



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



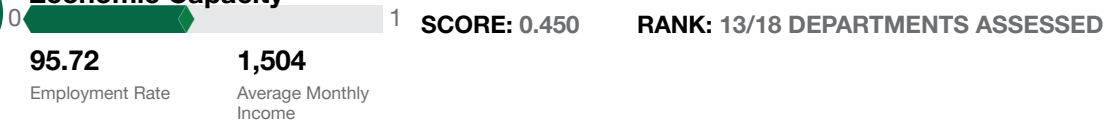
COPING CAPACITY (CC)

RANK: 7 / 18 DEPARTMENTS ASSESSED
SCORE: 0.530

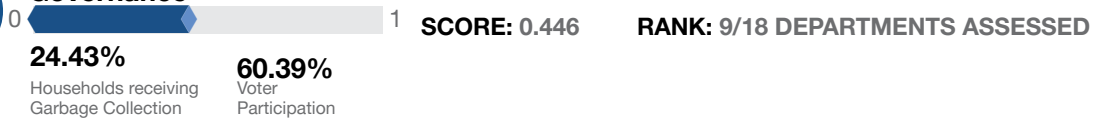
Guairá exhibits weaker Coping Capacity in the areas of Health Care Capacity and Communications Capacity. The bar chart indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.



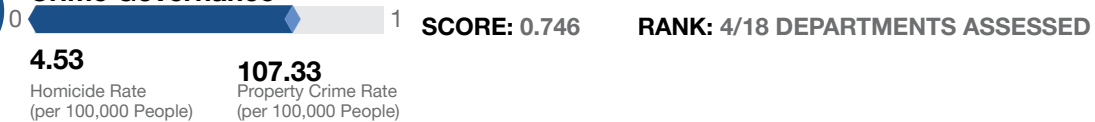
Economic Capacity



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

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



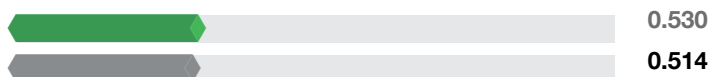
Multi-Hazard Exposure



Vulnerability



Coping Capacity



Department score
 Country score

GUAIRÁ RECOMMENDATIONS



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.

**Better solutions.
Fewer disasters.**

Safer world.

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