



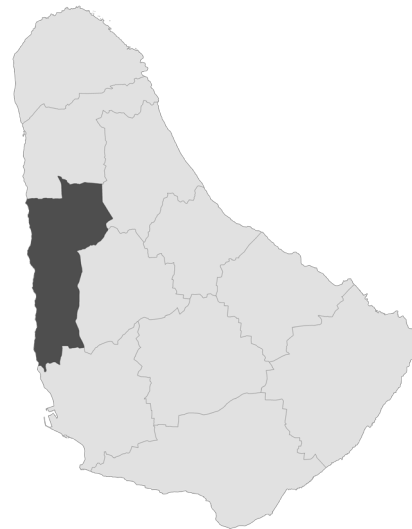
BARBADOS

SAINT JAMES

NDPBA SUBNATIONAL PROFILE

BARBADOS SAINT JAMES

Area: 31 km²



RISK AND VULNERABILITY COMPONENT SCORE



MULTI-HAZARD RISK (MHR)

- Very Low

Score: 0.345 • Rank: 9/11



RESILIENCE (R)

- Very High

Score: 0.663 • Rank: 1/11



MULTI-HAZARD EXPOSURE (MHE)

- Moderate

Score: 0.361 • Rank: 6/11



VULNERABILITY (V)

- Low

Score: 0.277 • Rank: 8/11



COPING CAPACITY (CC)

- Very High

Score: 0.602 • Rank: 2/11



Population (2010 Census)

21,258



Population Density
(persons per sq km)

686



Poverty Rate

13.5%



Housing Built Prior to
1991

65.7%



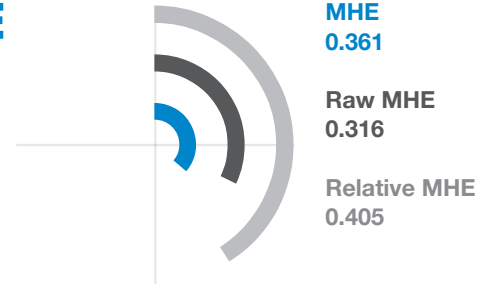
Households with
Unimproved Sanitation

3.9%



MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 11 PARISHES ASSESSED
SCORE: 0.361



ESTIMATED EXPOSURE TO EACH HAZARD:



Coastal Flooding

1%

503

Buildings Exposed: **3%**

Critical Infrastructure Exposed: **10%**



Hurricane Winds

100%

34,300

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Earthquake

100%

34,300

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Landslide

12%

4,140

Buildings Exposed: **11%**

Critical Infrastructure Exposed: **28%**



Extreme Heat

43%

14,800

Buildings Exposed: **44%**

Critical Infrastructure Exposed: **20%**



Sea Level Rise

1%

325

Buildings Exposed: **2%**

Critical Infrastructure Exposed: **9%**



Flash Flood

37%

12,600

Buildings Exposed: **42%**

Critical Infrastructure Exposed: **59%**



Tsunami

3%

923

Buildings Exposed: **4%**

Critical Infrastructure Exposed: **34%**

NOTE: Population exposure values for Barbados are estimated using PDC's AIM model. Values may differ from Census population.



MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 11 PARISHES ASSESSED
SCORE: 0.361

ESTIMATED EXPOSURE TO EACH HAZARD *(CONTINUED)*:



Volcanic Ashfall

100%

34,300

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Wildfire

1%

504

Buildings Exposed: **1%**

Critical Infrastructure Exposed: **2%**



VULNERABILITY (V)

RANK: 8 / 11 PARISHES ASSESSED
SCORE: 0.277

Vulnerability in Saint James is primarily driven by Environmental Stress and Household Composition and Vulnerable Health. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



Information Access Vulnerability

0  1 **SCORE: 0.338** **RANK: 7/11 PARISHES ASSESSED**

78.7%

Primary School
Attendance
Rate

55.7%

Secondary
School
Attendance
Rate

81.8%

Household
Access to
Radio

93.3%

Household
Access to
Television



Economic Constraints

0  1 **SCORE: 0.209** **RANK: 10/11 PARISHES ASSESSED**

0.47

Economic
Dependency
Ratio

13.5%

Poverty Rate

31.1%

GINI
Coefficient



Environmental Stress

0  1 **SCORE: 0.483** **RANK: 6/11 PARISHES ASSESSED**

44.6%

Coastline
Exposure to
Local or Global
Threats

11.0%

Tree Cover
Loss



Gender Inequality

0  1 **SCORE: 0.278** **RANK: 6/11 PARISHES ASSESSED**

0.09

Female to Male
Labor Ratio

0.09

Female
to Male
Secondary
School
Attendance



VULNERABILITY (V)

RANK: 8 / 11 PARISHES ASSESSED
SCORE: 0.277



Housing and Transportation Vulnerability

0  1 **SCORE: 0.218** **RANK: 10/11 PARISHES ASSESSED**

65.7%

Housing Built
Prior to 1991

13.8%

Household
Overcrowding

33.5%

Households
without a
Private Vehicle



Household Composition and Vulnerable Health

0  1 **SCORE: 0.352** **RANK: 10/11 PARISHES ASSESSED**

3.6

Prevalence of
Disability (per
100 persons)

13.0%

Population
Age 65 and
Over

22.7%

Population
Under Age 18



Population Pressures

0  1 **SCORE: 0.324** **RANK: 5/11 PARISHES ASSESSED**

0.7%

Average Annual
Population
Change

686

Population
Density
(persons per
sq km)



Clean Water Access Vulnerability

0  1 **SCORE: 0.013** **RANK: 10/11 PARISHES ASSESSED**

96.2%

Households
with Piped
Water

3.9%

Households
with
Unimproved
Sanitation



ISLAND CAPACITY (IC)

RANK: 1 / 11 PARISHES ASSESSED
SCORE: 0.626

Saint James exhibits weaker Island Capacity in the areas of Energy Capacity and Emergency Services and Health Care Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Islands Capacity score.



Environmental Capacity

0  1 **SCORE: 0.541** **RANK: 1/11 PARISHES ASSESSED**

0.6% Croplands	-0.7 Net Carbon Flux	6.7% Protected Area	46.2% Protected Coastlines
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Infrastructure Capacity

0  1 **SCORE: 0.663** **RANK: 4/11 PARISHES ASSESSED**



Communications Capacity

0  1 **SCORE: 1.000** **RANK: 1/11 PARISHES ASSESSED**

79.1% Households with Fixed Phones	65.7% Households with Computer	58.8% Households with Internet Access
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Emergency Services and Health Care Capacity

0  1 **SCORE: 0.593** **RANK: 5/11 PARISHES ASSESSED**

3.5 Average Distance to Fire Station (km)	2.3 Average Distance to Hospital or Clinic (km)	3.1 Average Distance to Police Station (km)	1.4 Average Distance to Shelter (km)	1.2 Hospitals and Clinics per 10,000 Persons
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Energy Capacity

0  1 **SCORE: 0.395** **RANK: 10/11 PARISHES ASSESSED**

98.0% Households with Electric Lighting	89.3% Households Using Gas for Cooking
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LOGISTICS CAPACITY (LC)

RANK: 3 / 11 PARISHES ASSESSED
SCORE: 0.578

Saint James exhibits weaker Logistics Capacity in the areas of Maritime Logistics and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Logistics Capacity score.



Maritime Logistics

0  1 **SCORE: 0.407** **RANK: 5/11 PARISHES ASSESSED**

5.8

Average
Distance to
Seaport (km)

216.2

Distance
to External
Medium or
Large Seaport
(km)

0.00

Port Density
(ports per km
of coastline)



Air Support

0  1 **SCORE: 0.729** **RANK: 4/11 PARISHES ASSESSED**

152.4

Distance to
External C130
Airport (km)

6.8

Average
Distance to
Airport or
Heliport (km)



Transportation Capacity

0  1 **SCORE: 0.408** **RANK: 5/11 PARISHES ASSESSED**

0.12

Gas Stations
per 1,000
Persons

8.4

Road Density
(km of roads
per sq km)



Warehouse Access

0  1 **SCORE: 0.767** **RANK: 3/11 PARISHES ASSESSED**

9.3

Average
Distance to
Warehouse
(km)

3.0

Distance to
CDEMA Sub-
Regional Focal
Point (km)



COPING CAPACITY (CC)

Coping Capacity measures the systems, means, and abilities of people and societies to absorb and respond to disruptions in normal function. Coping Capacity of Barbados was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 2 / 11 PARISHES ASSESSED
SCORE: 0.602



RESILIENCE (R)

Resilience in Barbados was calculated by using a combination of Vulnerability and Coping Capacity (including both Island Capacity and Logistics Capacity).

RANK: 1 / 11 PARISHES ASSESSED
SCORE: 0.663

KEY FACTORS INFLUENCING RESILIENCE

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

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



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.



Household Composition and Vulnerable Health

Households with dependent populations, such as the very young, elderly and the disabled may have more difficulty with mobilizing and evacuating in a timely fashion and therefore become even more susceptible to harm during times of disaster. Further, the deaf or hard of hearing may not hear audible hazard alerts. Once evacuated, these populations will require additional services and care considerations in the response aftermath and during recovery. Plans and strategies must consider the special accommodations for these populations during response and recovery, including evacuation and sheltering.



Maritime Logistics

Diverse maritime transport options, within and outside the country, offer crucial support for humanitarian efforts and the transit and delivery of disaster relief supplies. Protecting and maintaining port infrastructure and equipment can help safeguard these key assets and sustain functional operations during a disaster.



Transportation Capacity

Dense road networks and refueling locations facilitate the evacuation of populations during a disaster and increase the ability of response stakeholders to access affected populations. Improved transportation capacity supports the ability to distribute resources before, during, and after a disaster.



HAZARD-SPECIFIC RISK (HSR)



Coastal Flooding

RANK: 4 / 11 PARISHES ASSESSED

SCORE: 0.459



Earthquake

RANK: 9 / 11 PARISHES ASSESSED

SCORE: 0.477



Extreme Heat

RANK: 9 / 11 PARISHES ASSESSED

SCORE: 0.302



Flash Flood

RANK: 5 / 11 PARISHES ASSESSED

SCORE: 0.346



Hurricane Winds

RANK: 9 / 11 PARISHES ASSESSED

SCORE: 0.477



Landslide

RANK: 5 / 11 PARISHES ASSESSED

SCORE: 0.384



Sea Level Rise

RANK: 5 / 11 PARISHES ASSESSED

SCORE: 0.449



Tsunami

RANK: 3 / 11 PARISHES ASSESSED

SCORE: 0.506



Volcano

RANK: 9 / 11 PARISHES ASSESSED

SCORE: 0.477



Wildfire

RANK: 10 / 11 PARISHES ASSESSED

SCORE: 0.142



MULTI-HAZARD RISK (MHR)

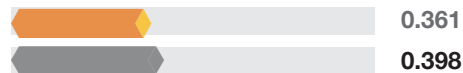
9 / 11RANK AMONG PARISHES
Score: 0.345

Saint James's score and ranking are due to Moderate Multi-Hazard Exposure combined with Low Vulnerability and Very High Coping Capacity scores.

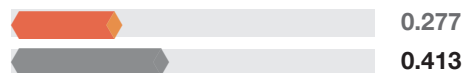
Multi-Hazard Risk component scores compared to overall average country scores:

 **PARISH SCORE**
COUNTRY SCORE

Multi-Hazard Exposure



Vulnerability



Coping Capacity



**Better solutions.
Fewer disasters.**

Safer world.

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