



**SURINAME**

# **MAROWIJNE**

**NDPBA SUBNATIONAL PROFILE**

# SURINAME MAROWIJNE

**CAPITAL: ALBINA**

Area: 4,627 km<sup>2</sup>



## RISK AND VULNERABILITY COMPONENT SCORE



### MULTI-HAZARD RISK (MHR)

**High**  
Score: 0.425 • Rank: 3/10



### RESILIENCE (R)

**Low**  
Score: 0.503 • Rank: 8/10



### MULTI-HAZARD EXPOSURE (MHE)

**Moderate**  
Score: 0.281 • Rank: 6/10



### VULNERABILITY (V)

**High**  
Score: 0.549 • Rank: 3/10



### COPING CAPACITY (CC)

**Low**  
Score: 0.555 • Rank: 8/10



Population (2012 Census)

**18,294**



Households with Unsafe Sanitation Practices

**76.4%**



Population with Electricity Access

**43.9%**



Child Labor

**4.8%**



Adolescent Birth Rate (to women under age 21)

**13.2%**



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 10 DISTRICTS ASSESSED  
SCORE: 0.281



MHE  
0.281

Raw MHE  
0.057

Relative MHE  
0.505

### ESTIMATED EXPOSURE TO EACH HAZARD:



Coastal Flooding

**52%**

**10,583**

Buildings Exposed: **60%**

Critical Infrastructure Exposed: **65%**



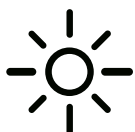
Landslide

**1%**

**212**

Buildings Exposed: **1%**

Critical Infrastructure Exposed: **2%**



Drought

**0%**

**0**

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**



Mosquito-borne Disease

**98%**

**19,825**

Buildings Exposed: **99%**

Critical Infrastructure Exposed: **100%**



Earthquake

**0%**

**0**

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**



Riverine Flooding

**74%**

**14,936**

Buildings Exposed: **77%**

Critical Infrastructure Exposed: **55%**



Extreme Heat

**100%**

**20,191**

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Sea Level Rise

**19%**

**3,899**

Buildings Exposed: **26%**

Critical Infrastructure Exposed: **33%**

NOTE: Population exposure values for Suriname are estimated using PDC's All-hazard Impact Model (AIM) model. Values may differ from Census population.



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 10 DISTRICTS  
SCORE: 0.281

### ESTIMATED EXPOSURE TO EACH HAZARD (CONTINUED):



Tsunami

**<1%**

**9**

Buildings Exposed: **5%**

Critical Infrastructure Exposed: **17%**



Wildfire

**84%**

**16,882**

Buildings Exposed: **81%**

Critical Infrastructure Exposed: **80%**



## VULNERABILITY (V)

**RANK: 3 / 10 DISTRICTS ASSESSED**  
**SCORE: 0.549**

Vulnerability in Marowijne is primarily driven by Education Vulnerability and Children's Vulnerability. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



### Children's Vulnerability

0  1 **SCORE: 0.516** **RANK: 4/10 DISTRICTS ASSESSED**

<b>4.8%</b> Child Labor Participation	<b>14.1%</b> Childhood Disability	<b>45.6%</b> Children Living with Parents	<b>61.9</b> Early Childhood Development Index Score (out of 100)	<b>23.1%</b> Lack of Household Support for Childhood Learning
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### Economic Constraints

0  1 **SCORE: 0.475** **RANK: 3/10 DISTRICTS ASSESSED**

<b>0.017</b> Multidimensional Poverty Index	<b>52.6%</b> Population in Poorest Wealth Quintile	<b>69.6%</b> Wealth Quintile Skew (income inequality: poorest two quintiles minus richest two quintiles)
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### Education Vulnerability

0  1 **SCORE: 0.778** **RANK: 3/10 DISTRICTS ASSESSED**

<b>25.5%</b> Childhood Literacy	<b>23%</b> Lower Secondary School Completion Rate	<b>62.1%</b> Out of School Rate
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### Gender Vulnerability

0  1 **SCORE: 0.510** **RANK: 3/10 DISTRICTS ASSESSED**

<b>13.2%</b> Adolescent Birth Rate (to women under age 21)	<b>14.2%</b> Child Marriage (Female)	<b>0.831</b> Mass Media Exposure Gender Parity (ratio of female exposure to male exposure rate)
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### Population Pressures

0  1 **SCORE: 0.467** **RANK: 4/10 DISTRICTS ASSESSED**

<b>8.1%</b> Elderly Population (over age 60)	<b>13.9%</b> Children Under Age 5	<b>27</b> Net Migration	<b>697</b> Population Flux (births minus deaths)
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## COPING CAPACITY (CC)

**RANK: 8 / 10 DISTRICTS ASSESSED**  
**SCORE: 0.555**

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



## Public Health Capacity



**SCORE: 0.676 RANK: 1/10 DISTRICTS ASSESSED**

**58.4%**  
Households with E. Coli Contaminated Drinking Water

**91.2%**  
Measles Vaccination Rate

**76.4%**  
Households with Unsafe Sanitation Practices

**4.4**  
Physicians per 10,000 persons

**36.4**  
Hospital Bed Density per 10,000 persons

**6.6**  
Clinics per 10,000 persons



## Standard of Living



**SCORE: 0.672 RANK: 7/10 DISTRICTS ASSESSED**

**93.4%**  
Households Using Clean Fuels for Cooking and Lighting

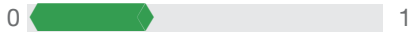
**88.0%**  
Households with Finished Exterior Walls

**56.3%**  
Rural Access Index (population within 2km of all-season road)

**78.6%**  
Population that Does Not Share Toilet Facilities



## Energy and Technology Capacity



**SCORE: 0.317 RANK: 8/10 DISTRICTS ASSESSED**

**13.9%**  
Households with Computer Access

**43.9%**  
Population with Electricity Access



## Infrastructure Capacity



**SCORE: 0.557 RANK: 8/10 DISTRICTS ASSESSED**

**101.7**  
Average Distance to Airport (km)

**102.8**  
Average Distance to EOC (km)

**26.5**  
Average Distance to Fire Station (km)

**25.9**  
Average Distance to Hospital (km)

**56.1**  
Average Distance to Police Station (km)

**20.3**  
Average Distance to Port (km)

**91.0**  
Average Distance to School (km)

**2.6**  
Average Distance to Telecommunications (km)



## RESILIENCE (R)

**RANK: 8 / 10 DISTRICTS ASSESSED**  
**SCORE: 0.503**

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

### KEY FACTORS INFLUENCING RESILIENCE:



#### Education Vulnerability

Limited access to education and low literacy rates can hinder a population's ability to understand and act upon hazard alert and warning messages. Emergency messages disseminated to the population must contain clear and simple information that fosters understanding and promotes life-saving action. Low school attendance rates can be further exacerbated due to the disruption caused by a natural disaster and the additional demands placed on households during the recovery process. Efforts to remove impediments to school attendance such as economic constraints, inadequate facilities, geographic isolation, and marginalization will reduce vulnerability and increase opportunities for the population.



#### Children's Vulnerability

Children who are developmentally disadvantaged or have a disability are more susceptible to harm during times of disaster. Furthermore, children engaged in child labor, where safety concerns may be an issue, and in living arrangements lacking adult supervision, are more likely to suffer negative consequences as a result of an emergency situation. Efforts to support the cognitive, physical, social and emotional development of young children will reduce their vulnerability and have positive bearing on their future health and well-being.



#### Energy and Technology 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 will contribute to economic development and increase the speed of recovery processes in the aftermath of a disaster. Furthermore, access to communications infrastructure and technology makes it easier for people to communicate reliably, increasing accessibility to alert and warning information.



#### Infrastructure Capacity

The density, quality, and resilience of infrastructure influences how local populations access critical lifelines including transportation, communications, emergency services, and skilled health care. Establishing and maintaining a robust network of systems and resources helps to safeguard communities by providing more options for bringing outside resources into an impacted area, improving the ability of disaster management stakeholders to effectively reach vulnerable populations.



## HAZARD-SPECIFIC RISK (HSR)



**Coastal Flooding**

**RANK: 2 / 10** DISTRICTS ASSESSED

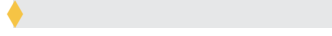
**SCORE: 0.444**



**Drought**

**RANK: 7 / 10** DISTRICTS ASSESSED

**SCORE: 0.000**



**Earthquake**

**RANK: 9 / 10** DISTRICTS ASSESSED

**SCORE: 0.000**



**Extreme Heat**

**RANK: 1 / 10** DISTRICTS ASSESSED

**SCORE: 0.585**



**Landslide**

**RANK: 3 / 10** DISTRICTS ASSESSED

**SCORE: 0.148**



**Mosquito-borne Disease**

**RANK: 2 / 10** DISTRICTS ASSESSED

**SCORE: 0.577**



**Riverine Flooding**

**RANK: 2 / 10** DISTRICTS ASSESSED

**SCORE: 0.474**



**Sea Level Rise**

**RANK: 1 / 10** DISTRICTS ASSESSED

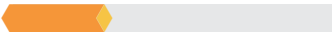
**SCORE: 0.521**



**Tsunami**

**RANK: 3 / 10** DISTRICTS ASSESSED

**SCORE: 0.275**



**Wildfire**

**RANK: 1 / 10** DISTRICTS ASSESSED

**SCORE: 0.606**







# MULTI-HAZARD RISK (MHR)

**3 / 10**  
RANK AMONG DISTRICTS  
Score: 0.425



Marowijne’s score and ranking are due to Moderate Multi-Hazard Exposure combined with High Vulnerability and Low Coping Capacity scores.

## Multi-Hazard Risk component scores compared to overall average country scores:

**DISTRICTS SCORE**  
 **COUNTRY SCORE**



**Better solutions.  
Fewer disasters.**

# Safer world.

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