

**GUYANA** 

# DEMERARA-MAHAICA

# **NDPBA SUBNATIONAL PROFILE**



#### **GUYANA**

# **DEMERARA-MAHAICA**

**CAPITAL: TRIUMPH** 

Area: 2,165 km2



## RISK AND VULNERABILITY

**COMPONENT SCORE** 



**MULTI-HAZARD RISK (MHR) -**

High

Score: 0.490 • Rank: 3/10



Population (2012 Census)

311,563



RESILIENCE (R) - Very High Score: 0.648 • Rank: 1/10



Infant Mortality Rate (per 1,000 live births)

16



**MULTI-HAZARD EXPOSURE** 

(MHE) - Very High

Score: 0.767 • Rank: 2/10



Households in Lowest Wealth Quintile

9.5%



**VULNERABILITY (V) - Very Low** 

Score:0.324 • Rank: 10/10



Households with Improved Drinking Water Source

98.0%



**COPING CAPACITY (CC) - Very** 

High

Score: 0.621 • Rank: 2/10



Adult Illiteracy

6.9%

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# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 2 / 10 REGIONS** 

**SCORE: 0.767** 



MHE 0.767

Raw MHE 0.895

Relative MHE 0.639

#### **ESTIMATED EXPOSURE TO EACH HAZARD:**



**Coastal Flooding** 

11%

**36,550** 

\$401 Million

Critical Infrastructure Exposed: 7%

**Critical Infrastructure Exposed:** 



Flash Flooding

74%

**237,276** 

\$3.51 Billion

Critical Infrastructure Exposed: 59%



**Drought** 

16%

**49 271** 

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**Riverine Flooding** 

68%

**218,877** 

\$3.76 Billion

Critical Infrastructure Exposed: 47%



**Extreme Heat** 

100%

**321.333** 

\$4.04 Billion

Critical Infrastructure Exposed: 100%



Wildfire

100%

**321,135** 

\$4.03 Billion

Critical Infrastructure Exposed: 100%



# **VULNERABILITY (V)**

**RANK: 10 / 10 REGIONS ASSESSED** 

**SCORE: 0.324** 

Vulnerability in Demerara-Mahaica is primarily driven by Environmental Stress and Vulnerable Groups. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Environmental Stress**



RANK: 2/10 REGIONS ASSESSED

47.0%
Households
Affected by
Drainage
Issues

26.3% Households Affected by Waste Disposal

3.8% Households Affected by Soil Erosion 26.0%
Households
Affected
by Water
Contamination

**SCORE: 0.680** 

Change in Intact Forest Area 5954.1 Livestock Density (per sq km)



#### Socio-Demographic Vulnerability



1 SCORE: 0.235

**RANK: 9/10 REGIONS ASSESSED** 



#### **Population Pressures**



SCORE: 0.351

**RANK: 5/10 REGIONS ASSESSED** 

0.04

-4.12
Net Migration
Rate

Average Annual Population Change



#### **Human Development Vulnerability**



SCORE: 0.124

SCORE: 0.046

**RANK: 10/10 REGIONS ASSESSED** 

**RANK: 10/10 REGIONS ASSESSED** 

**RANK: 8/10 REGIONS ASSESSED** 

#### Standard of Living

98.0%

Households with Improved Drinking Water Source 97.0%

Households with Improved Sanitation

Households with Water Source over 30 minutes from Home 1.6%

Households Cooking with Solid Fuels

SCORE: 0.222

24.9% Households with a Private

Vehicle

37.4%
Population
with Internet

89.0% Households with Television

Access

61.9% Households with Radio Access

#### **Vulnerable Health Status**

16 Infant Mortality

Rate

Adolescent Birth Rate **5.8%**Children
Under Age 5

Wasting

0.6%

# Information Access Vulnerability

20.5%

Adults with Adult Illiteracy Less than Secondary

6.9%

90.2% Net Primary School

**Enrollment** 

SCORE: 0.192

**SCORE: 0.037** 

**RANK: 8/10 REGIONS ASSESSED** 

**RANK: 10/10 REGIONS ASSESSED** 

#### **Economic Constraints**

50.1

Education

Age Dependency Ratio 9.5% Unemployment Rate 11.3% Unemployment Rate

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**RANK: 10 / 10 REGIONS ASSESSED** 

**SCORE: 0.324** 

**SCORE: 0.176** 



# Socio-Demographic Vulnerability (Continued...)



#### **Vulnerable Groups**

1 SCORE: 0.419

RANK: 7/10 REGIONS ASSESSED

**RANK: 8/10 REGIONS ASSESSED** 

3.0%

Disabled Population

#### **Gender Inequality**

1.08

Female to Male Labor Participation

0.55

Parity in Secondary Education Enrollment



# **COPING CAPACITY (CC)**

**RANK: 2 / 10 REGIONS ASSESSED** 

**SCORE: 0.621** 

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



#### **Economic Capacity**

**SCORE: 0.896** 

**RANK: 1/10 REGIONS ASSESSED** 

28.0% Concentration of Wealth

14.7% Population Receiving Remittances

69.7% Households with a Bank Account



#### Governance

SCORE: 0.042 **RANK: 10/10 REGIONS ASSESSED** 

128.6 Crime Rate per 10,000 persons

45.0% Trust in Government 20.1% Community Involvement 6.0% Local Government Participation

27.3% Prevalence of Corruption



#### **Environmental Capacity**

**SCORE: 0.002** RANK: 10/10 REGIONS ASSESSED

0.00% Percent Protected Area

0.5% State Managed Forest Area -228 Average Annual Net Carbon Flux



#### **Infrastructure Capacity**



**SCORE: 0.860 RANK: 1/10 REGIONS ASSESSED** 



#### **Emergency Services and Health Care Capacity**

**SCORE: 0.909 RANK: 1/10 REGIONS ASSESSED** 

3.7

Average Distance to Fire Station (km)

6.8

2.2 Average Average Distance to Distance to Police Station Hospital (km) (km)

91.9% DPT Immunization Coverage

Transportation Capacity

SCORE: 0.810 **RANK: 1/10 REGIONS ASSESSED** 

1.03

8.3

Road Density (km per sq km)

Average Distance to Port/Airport

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# **COPING CAPACITY (CC)**

**RANK: 2 / 10 REGIONS ASSESSED** 

**SCORE: 0.621** 



#### Infrastructure Capacity (Continued...)



#### **Communications Capacity**

SCORE: 0.966

**RANK: 1/10 REGIONS ASSESSED** 

74.9% Households with Mobile **62.4%**Households with Fixed Phones

100% Cell Tower Coverage Area



Phones

#### **Energy Capacity**

SCORE: 0.755

**RANK: 2/10 REGIONS ASSESSED** 

93.7% Households with Electricity 79.5% Households Using Gas as Main Cooking Fuel **1.3** Fuel Stations per 10,000 Persons



# **RESILIENCE (R)**

RANK: 1 / 10 REGIONS ASSESSED

**SCORE: 0.648** 

Demerara-Mahaica'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:



Environmental Stress



**Vulnerable Groups** 



Governance



Environmental Capacity

#### **KEY FACTORS INFLUENCING RESILIENCE**



#### **Environmental Stress**

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



## **Vulnerable Groups**

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 and involvement of persons with disabilities and their caregivers in all phases of disaster management, ensuring implementation at subnational and local levels. Plans and strategies must consider the special needs and accommodations of disabled populations during response and recovery, including evacuation and sheltering. Courses of action must consider the roles of women in society and support changes to policies and programs to promote gender-equal access.



#### Governance

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



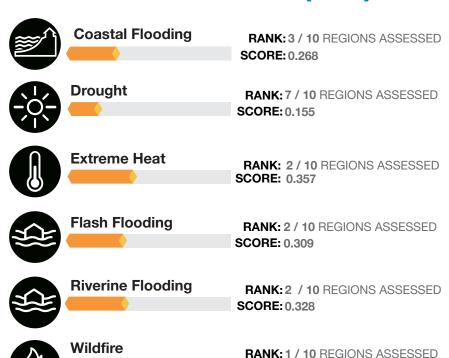
## **Environmental Capacity**

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 areas.

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# **HAZARD-SPECIFIC RISK (HSR)**



SCORE: 0.356



# **MULTI-HAZARD RISK (MHR)**



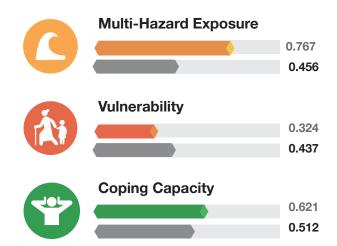
3 / 10

RANK WITHIN REGIONS Score: 0.490

Demerara-Mahaica's score and ranking are due to Very 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:





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Better solutions. Fewer disasters.

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