



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



6.30% Cultivated Area Change
24.73% Deforestation



Vulnerable Health Status



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



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



Information Access Vulnerability



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



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



Gender Inequality



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



1.08% Average Annual Population Change



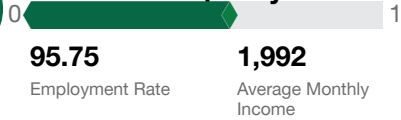
COPING CAPACITY (CC)

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

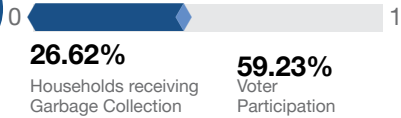


SCORE: 0.576

RANK: 8/18 DEPARTMENTS ASSESSED



Governance

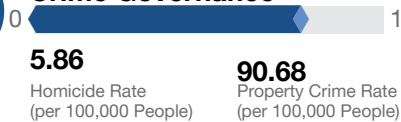


SCORE: 0.431

RANK: 10/18 DEPARTMENTS ASSESSED



Crime Governance

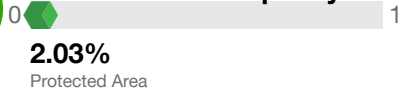


SCORE: 0.77

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
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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
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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
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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

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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

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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

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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.

**Better solutions.
Fewer disasters.**

Safer world.

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