTS ASSESSED**

2.32% Average Annual Population Change



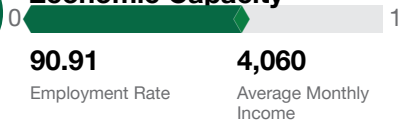
COPING CAPACITY (CC)

RANK: 14 / 18 DEPARTMENTS ASSESSED
SCORE: 0.448

Boquerón exhibits weaker Coping Capacity in the areas of Energy Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

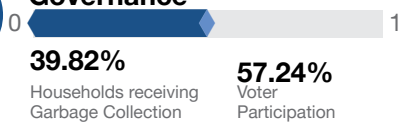


SCORE: 0.611

RANK: 5/18 DEPARTMENTS ASSESSED



Governance

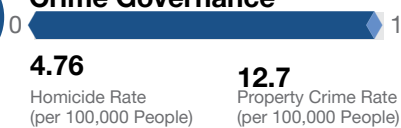


SCORE: 0.499

RANK: 7/18 DEPARTMENTS ASSESSED



Crime Governance



SCORE: 0.983

RANK: 1/18 DEPARTMENTS ASSESSED



Environmental Capacity



SCORE: 0.609

RANK: 4/18 DEPARTMENTS ASSESSED

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



Health Care Capacity **SCORE: 0.443** **RANK: 9/18 DEPARTMENTS ASSESSED**

4.76 Hospital Beds per 10,000 People	9.84 Physicians per 10,000 People	10.47 Nurses per 10,000 People	19,216.80 Average Distance to Nearest Hospital (km2)	99.53% Vaccination Coverage	75.15% Access to Healthcare
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Transportation Capacity **SCORE: 0.223** **RANK: 16/18 DEPARTMENTS ASSESSED**

0.14 Road Density (km per sq. km)	86.52 Distance to Airport or Seaport (km)
---	---



Communications Capacity **SCORE: 0.292** **RANK: 16/18 DEPARTMENTS ASSESSED**

90.0% Households with Mobile Phone	9.54% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.000** **RANK: 18/18 DEPARTMENTS ASSESSED**

87.51% Households Connected to Electric Grid



Disaster Management Capacity



11.11 Ambulances per 100,000 People	466.21 Distance to Fire Station	98.08 Distance to Warehouse
--	---	---------------------------------------



RESILIENCE (R) **RANK: 16 / 18 DEPARTMENTS**
SCORE: 0.375

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

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



Population Pressures



Gender Inequality



Energy Capacity



Transportation Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 11
SCORE: 0.210



Drought

RANK: 17
SCORE: 0.037



Wildfire

RANK: 6
SCORE: 0.343



Extreme Cold

RANK: 1
SCORE: 0.555



Water Deficit

RANK: 1
SCORE: 0.384



Storm

RANK: 12
SCORE: 0.000



MULTI-HAZARD RISK (MHR)



7 / 18

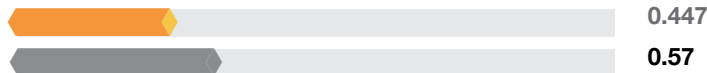
Rank within departments
Score: 0.566

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

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



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

BOQUERÓN RECOMMENDATIONS



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

In Boquerón the average annual total population change is 2.32%, 2nd highest in Paraguay. The department is also ranked 2nd highest for overall Vulnerability, which underscores the need to prioritize Boquerón for disaster risk reduction initiatives. Underlying vulnerabilities including Gender Inequality will likely be amplified as the population grows. Invest in public programs to bring awareness of existing vulnerabilities and to reduce their impacts.

Investment in resilient infrastructure needs to be a priority. Focusing on projects to increase energy and transportation capacity. Seek public-private partnerships to help fund projects and ensure that distribution of critical infrastructure is equitable and sustainable.

BOQUERÓN RECOMMENDATIONS

2

Gender Inequality

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Increase gender-based inclusion in all phases of DM, ensuring the implementation at the district and local levels. Course of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.

Boquerón ranked highest in Paraguay for Gender Inequality. The findings highlight that women are less economically active than men. Additionally, women have lower secondary enrollment rates. Increase funding of public programs that are focused on empowering women to continue their education and join the workforce. Programs should ensure women have the training and skills needed to reduce the wage and employment gap. Explore incentive-based initiatives to encourage employers to hire women and other marginalized groups

Population pressures in Boquerón will likely exacerbate the existing inequalities if no targeted interventions are put in place. As the population grows the competition for employment and educational opportunities will increase. Thus, efforts to ensure equality throughout society should be prioritized.

BOQUERÓN RECOMMENDATIONS

3

Energy Capacity

Homes, businesses, industry, and government all rely on access to energy resources for continuity of daily activities. Expanding, strengthening, and securing the energy network and increasing the availability and quantity of energy reserves in Boquerón will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster.

Boquerón ranks lowest for Energy Capacity and only 87.5% of households are connected to the electric grid. Investing in energy capacity will ensure enhanced communications during emergencies and proactively enhance the grid as the population grows.

Extreme cold impacts a large portion of the population and having electricity to help heat the home can reduce indoor smoke exposure. Working to equip homes, business and critical services with backup generators is also important as Transportation Capacity in Boquerón is identified as another driver of risk.

BOQUERÓN RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Boquerón's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the environmental stresses and hazards that impact Boquerón. Additionally, the growing population should be a primary focus when planning transportation projects, to reduce bottlenecks and increase evacuation routes.

Evacuation routes and emergency response plans should be adapted as construction is planned and implemented.

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PARAGUAY

CAAGUAZÚ

NDPBA DEPARTMENT PROFILE

PARAGUAY CAAGUAZÚ

CAPITAL: CORONEL OVIEDO

Area: 15,829 (km²)

The Caaguazú department is located in the Eastern region of Paraguay. This department is divided into 22 districts: Coronel Oviedo (The Capital), Caaguazú, Carayaó, Dr. Cecilio Báez, Sta. Rosa del Mbutuy, Dr. Juan Manuel Frutos, Repatriación, Nueva Londres, San Joaquín, San José de los Arroyos, Yhú, Dr. J. Eulogio Estigarribia, R. I. 3 Corrales, Raúl Arsenio Oviedo, José Domingo Ocampos, Mcal. Francisco Solano López, La Pastora, 3 de Febrero, Simón Bolívar, Vaquería, Tembiaporá, Nueva Toledo. The department borders the departments of San Pedro, Canindeyú, Alto Paraná, Cordillera, Paraguairí, Guairá and Caazapá. The main economic sources are yuca, cotton and sugar.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very High

Score: 0.629 • Rank: 1/18



RESILIENCE (R) - Low

Score: 0.460 • Rank: 12/18



MULTI-HAZARD EXPOSURE (MHE) - Very High

Score: 0.809 • Rank: 2/18



VULNERABILITY (V) - Moderate

Score: 0.557 • Rank: 7/18



COPING CAPACITY (CC) - Low

Score: 0.478 • Rank: 12/18



Population (2015)

551,774



Infant Mortality Rate

11



Illiterate population

7.8%



Access to improved water

84.4%



Average life expectancy

74.2 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 2 / 18 DEPARTMENT
SCORE: 0.809





MHE
0.809


Raw MHE
 0.664


Relative MHE
 0.954


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:


 **Inland Flood**
15%
 84,683
\$2.1 Billion

 **Wildfire**
89%
 490,654
\$6.2 Billion

 **Water Deficit**
44%
 244,142
\$3.1 Billion

 **Drought**
100%
 550,304
\$6.8 Billion

 **Extreme Cold**
45%
 248,474
\$3.1 Billion

 **Storm**
49%
 270,159
\$2.6 Billion



VULNERABILITY (V)

RANK: 7 / 18 DEPARTMENTS ASSESSED
SCORE: 0.557

Vulnerability in Caaguazú is primarily driven by Economic Constraints and Environmental Stress. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.661** **RANK: 4/18 DEPARTMENTS ASSESSED**

6.30% Cultivated Area Change
24.73% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.421** **RANK: 9/18 DEPARTMENTS ASSESSED**

74.16 Life Expectancy (years)
11 Infant Mortality Rate (per 1,000 live births)
82.5 Maternal Mortality Ratio
40.25 Adult Malnutrition
31.4% Population with Disability
51.3% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.363** **RANK: 8/18 DEPARTMENTS ASSESSED**

84.41% Households with Improved Water Source
69.68% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.632** **RANK: 7/18 DEPARTMENTS ASSESSED**

7.8% Illiteracy Rate (Age 10+)
7.6 Average Years of Schooling
9.18% Households with Internet
83.84% Households with Television
77.4% Households with Radio



Economic Constraints

0 1 **SCORE: 0.834** **RANK: 1/18 DEPARTMENTS ASSESSED**

60.62 Economic Dependency Ratio
43.68% Poverty Rate
0.58 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.575** **RANK: 5/18 DEPARTMENTS ASSESSED**

0.02 Female to Male Secondary Education*
0.37 Female to Male Economic Activity*
0.44 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.413** **RANK: 14/18 DEPARTMENTS ASSESSED**

1.08% Average Annual Population Change



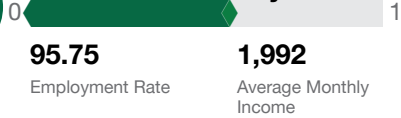
COPING CAPACITY (CC)

RANK: 12 / 18 DEPARTMENTS ASSESSED
SCORE: 0.478

Caaguazú exhibits weaker Coping Capacity in the areas of Health Care Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

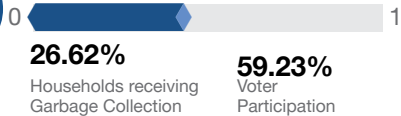


SCORE: 0.576

RANK: 8/18 DEPARTMENTS ASSESSED



Governance



SCORE: 0.431

RANK: 10/18 DEPARTMENTS ASSESSED



Crime Governance

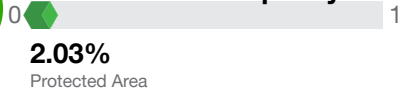


SCORE: 0.77

RANK: 3/18 DEPARTMENTS ASSESSED



Environmental Capacity



SCORE: 0.054

RANK: 17/18 DEPARTMENTS ASSESSED

(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.573** **RANK: 10/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.289** **RANK: 17/18 DEPARTMENTS ASSESSED**

4.30 Hospital Beds per 10,000 People	7.38 Physicians per 10,000 People	10.95 Nurses per 10,000 People	6,108.53 Average Distance to Nearest Hospital (km ²)	75.70% Vaccination Coverage	64.27% Access to Healthcare
---	--	---	---	--	--



Transportation Capacity **SCORE: 0.501** **RANK: 6/18 DEPARTMENTS ASSESSED**

0.95 Road Density (km per sq. km)	66.74 Distance to Airport or Seaport (km)
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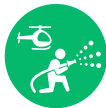
Communications Capacity **SCORE: 0.537** **RANK: 9/18 DEPARTMENTS ASSESSED**

96.7% Households with Mobile Phone	5.49% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.963** **RANK: 5/18 DEPARTMENTS ASSESSED**

99.46%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.519** **RANK: 12/18 DEPARTMENTS ASSESSED**

2.02 Ambulances per 100,000 People	32.38 Distance to Fire Station	98.95 Distance to Warehouse
---	--	---------------------------------------



RESILIENCE (R)

RANK: 12 / 18 DEPARTMENTS
SCORE: 0.460

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

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



**Economic
Constraints**



**Environmental
Stress**



**Health Care
Capacity**



**Transportation
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 4
SCORE: 0.331



Drought

RANK: 1
SCORE: 0.434



Wildfire

RANK: 1
SCORE: 0.444



Extreme Cold

RANK: 3
SCORE: 0.508



Water Deficit

RANK: 2
SCORE: 0.366



Storm

RANK: 6
SCORE: 0.356



MULTI-HAZARD RISK (MHR)



1 / 18

Rank within departments
Score: 0.629

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

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



Multi-Hazard Exposure



Vulnerability



Coping Capacity



█ Department score

█ Country score

CAAGUAZÚ RECOMMENDATIONS



Economic Constraints

Economic constraints have individual, household, community, and district-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit Caaguazú's ability to facilitate short- and long-term recovery.

Caaguazú is ranked among the highest in both Economic Constraints and Multi-Hazard Exposure. Interventions including development of public policies that ensure equal opportunity for employment and fair wages should be prioritized. Expand public assistance programs to increase opportunities for economic mobility and enhance access to resources.

Assess disaster response and recovery plans to ensure that economically vulnerable populations are incorporated. This includes plans for short-term response and long-term recovery plans, as economically disadvantaged populations are often more likely to be severely impacted by disasters and have slower to recovery times.

CAAGUAZÚ RECOMMENDATIONS

2

Environmental Stress

Environmental stressors such as the depletion, degradation, or contamination of natural resources can exacerbate natural hazards and negatively impact the health, safety, and economic security of Caaguazú's population.

In Caaguazú, increases in cultivated area rank 2nd highest in Paraguay. Additionally, deforestation is estimated at 24.73%, which ranks as the 5th highest in the country. With climate change and growing population pressures the need to put in place environmental protections is vital to ensuring sustainable development. Forest land management should be closely monitored to balance economic benefits and potential environmental stress. Promote sustainable agricultural practices by providing trainings and incentives where possible.

Economic constraints of the population need to be carefully balanced with agricultural and environmental reforms. High poverty rates and income inequality that already exists in Caaguazú can be further exacerbated by environmental regulations if proper stakeholder input is not incorporated.

CAAGUAZÚ RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

In Caaguazú there are only 4.3 hospital beds per 10,000 persons. Additionally, there are only 7.38 physicians per 10,000 persons, which is the second lowest in Paraguay. Work with NGOs and other partners to increase the number of medical workers and hospital beds available.

The average distance to hospitals is 6,108.53 square kilometers. Removing barriers such as distance could improve overall utilization of services and increase the health of the population. Vaccination coverage is 75.7% the 6th lowest in the country demonstrating the potential for outbreaks and the need to increase utilization of medical services. Invest in healthcare infrastructure to reduce travel distances and ensure that services are affordable.

Caaguazú is ranked highest in Multi-Hazard Risk and highly exposed to hazards. Ensuring healthcare capacity can meet the needs of the population is vital to protect lives.

CAAGUAZÚ RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Caaguazú's ability to distribute resources before, during, and after a disaster.

Although Caaguazú is ranked relatively high in Transportation Capacity, investments should be made to increase existing networks. Limited transportation capacity may hamper emergency response activities and decrease public access to resources. Focus on ensuring transportation projects target areas that have the most limited transportation networks. Increased transportation networks can also bring increase health care accessibility and service delivery.

Economic benefits and enhanced emergency response operations should be the focus of enhancements to the transportation network in Caaguazú. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented. Additionally, all construction projects need to be balanced with research and planners to ensure that environmental hazards are mitigated.

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PARAGUAY

CAAZAPÁ

NDPBA DEPARTMENT PROFILE

PARAGUAY CAAZAPÁ

CAPITAL: CAAZAPÁ

Area: 11,919 (km²)

The Caazapá department is located in the Eastern region of Paraguay. This department is divided into 11 districts: Caazapá (The Capital), Abaí, Buena Vista, Dr. Moisés S. Bertoni, Gral. Higinio Morínigo, Maciel, San Juan Nepomuceno, Tavaí, Yegros, Yuty, 3 de Mayo. The department borders the departments of Guairá, Caaguazú, Itapúa, Alto Paraná, Misiones and Paraguari. The main economic sources are cotton, soy, sugar cane, corn and yuca.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - High

Score: 0.602 • Rank: 4/18



RESILIENCE (R) - Very Low

Score: 0.436 • Rank: 15/18



MULTI-HAZARD EXPOSURE (MHE) - Moderate

Score: 0.678 • Rank: 7/18



VULNERABILITY (V) - High

Score: 0.569 • Rank: 6/18



COPING CAPACITY (CC) - Very Low

Score: 0.442 • Rank: 16/18



Population (2015)

187,035



Infant Mortality Rate

12.8



Illiterate population

11.1%



Access to improved water

78.6%



Average life expectancy

74.6 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 7 / 18 DEPARTMENT
SCORE: 0.678




MHE
0.678

Raw MHE
0.368

Relative MHE
0.988


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




28%
 51,316
\$826.4 Million

Wildfire




77%
 138,855
\$1.4 Billion

Water Deficit




41%
 73,798
\$760.2 Million

Drought




100%
 180,068
\$1.7 Billion

Extreme Cold



78%
 139,576
\$1.3 Billion

Storm



22%
 39,438
\$328.2 Million



VULNERABILITY (V)

RANK: 6 / 18 DEPARTMENTS ASSESSED
SCORE: 0.569

Vulnerability in Caazapá is primarily driven by Economic Constraints and Information Access Vulnerability. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.486** **RANK: 8/18 DEPARTMENTS ASSESSED**

5.62% Cultivated Area Change
14.56% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.402** **RANK: 12/18 DEPARTMENTS ASSESSED**

74.64 Life Expectancy (years)
12.8 Infant Mortality Rate (per 1,000 live births)
39.9 Maternal Mortality Ratio
38.17 Adult Malnutrition
34.3% Population with Disability
52.3% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.557** **RANK: 2/18 DEPARTMENTS ASSESSED**

78.64% Households with Improved Water Source
51.58% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.713** **RANK: 5/18 DEPARTMENTS ASSESSED**

11.1% Illiteracy Rate (Age 10+)
6.4 Average Years of Schooling
10.58% Households with Internet
83.17% Households with Television
78.8% Households with Radio



Economic Constraints

0 1 **SCORE: 0.817** **RANK: 2/18 DEPARTMENTS ASSESSED**

66.34 Economic Dependency Ratio
46.97% Poverty Rate
0.47 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.432** **RANK: 14/18 DEPARTMENTS ASSESSED**

0.13 Female to Male Secondary Education*
0.34 Female to Male Economic Activity*
0.22 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.572** **RANK: 9/18 DEPARTMENTS ASSESSED**

1.42% Average Annual Population Change



COPING CAPACITY (CC)

RANK: 16 / 18 DEPARTMENTS ASSESSED
SCORE: 0.442

Caazapá exhibits weaker Coping Capacity in the areas of Health Care Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE: 0.485** **RANK: 12/18 DEPARTMENTS ASSESSED**

97.15 **1,352**
 Employment Rate Average Monthly Income



Governance

0 1 **SCORE: 0.208** **RANK: 18/18 DEPARTMENTS ASSESSED**

15.43% **56.67%**
 Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE: 0.454** **RANK: 15/18 DEPARTMENTS ASSESSED**

11.92 **183.17**
 Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE: 0.320** **RANK: 10/18 DEPARTMENTS ASSESSED**

5.44%
 Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.508** **RANK: 15/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.354** **RANK: 15/18 DEPARTMENTS ASSESSED**

10.35
Hospital Beds per
10,000 People

11.54
Physicians per
10,000 People

11.38
Nurses per 10,000
People

7,074.85
Average Distance to Nearest
Hospital (km²)

60.15%
Vaccination
Coverage

68.42%
Access to
Healthcare



Transportation Capacity **SCORE: 0.353** **RANK: 13/18 DEPARTMENTS ASSESSED**

0.73
Road Density (km per sq. km)

96.88
Distance to Airport or Seaport (km)



Communications Capacity **SCORE: 0.418** **RANK: 14/18 DEPARTMENTS ASSESSED**

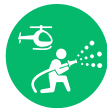
96.4%
Households with Mobile Phone

2.63%
Households with Fixed Phone



Energy Capacity **SCORE: 0.909** **RANK: 10/18 DEPARTMENTS ASSESSED**

98.79%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.634** **RANK: 7/18 DEPARTMENTS ASSESSED**

4.88
Ambulances per
100,000 People

67.13
Distance to Fire Station

79.77
Distance to Warehouse



RESILIENCE (R)

RANK: 15 / 18 DEPARTMENTS
SCORE: 0.436

Caazapá'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:



**Economic
Constraints**



**Information
Access
Vulnerability**



**Health Care
Capacity**



**Transportation
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 8
SCORE: 0.272



Drought

RANK: 3
SCORE: 0.393



Wildfire

RANK: 5
SCORE: 0.359



Extreme Cold

RANK: 2
SCORE: 0.542



Water Deficit

RANK: 9
SCORE: 0.192



Storm

RANK: 8
SCORE: 0.254



MULTI-HAZARD RISK (MHR)

4 / 18

Rank within departments
Score: 0.602

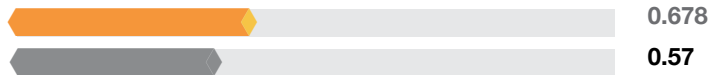


Caazapá's score and ranking are due to Moderate Multi-hazard exposure combined with High Vulnerability and Very Low Coping Capacity scores.

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



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

CAAZAPÁ RECOMMENDATIONS



Economic Constraints

Economic constraints have individual, household, community, and district-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit Caazapá's ability to facilitate short- and long-term recovery.

Findings show that in Caazapá 47% of the population lives in poverty, which is the highest rate in Paraguay. In addition, Caazapá has the 2nd highest age dependency ratio in the country. Focus efforts on creating public policies that ensure equal opportunity for employment and fair wages. Expand public assistance programs to increase opportunities for economic mobility and enhance access to resources.

Assess disaster response and recovery plans to ensure that economically vulnerable populations are incorporated. This includes plans for short-term response and long-term recovery plans, as economically disadvantaged populations are often more likely to be severely impacted by disasters and have slower to recovery times.

CAAZAPÁ RECOMMENDATIONS

2

Information Access Vulnerability

Limitations in information access can impede a population's ability to receive, understand, and take action. Emergency messages must take into account the unique information access constraints of the district. Emergency messages presented to the population of Caazapá must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.

Caazapá ranks 5th highest in Access to Information Vulnerability in the country. The findings show that 11.1% of the population are illiterate, which is also 5th highest in Paraguay. In addition, the average years of schooling is 6.4, the second lowest amongst the 18 departments. Focus efforts on providing programs to increase literacy rates and promote continued education. Work with communities to better understand the underlying factors that may be leading to the low average years of schooling. In particular, poverty in Caazapá impacts 47% of the population and may be a contributing factor hindering educational achievements.

Efforts should also be focused on ensuring households have reliable access to lines of communications within their homes. About 83.2% of homes report having a television and 10.6% have internet, disaster managers should take advantage of the household capacities and work with local radio and television broadcasting stations to deliver critical messages. The findings also show that 77.5% of the population are potentially exposed to extreme cold hazards, which would limit them to their homes during such an emergency event. Effective communication of updates and warnings to the public is critical to reducing disaster risk.

CAAZAPÁ RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

In Caazapá there are only 11.38 nurses per 10,000 persons, which ranks 8th out of the 18 departments in Paraguay. Where available increase funding to properly staff hospitals and work with private hospitals, NGOs and other partners to ensure equitable coverage.

Findings also show that access to health care is ranked 6th compared to other departments. Removing barriers such as distance and cost could improve overall utilization of services and increase the health of the population. Vaccination coverage is 60.15%, which is the lowest in the country. Demonstrating the potential for outbreaks and the need to increase utilization of medical services. Fund public programs to increase vaccination rates and promote healthy lifestyles to reduce the burdens on the limited healthcare resources.

CAAZAPÁ RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Caazapá's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the environmental stresses and hazards that impact Caazapá.

Increased transportation networks can also enhance access to markets, which can help reduce the economic constraints within the population. Economic benefits and enhanced access to health care should be the focus of enhancements to the transportation network in Caazapá. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented.

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PARAGUAY

CANINDEYÚ

NDPBA DEPARTMENT PROFILE

PARAGUAY

CANINDEYÚ

CAPITAL: SALTO DE GUAIRÁ

Area: 18,156 (km²)

The Canindeyú department is located in the Eastern region of Paraguay. This department is divided into 13 districts: Salto del Guairá (The Capital), Corpus Christi, Villa Curuguaty, Villa Ygatimí, Itanará, Ypejhú, Francisco Caballero Alvarez, Katueté, La Paloma del Espíritu Santo, Nueva Esperanza, Yasy Cañy, Ybyrarobaná, Yby Pytá. The department borders Brazil, and the departments of Alto Paraná, Amambay, Caaguazú and San Pedro. The main economic sources are commercial activities and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - High

Score: 0.590 • Rank: 6/18



RESILIENCE (R) - Low

Score: 0.463 • Rank: 11/18



MULTI-HAZARD EXPOSURE (MHE) - High

Score: 0.696 • Rank: 6/18



VULNERABILITY (V) - High

Score: 0.609 • Rank: 4/18



COPING CAPACITY (CC) - High

Score: 0.535 • Rank: 6/18



Population (2015)

226,111



Infant Mortality Rate

13.5



Illiterate population

11.1%



Access to improved water

86.6%



Average life expectancy

73.7 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 18 DEPARTMENT
SCORE: 0.696




MHE
0.696

Raw MHE
0.416

Relative MHE
0.976


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




12%
 26,313
 \$581.5 Million

Wildfire




74%
 169,003
 \$1.8 Billion

Water Deficit



59%
 134,451
 \$1.3 Billion

Drought




100%
 227,336
 \$2.3 Billion

Extreme Cold



-
 -
 -

Storm



100%
 227,336
 \$2.3 Billion



VULNERABILITY (V)

RANK: 4 / 18 DEPARTMENTS ASSESSED
SCORE: 0.609

Vulnerability in Canindeyú is primarily driven by Population Pressures and Environmental Stress. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress



3.71% **31.92%**
Cultivated Area Deforestation
Change



Vulnerable Health Status



73.7 **13.5** **110.5** **20.39** **18.1%** **52.5%**
Life Expectancy Infant Mortality Maternal Adult Population with Population Reporting
(years) Rate (per 1,000 Mortality Ratio Malnutrition Disability Illness or Injury
live births)



Clean Water Vulnerability



86.58% **65.51%**
Households with Households
Improved Water with Improved
Source Sanitation



Information Access Vulnerability



11.1% **7.2** **17.27%** **81.69%** **74.8%**
Illiteracy Rate Average Years Households with Households with Households with
(Age 10+) of Schooling Internet Television Radio



Economic Constraints



58.06 **38.04%** **0.53**
Economic Poverty Rate Income
Dependency Inequality (GINI)
Ratio



Gender Inequality



0.10 **0.38** **0.30**
Female to Male Female to Male Female to Male
Secondary Economic Activity* Average Monthly
Education* Income*

*Higher values indicate greater gender disparity.



Population Pressures



2.28%
Average Annual
Population
Change



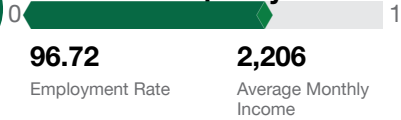
COPING CAPACITY (CC)

RANK: 6 / 18 DEPARTMENTS ASSESSED
SCORE: 0.535

Canindeyú exhibits weaker Coping Capacity in the areas of Transportation Capacity and Health Care Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

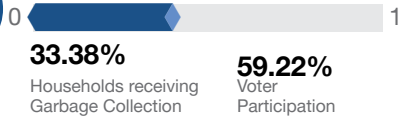


SCORE: 0.678

RANK: 2/18 DEPARTMENTS ASSESSED



Governance

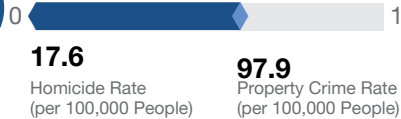


SCORE: 0.399

RANK: 13/18 DEPARTMENTS ASSESSED



Crime Governance



SCORE: 0.594

RANK: 11/18 DEPARTMENTS ASSESSED



Environmental Capacity



SCORE: 0.740

RANK: 2/18 DEPARTMENTS ASSESSED

(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.525** **RANK: 12/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.360** **RANK: 13/18 DEPARTMENTS ASSESSED**

5.59 Hospital Beds per 10,000 People	9.02 Physicians per 10,000 People	9.93 Nurses per 10,000 People	9,229.14 Average Distance to Nearest Hospital (km ²)	84.53% Vaccination Coverage	66.25% Access to Healthcare
---	--	--	---	--	--



Transportation Capacity **SCORE: 0.320** **RANK: 14/18 DEPARTMENTS ASSESSED**

0.65 Road Density (km per sq. km)	101.95 Distance to Airport or Seaport (km)
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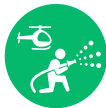
Communications Capacity **SCORE: 0.431** **RANK: 13/18 DEPARTMENTS ASSESSED**

97.5% Households with Mobile Phone	1.20% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.987** **RANK: 3/18 DEPARTMENTS ASSESSED**

99.76%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.489** **RANK: 16/18 DEPARTMENTS ASSESSED**

4.96 Ambulances per 100,000 People	74.2 Distance to Fire Station	155.11 Distance to Warehouse
---	---	--



RESILIENCE (R) **RANK: 11 / 18 DEPARTMENTS**
SCORE: 0.463

Canindeyú'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:



Population Pressures



Environmental Stress



Transportation Capacity



Health Care Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 14
SCORE: 0.134



Drought

RANK: 6
SCORE: 0.385



Wildfire

RANK: 8
SCORE: 0.338



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 5
SCORE: 0.281



Storm

RANK: 2
SCORE: 0.501



MULTI-HAZARD RISK (MHR)



6 / 18

Rank within departments
Score: 0.590

Canindeyú'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:



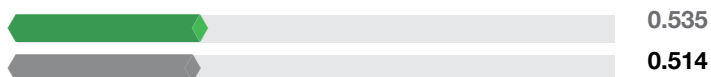
Multi-Hazard Exposure



Vulnerability



Coping Capacity



CANINDEYÚ RECOMMENDATIONS



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Findings show that population pressures are a leading driver of vulnerability in Canindeyú. Ranked 4th highest in overall Vulnerability, risk reduction initiatives need to be prioritized. Current food insecurity due to the COVID-19 pandemic and unfavorable climatic factors underscores the need to ensure emergency reserves keep with the growing population. Public awareness and proper preparedness at the household level is also necessary. Continue to efforts to inform the public on precautionary measures and ways to help mitigate hazards, from campaigns to promote water conservation to proper social distancing.

Investing in resilient and eco-conscious infrastructure needs to be a priority, as the growing population add stress to already fragile environmental conditions. Infrastructure projects should ensure construction efficiently use resources, focus on renewable and local materials, and implement proper mitigation techniques. Access healthcare and increased transportation should be the primary areas of investment to keep up with the expanding population.

CANINDEYÚ RECOMMENDATIONS

2

Environmental Stress

Environmental stressors such as the depletion, degradation, or contamination of natural resources can exacerbate natural hazards and negatively impact the health, safety, and economic security of Canindeyú's population.

Food insecurity due to insufficient rains in the midst of the COVID-19 pandemic has greatly impacted Paraguay this year. The decreased production yields in departments including Canindeyú coupled with the shutdowns have impacted food security, which highlights the need to strengthen risk reduction plans.

Actions should be focused on reducing environmental stresses such as deforestation. Forests play a critical role in soil conservation, reducing the impacts of climate change among other ecosystem functions. Enhance efforts to work with local farmers to incorporate drought resistant crops and take other steps to move toward more sustainable agricultural practices.

CANINDEYÚ RECOMMENDATIONS

3

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Canindeyú's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment plans. Ensure that environmental mitigation plans for transportation projects consider the storm and water stress hazards that impact Canindeyú. In addition, the growing population will likely change urbanization dynamics, requiring coordination with land use planners.

Closely monitor hotspots of population growth and ensure emergency plans from evacuation and resource transportation routes are updated.

CANINDEYÚ RECOMMENDATIONS

4

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Canindeyú is ranked as the 4th lowest department for healthcare capacity in Paraguay. Findings show that there are only 5.59 hospital beds per 10,000 persons. Invest in increased inpatient capacity by acquiring more hospital beds. Additionally, there are only 9.02 physicians per 10,000 persons, which is the 4th lowest out of the 18 departments. Work with NGOs and other partners to increase the number of medical workers available and ensure they are equitably stationed throughout Canindeyú.

Access to healthcare is ranked as the 4th lowest in the country. With the growing population, the need to invest in healthcare capacity through increased number of beds and staff is critical. In addition, current facilities and new construction plans should be built to withstand storm conditions. Building resilient structures and reinforcing existing ones is also important as the department is highly exposed to storms.

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PARAGUAY

CENTRAL

NDPBA DEPARTMENT PROFILE

PARAGUAY CENTRAL

CAPITAL: AREGUÁ

Area: 2,977 (km²)

The Central department is located in the Eastern region of Paraguay. This department is divided into 19 districts: Areguá (The Capital), Capiatá, Fernando de la Mora, Guarambaré, Itá, Itauguá, Lambaré, Limpio, Luque, Mariano Roque Alonso, Nueva Italia, Ñemby, San Antonio, San Lorenzo, Villa Elisa, Villeta, Ypacaraí, Ypané, J. Augusto Saldívar. The department borders Argentina, Asuncion DC and the departments of Presidente Hayes, Cordillera, Paraguari and Ñeembucú. The main economic sources are industrial production includes the processing of food, furniture, clothing, pharmaceutical production, metallurgic, plastic and ceramics.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low

Score: 0.450 • Rank: 14/18



RESILIENCE (R) - Very High

Score: 0.674 • Rank: 2/18



MULTI-HAZARD EXPOSURE (MHE) - High

Score: 0.699 • Rank: 5/18



VULNERABILITY (V) - Very Low

Score: 0.298 • Rank: 17/18



COPING CAPACITY (CC) - Very High

Score: 0.646 • Rank: 2/18



Population (2015)

2,115,174



Infant Mortality Rate

10.9



Illiterate population

2.9%



Access to improved water

96.2%



Average life expectancy

74.6 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 5 / 18 DEPARTMENT
SCORE: 0.699




MHE
0.699

Raw MHE
1.000

Relative MHE
0.399


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




2%
 45,175
\$1.3 Billion

Wildfire




98%
 1,929,662
\$34.5 Billion

Water Deficit



0%
 9,459
\$138.4 Million

Drought



100%
 1,973,500
\$35.2 Billion

Extreme Cold



-
 -
 -

Storm



-
 -
 -



VULNERABILITY (V)

RANK: 17 / 18 DEPARTMENTS ASSESSED
SCORE: 0.298

Vulnerability in Central is primarily driven by Population Pressures and Gender Inequality. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.196** **RANK: 16/18 DEPARTMENTS ASSESSED**

-0.35% **6.16%**
Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.248** **RANK: 18/18 DEPARTMENTS ASSESSED**

74.57 **10.9** **41.2** **43.08** **28.1%** **40.7%**
Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.039** **RANK: 17/18 DEPARTMENTS ASSESSED**

96.19% **96.39%**
Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.085** **RANK: 17/18 DEPARTMENTS ASSESSED**

2.9% **10.1** **27.47%** **96.58%** **86.9%**
Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE: 0.043** **RANK: 18/18 DEPARTMENTS ASSESSED**

50.8 **16.18%** **0.36**
Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.471** **RANK: 10/18 DEPARTMENTS ASSESSED**

0.22 **0.28** **0.22**
Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 1.000** **RANK: 1/18 DEPARTMENTS ASSESSED**

2.34%
Average Annual Population Change



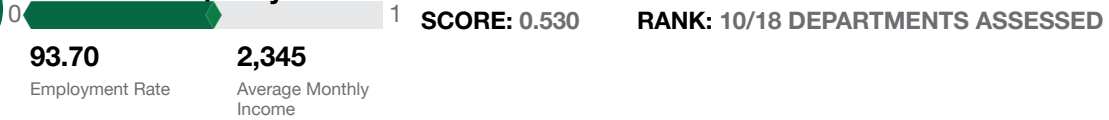
COPING CAPACITY (CC)

RANK: 2 / 18 DEPARTMENTS ASSESSED
SCORE: 0.646

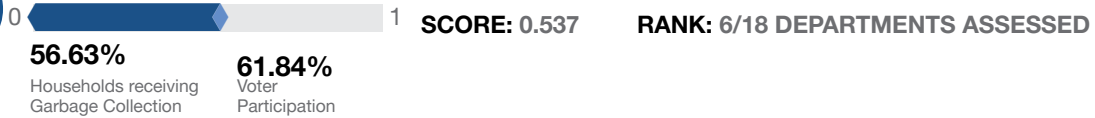
Central exhibits weaker Coping Capacity in the areas of Health Care Capacity and Economic Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



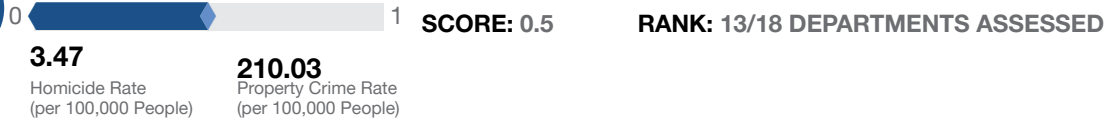
Economic Capacity



Governance



Crime Governance



Environmental Capacity



(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.805** **RANK: 2/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.506** **RANK: 5/18 DEPARTMENTS ASSESSED**

7.01 Hospital Beds per 10,000 People	17.34 Physicians per 10,000 People	15.07 Nurses per 10,000 People	3,371.45 Average Distance to Nearest Hospital (km ²)	82.83% Vaccination Coverage	72.87% Access to Healthcare
---	---	---	---	--	--



Transportation Capacity **SCORE: 0.789** **RANK: 2/18 DEPARTMENTS ASSESSED**

4.29 Road Density (km per sq. km)	34.04 Distance to Airport or Seaport (km)
---	---



Communications Capacity **SCORE: 0.943** **RANK: 2/18 DEPARTMENTS ASSESSED**

97.7% Households with Mobile Phone	15.48% Households with Fixed Phone
--	--



Energy Capacity **SCORE: 0.981** **RANK: 4/18 DEPARTMENTS ASSESSED**

99.69%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.608** **RANK: 8/18 DEPARTMENTS ASSESSED**

0.68 Ambulances per 100,000 People	23.52 Distance to Fire Station	34.29 Distance to Warehouse
---	--	---------------------------------------



RESILIENCE (R)

RANK: 2 / 18 DEPARTMENTS
SCORE: 0.674

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

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



Population Pressures



Gender Inequality



Health Care Capacity



Economic Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 16
SCORE: 0.090



Drought

RANK: 11
SCORE: 0.326



Wildfire

RANK: 10
SCORE: 0.325



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 16
SCORE: 0.007



Storm

RANK: 12
SCORE: 0.000



MULTI-HAZARD RISK (MHR)



14 / 18

Rank within departments
Score: 0.450

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

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



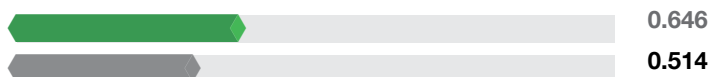
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

CENTRAL RECOMMENDATIONS



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Central ranked highest for Population Pressures with an average annual total population change of 2.34%, which demonstrates the need to grow the economy and infrastructure sustainably.

Focus investments on public programs to reduce marginalization of women and assist in the employment of the working-age population. Providing trainings and financial assistance to increase employment rates can help to stimulate the economy and generate public funds for disaster risk reduction activities.

CENTRAL RECOMMENDATIONS

2

Gender Inequality

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Increase gender-based inclusion in all phases of DM, ensuring the implementation at the district and local levels. Course of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.

Although the ratio of female to male income and economic activity in Central is relatively balanced, the secondary school enrollment ratio shows inequalities in education. Focus efforts on promoting equal access to education and encouraging young women to pursue higher academic achievements beyond primary school. Work with stakeholders and partners to provide community outreach that empowers women to continue their education.

Continue to monitor educational and economic success of women throughout society. As the population grows the already limited resources will be increasingly strained. Closely monitor public programs and projects such as those encouraging gender equality to ensure resources are being properly utilized.

CENTRAL RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Invest in increased healthcare capacity by allocating funds for hospital beds, medical staff and infrastructure. Population growth will continue to increase the demand on the already limited healthcare resources.

In addition to increasing the number of facilities, supplies and staff, funds should focus on public health campaigns. Promotion of vaccinations, healthy lifestyles and use of primary care will help boost the health of the population to reduce the burden on the healthcare sector. With limited economic capacity in the department expanded partnerships with NGOs and the private sector are needed.

CENTRAL RECOMMENDATIONS

4

Economic Capacity

A strong economic foundation provides an indication of a department's ability to absorb economic losses and quickly mobilize financial assets for preparedness, response and recovery activities. Central's limited economic capacity correlates to disproportionate disaster impacts.

Continue to encourage programs that diversify the economy in Central to generate public revenue and create new job opportunities. Pursue policies create equal opportunities for employment and fair wages. Focus on ensuring that incomes grow equitably across the department and mirror achievements in economic growth.

The employment rate in Central is 93.7% which is the 5th lowest in the country. Assess current policies and ensure that they are creating a business environment that encourages growth. Additionally, focus public policies on utilizing technological advancements and proven best practices.

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PARAGUAY

CONCEPCIÓN

NDPBA DEPARTMENT PROFILE

PARAGUAY

CONCEPCIÓN

CAPITAL: CONCEPCIÓN

Area: 21,931 (km²)

The Concepción department is located in the Eastern region of Paraguay. This department is divided into 11 districts: Concepción (The Capital), Belén, Horqueta, Loreto, San Carlos del Apa, San Lázaro, Yby Yaú, Azoté'y, Sargento José Félix López, San Alfredo, Paso Barreto. The department borders Brazil, and the departments of Presidente Hayes, Alto Paraguay, Amambay and San Pedro. The main economic sources are livestock and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - High

Score: 0.601 • Rank: 5/18



RESILIENCE (R) - Low

Score: 0.448 • Rank: 13/18



MULTI-HAZARD EXPOSURE (MHE) - High

Score: 0.700 • Rank: 4/18



VULNERABILITY (V) - Moderate

Score: 0.555 • Rank: 8/18



COPING CAPACITY (CC) - Low

Score: 0.452 • Rank: 13/18



Population (2015)

247,675



Infant Mortality Rate

14.5



Illiterate population

8.5%



Access to improved water

91.9%



Average life expectancy

74.4 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 4 / 18 DEPARTMENT
SCORE: 0.700





MHE
0.700


Raw MHE
0.451


Relative MHE
0.949

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:


 Inland Flood
37%
👤 94,325
\$2.2 Billion

 Wildfire
89%
👤 225,352
\$2.7 Billion

 Water Deficit
24%
👤 61,666
\$508 Million

 Drought
90%
👤 227,534
\$2.7 Billion

 Extreme Cold
-
👤 -
-

 Storm
88%
👤 223,749
\$2.7 Billion



VULNERABILITY (V)

RANK: 8 / 18 DEPARTMENTS ASSESSED
SCORE: 0.555

Vulnerability in Concepción is primarily driven by Economic Constraints and Population Pressures. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress



3.53% Cultivated Area Change
15.77% Deforestation



Vulnerable Health Status



74.44 Life Expectancy (years)
14.5 Infant Mortality Rate (per 1,000 live births)
156 Maternal Mortality Ratio
45.58 Adult Malnutrition
31.3% Population with Disability
53.2% Population Reporting Illness or Injury



Clean Water Vulnerability



91.94% Households with Improved Water Source
61.72% Households with Improved Sanitation



Information Access Vulnerability



8.5% Illiteracy Rate (Age 10+)
7.6 Average Years of Schooling
9.35% Households with Internet
81.64% Households with Television
80.6% Households with Radio



Economic Constraints



66.36 Economic Dependency Ratio
43.97% Poverty Rate
0.42 Income Inequality (GINI)



Gender Inequality



0.15 Female to Male Secondary Education*
0.39 Female to Male Economic Activity*
0.27 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures



1.55% Average Annual Population Change



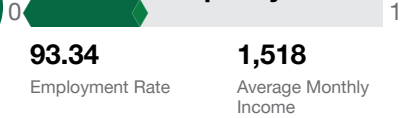
COPING CAPACITY (CC)

RANK: 13 / 18 DEPARTMENTS ASSESSED
SCORE: 0.452

Concepción exhibits weaker Coping Capacity in the areas of Health Care Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

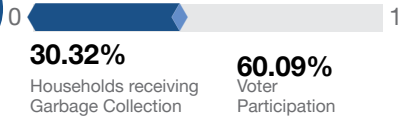


SCORE: 0.316

RANK: 17/18 DEPARTMENTS ASSESSED



Governance

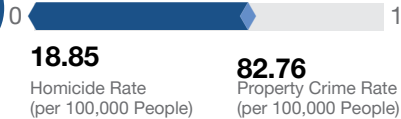


SCORE: 0.419

RANK: 12/18 DEPARTMENTS ASSESSED



Crime Governance



SCORE: 0.616

RANK: 9/18 DEPARTMENTS ASSESSED



Environmental Capacity



SCORE: 0.582

RANK: 5/18 DEPARTMENTS ASSESSED

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



Health Care Capacity **SCORE: 0.422** **RANK: 10/18 DEPARTMENTS ASSESSED**

8.77 Hospital Beds per 10,000 People	11.31 Physicians per 10,000 People	15.41 Nurses per 10,000 People	13,776.36 Average Distance to Nearest Hospital (km ²)	77.23% Vaccination Coverage	71.48% Access to Healthcare
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Transportation Capacity **SCORE: 0.466** **RANK: 9/18 DEPARTMENTS ASSESSED**

0.37 Road Density (km per sq. km)	51.66 Distance to Airport or Seaport (km)
---	---



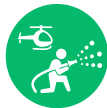
Communications Capacity **SCORE: 0.620** **RANK: 6/18 DEPARTMENTS ASSESSED**

96.6% Households with Mobile Phone	8.00% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.828** **RANK: 14/18 DEPARTMENTS ASSESSED**

97.79% Households Connected to Electric Grid



Disaster Management Capacity



4.51 Ambulances per 100,000 People	244.6 Distance to Fire Station	132.33 Distance to Warehouse
---	--	--



RESILIENCE (R)

RANK: 13 / 18 DEPARTMENTS
SCORE: 0.448

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

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



**Economic
Constraints**



**Population
Pressures**



**Health Care
Capacity**



**Transportation
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood



RANK: 2
SCORE: 0.481



Drought



RANK: 7
SCORE: 0.373



Wildfire



RANK: 2
SCORE: 0.416



Extreme Cold



RANK: 9
SCORE: 0.000



Water Deficit



RANK: 12
SCORE: 0.110



Storm



RANK: 3
SCORE: 0.488



MULTI-HAZARD RISK (MHR)



5 / 18

Rank within departments
Score: 0.601

Concepción's score and ranking are due to High Multi-hazard exposure combined with Moderate Vulnerability and Low Coping Capacity scores.

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



Multi-Hazard Exposure



0.700
0.57



Vulnerability



0.555
0.479



Coping Capacity



0.452
0.514

Department score
Country score

CONCEPCIÓN RECOMMENDATIONS



Economic Constraints

Economic constraints have individual, household, community, and district-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit Concepción's ability to facilitate short- and long-term recovery.

Findings show that Concepción ranks 5th highest in the country in overall Economic Constraints. Concepción has the third highest poverty rate (44%) and the highest age dependency ratio in Paraguay. Focus efforts on creating public policies that ensure equal opportunity for employment and fair wages.

Expand public assistance programs to increase opportunities for economic mobility and enhance access to resources, particularly for elderly populations and families with young children.

Assess disaster response and recovery plans to ensure that economically vulnerable populations are incorporated. This includes plans for short-term response and long-term recovery plans, as economically disadvantaged populations are often more likely to be severely impacted by disasters and have slower to recovery times.

CONCEPCIÓN RECOMMENDATIONS

2

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Findings show that the average annual total population change is 1.55%, ranking 8th in Paraguay. As the population grows, so do the risks associated with disasters due to urbanization and expanded public resource needs. Increases in demands on health care, emergency services, and public programs can put strain on already limited resources.

Continue to closely monitor the population to adjust plans, policies and programs accordingly. Promoting economic development opportunities for an increasing population will help alleviate economic constraints, another key driver of Vulnerability in Concepción.

Sustainable development plans must consider hazard exposure, and apply zoning restrictions is hazard-prone to reduce risk and prevent disasters. Findings show that Concepción is susceptible to floods, storms, wildfire, and seasonal drought.

CONCEPCIÓN RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

The population in Concepción is growing and so will the need to expand health care capacity. Findings show that just 71% of sick and injured persons reported that they consulted a doctor in 2017, and vaccination coverage rates were just 77%.

The average distance between hospitals and populated places is over 13,000 square kilometers. Removing barriers such as distance could improve overall utilization of services and increase the health of the population. Providing incentives to work in the health care sector, especially within rural communities will ensure enhanced and equitable access to health care.

CONCEPCIÓN RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Concepción's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the environmental stresses and hazards that impact Concepción.

Increased transportation networks can also enhance access to markets, which can help reduce the economic constraints within the population. Economic benefits and enhanced access to health care should be the focus of enhancements to the transportation network in Concepción. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented.

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PARAGUAY

CORDILLERA

NDPBA DEPARTMENT PROFILE

PARAGUAY CORDILLERA

CAPITAL: CAACUPÉ

Area: 5,877 (km²)

The Cordillera department is located in the Eastern region of Paraguay. This department is divided into 20 districts: Caacupé (The Capital), Altos, Arroyos y Esteros, Atyrá, Caraguatay, Emboscada, Eusebio Ayala, Isla Pucú, Itacurubí de la Cordillera, Juan de Mena, Loma Grande, Mbocayaty del Yhaguy, Nueva Colombia, Piribebuy, Primero de Marzo, San Bernardino, Santa Elena, Tobatí, Valenzuela, San José Obrero. The department borders the departments of Presidente Hayes, San Pedro, Caaguazú, Paraguari and Central. The main economic sources are livestock and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low

Score: 0.457 • Rank: 13/18



RESILIENCE (R) - High

Score: 0.562 • Rank: 5/18



MULTI-HAZARD EXPOSURE (MHE) - Low

Score: 0.495 • Rank: 13/18



VULNERABILITY (V) - Low

Score: 0.382 • Rank: 14/18



COPING CAPACITY (CC) - Moderate

Score: 0.506 • Rank: 9/18



Population (2015)

303,242



Infant Mortality Rate

12.3



Illiterate population

5.4%



Access to improved water

98.0%



Average life expectancy

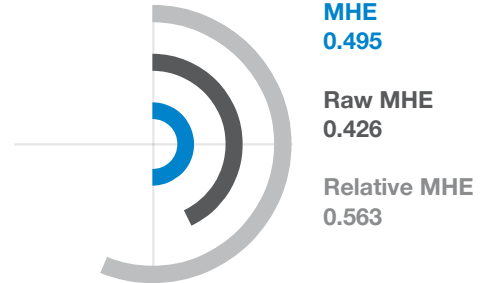
74.3 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 13 / 18 DEPARTMENT
SCORE: 0.495



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood

15%
 47,287
 \$888.8 Million

Wildfire

83%
 254,678
 \$3.5 Billion

Water Deficit

37%
 114,650
 \$1.7 Billion

Drought

100%
 306,776
 \$4 Billion

Extreme Cold

-
 -
 -

Storm

0%
 713
 \$5.2 Million



VULNERABILITY (V)

RANK: 14 / 18 DEPARTMENTS ASSESSED
SCORE: 0.382

Vulnerability in Cordillera is primarily driven by Population Pressures and Gender Inequality. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.379** **RANK: 11/18 DEPARTMENTS ASSESSED**

5.60% Cultivated Area Change
7.60% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.404** **RANK: 11/18 DEPARTMENTS ASSESSED**

74.34 Life Expectancy (years)
12.3 Infant Mortality Rate (per 1,000 live births)
22 Maternal Mortality Ratio
63.41 Adult Malnutrition
34.0% Population with Disability
41.3% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.097** **RANK: 16/18 DEPARTMENTS ASSESSED**

97.95% Households with Improved Water Source
85.59% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.455** **RANK: 13/18 DEPARTMENTS ASSESSED**

5.4% Illiteracy Rate (Age 10+)
7.9 Average Years of Schooling
10.50% Households with Internet
90.37% Households with Television
83.0% Households with Radio



Economic Constraints

0 1 **SCORE: 0.309** **RANK: 15/18 DEPARTMENTS ASSESSED**

56.22 Economic Dependency Ratio
26.90% Poverty Rate
0.4 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.473** **RANK: 9/18 DEPARTMENTS ASSESSED**

0.06 Female to Male Secondary Education*
0.37 Female to Male Economic Activity*
0.31 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.559** **RANK: 10/18 DEPARTMENTS ASSESSED**

1.39% Average Annual Population Change



COPING CAPACITY (CC)

RANK: 9 / 18 DEPARTMENTS ASSESSED
SCORE: 0.506

Cordillera exhibits weaker Coping Capacity in the areas of Health Care Capacity and Communications Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

0  1 **SCORE: 0.440** **RANK: 15/18 DEPARTMENTS ASSESSED**

95.03 **1,609**
 Employment Rate Average Monthly Income



Governance

0  1 **SCORE: 0.497** **RANK: 8/18 DEPARTMENTS ASSESSED**

25.49% **63.60%**
 Households receiving Garbage Collection Voter Participation



Crime Governance

0  1 **SCORE: 0.615** **RANK: 10/18 DEPARTMENTS ASSESSED**

4.68 **158.4**
 Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0  1 **SCORE: 0.155** **RANK: 15/18 DEPARTMENTS ASSESSED**

3.04%
 Protected Area

(COPING CAPACITY CONTINUED)


 **Infrastructure Capacity**  SCORE: 0.623 RANK: 5/18 DEPARTMENTS ASSESSED

 **Health Care Capacity** SCORE: 0.453 RANK: 8/18 DEPARTMENTS ASSESSED


6.78 Hospital Beds per 10,000 People	10.23 Physicians per 10,000 People	12.33 Nurses per 10,000 People	5,571.30 Average Distance to Nearest Hospital (km ²)	81.40% Vaccination Coverage	74.98% Access to Healthcare
---	---	---	---	--	--

 **Transportation Capacity** SCORE: 0.584 RANK: 4/18 DEPARTMENTS ASSESSED



1.32 Road Density (km per sq. km)	54.57 Distance to Airport or Seaport (km)
---	---

 **Communications Capacity** SCORE: 0.538 RANK: 8/18 DEPARTMENTS ASSESSED

94.9% Households with Mobile Phone	8.47% Households with Fixed Phone
--	---

 **Energy Capacity** SCORE: 0.915 RANK: 9/18 DEPARTMENTS ASSESSED

98.87%
Households Connected to
Electric Grid

 **Disaster Management Capacity**  SCORE: 0.606 RANK: 9/18 DEPARTMENTS ASSESSED

3.01 Ambulances per 100,000 People	34.22 Distance to Fire Station	68.86 Distance to Warehouse
---	--	---------------------------------------

 **RESILIENCE (R)** RANK: 5 / 18 DEPARTMENTS
SCORE: 0.562

Cordillera’s score and ranking are due to Low Vulnerability combined with Moderate Coping Capacity scores.

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

 **Population Pressures**

 **Gender Inequality**

 **Health Care Capacity**

 **Communications Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 12
SCORE: 0.153



Drought

RANK: 9
SCORE: 0.329



Wildfire

RANK: 11
SCORE: 0.324



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 8
SCORE: 0.192



Storm

RANK: 11
SCORE: 0.075



MULTI-HAZARD RISK (MHR)



13 / 18

Rank within departments
Score: 0.457

Cordillera's score and ranking are due to Low Multi-hazard exposure combined with Low Vulnerability and Moderate Coping Capacity scores.

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



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

CORDILLERA RECOMMENDATIONS



Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Although overall vulnerability is low in Cordillera, findings show that the department ranks 10th in population pressures. As the population grows, so do the risks associated with disasters due to urbanization and expanded public resource needs. Increases in demands on health care, emergency services, and public programs can put strain on already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly.

Focus investments on public programs to reduce marginalization of women and assist in the employment of the working-age population. Providing trainings and financial assistance to increase employment rates can help to stimulate the economy and generate public funds for disaster risk reduction activities.

CORDILLERA RECOMMENDATIONS

2

Gender Inequality

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Increase gender-based inclusion in all phases of DM, ensuring the implementation at the district and local levels. Course of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.

Although Cordillera ranks 9th of the 18 departments in Gender Inequality, findings highlight that women are less economically active than men. Increase funding of public programs that are focused on empowering women to continue their education and join the workforce.

Programs should ensure women have the training and skills needed to reduce the wage and employment gap. Explore incentive-based initiatives to encourage employers to hire women and other marginalized groups

Population pressures in Cordillera may exacerbate the existing inequalities if no mitigation strategies are put in place. As the population grows the competition for employment and educational opportunities will increase. Thus, efforts to ensure equality throughout society should be prioritized.

CORDILLERA RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Cordillera must meet the health care needs of a growing population. Findings show that department ranks 12th in Physicians per 10,000 People, and 10th in Nurses per 10,000 People (10.2 and 12.3, respectively).

Ensuring healthcare capacity can meet the needs of the population is vital to protect lives. Work with Regional and International health institutions, NGOs and other partners to increase the number of skilled medical workers in the department. Providing incentives to work in the health care sector, especially within vulnerable communities, will ensure enhanced and equitable access to health care.

CORDILLERA RECOMMENDATIONS

4

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how department- and local-level populations able to facilitate effective and coordinated communication.

Overall, Communications Capacity in Cordillera is ranked 8th out of the 18 departments in Paraguay. In Cordillera only 94% of households have access to mobile phones, which is the 4th lowest in the country. Expand all communications infrastructure to the department to ensure coverage, accessibility, and reliability of multimodal communications before, during, and after a disaster.

Increasing communications capacity and information technology will also reduce vulnerability by increasing access to Information, ensuring that populations receive, understand, and take appropriate actions when information is provided.

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PARAGUAY

GUAIRÁ

NDPBA DEPARTMENT PROFILE

PARAGUAY GUAIRÁ

CAPITAL: VILLARRICA

Area: 4,797 (km²)

The Guairá department is located in the Eastern region of Paraguay. This department is divided into 18 districts: Villarrica (The Capital), Borja, Cptán. Mauricio José Troche, Coronel Martínez, Félix Pérez Cardozo, General Eugenio A. Garay, Independencia, Itapé, Iturbe, José Fassardi, Mbocayaty, Natalicio Talavera, Ñumí, San Salvador, Yataity, Dr. Bottrell, Paso Yobai, Tebicuary. The department borders the departments of Caaguazú, Caazapá and Paraguari. The main economic sources are are sugar cane cotton, soybean, maize, vegetables, fruits and also wine.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low

Score: 0.481 • Rank: 11/18



RESILIENCE (R) - High

Score: 0.548 • Rank: 6/18



MULTI-HAZARD EXPOSURE (MHE) - Moderate

Score: 0.539 • Rank: 10/18



VULNERABILITY (V) - Low

Score: 0.434 • Rank: 13/18



COPING CAPACITY (CC) - Moderate

Score: 0.530 • Rank: 7/18



Population (2015)

223,104



Infant Mortality Rate

11.5



Illiterate population

9.1%



Access to improved water

77.8%



Average life expectancy

74.4 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 10 / 18 DEPARTMENT
SCORE: 0.539





MHE
0.539


Raw MHE
0.390


Relative MHE
0.687


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:


 Inland Flood
13%
👤 29,573
\$583.2 Million

 Wildfire
90%
👤 206,271
\$2.7 Billion

 Water Deficit
49%
👤 111,921
\$1.6 Billion

 Drought
100%
👤 230,207
\$2.9 Billion

 Extreme Cold
18%
👤 41,433
\$411.3 Million

 Storm
2%
👤 4,160
\$28.8 Million



VULNERABILITY (V)

RANK: 13 / 18 DEPARTMENTS ASSESSED
SCORE: 0.434

Vulnerability in Guairá is primarily driven by Information Access Vulnerability and Gender Inequality. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.331** **RANK: 13/18 DEPARTMENTS ASSESSED**

1.30% Cultivated Area Change
12.04% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.395** **RANK: 13/18 DEPARTMENTS ASSESSED**

74.35 Life Expectancy (years)
11.5 Infant Mortality Rate (per 1,000 live births)
0 Maternal Mortality Ratio
49.13 Adult Malnutrition
28.8% Population with Disability
44.8% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.435** **RANK: 6/18 DEPARTMENTS ASSESSED**

77.82% Households with Improved Water Source
69.93% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.608** **RANK: 9/18 DEPARTMENTS ASSESSED**

9.1% Illiteracy Rate (Age 10+)
7.3 Average Years of Schooling
9.96% Households with Internet
88.64% Households with Television
78.6% Households with Radio



Economic Constraints

0 1 **SCORE: 0.423** **RANK: 12/18 DEPARTMENTS ASSESSED**

56.85 Economic Dependency Ratio
33.88% Poverty Rate
0.42 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.450** **RANK: 11/18 DEPARTMENTS ASSESSED**

0.08 Female to Male Secondary Education*
0.31 Female to Male Economic Activity*
0.34 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.398** **RANK: 15/18 DEPARTMENTS ASSESSED**

1.05% Average Annual Population Change



COPING CAPACITY (CC)

RANK: 7 / 18 DEPARTMENTS ASSESSED
SCORE: 0.530

Guairá exhibits weaker Coping Capacity in the areas of Health Care Capacity and Communications Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



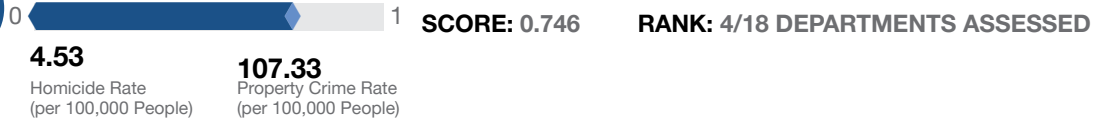
Economic Capacity



Governance



Crime Governance



Environmental Capacity



(COPING CAPACITY CONTINUED)



Infrastructure Capacity



Health Care Capacity **SCORE: 0.421** **RANK: 11/18 DEPARTMENTS ASSESSED**

7.25 Hospital Beds per 10,000 People	15.35 Physicians per 10,000 People	15.99 Nurses per 10,000 People	3,561.78 Average Distance to Nearest Hospital (km2)	65.48% Vaccination Coverage	71.48% Access to Healthcare
---	---	---	--	--	--



Transportation Capacity **SCORE: 0.600** **RANK: 3/18 DEPARTMENTS ASSESSED**

1.22 Road Density (km per sq. km)	48.84 Distance to Airport or Seaport (km)
---	---



Communications Capacity **SCORE: 0.478** **RANK: 11/18 DEPARTMENTS ASSESSED**

95.8% Households with Mobile Phone	5.24% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.921** **RANK: 7/18 DEPARTMENTS ASSESSED**

98.94% Households Connected to Electric Grid



Disaster Management Capacity



3.17 Ambulances per 100,000 People	47.97 Distance to Fire Station	32.84 Distance to Warehouse
---	--	---------------------------------------



RESILIENCE (R)

RANK: 6 / 18 DEPARTMENTS
SCORE: 0.548

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

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



**Information
Access
Vulnerability**



Gender Inequality



**Health Care
Capacity**



**Communications
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 15
SCORE: 0.113



Drought

RANK: 10
SCORE: 0.328



Wildfire

RANK: 7
SCORE: 0.343



Extreme Cold

RANK: 6
SCORE: 0.329



Water Deficit

RANK: 7
SCORE: 0.222



Storm

RANK: 10
SCORE: 0.113



MULTI-HAZARD RISK (MHR)



11 / 18

Rank within departments
Score: 0.481

Guairá's score and ranking are due to Moderate Multi-hazard exposure combined with Low Vulnerability and Moderate Coping Capacity scores.

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



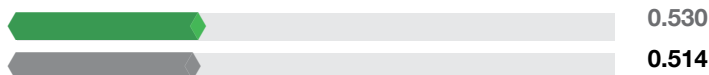
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

GUAIRÁ RECOMMENDATIONS

1

Information Access Vulnerability

Limitations in information access can impede a population's ability to receive, understand, and take action. Emergency messages must take into account the unique information access constraints of the district. Emergency messages presented to the population of Guairá must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.

Findings show that Guairá has the 7th highest illiteracy rate in Paraguay (9%), combined with the 6th lowest average years of schooling, at 7.28. Focus efforts on providing programs to increase literacy rates and promote continued education. Work with communities to better understand the underlying factors that represent barriers to education and literacy. In Particular, poverty and gender inequalities may also drive the disparities.

Efforts should also be focused on ensuring households have reliable access to lines of communications within their homes. Just 10% of homes in Guairá have internet. Disaster managers should take advantage of the household capacities and work with local radio and television broadcasting stations to deliver critical messages. A significant proportion of the department's population is exposed to extreme cold, wildfire, and drought hazards. Effective communication of updates and warnings to the public is critical to reducing disaster risk.

GUAIRÁ RECOMMENDATIONS

2

Gender Inequality

Marginalized populations are less likely to have their needs met under pre-disaster conditions, and therefore become even more susceptible to harm during times of disaster. Increase gender-based inclusion in all phases of DM, ensuring the implementation at the district and local levels. Course of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.

Although Guairá ranks 11th of 18 departments in Gender Inequality, findings highlight income disparities for women. Increase funding of public programs that are focused on empowering women to continue their education and join the workforce. Programs should ensure women have the training and skills needed to reduce wage and employment gaps.

GUAIRÁ RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Invest in increased healthcare capacity by allocating funds for infrastructure and public health education. In addition to increasing the number of facilities, supplies and staff, funds should focus on public health campaigns.

Promotion of vaccinations, healthy lifestyles and use of primary care will help boost the health of the population to reduce the burden on the healthcare sector. With limited access to information in the department, community health campaigns and expanded partnerships with NGOs and the private sector are needed to educate and meet the health care needs of the population.

GUAIRÁ RECOMMENDATIONS

4

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how department- and local-level populations able to facilitate effective and coordinated communication.

Overall, Communications Capacity in Guairá is ranked 11th out of the 18 departments in Paraguay. Expand all communications infrastructure to the department to ensure coverage, accessibility, and reliability of multimodal communications before, during, and after a disaster.

Increasing communications capacity and information technology will also reduce vulnerability by increasing access to Information, ensuring that populations receive, understand, and take appropriate actions when information is provided.

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PARAGUAY
ITAPÚA

NDPBA DEPARTMENT PROFILE

PARAGUAY ITAPÚA

CAPITAL: ENCARNACIÓN

Area: 20,009 (km²)

The Itapúa department is located in the Eastern region of Paraguay. This department is divided into 30 districts: Encarnación (The Capital), Bella Vista, Cambyretá, Capitán Meza, Capitán Miranda, Nueva Alborada, Carmen del Paraná, Coronel Bogado, Carlos Antonio López, Natalio, Fram, General Artigas, General Delgado, Hohenau, Jesús, José Leandro Oviedo, Obligado, Mayor Julio Dionisio Otaño, San Cosme y Damián, San Pedro del Paraná, San Rafael del Paraná, Trinidad, Edelira, Tomás Romero Pereira, Alto Verá, La Paz, Yatytay, San Juan del Paraná, Pirapó, Itapúa Poty. The department borders Argentina, and the departments of Misiones, Alto Paraná and Caazapá. The main economic sources are livestock and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Moderate

Score: 0.542 • Rank: 9/18



RESILIENCE (R) - Moderate

Score: 0.523 • Rank: 9/18



MULTI-HAZARD EXPOSURE (MHE) - Moderate

Score: 0.672 • Rank: 9/18



VULNERABILITY (V) - Low

Score: 0.434 • Rank: 12/18



COPING CAPACITY (CC) - Low

Score: 0.481 • Rank: 11/18



Population (2015)

600,011



Infant Mortality Rate

10.5



Illiterate population

8.7%



Access to improved water

84.4%



Average life expectancy

74.3 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 9 / 18 DEPARTMENT
SCORE: 0.672




MHE
0.672

Raw MHE
0.631

Relative MHE
0.713


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




5%
 30,525
 \$563.9 Million

Wildfire




74%
 439,390
 \$5.2 Billion

Water Deficit




50%
 299,078
 \$3.1 Billion

Drought




100%
 597,473
 \$7.5 Billion

Extreme Cold



29%
 173,252
 \$1.6 Billion

Storm



39%
 232,303
 \$2.3 Billion



VULNERABILITY (V)

RANK: 12 / 18 DEPARTMENTS ASSESSED
SCORE: 0.434

Vulnerability in Itapúa is primarily driven by Population Pressures and Economic Constraints. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.361** **RANK: 12/18 DEPARTMENTS ASSESSED**

2.82% Cultivated Area Change
11.30% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.356** **RANK: 14/18 DEPARTMENTS ASSESSED**

74.31 Life Expectancy (years)
10.5 Infant Mortality Rate (per 1,000 live births)
104.8 Maternal Mortality Ratio
34.68 Adult Malnutrition
35.8% Population with Disability
43.6% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.316** **RANK: 11/18 DEPARTMENTS ASSESSED**

84.40% Households with Improved Water Source
76.24% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.472** **RANK: 11/18 DEPARTMENTS ASSESSED**

8.7% Illiteracy Rate (Age 10+)
7.9 Average Years of Schooling
17.20% Households with Internet
89.10% Households with Television
81.4% Households with Radio



Economic Constraints

0 1 **SCORE: 0.545** **RANK: 9/18 DEPARTMENTS ASSESSED**

59.56 Economic Dependency Ratio
33.16% Poverty Rate
0.47 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.446** **RANK: 12/18 DEPARTMENTS ASSESSED**

0.07 Female to Male Secondary Education*
0.35 Female to Male Economic Activity*
0.30 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.545** **RANK: 11/18 DEPARTMENTS ASSESSED**

1.36% Average Annual Population Change



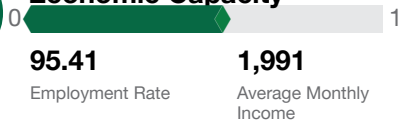
COPING CAPACITY (CC)

RANK: 11 / 18 DEPARTMENTS ASSESSED
SCORE: 0.481

Itapúa exhibits weaker Coping Capacity in the areas of Health Care Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

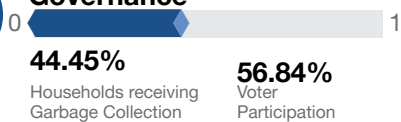


SCORE: 0.556

RANK: 9/18 DEPARTMENTS ASSESSED



Governance

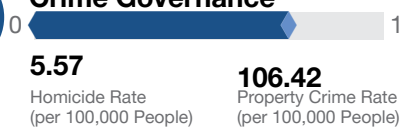


SCORE: 0.424

RANK: 11/18 DEPARTMENTS ASSESSED



Crime Governance

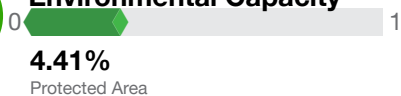


SCORE: 0.734

RANK: 5/18 DEPARTMENTS ASSESSED



Environmental Capacity



SCORE: 0.258

RANK: 11/18 DEPARTMENTS ASSESSED

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



Health Care Capacity **SCORE: 0.254** **RANK: 18/18 DEPARTMENTS ASSESSED**

2.70 Hospital Beds per 10,000 People	8.88 Physicians per 10,000 People	6.11 Nurses per 10,000 People	6,623.05 Average Distance to Nearest Hospital (km ²)	68.88% Vaccination Coverage	69.57% Access to Healthcare
---	--	--	---	--	--



Transportation Capacity **SCORE: 0.496** **RANK: 8/18 DEPARTMENTS ASSESSED**

1.05 Road Density (km per sq. km)	70.43 Distance to Airport or Seaport (km)
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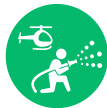
Communications Capacity **SCORE: 0.533** **RANK: 10/18 DEPARTMENTS ASSESSED**

96.4% Households with Mobile Phone	5.90% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.921** **RANK: 7/18 DEPARTMENTS ASSESSED**

98.94% Households Connected to Electric Grid



Disaster Management Capacity



3.38 Ambulances per 100,000 People	30.92 Distance to Fire Station	133.06 Distance to Warehouse
---	--	--



RESILIENCE (R) **RANK: 9 / 18 DEPARTMENTS**
SCORE: 0.523

Itapúa'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:



Population Pressures



Economic Constraints



Health Care Capacity



Transportation Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 17
SCORE: 0.086



Drought

RANK: 5
SCORE: 0.388



Wildfire

RANK: 12
SCORE: 0.322



Extreme Cold

RANK: 5
SCORE: 0.403



Water Deficit

RANK: 3
SCORE: 0.351



Storm

RANK: 7
SCORE: 0.290



MULTI-HAZARD RISK (MHR)



9 / 18

Rank within departments
Score: 0.542

Itapúa's score and ranking are due to Moderate Multi-hazard exposure combined with Low Vulnerability and Low Coping Capacity scores.

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



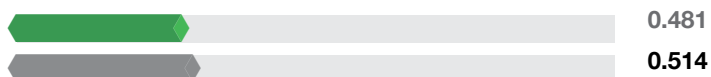
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

ITAPÚA RECOMMENDATIONS

1

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

As the population grows, so do the risks associated with disasters due to urbanization and expanded public needs. Increasing demands for health care and emergency services put strain on already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly. Promoting economic development opportunities for an increasing population will help alleviate economic constraints, another key driver of Vulnerability in Itapúa.

As Itapúa ranks 4th in overall Multi-Hazard Population Exposure, sustainable development of resilient infrastructure needs to be a priority. Access to clean water, education, healthcare, and disaster management resources should be the primary areas of investment. Seek public-private partnerships to help fund projects to increase access to critical infrastructure and services.

ITAPÚA RECOMMENDATIONS

2

Economic Constraints

Economic constraints have individual, household, community, and district-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit Itapúa's ability to facilitate short- and long-term recovery.

A third of the population in Itapúa lives in poverty. Expand public assistance programs to increase opportunities for economic mobility and enhance access to resources, particularly for elderly populations and families with young children. Focus efforts on creating public policies that ensure equal opportunity for employment and fair wages.

Assess disaster response and recovery plans to ensure that economically vulnerable populations are incorporated. This includes plans for short-term response and long-term recovery plans, as economically disadvantaged populations are often more likely to be severely impacted by disasters and have slower to recovery times.

ITAPÚA RECOMMENDATIONS

3

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Findings show that Itapúa ranks lowest in the country in overall Health Care Capacity. The department has the fewest hospital beds and nurses per 10,00 persons (2.7 and 6.1, respectively). Combined with the 4th lowest vaccination coverage rate (69%), these challenges highlight significant gaps in access to health care.

With the growing population, the need to invest in healthcare capacity through increase human resources, infrastructure, and community education is critical. Invest in increased inpatient capacity by expanding inpatient health care infrastructure and acquiring more hospital beds. Work with regional and international health networks, NGOs, and other partners to increase the number of skilled medical workers available and ensure they are stationed equitably throughout the department.

Invest in community public health outreach and education to promote utilization of preventive medical services for the growing population.

ITAPÚA RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Itapúa's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the environmental stresses and hazards that impact Itapúa.

Increased transportation networks can also enhance access to markets, which can help reduce the economic constraints within the population. Economic benefits and enhanced access to health care should be the focus of enhancements to the transportation network in Concepción. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented.

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PARAGUAY

MISIONES

NDPBA DEPARTMENT PROFILE

PARAGUAY

MISIONES

CAPITAL: POSADAS

Area: 10,304 (km²)

The Misiones department is located in the Eastern region of Paraguay. This department is divided into 10 districts: San Juan Bautista (The Capital), Ayolas, San Ignacio, San Miguel, San Patricio, Santa María, Santa Rosa, Santiago, Villa Florida, Yabebyry. The department borders Argentina, and the departments of Itapúa, Caaguazú, Paraguari and Ñeembucú. The main economic sources are cattle breeding and some agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low

Score: 0.411 • Rank: 16/18



RESILIENCE (R) - Very High

Score: 0.649 • Rank: 3/18



MULTI-HAZARD EXPOSURE (MHE) - Low

Score: 0.531 • Rank: 11/18



VULNERABILITY (V) - Very Low

Score: 0.335 • Rank: 15/18



COPING CAPACITY (CC) - Very High

Score: 0.632 • Rank: 3/18



Population (2015)

124,954



Infant Mortality Rate

9.8



Illiterate population

9.1%



Access to improved water

94.6%



Average life expectancy

74.4 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 11 / 18 DEPARTMENT
SCORE: 0.531





MHE
0.531


Raw MHE
0.288


Relative MHE
0.774

ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

 Inland Flood
54%
👤 67,115
\$1.3 Billion

 Wildfire
71%
👤 88,508
\$1.1 Billion

 Water Deficit
49%
👤 61,612
\$787.2 Million

 Drought
100%
👤 124,969
\$1.4 Billion

 Extreme Cold
-
👤 -
-

 Storm
-
👤 -
-



VULNERABILITY (V)

RANK: 15 / 18 DEPARTMENTS ASSESSED
SCORE: 0.335

Vulnerability in Misiones is primarily driven by Vulnerable Health Status and Population Pressures. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.243** **RANK: 15/18 DEPARTMENTS ASSESSED**

3.12% Cultivated Area Change
3.06% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.514** **RANK: 7/18 DEPARTMENTS ASSESSED**

74.35 Life Expectancy (years)
9.8 Infant Mortality Rate (per 1,000 live births)
154.2 Maternal Mortality Ratio
54.18 Adult Malnutrition
36.7% Population with Disability
49.9% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.149** **RANK: 15/18 DEPARTMENTS ASSESSED**

94.59% Households with Improved Water Source
83.61% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.413** **RANK: 14/18 DEPARTMENTS ASSESSED**

9.1% Illiteracy Rate (Age 10+)
8.6 Average Years of Schooling
17.91% Households with Internet
88.54% Households with Television
84.4% Households with Radio



Economic Constraints

0 1 **SCORE: 0.441** **RANK: 11/18 DEPARTMENTS ASSESSED**

57.07 Economic Dependency Ratio
27.48% Poverty Rate
0.47 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.125** **RANK: 18/18 DEPARTMENTS ASSESSED**

0.00 Female to Male Secondary Education*
0.22 Female to Male Economic Activity*
0.26 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.461** **RANK: 13/18 DEPARTMENTS ASSESSED**

1.18% Average Annual Population Change



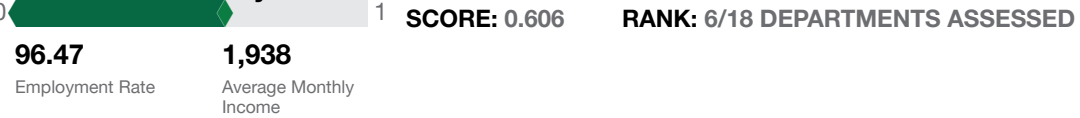
COPING CAPACITY (CC)

RANK: 3 / 18 DEPARTMENTS ASSESSED
SCORE: 0.632

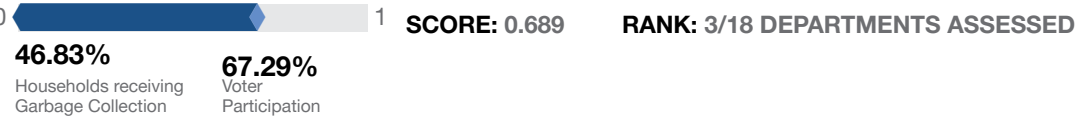
Misiones exhibits weaker Coping Capacity in the areas of Transportation Capacity and Health Care Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity



Governance



Crime Governance



Environmental Capacity



(COPING CAPACITY CONTINUED)

 **Infrastructure Capacity** SCORE: 0.622 RANK: 6/18 DEPARTMENTS ASSESSED

 **Health Care Capacity** SCORE: 0.588 RANK: 3/18 DEPARTMENTS ASSESSED

11.58 Hospital Beds per 10,000 People	20.66 Physicians per 10,000 People	22.68 Nurses per 10,000 People	9,949.26 Average Distance to Nearest Hospital (km ²)	76.80% Vaccination Coverage	80.10% Access to Healthcare
--	---	---	---	--	--

 **Transportation Capacity** SCORE: 0.431 RANK: 10/18 DEPARTMENTS ASSESSED

0.48 Road Density (km per sq. km)	66.66 Distance to Airport or Seaport (km)
---	---

 **Communications Capacity** SCORE: 0.637 RANK: 5/18 DEPARTMENTS ASSESSED

95.3% Households with Mobile Phone	10.68% Households with Fixed Phone
--	--

 **Energy Capacity** SCORE: 0.832 RANK: 13/18 DEPARTMENTS ASSESSED

97.84% Households Connected to Electric Grid

 **Disaster Management Capacity** SCORE: 0.852 RANK: 1/18 DEPARTMENTS ASSESSED

9.72 Ambulances per 100,000 People	32.44 Distance to Fire Station	40.97 Distance to Warehouse
---	--	---------------------------------------

 **RESILIENCE (R)** RANK: 3 / 18 DEPARTMENTS SCORE: 0.649

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

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



Vulnerable Health Status



Population Pressures



Transportation Capacity



Health Care Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 7
SCORE: 0.289



Drought

RANK: 15
SCORE: 0.239



Wildfire

RANK: 14
SCORE: 0.202



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 11
SCORE: 0.135

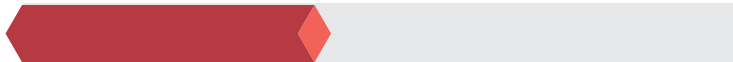


Storm

RANK: 12
SCORE: 0.000



MULTI-HAZARD RISK (MHR)



16 / 18

Rank within departments
Score: 0.411

Misiones's score and ranking are due to Low Multi-hazard exposure combined with Very 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



Department score
 Country score

MISIONES RECOMMENDATIONS



Vulnerable Health Status

A population with a compromised health status will have a greatly reduced ability to manage short- and long-term disaster outcomes. Improving health is often correlated with decreased susceptibility to injury, disease, and stress associated with disasters. Acute or prolonged vulnerable health status limits the basic capacity of response functions.

Misiones is among the highest in the country in prevalence of households experiencing disability (36.7%) and self-reported sickness or injury (50%). The maternal mortality ratio is 4th highest in the country, and malnutrition is pervasive at a rate of 54%.

Focus efforts on reducing malnutrition efforts by providing public assistance, as well as monitoring and regulating market prices. Ensure access to goods even in rural communities through incentives and direct support for underserved communities. Continue to monitor the health of the community and promote healthy lifestyles.

Ensure that disaster plans account for special needs populations, including the sick and disabled, who may need medical assistance during evacuation and in shelters. Communities with vulnerable health status are also more susceptible to the negative health impacts of disasters. Misiones is susceptible to flood, among other hazards.

MISIONES RECOMMENDATIONS

2

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

As the population grows so do the risks associated with disasters due to urbanization and expanded public needs. Increases in the demands for health care and emergency services will strain the already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly.

Increases in demands on health care, emergency services, and public programs put strain on already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly. Promoting accessibility to quality health services and infrastructure will help alleviate vulnerable health status, another key driver of Vulnerability in Misiones.

MISIONES RECOMMENDATIONS

3

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Misiones' ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the flood and drought hazards that impact Misiones. In addition, the growing population will likely change urbanization dynamics, requiring coordination with land use planners.

Closely monitor hotspots of population growth and ensure emergency plans from evacuation and resource transportation routes are updated.

MISIONES RECOMMENDATIONS

4

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Although Misiones ranks 3rd in overall Health Care Capacity, findings show that the department has the 7th lowest vaccination coverage rate (77%). Promotion of vaccinations, healthy lifestyles and availability of primary care will help boost the health of the population to reduce the burden on the healthcare sector.

With the population's vulnerable health status, community health campaigns and expanded partnerships with NGOs and the private sector are needed to educate the communities and provide programs and services that meet their specific health care needs.

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PARAGUAY

ÑEEMBUCÚ

NDPBA DEPARTMENT PROFILE

PARAGUAY

ÑEEMBUCÚ

CAPITAL: PILAR

Area: 14,706 (km²)

The Ñeembucú department is located in the Eastern region of Paraguay. This department is divided into 16 districts: Pilar (The Capital), Alberdi, Cerrito, Desmochados, Gral. José Eduvigis Díaz, Guazú Cuá, Humaitá, Isla Umbú, Laureles, Mayor José Dejesús Martínez, Paso de Patria, San Juan Bautista de Ñeembucú, Tacuaras, Villa Franca, Villa Oliva, Villalbín. The department borders Argentina, and the departments of Misiones and Paraguari. The main economic sources are livestock and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very Low

Score: 0.344 • Rank: 17/18



RESILIENCE (R) - High

Score: 0.642 • Rank: 4/18



MULTI-HAZARD EXPOSURE (MHE) - Very Low

Score: 0.317 • Rank: 17/18



VULNERABILITY (V) - Very Low

Score: 0.314 • Rank: 16/18



COPING CAPACITY (CC) - High

Score: 0.599 • Rank: 4/18



Population (2015)

89,290



Infant Mortality Rate

11.7



Illiterate population

8.8%



Access to improved water

69.8%



Average life expectancy

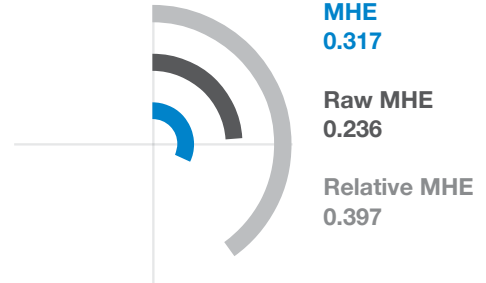
74.3 years

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




MULTI-HAZARD EXPOSURE (MHE)

RANK: 17 / 18 DEPARTMENT
SCORE: 0.317




ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




54%
 64,408
 \$1.5 Billion

Wildfire




25%
 30,403
 \$466.5 Million

Water Deficit



0%
 45
 \$307,821

Drought




100%
 119,526
 \$1.6 Billion

Extreme Cold



-
 -
 -

Storm



-
 -
 -



VULNERABILITY (V)

RANK: 16 / 18 DEPARTMENTS ASSESSED
SCORE: 0.314

Vulnerability in Ñeembucú is primarily driven by Vulnerable Health Status and Clean Water Access Vulnerability. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.167** **RANK: 18/18 DEPARTMENTS ASSESSED**

1.37% **1.19%**
Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.561** **RANK: 3/18 DEPARTMENTS ASSESSED**

74.25 **11.7** **117** **55.44** **40.9%** **49.7%**
Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.459** **RANK: 5/18 DEPARTMENTS ASSESSED**

69.83% **79.08%**
Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.367** **RANK: 15/18 DEPARTMENTS ASSESSED**

8.8% **8.3** **19.29%** **86.04%** **89.7%**
Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE: 0.297** **RANK: 17/18 DEPARTMENTS ASSESSED**

54.32 **24.23%** **0.43**
Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.160** **RANK: 16/18 DEPARTMENTS ASSESSED**

0.05 **0.21** **0.25**
Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.189** **RANK: 16/18 DEPARTMENTS ASSESSED**

0.60%
Average Annual Population Change



COPING CAPACITY (CC)

RANK: 4 / 18 DEPARTMENTS ASSESSED
SCORE: 0.599

Ñeembucú exhibits weaker Coping Capacity in the areas of Transportation Capacity and Health Care Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE: 0.502** **RANK: 11/18 DEPARTMENTS ASSESSED**

95.22 **1,806**
Employment Rate Average Monthly Income



Governance

0 1 **SCORE: 0.711** **RANK: 2/18 DEPARTMENTS ASSESSED**

44.67% **67.15%**
Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE: 0.721** **RANK: 6/18 DEPARTMENTS ASSESSED**

4.51 **117.14**
Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)




Environmental Capacity

0 1 **SCORE: 0.227** **RANK: 12/18 DEPARTMENTS ASSESSED**

3.95%
Protected Area

(COPING CAPACITY CONTINUED)

 **Infrastructure Capacity**  **SCORE: 0.601** **RANK: 8/18 DEPARTMENTS ASSESSED**

 **Health Care Capacity** **SCORE: 0.524** **RANK: 4/18 DEPARTMENTS ASSESSED**

10.14 Hospital Beds per 10,000 People	15.88 Physicians per 10,000 People	23.77 Nurses per 10,000 People	8,498.79 Average Distance to Nearest Hospital (km ²)	73.28% Vaccination Coverage	75.84% Access to Healthcare
--	---	---	---	--	--

 **Transportation Capacity** **SCORE: 0.428** **RANK: 11/18 DEPARTMENTS ASSESSED**

0.35 Road Density (km per sq. km)	59.37 Distance to Airport or Seaport (km)
---	---

 **Communications Capacity** **SCORE: 0.611** **RANK: 7/18 DEPARTMENTS ASSESSED**

95.7% Households with Mobile Phone	9.34% Households with Fixed Phone
--	---

 **Energy Capacity** **SCORE: 0.844** **RANK: 12/18 DEPARTMENTS ASSESSED**

97.98% Households Connected to Electric Grid

 **Disaster Management Capacity**  **SCORE: 0.801** **RANK: 3/18 DEPARTMENTS ASSESSED**

12.39 Ambulances per 100,000 People	50.35 Distance to Fire Station	104.74 Distance to Warehouse
--	--	--

 **RESILIENCE (R)** **RANK: 4 / 18 DEPARTMENTS**
SCORE: 0.642

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

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



**Vulnerable
Health Status**



**Clean Water
Access
Vulnerability**



**Transportation
Capacity**



**Health Care
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 6
SCORE: 0.298



Drought

RANK: 14
SCORE: 0.244



Wildfire

RANK: 18
SCORE: 0.058



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 17
SCORE: 0.000

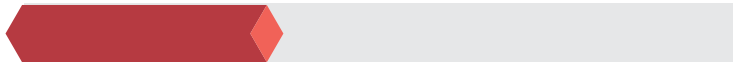


Storm

RANK: 12
SCORE: 0.000



MULTI-HAZARD RISK (MHR)



17 / 18

Rank within departments
Score: 0.344

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

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



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

ÑEEMBUCÚ RECOMMENDATIONS



Vulnerable Health Status

A population with a compromised health status will have a greatly reduced ability to manage short- and long-term disaster outcomes. Improving health is often correlated with decreased susceptibility to injury, disease, and stress associated with disasters. Acute or prolonged vulnerable health status limits the basic capacity of response functions.

Ñeembucú ranks 3rd in overall Vulnerable Health Status. The department is highest in the country in prevalence of disability (41%) and 7th highest in self-reported sickness or injury (50%). Malnutrition is pervasive at a rate of 55%. Continue to monitor the health of the community and promote healthy lifestyles. Focus on attracting additional resources to support health care in rural and vulnerable regions of the department.

Focus efforts on reducing malnutrition by providing public assistance, as well as monitoring and regulating market prices. Ensure access to goods even in rural communities through incentives and direct support for underserved communities.

Ensure that disaster plans account for special needs populations, including the sick and disabled, who may need medical assistance during evacuation and in shelters. Communities with vulnerable health status are also more susceptible to the negative health impacts of disasters. Preexisting health challenges, combined with clean water vulnerability and exposure to flood hazards, increase the potential to spread waterborne illness in Ñeembucú.

ÑEEMBUCÚ RECOMMENDATIONS

2

Clean Water Access Vulnerability

Those without easy or adequate access to water distribution and containment systems face significant demands on daily routines that effectively limit their response and recovery capacity and the ability to maintain livelihoods. Increasing access to improved water and sanitation in Ñeembucú improves health outcomes and frees up resources to decrease further susceptibility to impacts.

In Ñeembucú, only 69.8% of households have access to improved water sources. Invest in water delivery infrastructure and ensure that sources are safe, sustainable, and reliable. Develop partnerships to invest in water treatment and distribution systems as the growing population and climate change will only exacerbate the already existing vulnerabilities.

Floods are already impacting the population, which may increase health risks when combined with limitations in improved water infrastructure.

ÑEEMBUĆÚ RECOMMENDATIONS

3

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Ñeembucú's ability to distribute resources before, during, and after a disaster.

Although Ñeembucú has a relatively low population density, limited transportation capacity may hamper emergency response activities and decrease public access to resources. Focus on ensuring transportation projects target areas that have the most limited transportation networks. Increased transportation networks can also bring increase health care accessibility and service delivery.

Economic benefits and enhanced emergency response operations should be the focus of enhancements to the transportation network in Alto Paraguay. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented. Additionally, all construction projects need to be balanced with research and planners to ensure that environmental hazards are mitigated.

ÑEEMBUCÚ RECOMMENDATIONS

4

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

Although Ñeembucú ranks 5th in overall Health Care Capacity, findings show that the department has the 5th lowest vaccination coverage rate (73%). Promotion of vaccinations, healthy lifestyles and use of primary care will help boost the health of the population to reduce the burden on the healthcare sector.

With the population's vulnerable health status, community health campaigns and expanded partnerships with NGOs and the private sector are needed to educate the communities and provide programs and services that meet their specific health care needs.

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PARAGUAY

PARAGUARÍ

NDPBA DEPARTMENT PROFILE

PARAGUAY PARAGUARÍ

CAPITAL: PARAGUARÍ

Area: 10,703 (km²)

The Paraguari department is located in the Eastern region of Paraguay. This department is divided into 17 districts: Paraguari (The Capital), Acahay, Caapucú, Caballero, Carapeguá, Escobar, La Colmena, Mbuyapey, Pirayú, Quiindy, Quyquyhó, Roque G. de Santa Cruz, Sapucaí, Tebicuary-mí, Yaguarón, Ybycuí, Ybytí. The department borders the departments of Cordillera, Caaguazú, Misiones, Guairá, Caazapá, Central and Ñeembucú. The main economic sources are livestock and poultry.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Low

Score: 0.464 • Rank: 12/18



RESILIENCE (R) - Moderate

Score: 0.522 • Rank: 10/18



MULTI-HAZARD EXPOSURE (MHE) - Very Low

Score: 0.436 • Rank: 15/18



VULNERABILITY (V) - Moderate

Score: 0.438 • Rank: 10/18



COPING CAPACITY (CC) - Moderate

Score: 0.482 • Rank: 10/18



Population (2015)

256,224



Infant Mortality Rate

14.6



Illiterate population

7.4%



Access to improved water

88.7%



Average life expectancy

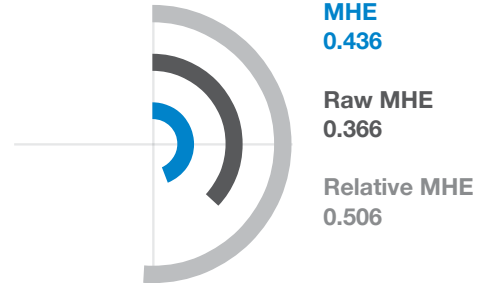
74.2 years

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




MULTI-HAZARD EXPOSURE (MHE)

RANK: 15 / 18 DEPARTMENT
SCORE: 0.436




ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




33%
 82,789
 \$1.6 Billion

Wildfire




82%
 206,672
 \$2.5 Billion

Water Deficit



4%
 9,038
 \$95.6 Million

Drought




100%
 253,144
 \$3 Billion

Extreme Cold



-
 -
 -

Storm



-
 -
 -



VULNERABILITY (V)

RANK: 10 / 18 DEPARTMENTS ASSESSED
SCORE: 0.438

Vulnerability in Paraguari is primarily driven by Vulnerable Health Status and Environmental Stress. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress



13.68% **5.89%**
Cultivated Area Deforestation
Change



Vulnerable Health Status



74.17 **14.6** **173.4** **59.67** **36.1%** **46.3%**
Life Expectancy Infant Mortality Maternal Adult Population with Population Reporting
(years) Rate (per 1,000 Mortality Ratio Malnutrition Disability Illness or Injury
live births)



Clean Water Vulnerability



88.72% **76.33%**
Households with Households
Improved Water with Improved
Source Sanitation



Information Access Vulnerability



7.4% **7.6** **7.72%** **87.92%** **83.5%**
Illiteracy Rate Average Years Households with Households with Households with
(Age 10+) of Schooling Internet Television Radio



Economic Constraints



57.74 **35.82%** **0.45**
Economic Poverty Rate Income
Dependency Inequality (GINI)
Ratio



Gender Inequality



0.00 **0.39** **0.33**
Female to Male Female to Male Female to Male
Secondary Economic Activity* Average Monthly
Education* Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures



0.52%
Average Annual
Population
Change



COPING CAPACITY (CC)

RANK: 10 / 18 DEPARTMENTS ASSESSED
SCORE: 0.482

Paraguari exhibits weaker Coping Capacity in the areas of Communications Capacity and Transportation Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE: 0.446** **RANK: 14/18 DEPARTMENTS ASSESSED**

95.51 **1,531**
 Employment Rate Average Monthly Income



Governance

0 1 **SCORE: 0.346** **RANK: 15/18 DEPARTMENTS ASSESSED**

13.18% **60.86%**
 Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE: 0.544** **RANK: 12/18 DEPARTMENTS ASSESSED**

3.92 **190.28**
 Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE: 0.451** **RANK: 6/18 DEPARTMENTS ASSESSED**

8.35%
 Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.509** **RANK: 14/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.462** **RANK: 7/18 DEPARTMENTS ASSESSED**

13.85 Hospital Beds per 10,000 People	11.06 Physicians per 10,000 People	14.05 Nurses per 10,000 People	7,517.83 Average Distance to Nearest Hospital (km ²)	68.80% Vaccination Coverage	74.96% Access to Healthcare
--	---	---	---	--	--



Transportation Capacity **SCORE: 0.390** **RANK: 12/18 DEPARTMENTS ASSESSED**

0.87 Road Density (km per sq. km)	92.25 Distance to Airport or Seaport (km)
---	---



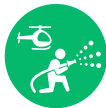
Communications Capacity **SCORE: 0.369** **RANK: 15/18 DEPARTMENTS ASSESSED**

94.7% Households with Mobile Phone	3.95% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.814** **RANK: 15/18 DEPARTMENTS ASSESSED**

97.61%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.662** **RANK: 6/18 DEPARTMENTS ASSESSED**

5.1 Ambulances per 100,000 People	44.43 Distance to Fire Station	69.86 Distance to Warehouse
--	--	---------------------------------------



RESILIENCE (R)

RANK: 10 / 18 DEPARTMENTS
SCORE: 0.522

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

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



**Vulnerable
Health Status**



**Environmental
Stress**



**Communications
Capacity**



**Transportation
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood



RANK: 5
SCORE: 0.327



Drought



RANK: 8
SCORE: 0.349



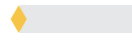
Wildfire



RANK: 9
SCORE: 0.337



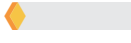
Extreme Cold



RANK: 9
SCORE: 0.000



Water Deficit



RANK: 15
SCORE: 0.016



Storm



RANK: 12
SCORE: 0.000



MULTI-HAZARD RISK (MHR)



12 / 18

Rank within departments
Score: 0.464

Paraguay's score and ranking are due to Very Low Multi-hazard exposure combined with Moderate Vulnerability and Moderate Coping Capacity scores.

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



Multi-Hazard Exposure



0.436

0.57



Vulnerability



0.438

0.479



Coping Capacity



0.482

0.514

Department score
 Country score

PARAGUARÍ RECOMMENDATIONS



Vulnerable Health Status

A population with a compromised health status will have a greatly reduced ability to manage short- and long-term disaster outcomes. Improving health is often correlated with decreased susceptibility to injury, disease, and stress associated with disasters. Acute or prolonged vulnerable health status limits the basic capacity of response functions.

Paraguarí ranks 2nd in overall Vulnerable Health Status. The department is among the highest in the country in prevalence of disability (36%) and maternal mortality ratio (173.4). Malnutrition is pervasive at a rate of nearly 60%. Continue to monitor the health of the community and promote healthy lifestyles. Focus on attracting additional resources to support health care in rural and vulnerable regions of the department.

Focus efforts on reducing malnutrition by providing public assistance, as well as monitoring and regulating market prices. Ensure access to goods even in rural communities through incentives and direct support for underserved communities.

Ensure that disaster plans account for special needs populations, including the disabled, who may need medical assistance during evacuation and in shelters. Communities with vulnerable health status are also more susceptible to the negative health impacts of disasters. Preexisting health challenges, combined exposure to flood and drought hazards, increase the potential for disaster.

PARAGUARÍ RECOMMENDATIONS

2

Environmental Stress

Environmental stressors such as the depletion, degradation, or contamination of natural resources can exacerbate natural hazards and negatively impact the health, safety, and economic security of Paraguari's population.

Findings show that Paraguari experienced significant increase in cultivated area from 2007 to 2016 and an annual rate of 13.7%. With climate change and growing population pressures the need to put in place environmental protections is vital to ensuring sustainable development. Land management and sustainable development need to be carefully monitored to that ensure critical ecosystems are protected and hazards are mitigated.

Promote resilience in the agricultural sector by providing training and incentives for sustainable farming practices. Focus areas can include the use of drought resistant crops, flood planning and management, organic practices, as well as other methods to reduce environmental impacts of agriculture.

PARAGUARÍ RECOMMENDATIONS

3

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how department- and local-level populations able to facilitate effective and coordinated communication.

Paraguari ranks 15th in overall Communications Capacity. Just 4% of households have a fixed telephone line, while 94.7% have access to mobile phone. Expand all communications infrastructure to the department to ensure coverage, accessibility, and reliability of multimodal communications during a disaster.

PARAGUARÍ RECOMMENDATIONS

4

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Paraguari's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the hazards that impact Paraguari. In addition, the growing population will likely change urbanization dynamics, requiring coordination with land use planners.

Closely monitor hotspots of population growth and ensure emergency plans from evacuation and resource transportation routes are updated.

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PARAGUAY

PRESIDENTE HAYES

NDPBA DEPARTMENT PROFILE

PARAGUAY

PRESIDENTE HAYES

CAPITAL: VILLA HAYES

Area: 88,157 (km²)

The Presidente Hayes department is located in the Western region of Paraguay. This department is divided into 8 districts: Villa Hayes (The Capital), Benjamin Aceval, Pto. Pinasco, Nanawa, José Falcón, Tte. 1° Manuel Irala Fernández, Tte. Esteban Martínez, General José María. The department borders Argentina, and the departments of Alto Paraguay, Boquerón, Concepción, San Pedro, Cordillera, Central and Asunción (DC). The main economic sources are livestock and agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Moderate

Score: 0.559 • Rank: 8/18



RESILIENCE (R) - Very Low

Score: 0.345 • Rank: 17/18



MULTI-HAZARD EXPOSURE (MHE) - Very Low

Score: 0.368 • Rank: 16/18



VULNERABILITY (V) - Very High

Score: 0.610 • Rank: 3/18



COPING CAPACITY (CC) - Very Low

Score: 0.300 • Rank: 18/18



Population (2015)

123,361



Infant Mortality Rate

21



Illiterate population

14.3%



Access to improved water

90.5%



Average life expectancy

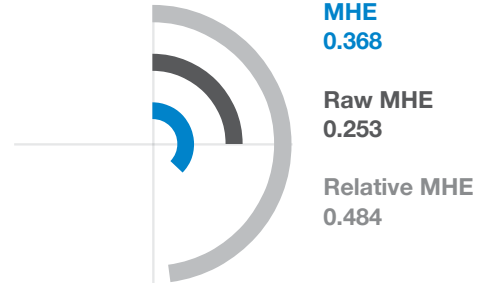
72.7 years

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




MULTI-HAZARD EXPOSURE (MHE)


RANK: 16 / 18 DEPARTMENT
SCORE: 0.368




ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:




Inland Flood
45%
59,988
\$1.4 Billion




Wildfire
38%
51,064
\$638.1 Million




Water Deficit
24%
31,874
\$235.6 Million



Drought
54%
72,565
\$1 Billion



Extreme Cold
27%
35,636
\$267.8 Million



Storm
13%
16,731
\$120.4 Million



VULNERABILITY (V)

RANK: 3 / 18 DEPARTMENTS ASSESSED
SCORE: 0.610

Vulnerability in Presidente Hayes is primarily driven by Population Pressures and Information Access Vulnerability. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress

0 1 **SCORE: 0.437** **RANK: 10/18 DEPARTMENTS ASSESSED**

2.71% Cultivated Area Change
16.44% Deforestation



Vulnerable Health Status

0 1 **SCORE: 0.560** **RANK: 4/18 DEPARTMENTS ASSESSED**

72.71 Life Expectancy (years)
21 Infant Mortality Rate (per 1,000 live births)
82.5 Maternal Mortality Ratio
37.78 Adult Malnutrition
29.7% Population with Disability
38.9% Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE: 0.340** **RANK: 9/18 DEPARTMENTS ASSESSED**

90.50% Households with Improved Water Source
63.25% Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE: 0.780** **RANK: 2/18 DEPARTMENTS ASSESSED**

14.3% Illiteracy Rate (Age 10+)
7.4 Average Years of Schooling
16.09% Households with Internet
76.79% Households with Television
72.5% Households with Radio



Economic Constraints

0 1 **SCORE: 0.609** **RANK: 7/18 DEPARTMENTS ASSESSED**

60.99 Economic Dependency Ratio
28.49% Poverty Rate
0.52 Income Inequality (GINI)



Gender Inequality

0 1 **SCORE: 0.672** **RANK: 3/18 DEPARTMENTS ASSESSED**

0.05 Female to Male Secondary Education*
0.40 Female to Male Economic Activity*
0.46 Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE: 0.869** **RANK: 4/18 DEPARTMENTS ASSESSED**

2.06% Average Annual Population Change



COPING CAPACITY (CC)

RANK: 18 / 18 DEPARTMENTS ASSESSED
SCORE: 0.300

Presidente Hayes exhibits weaker Coping Capacity in the areas of Transportation Capacity and Communications Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity

0  1 **SCORE: 0.316** **RANK: 16/18 DEPARTMENTS ASSESSED**

90.26 **2,271**
Employment Rate Average Monthly Income



Governance

0  1 **SCORE: 0.283** **RANK: 17/18 DEPARTMENTS ASSESSED**

26.21% **57.73%**
Households receiving Garbage Collection Voter Participation



Crime Governance

0  1 **SCORE: 0.458** **RANK: 14/18 DEPARTMENTS ASSESSED**

15.69 **161.88**
Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0  1 **SCORE: 0.138** **RANK: 16/18 DEPARTMENTS ASSESSED**

2.85%
Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity

0 1 **SCORE: 0.265** **RANK: 17/18 DEPARTMENTS ASSESSED**



Health Care Capacity **SCORE: 0.470** **RANK: 6/18 DEPARTMENTS ASSESSED**

11.65 Hospital Beds per 10,000 People	13.63 Physicians per 10,000 People	9.83 Nurses per 10,000 People	23,406.32 Average Distance to Nearest Hospital (km ²)	79.35% Vaccination Coverage	80.15% Access to Healthcare
--	---	--	--	--	--



Transportation Capacity **SCORE: 0.083** **RANK: 17/18 DEPARTMENTS ASSESSED**

0.17 Road Density (km per sq. km)	126.77 Distance to Airport or Seaport (km)
---	--



Communications Capacity **SCORE: 0.242** **RANK: 18/18 DEPARTMENTS ASSESSED**

90.5% Households with Mobile Phone	7.34% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.264** **RANK: 17/18 DEPARTMENTS ASSESSED**

90.79%
Households Connected to
Electric Grid



Disaster Management Capacity

0 1 **SCORE: 0.591** **RANK: 10/18 DEPARTMENTS ASSESSED**

9.09 Ambulances per 100,000 People	254.7 Distance to Fire Station	149.15 Distance to Warehouse
---	--	--



RESILIENCE (R)

RANK: 17 / 18 DEPARTMENTS
SCORE: 0.345

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

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



Population Pressures



Information Access Vulnerability



Transportation Capacity



Communications Capacity



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 1
SCORE: 0.498



Drought

RANK: 13
SCORE: 0.302



Wildfire

RANK: 15
SCORE: 0.191



Extreme Cold

RANK: 4
SCORE: 0.488



Water Deficit

RANK: 13
SCORE: 0.097



Storm

RANK: 9
SCORE: 0.235



MULTI-HAZARD RISK (MHR)

8 / 18

Rank within departments
Score: 0.559

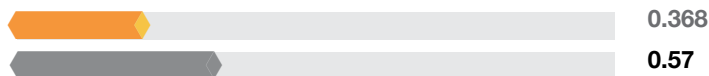


Presidente Hayes's score and ranking are due to Very Low Multi-hazard exposure combined with Very High Vulnerability and Very Low Coping Capacity scores.

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



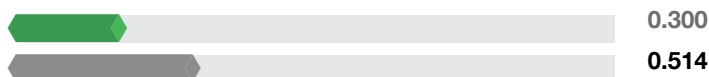
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

PRESIDENTE HAYES RECOMMENDATIONS

1

Population Pressures

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.

Findings show that the average annual total population change is 2.1%, ranking 4th in Paraguay. As the population grows, so do the risks associated with disasters due to urbanization and expanded public resource needs. Increases in demands on health care, emergency services, and public programs can put strain on already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly.

As the population grows so do the risks associated with disasters due to urbanization and expanded public needs. Increases in the demands for health care and emergency services will strain the already limited resources. Continue to closely monitor the population to adjust plans, policies and programs accordingly. Seek public-private partnerships to help fund projects to increase access to critical infrastructure and services.

PRESIDENTE HAYES RECOMMENDATIONS

2

Information Access Vulnerability

Limitations in information access can impede a population's ability to receive, understand, and take action. Emergency messages must take into account the unique information access constraints of the district. Emergency messages presented to the population of Presidente Hayes must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.

Presidente Hayes ranks 2nd highest in overall Information Access Vulnerability, also exhibiting the 2nd highest illiteracy rate in Paraguay (14.3%). Households' access to television and radio are among the lowest in the country. Population pressures may exacerbate existing limitations in education and communication resources.

Work with communities to better understand the underlying barriers to literacy and education in particular, factors of poverty and gender inequalities may also drive disparities in education.

PRESIDENTE HAYES RECOMMENDATIONS

3

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of Presidente Hayes's ability to distribute resources before, during, and after a disaster.

Although Presidente Hayes has a relatively low population density, limited transportation capacity may hamper emergency response activities and decrease public access to resources. Focus on ensuring transportation projects target areas that have the most limited transportation networks.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the hazards that threaten Presidente Hayes.

In addition, the growing population will likely change urbanization dynamics, requiring coordination with land use planners. Closely monitor hotspots of population growth and ensure emergency plans from evacuation and resource transportation routes are updated.

PRESIDENTE HAYES RECOMMENDATIONS

4

Communications Capacity

The density, diversity, resilience, and quality of communications infrastructure influence how department- and local-level populations able to facilitate effective and coordinated communication.

Presidente Hayes ranks lowest in the country in overall Communications Capacity. Just 7% of households have a fixed telephone line, while 90% have access to mobile phone. Expand all communications infrastructure to the department to ensure coverage, accessibility, and reliability of multimodal communications before, during, and after a disaster.

Increasing communications capacity and information technology will also reduce vulnerability by increasing access to Information, ensuring that populations receive, understand, and take appropriate actions when information is provided.

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PARAGUAY

SAN PEDRO

NDPBA DEPARTMENT PROFILE

PARAGUAY

SAN PEDRO

CAPITAL: SAN PEDRO DE YCUAMANDIYÚ

Area: 25,168 (km²)

The San Pedro department is located in the Eastern region of Paraguay. This department is divided into 20 districts: San Pedro de Ycuamandiyú (The Capital), Antequera, Choré, General Elizardo Aquino, Itacurubí del Rosario, Lima, Nueva Germania, San Estanislao, San Pablo, Tacuatí, Unión, 25 de Diciembre, Villa del Rosario, Gral. Francisco Isidoro Resquín, Yataity del Norte, Guajayví, Capiibary, Santa Rosa del Aguaray, Yrybucua, Liberación. The department borders the departments of Concepción, Cordillera, Caaguazú, Amambay, Canindeyú, Presidente Hayes. The main economic sources are livestock and some agriculture.



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR) - Very High

Score: 0.629 • Rank: 2/18



RESILIENCE (R) - Low

Score: 0.437 • Rank: 14/18



MULTI-HAZARD EXPOSURE (MHE) - Very High

Score: 0.761 • Rank: 3/18



VULNERABILITY (V) - High

Score: 0.572 • Rank: 5/18



COPING CAPACITY (CC) - Very Low

Score: 0.445 • Rank: 15/18



Population (2015)

424,774



Infant Mortality Rate

13.5



Illiterate population

8.7%



Access to improved water

95.7%



Average life expectancy

74.0 years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: 3 / 18 DEPARTMENT
SCORE: 0.761




MHE
0.761

Raw MHE
0.561

Relative MHE
0.962


ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood




16%
 69,289
\$1.2 Billion

Wildfire




81%
 344,294
\$3.5 Billion

Water Deficit



48%
 202,340
\$1.9 Billion

Drought




100%
 422,821
\$4.1 Billion

Extreme Cold



-
 -
 -

Storm



97%
 411,584
\$4 Billion



VULNERABILITY (V)

RANK: 5 / 18 DEPARTMENTS ASSESSED
SCORE: 0.572

Vulnerability in San Pedro is primarily driven by Economic Constraints and Environmental Stress. The bar chart indicates the socioeconomic themes contributing to the department's overall Vulnerability score.



Environmental Stress



3.96% Cultivated Area Change
33.85% Deforestation



Vulnerable Health Status



74.02 Life Expectancy (years) **13.5** Infant Mortality Rate (per 1,000 live births) **56.1** Maternal Mortality Ratio **33.57** Adult Malnutrition **27.1%** Population with Disability **52.3%** Population Reporting Illness or Injury



Clean Water Vulnerability



95.71% Households with Improved Water Source **62.82%** Households with Improved Sanitation



Information Access Vulnerability



8.7% Illiteracy Rate (Age 10+) **7.0** Average Years of Schooling **6.83%** Households with Internet **79.98%** Households with Television **76.3%** Households with Radio



Economic Constraints



63.95 Economic Dependency Ratio **43.59%** Poverty Rate **0.51** Income Inequality (GINI)



Gender Inequality



0.01 Female to Male Secondary Education* **0.39** Female to Male Economic Activity* **0.39** Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures



1.29% Average Annual Population Change



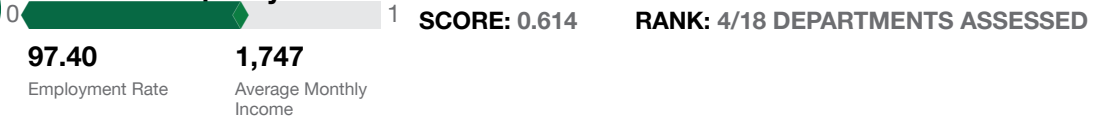
COPING CAPACITY (CC)

RANK: 15 / 18 DEPARTMENTS ASSESSED
SCORE: 0.445

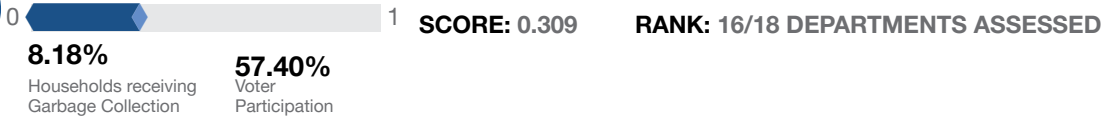
San Pedro exhibits weaker Coping Capacity in the areas of Transportation Capacity and Health Care Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



Economic Capacity



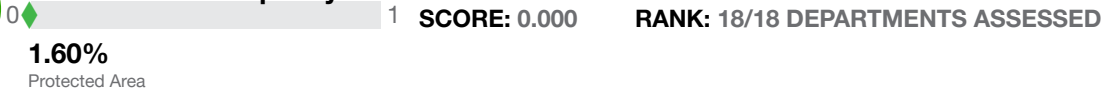
Governance



Crime Governance



Environmental Capacity



(COPING CAPACITY CONTINUED)



Infrastructure Capacity



Health Care Capacity **SCORE: 0.375** **RANK: 12/18 DEPARTMENTS ASSESSED**

6.46 Hospital Beds per 10,000 People	9.48 Physicians per 10,000 People	15.63 Nurses per 10,000 People	8,427.48 Average Distance to Nearest Hospital (km ²)	79.95% Vaccination Coverage	65.41% Access to Healthcare
---	--	---	---	--	--



Transportation Capacity **SCORE: 0.302** **RANK: 15/18 DEPARTMENTS ASSESSED**

0.59 Road Density (km per sq. km)	104.03 Distance to Airport or Seaport (km)
---	--



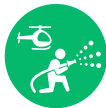
Communications Capacity **SCORE: 0.449** **RANK: 12/18 DEPARTMENTS ASSESSED**

96.0% Households with Mobile Phone	4.21% Households with Fixed Phone
--	---



Energy Capacity **SCORE: 0.945** **RANK: 6/18 DEPARTMENTS ASSESSED**

99.24% Households Connected to Electric Grid



Disaster Management Capacity



2.87 Ambulances per 100,000 People	109.04 Distance to Fire Station	70.49 Distance to Warehouse
---	---	---------------------------------------



RESILIENCE (R) **RANK: 14 / 18 DEPARTMENTS**
SCORE: 0.437

San Pedro'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:



**Economic
Constraints**



**Environmental
Stress**



**Transportation
Capacity**



**Health Care
Capacity**



HAZARD-SPECIFIC RISK (HSR)



Flood

RANK: 10
SCORE: 0.263



Drought

RANK: 2
SCORE: 0.432



Wildfire

RANK: 3
SCORE: 0.413



Extreme Cold

RANK: 9
SCORE: 0.000



Water Deficit

RANK: 4
SCORE: 0.316



Storm

RANK: 1
SCORE: 0.534



MULTI-HAZARD RISK (MHR)



2 / 18

Rank within departments
Score: 0.629

San Pedro's score and ranking are due to Very 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:



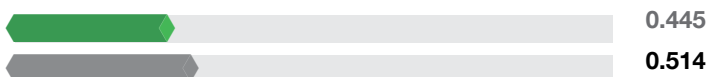
Multi-Hazard Exposure



Vulnerability



Coping Capacity



█ Department score

█ Country score

SAN PEDRO RECOMMENDATIONS



Economic Constraints

Economic constraints have individual, household, community, and district-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit San Pedro's ability to facilitate short- and long-term recovery.

San Pedro rank 3rd highest in both Economic Constraints and Multi-Hazard Exposure. Interventions including development of public policies that ensure equal opportunity for employment and fair wages should be prioritized. Expand public assistance programs to increase opportunities for economic mobility and enhance access to resources.

Assess disaster response and recovery plans to ensure that economically vulnerable populations are incorporated. This includes plans for short-term response and long-term recovery plans, as economically disadvantaged populations are often more likely to be severely impacted by disasters and have slower to recovery times.

SAN PEDRO RECOMMENDATIONS

2

Environmental Stress

Environmental stressors such as the depletion, degradation, or contamination of natural resources can exacerbate natural hazards and negatively impact the health, safety, and economic security of San Pedro's population.

San Pedro ranks highest in the country in overall environmental stress, experiencing the highest rate of deforestation between 2000 and 2018 (33.8%). Forest land management must be carefully balanced with economic development to ensure that critical ecosystems and livelihoods are protected, and hazards are mitigated.

Carefully monitor climate-sensitive hazards with citizen and stakeholder inputs to prioritize areas for environmental protection and mitigation. Economic constraints can be further exacerbated by environmental regulations if proper stakeholder input is not incorporated.

SAN PEDRO RECOMMENDATIONS

3

Transportation Capacity

Denser and more diverse transportation networks provide more options for bringing outside resources into an impacted area and increase the ability of response stakeholders to access department populations. Improved transportation capacity supports all aspects of San Pedro's ability to distribute resources before, during, and after a disaster.

Invest in transportation infrastructure that incorporates holistic risk assessment and sustainable development plans. Ensure that environmental mitigation plans for transportation projects consider the environmental stresses and hazards that impact San Pedro.

Increased transportation networks can also bring economic benefits by enhancing access to markets. Economic benefits and enhanced emergency response operations should be the focus of enhancements to the transportation network in San Pedro. Evacuation routes and emergency response plans should be adapted as construction is planned and implemented.

SAN PEDRO RECOMMENDATIONS

4

Health Care Capacity

Robust access to skilled caregivers and the dedicated facilities for the treatment of injury and disease during non-disaster times greatly enhances the ability of the served population to absorb and manage post-disaster impacts to health, and increases the likelihood that disaster associated health and medical impacts may be addressed.

San Pedro ranks 12th in overall Health Care Capacity. In particular, access to health care in San Pedro is ranked 3rd lowest and there are only 9.48 physicians per 10,000 persons, the 5th lowest in Paraguay. Promotion of vaccinations, healthy lifestyles and use of primary care will help boost the health of the population to reduce the burden on the healthcare sector.

With economic constraints impacting the population, focus needs to be on community health campaigns and ensuring that barriers to access are reduced. Working with NGO's and private sector partners to increase health care coverage, especially within rural communities needs to be prioritized.

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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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit





Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

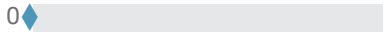
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

SCORE:

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

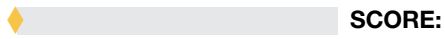
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



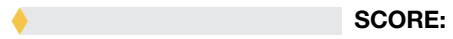
Flood



RANK:
SCORE:



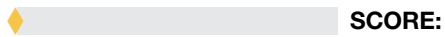
Drought



RANK:
SCORE:



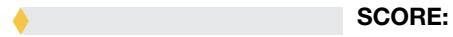
Wildfire



RANK:
SCORE:



Extreme Cold



RANK:
SCORE:



Water Deficit



RANK:
SCORE:



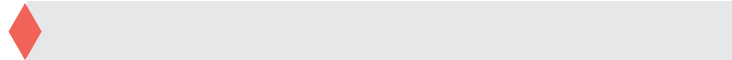
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



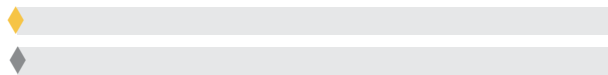
/
Rank within s
Score:

'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:



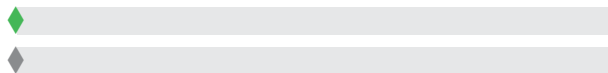
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

2

RECOMMENDATIONS

3

RECOMMENDATIONS

4

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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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood



Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

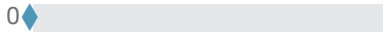
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

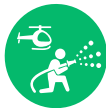


Energy Capacity

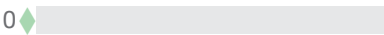
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

SCORE:

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

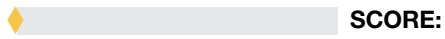
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



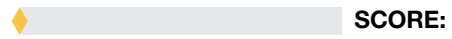
Flood



RANK:
SCORE:



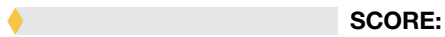
Drought



RANK:
SCORE:



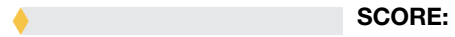
Wildfire



RANK:
SCORE:



Extreme Cold



RANK:
SCORE:



Water Deficit



RANK:
SCORE:



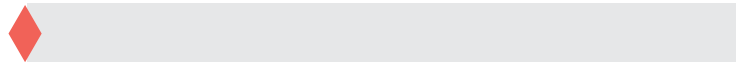
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



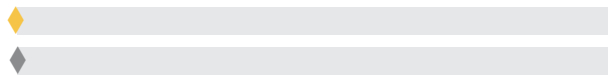
/
Rank within s
Score:

'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:



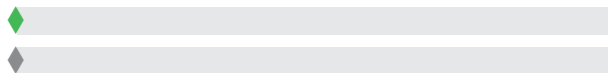
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

2

RECOMMENDATIONS

3

RECOMMENDATIONS

4

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/PDCGlobal



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ndpba.pry@pdc.org



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit





Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance



SCORE:

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance



SCORE:

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity



SCORE:

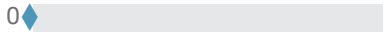
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

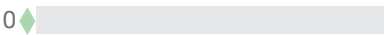
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

SCORE:

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

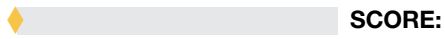
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HAZARD-SPECIFIC RISK (HSR)



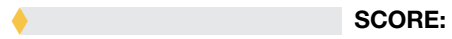
Flood



RANK:
SCORE:



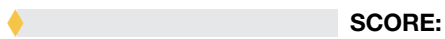
Drought



RANK:
SCORE:



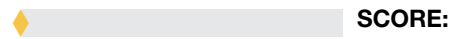
Wildfire



RANK:
SCORE:



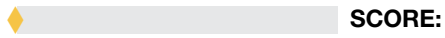
Extreme Cold



RANK:
SCORE:



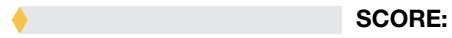
Water Deficit



RANK:
SCORE:



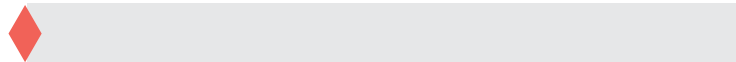
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



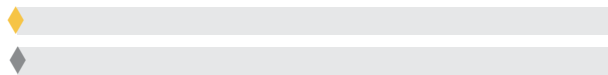
/
Rank within s
Score:

'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:



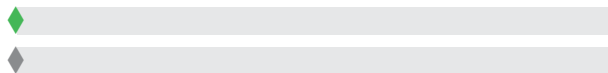
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

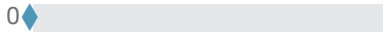
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

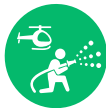


Energy Capacity

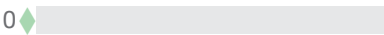
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

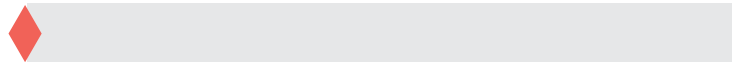


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



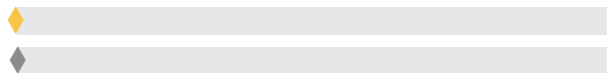
/
Rank within s
Score:

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

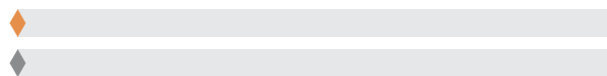
Multi-hazard risk component scores compared to overall average country scores:



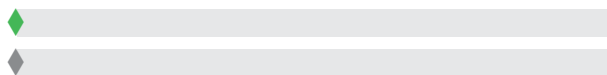
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood

Wildfire

Water Deficit

Drought

Extreme Cold

Storm



VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

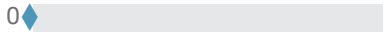
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

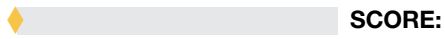
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



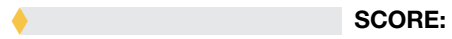
Flood



RANK:
SCORE:



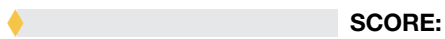
Drought



RANK:
SCORE:



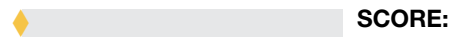
Wildfire



RANK:
SCORE:



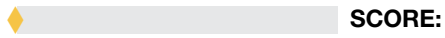
Extreme Cold



RANK:
SCORE:



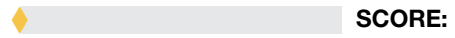
Water Deficit



RANK:
SCORE:



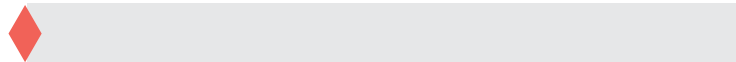
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



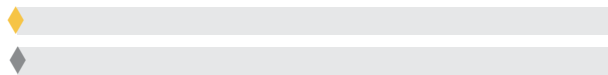
/
Rank within s
Score:

'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



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood

Wildfire

Water Deficit

Drought

Extreme Cold

Storm



VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

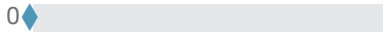
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

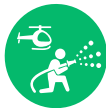


Energy Capacity

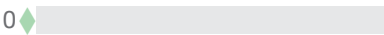
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

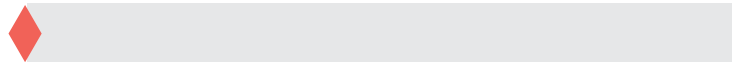


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



/
Rank within s
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:



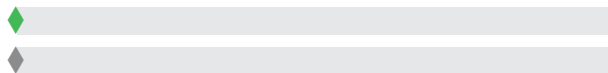
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

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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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood





Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income* *Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

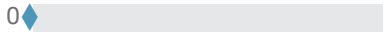
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

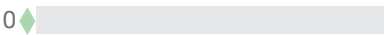
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

SCORE:

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

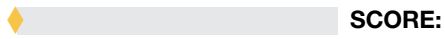
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



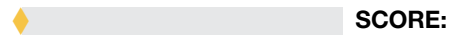
Flood



RANK:
SCORE:



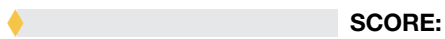
Drought



RANK:
SCORE:



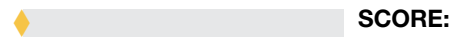
Wildfire



RANK:
SCORE:



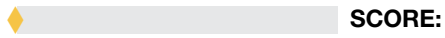
Extreme Cold



RANK:
SCORE:



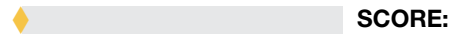
Water Deficit



RANK:
SCORE:



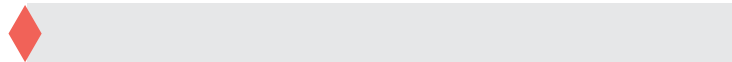
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



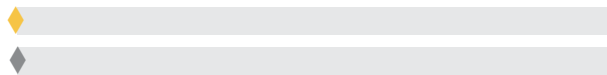
/
Rank within s
Score:

'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:



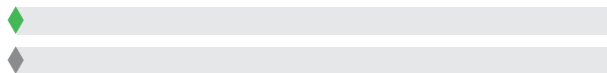
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)



RANK: /
SCORE:






ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:


 Inland Flood


 Wildfire


 Water Deficit


 Drought


 Extreme Cold


 Storm




VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

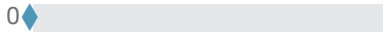
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

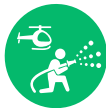


Energy Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

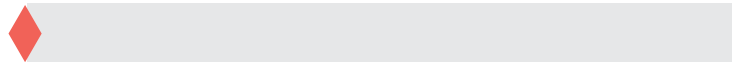


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



/
Rank within s
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:



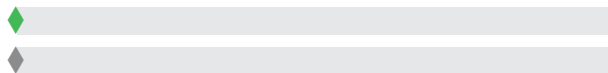
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

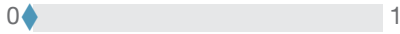
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

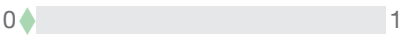
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

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)



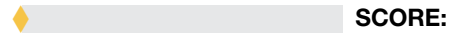
Flood



RANK:
SCORE:



Drought



RANK:
SCORE:



Wildfire



RANK:
SCORE:



Extreme Cold



RANK:
SCORE:



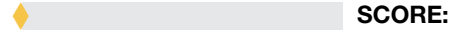
Water Deficit



RANK:
SCORE:



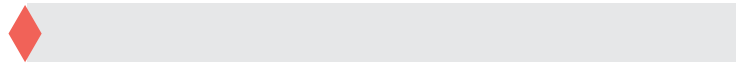
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



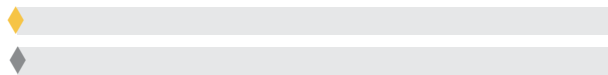
/
Rank within s
Score:

'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:



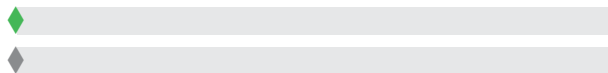
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood



Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

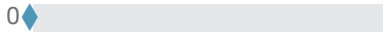
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

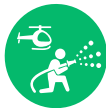


Energy Capacity

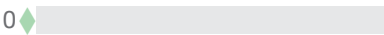
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

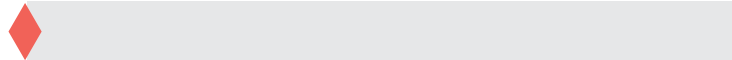


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



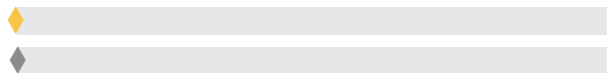
/
Rank within s
Score:

'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



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

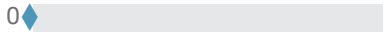
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

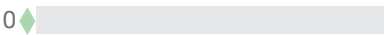
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

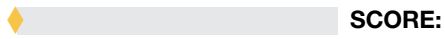
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



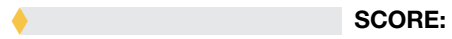
Flood



RANK:
SCORE:



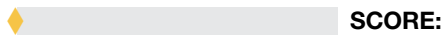
Drought



RANK:
SCORE:



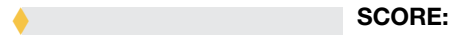
Wildfire



RANK:
SCORE:



Extreme Cold



RANK:
SCORE:



Water Deficit



RANK:
SCORE:



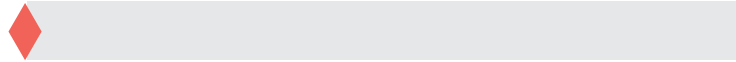
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



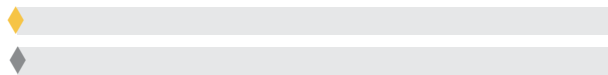
/
Rank within s
Score:

'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:



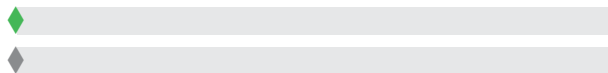
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

2

RECOMMENDATIONS

3

RECOMMENDATIONS

4

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ndpba.pry@pdc.org



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

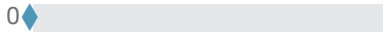
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

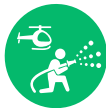


Energy Capacity

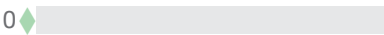
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

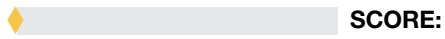
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HAZARD-SPECIFIC RISK (HSR)



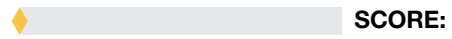
Flood



RANK:
SCORE:



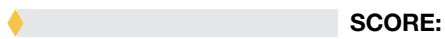
Drought



RANK:
SCORE:



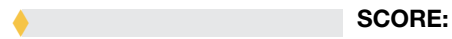
Wildfire



RANK:
SCORE:



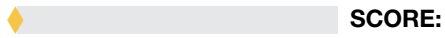
Extreme Cold



RANK:
SCORE:



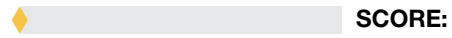
Water Deficit



RANK:
SCORE:



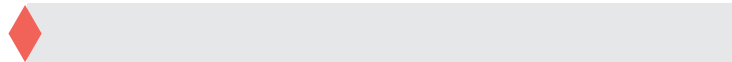
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



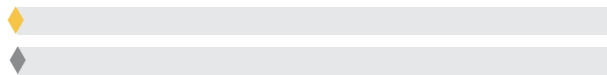
/
Rank within s
Score:

'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



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

2

RECOMMENDATIONS

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RECOMMENDATIONS

4

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ndpba.pry@pdc.org



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood





Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance



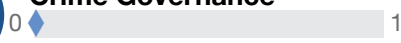
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance



SCORE:

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity



SCORE:

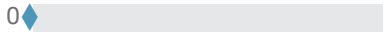
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

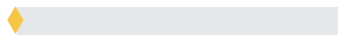
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



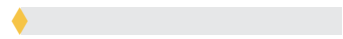
Flood



RANK:
SCORE:



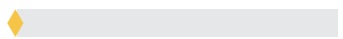
Drought



RANK:
SCORE:



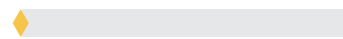
Wildfire



RANK:
SCORE:



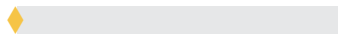
Extreme Cold



RANK:
SCORE:



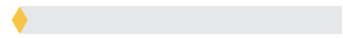
Water Deficit



RANK:
SCORE:



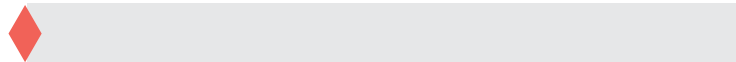
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



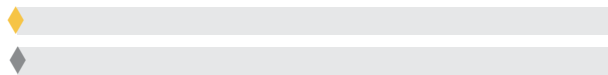
/
Rank within s
Score:

'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



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

2

RECOMMENDATIONS

3

RECOMMENDATIONS

4

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/PDCGlobal



www.pdc.prg



ndpba.pry@pdc.org



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood



Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

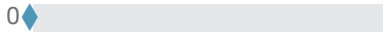
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

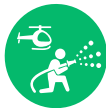


Energy Capacity

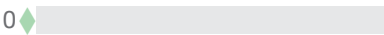
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

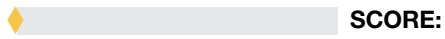
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



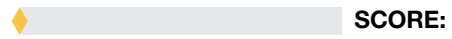
Flood



RANK:
SCORE:



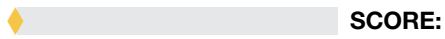
Drought



RANK:
SCORE:



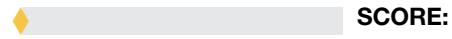
Wildfire



RANK:
SCORE:



Extreme Cold



RANK:
SCORE:



Water Deficit



RANK:
SCORE:



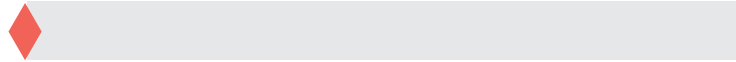
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



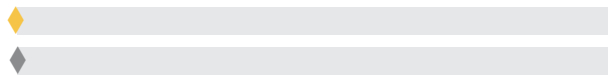
/
Rank within s
Score:

'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:



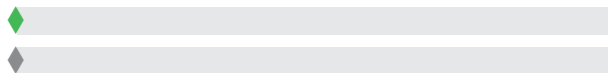
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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





MULTI-HAZARD EXPOSURE (MHE)



RANK: /
SCORE:






ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

 Inland Flood


 Wildfire


 Water Deficit


 Drought


 Extreme Cold


 Storm




VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

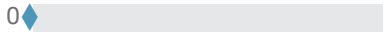
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hospital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

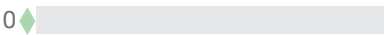
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

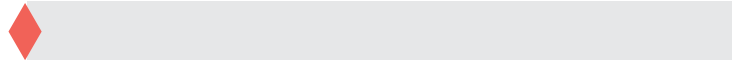


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



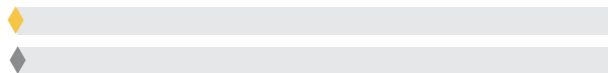
/
Rank within s
Score:

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

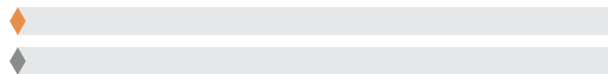
Multi-hazard risk component scores compared to overall average country scores:



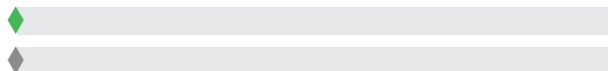
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

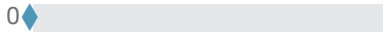
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

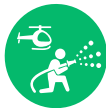


Energy Capacity

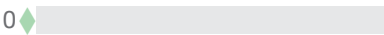
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

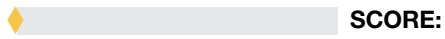
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



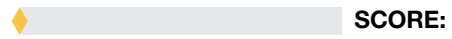
Flood



RANK:
SCORE:



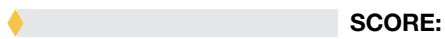
Drought



RANK:
SCORE:



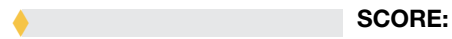
Wildfire



RANK:
SCORE:



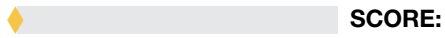
Extreme Cold



RANK:
SCORE:



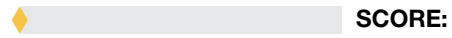
Water Deficit



RANK:
SCORE:



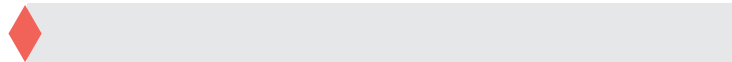
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



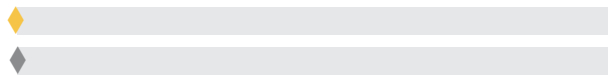
/
Rank within s
Score:

'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:



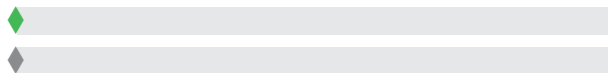
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

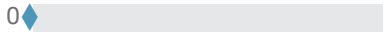
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

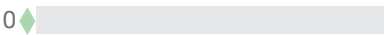
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

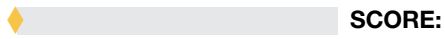
Below are the four thematic areas with the weakest relative scores:



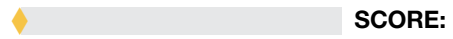
HAZARD-SPECIFIC RISK (HSR)



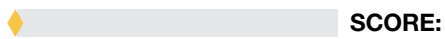
Flood



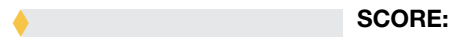
Drought



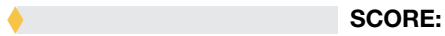
Wildfire



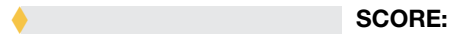
Extreme Cold



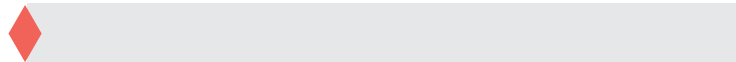
Water Deficit



Storm



MULTI-HAZARD RISK (MHR)



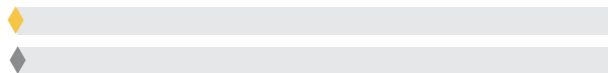
/
Rank within s
Score:

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

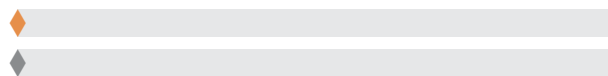
Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

2

RECOMMENDATIONS

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RECOMMENDATIONS

4

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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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance



SCORE:

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance



SCORE:

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity



SCORE:

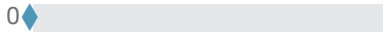
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

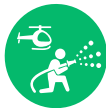


Energy Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

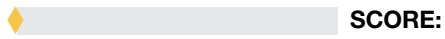
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



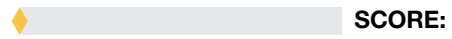
Flood



RANK:
SCORE:



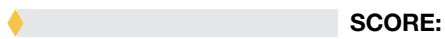
Drought



RANK:
SCORE:



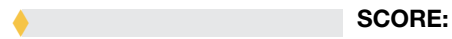
Wildfire



RANK:
SCORE:



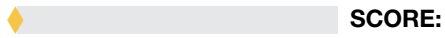
Extreme Cold



RANK:
SCORE:



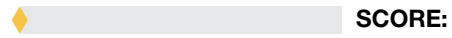
Water Deficit



RANK:
SCORE:



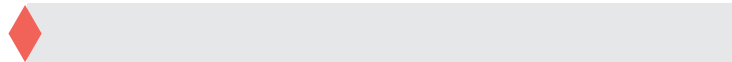
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



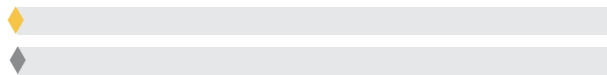
/
Rank within s
Score:

'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



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

2

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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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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





MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit



Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

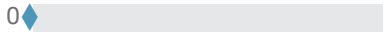
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hospital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km²)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

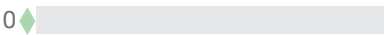
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

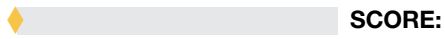
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



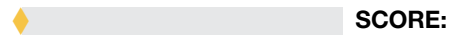
Flood



RANK:
SCORE:



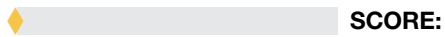
Drought



RANK:
SCORE:



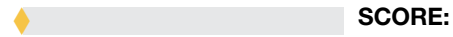
Wildfire



RANK:
SCORE:



Extreme Cold



RANK:
SCORE:



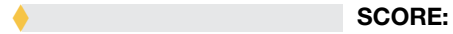
Water Deficit



RANK:
SCORE:



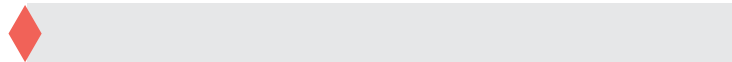
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



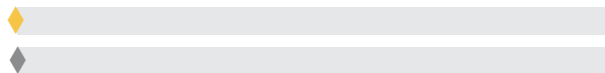
/
Rank within s
Score:

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

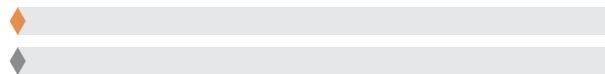
Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

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ndpba.pry@pdc.org



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

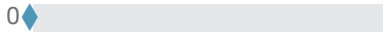
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

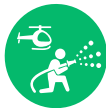


Energy Capacity

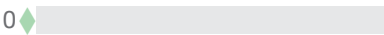
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

SCORE:

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

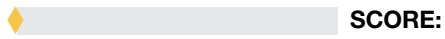
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HAZARD-SPECIFIC RISK (HSR)



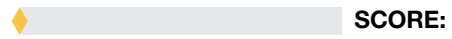
Flood



RANK:
SCORE:



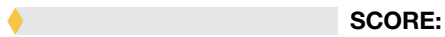
Drought



RANK:
SCORE:



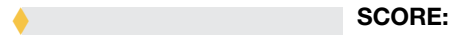
Wildfire



RANK:
SCORE:



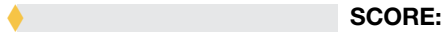
Extreme Cold



RANK:
SCORE:



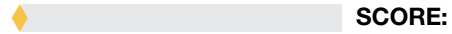
Water Deficit



RANK:
SCORE:



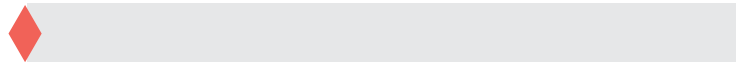
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



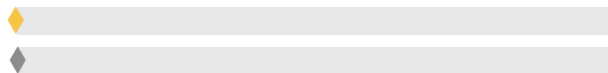
/
Rank within s
Score:

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

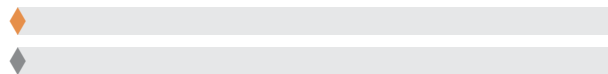
Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

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RECOMMENDATIONS

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RECOMMENDATIONS

4

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www.pdc.prg



ndpba.pry@pdc.org



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood

Wildfire

Water Deficit

Drought

Extreme Cold

Storm



VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

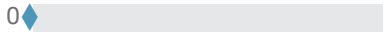
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

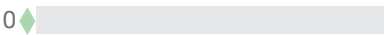
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

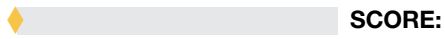
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



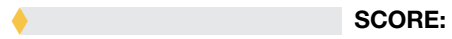
Flood



RANK:
SCORE:



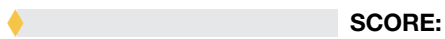
Drought



RANK:
SCORE:



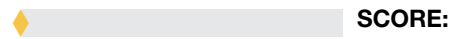
Wildfire



RANK:
SCORE:



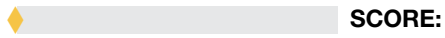
Extreme Cold



RANK:
SCORE:



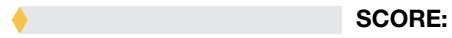
Water Deficit



RANK:
SCORE:



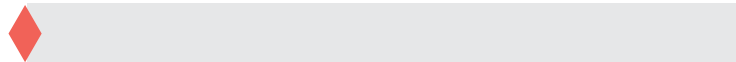
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



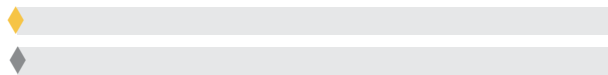
/
Rank within s
Score:

'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:



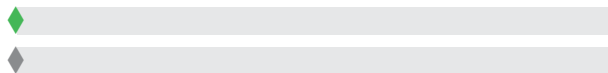
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
Country score

RECOMMENDATIONS



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

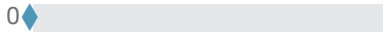
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

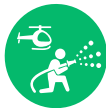


Energy Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

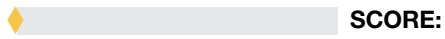
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HAZARD-SPECIFIC RISK (HSR)



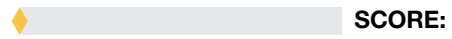
Flood



RANK:
SCORE:



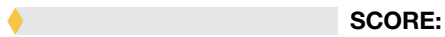
Drought



RANK:
SCORE:



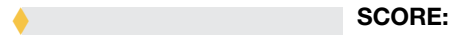
Wildfire



RANK:
SCORE:



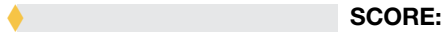
Extreme Cold



RANK:
SCORE:



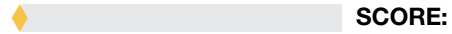
Water Deficit



RANK:
SCORE:



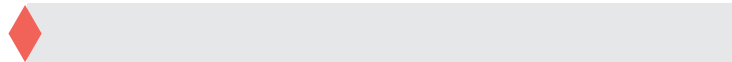
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



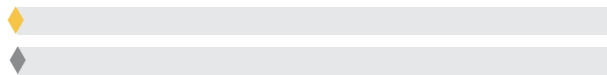
/
Rank within s
Score:

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

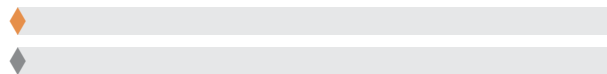
Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

RECOMMENDATIONS



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:

Inland Flood

Wildfire

Water Deficit

Drought

Extreme Cold

Storm



VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

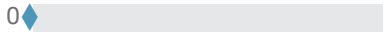
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

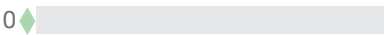
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

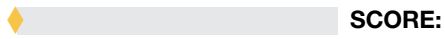
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



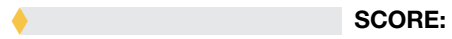
Flood



RANK:
SCORE:



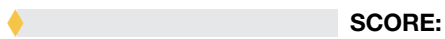
Drought



RANK:
SCORE:



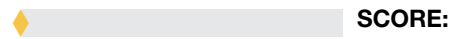
Wildfire



RANK:
SCORE:



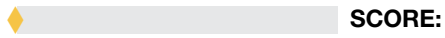
Extreme Cold



RANK:
SCORE:



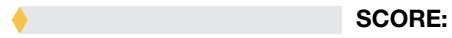
Water Deficit



RANK:
SCORE:



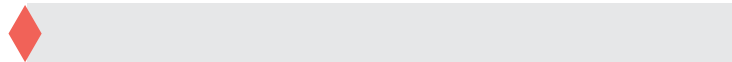
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



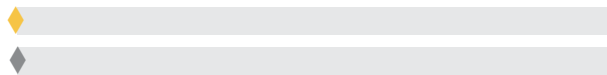
/
Rank within s
Score:

'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:



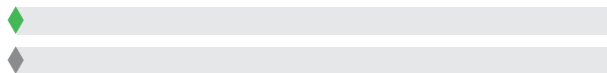
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



RECOMMENDATIONS

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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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

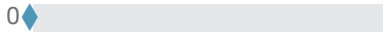
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

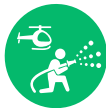


Energy Capacity

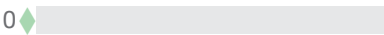
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

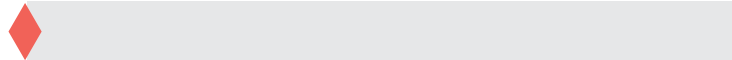


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



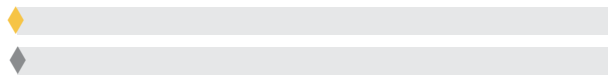
/
Rank within s
Score:

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



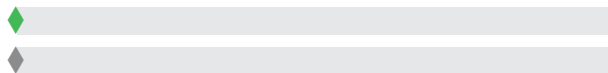
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit



Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

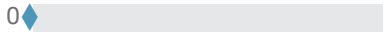
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

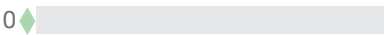
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

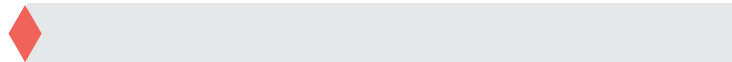


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



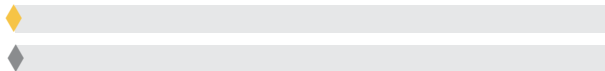
/
Rank within s
Score:

'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



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood



Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

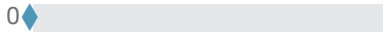
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

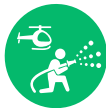


Energy Capacity

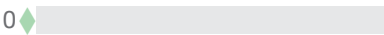
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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

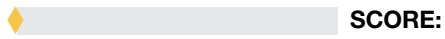
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



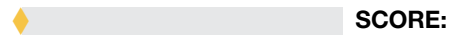
Flood



RANK:
SCORE:



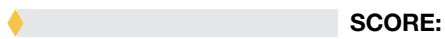
Drought



RANK:
SCORE:



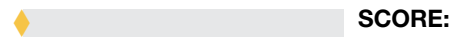
Wildfire



RANK:
SCORE:



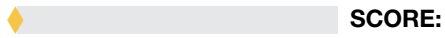
Extreme Cold



RANK:
SCORE:



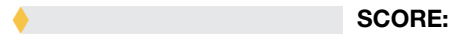
Water Deficit



RANK:
SCORE:



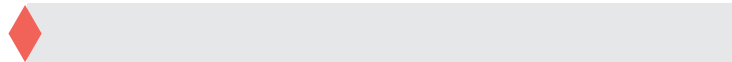
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



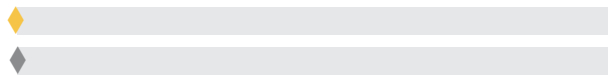
/
Rank within s
Score:

'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



 Department score
 Country score

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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit




Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

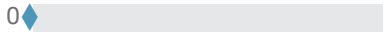
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

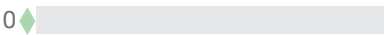
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

SCORE:

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

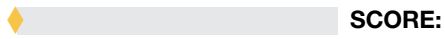
Below are the four thematic areas with the weakest relative scores:



HAZARD-SPECIFIC RISK (HSR)



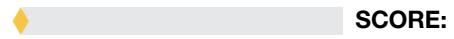
Flood



RANK:
SCORE:



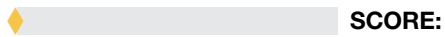
Drought



RANK:
SCORE:



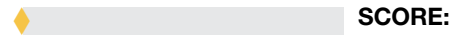
Wildfire



RANK:
SCORE:



Extreme Cold



RANK:
SCORE:



Water Deficit



RANK:
SCORE:



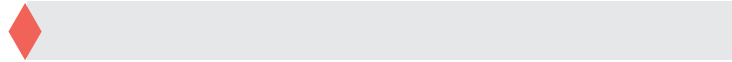
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



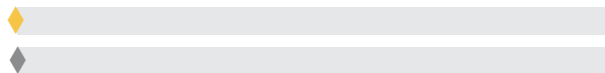
/
Rank within s
Score:

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

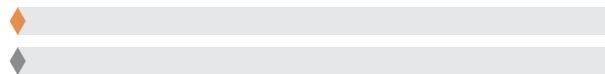
Multi-hazard risk component scores compared to overall average country scores:



Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

RECOMMENDATIONS



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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





MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit



Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

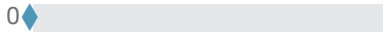
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone

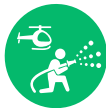


Energy Capacity

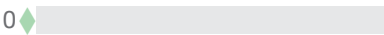
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S

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)



Flood

RANK:
SCORE:



Drought

RANK:
SCORE:



Wildfire

RANK:
SCORE:



Extreme Cold

RANK:
SCORE:



Water Deficit

RANK:
SCORE:

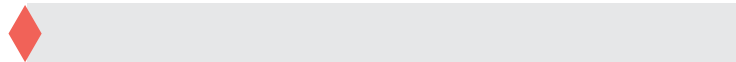


Storm

RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



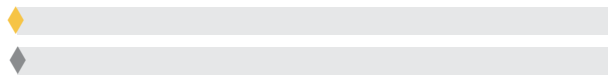
/
Rank within s
Score:

'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:



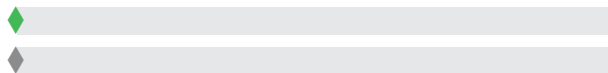
Multi-Hazard Exposure



Vulnerability



Coping Capacity



 Department score
 Country score

RECOMMENDATIONS



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ndpba.pry@pdc.org



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 (2015)



Infant Mortality Rate



Illiterate population



Access to improved water



Average life expectancy
years

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



MULTI-HAZARD EXPOSURE (MHE)

RANK: /
SCORE:



ESTIMATED POPULATION AND CAPITAL EXPOSED TO EACH HAZARD:



Inland Flood




Wildfire





Water Deficit



Drought



Extreme Cold



Storm





VULNERABILITY (V)

RANK: / DEPARTMENTS ASSESSED
SCORE:

Vulnerability in is primarily driven by and . The bar chart indicates the socioeconomic themes contributing to the 's overall Vulnerability score.



Environmental Stress

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Cultivated Area Change Deforestation



Vulnerable Health Status

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Life Expectancy (years) Infant Mortality Rate (per 1,000 live births) Maternal Mortality Ratio Adult Malnutrition Population with Disability Population Reporting Illness or Injury



Clean Water Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households with Improved Water Source Households with Improved Sanitation



Information Access Vulnerability

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Illiteracy Rate (Age 10+) Average Years of Schooling Households with Internet Households with Television Households with Radio



Economic Constraints

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Economic Dependency Ratio Poverty Rate Income Inequality (GINI)



Gender Inequality

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Female to Male Secondary Education* Female to Male Economic Activity* Female to Male Average Monthly Income*

*Higher values indicate greater gender disparity.



Population Pressures

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Average Annual Population Change



COPING CAPACITY (CC)

RANK: / DEPARTMENTS ASSESSED
SCORE:

exhibits weaker Coping Capacity in the areas of and . The bar chart indicates the socioeconomic themes contributing to the 's overall Coping Capacity score.



Economic Capacity

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Employment Rate Average Monthly Income



Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Households receiving Garbage Collection Voter Participation



Crime Governance

0 1 **SCORE:**

RANK: / DEPARTMENTS ASSESSED

Homicide Rate (per 100,000 People) Property Crime Rate (per 100,000 People)



Environmental Capacity

0 1 **SCORE:**

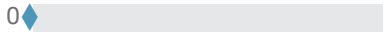
RANK: / DEPARTMENTS ASSESSED

Protected Area

(COPING CAPACITY CONTINUED)



Infrastructure Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED



Health Care Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Hopital Beds per 10,000 People

Physicians per 10,000 People

Nurses per 10,000 People

Average Distance to Nearest Hospital (km2)

Vaccination Coverage

Access to Healthcare



Transportation Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Road Density (km per sq. km)

Distance to Airport or Seaport (km)



Communications Capacity

SCORE:

RANK: / DEPARTMENTS ASSESSED

Households with Mobile Phone

Households with Fixed Phone



Energy Capacity

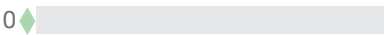
SCORE:

RANK: / DEPARTMENTS ASSESSED

Households Connected to Electric Grid



Disaster Management Capacity



SCORE:

RANK: / DEPARTMENTS ASSESSED

Ambulances per 100,000 People

Distance to Fire Station

Distance to Warehouse



RESILIENCE (R)

RANK: / S
SCORE:

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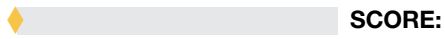
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HAZARD-SPECIFIC RISK (HSR)



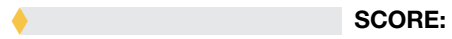
Flood



RANK:
SCORE:



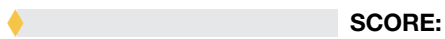
Drought



RANK:
SCORE:



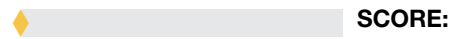
Wildfire



RANK:
SCORE:



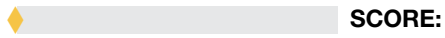
Extreme Cold



RANK:
SCORE:



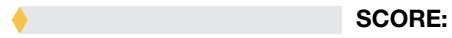
Water Deficit



RANK:
SCORE:



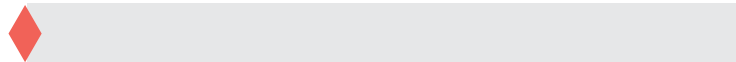
Storm



RANK:
SCORE:



MULTI-HAZARD RISK (MHR)



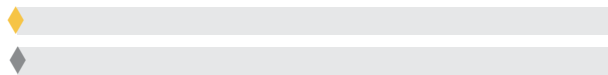
/
Rank within s
Score:

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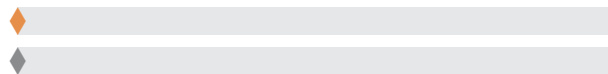
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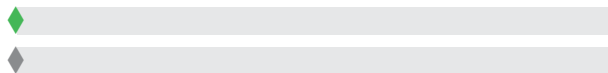
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

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