

**BARBADOS** 

# **SAINT PHILIP**

# **NDPBA SUBNATIONAL PROFILE**



# BARBADOS SAINT PHILIP

Area: 60 km2



# **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



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

- Low

Score: 0.415 • Rank: 8/11



Population (2010 Census)

23,788



## **RESILIENCE (R)**

- Moderate

Score: 0.601 • Rank: 5/11



Population Density (persons per sq km)

396



#### **MULTI-HAZARD EXPOSURE (MHE)**

- Moderate

Score: 0.447 • Rank: 5/11



**Poverty Rate** 

12.6%



# **VULNERABILITY (V)**

- Very Low

Score: 0.232 • Rank: 10/11



Housing Built Prior to

1991

50.1%



119

#### **COPING CAPACITY (CC)**

- LOW

Score: 0.434 • Rank: 7/11



Households with Unimproved Sanitation

6.3%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 5 / 11 PARISHES ASSESSED** 

**SCORE: 0.447** 



MHE 0.447

Raw MHE 0.337

Relative MHE 0.557

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



**Coastal Flooding** 

<1%

**4** 138

Buildings Exposed: <1%

Critical Infrastructure Exposed: 11%



**Hurricane Winds** 

100%

**37,600** 

Buildings Exposed: **100%** 

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**37,600** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

6%

**2,200** 

Buildings Exposed: 6%

Critical Infrastructure Exposed: **12%** 



**Extreme Heat** 

100%

**37,600** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%

Sea Level Rise

<1%

**105** 

Buildings Exposed: <1%

Critical Infrastructure Exposed: 11%



Flash Flood

26%

**9,930** 

Buildings Exposed: 28%

Critical Infrastructure Exposed: 18%



**Tsunami** 

<1%

**2** 2

Buildings Exposed: <1%

Critical Infrastructure Exposed: 0%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 5 / 11 PARISHES ASSESSED** 

**SCORE: 0.447** 

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



**Volcanic Ashfall** 

100%

**37,600** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Wildfire

19%

**~** 7,130

Buildings Exposed: 19%

Critical Infrastructure Exposed: **19%** 



# **VULNERABILITY (V)**

**RANK: 10 / 11 PARISHES ASSESSED** 

**SCORE: 0.232** 

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



# **Information Access Vulnerability**

1 SCORE: 0.196 RANK: 10/11 PARISHES ASSESSED

83.6%
Primary School
Attendance
Rate

55.1% Secondary School Attendance Rate 81.8% Household Access to Radio 94.8% Household Access to Television



## **Economic Constraints**

0

SCORE: 0.453

**RANK: 5/11 PARISHES ASSESSED** 

**0.47**Economic
Dependency
Ratio

12.6% Poverty Rate **34.5%** GINI Coefficient



## **Environmental Stress**

1 SCORE: 0.211

SCORE: 0.054

RANK: 10/11 PARISHES ASSESSED

**RANK: 11/11 PARISHES ASSESSED** 

40.5%
Coastline
Exposure to
Local or Global
Threats

**4.9%**Tree Cover Loss



# **Gender Inequality**

0

0.09 0.02

Female to Male Labor Ratio Female to Male Secondary School Attendance



**RANK: 10 / 11 PARISHES ASSESSED** 

**SCORE: 0.232** 



# **Housing and Transportation Vulnerability**

0 SCORE: 0.161 RANK: 11/11 PARISHES ASSESSED

50.1%

Housing Built Prior to 1991 **36.0%** Household

Households without a Private Vehicle



# **Household Composition and Vulnerable Health**

0 SCORE: 0.444 RANK: 6/11 PARISHES ASSESSED

3.7

Prevalence of Disability (per 100 persons)

11.2%

16.3%

Household

Overcrowding

**24.8%**Population
Under Age 18

e of Population F (per Age 65 and Ins) Over



# **Population Pressures**

0 1

1 SCORE: 0.153 RANK: 7/11 PARISHES ASSESSED

**0.5%** Average Annual

Average An Population Change

**396**Population
Density
(persons per sq km)



# Clean Water Access Vulnerability

1 SCORE: 0.184 RANK: 9/11 PARISHES ASSESSED

94.4%

Households with Piped Water **6.3%**Households with Unimproved Sanitation



# **ISLAND CAPACITY (IC)**

**RANK: 7 / 11 PARISHES ASSESSED** 

**SCORE: 0.516** 

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



# **Environmental Capacity**

0 SCORE: 0.203 RANK: 8/11 PARISHES ASSESSED

**35.1%** Croplands

-0.2

Net Carbon

0.0% Protected Area P

0%
Protected
Coastlines



## Infrastructure Capacity

1 SCORE: 0.651 RANK: 5/11 PARISHES ASSESSED



#### **Communications Capacity**

1 SCORE: 0.777 RANK: 3/11 PARISHES ASSESSED

77.0% Households with Fixed **61.4%**Households with Computer

51.5% Households with Internet Access



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

6.2 2.3 4.6 1.2 0.8
Average Average Average Picture to and Clinical an

Average Average Average Average Hospitals
Distance to Distance Distance to Distance to Distance to Distance to Distance to Dis



#### **Energy Capacity**

1 SCORE: 0.684 RANK: 7/11 PARISHES ASSESSED

98.1%
Households
with Electric
Lighting

92.7% Households Using Gas for Cooking



# **LOGISTICS CAPACITY (LC)**

**RANK: 9 / 11 PARISHES ASSESSED** 

**SCORE: 0.352** 

Saint Philip 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: 0.223 RANK: 10/11 PARISHES ASSESSED

**5.7**Average
Distance to
Seaport (km)

233.4
Distance
to External
Medium or
Large Seaport
(km)

**0.05**Port Density (ports per km of coastline)



# Air Support

0

SCORE: 0.311 RANK: 9/11 PARISHES ASSESSED

170.1 Distance to External C130 Airport (km) Average
Distance to
Airport or
Heliport (km)



# Transportation Capacity

0

1 SCORE: 0.272 RANK: 8/11 PARISHES ASSESSED

**0.05**Gas Stations per 1,000

**7.2**Road Density (km of roads per sq km)



## Warehouse Access

0

1 SCORE: 0.603 RANK: 6/11 PARISHES ASSESSED

17.8
Average
Distance to
Warehouse
(km)

1.3
Distance to
CDEMA SubRegional Focal
Point (km)



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: 7 / 11 PARISHES ASSESSED

**SCORE: 0.434** 



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

RANK: 5 / 11 PARISHES ASSESSED

SCORE: 0.601

# **KEY FACTORS INFLUENCING RESILIENCE**

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

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



# **Economic Constraints**

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



# **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: 8 / 11 PARISHES ASSESSED SCORE: 0.268
	Earthquake	RANK: 7 / 11 PARISHES ASSESSED SCORE: 0.519
	Extreme Heat	RANK: 4 / 11 PARISHES ASSESSED SCORE: 0.544
	Flash Flood	RANK: 8 / 11 PARISHES ASSESSED SCORE: 0.275
	Hurricane Winds	RANK: 7 / 11 PARISHES ASSESSED SCORE: 0.519
MÈ	Landslide	RANK: 7 / 11 PARISHES ASSESSED SCORE: 0.304
	Sea Level Rise	RANK: 8 / 11 PARISHES ASSESSED SCORE: 0.278
	Tsunami •	RANK: 6 / 11 PARISHES ASSESSED SCORE: 0.029
(S)	Volcano	RANK: 7 / 11 PARISHES ASSESSED SCORE: 0.519
	Wildfire	RANK: 3 / 11 PARISHES ASSESSED SCORE: 0.566



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

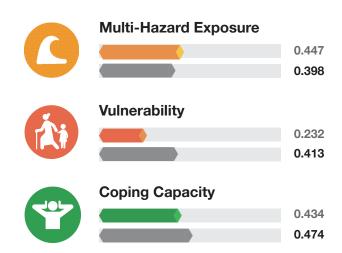
8/11

RANK AMONG PARISHES Score: 0.415

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

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







Better solutions. Fewer disasters.

# Safer World.

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