

**NDPBA** 

# GRENADA PARISH RISK PROFILES

**SUBNATIONAL ASSESSMENT RESULTS** 



**GRENADA** 

# CARRIACOU AND PETITE MARTINIQUE

NDPBA SUBNATIONAL PROFILE



# GRENADA CARRIACOU AND PETITE MARTINIQUE

Area: 34 km2





#### **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



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

- Moderate

Score: 0.503 • Rank: 3/7



Household Population (2011 Census)

5,633



#### **RESILIENCE (R)**

- Moderate

Score: 0.489 • Rank: 3/7



Prevalence of Chronic Illness (per 100 persons)

25.4



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

- High

Score: 0.488 • Rank: 2/7



**Unemployment Rate** 

21.8%



#### **VULNERABILITY (V)**

- Moderate

Score: 0.532 • Rank: 3/7



Adults without Secondary Education

34.6%



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

- Higr

Score: 0.511 • Rank: 2/7



Population with No Internet Access

61.3%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 2/7 ASSESSED** 

**SCORE: 0.488** 



MHE 0.488

Raw MHE 0.087

Relative MHE 0.890

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



**Coastal Flooding** 

10%

**\$** 528

Buildings Exposed: 21%

Critical Infrastructure Exposed: 50%



**Hurricane Winds** 

100%

**5**,100

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**5,100** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

#### **NO DATA**

No Data

Buildings Exposed: No Data

Critical Infrastructure Exposed: No Data



**Extreme Heat** 

100%

**5.100** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Sea Level Rise

9%

**468** 

Buildings Exposed: 19%

Critical Infrastructure Exposed: 41%



Flash Flood

**NO DATA** 

No Data

Buildings Exposed: No Data

Critical Infrastructure Exposed: No Data



Tsunami

7%

**357** 

Buildings Exposed: 13%

Critical Infrastructure Exposed: 41%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 2/7 ASSESSED** 

**SCORE: 0.488** 

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



Volcano

**No Data** 

♣ No Data

Buildings Exposed: No Data

Critical Infrastructure Exposed: No Data



Wildfire

4%

**217** 

Buildings Exposed: 7%

Critical Infrastructure Exposed: 0%



### **VULNERABILITY (V)**

**RANK: 3 / 7 ASSESSED** 

**SCORE: 0.532** 

Vulnerability in Carriacou and Petite Martinique is primarily driven by Household Infrastructure Vulnerability and Environmental Stress. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Information Access Vulnerability**

0 SCORE: 0.334 RANK: 6/7 ASSESSED

33.6%

Household

Computer

Access

**97.6%**School

School Attendance Rate (children ages 5 to 16) 34.6%
Adults without Secondary Education

61.3%
Population with No Internet Access



#### **Economic Constraints**

1 **SCORE: 0.364 RANK: 5/7** ASSESSED

37.0

Economic Dependency Ratio 21.8% Unemployment 17.1% Youth Bulge (population ages 15-24)



#### **Environmental Stress**

Rate

1 **SCORE: 0.715 RANK: 3/7** ASSESSED

SCORE: 0.493

**RANK: 6/7 ASSESSED** 

**42.6**%

Coastline Exposure to Local or Global Threats **7.2%**Tree Cover Loss



#### **Gender Inequality**

0

0.19 0.0

Female to Male Labor Ratio 0.06
Parity in
Secondary
Education
Attainment



**RANK: 3 / 7 ASSESSED** 

**SCORE: 0.532** 



#### **Household Infrastructure Vulnerability**

0 1

47.4%

1 SCORE: 0.941 RANK: 1/7 ASSESSED

37.9% Housing Built

Housing Built Households
Prior to 2000 with Indoor
Toilets

71.2%
Households
with Improved
Sanitation

0.5% Households with Treated Water



#### **Household Composition and Vulnerable Health**

15.3%

0 \ 1

SCORE: 0.697 RANK: 1/7 ASSESSED

19.0

Prevalence of Disability (per 100 persons) 25.4

Prevalence of Chronic Illness (per 100 persons)

Population Age 65 and Over

**21.7%**Population

Population Under Age 15



#### **Population Pressures**



1 SCORE: 0.182 RANK: 4/7 ASSESSED

1.0%

Average Annual Population Change 166.5
Population
Density
(persons per
sq km)



### **ISLAND CAPACITY (IC)**

**RANK: 2/7 ASSESSED** 

**RANK: 3/7 ASSESSED** 

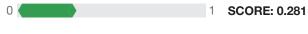
**RANK: 1/7 ASSESSED** 

**SCORE: 0.518** 

Carriacou and Petite Martinique exhibits weaker Island Capacity in the areas of Economic Capacity and Health Care Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



#### **Economic Capacity**



65.9% Labor Force Participation

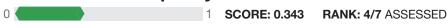
Rate

14.1% Households with Home Insurance

10.8% Household Content Insured (percent of households)



#### **Environmental Capacity**



0.07%

-9.3 Croplands Net Carbon Flux

27.5% Protected Terrestrial Area

63.0% Protected Coastlines

**SCORE: 0.544** 



#### **Governance Capacity**



1.9% 98.1%

Prevalence of Crime

Household Waste Disposal

69.5% Voter Participation Rate



**RANK: 2/7 ASSESSED** 

**SCORE: 0.518** 



#### Infrastructure Capacity

**SCORE: 0.710 RANK: 2/7 ASSESSED** 



#### **Communications Capacity**

**SCORE: 0.692** 

**RANK: 2/7 ASSESSED** 

66.6%

Households with Fixed Phones

69.6% Households with Mobile Phones

#### **Emergency Services Capacity**

**SCORE: 0.692** 

**RANK: 3/7 ASSESSED** 

2.7 Average Distance to Fire Station

(km)

1.0 Average Distance to Hospital or Clinic (km)

2.4 Average Distance to Police Station (km)

0.9 Average Distance to Shelter (km)

**SCORE: 0.815** 



#### **Energy Capacity**

92.4% Households Using Gas for

94.1%

Household Electricity Access

Cooking

#### **Health Care Capacity**

**SCORE: 0.641** 

**RANK: 1/7 ASSESSED** 

**RANK: 2/7 ASSESSED** 

53.3% Health Insurance Coverage

Hospitals and Clinics per 1,000 Persons

1.18



### **LOGISTICS CAPACITY (LC)**

**RANK: 3 / 7 ASSESSED** 

**SCORE: 0.505** 

Carriacou and Petite Martinique exhibits weaker Logistics Capacity in the areas of Warehouse Access and Maritime Logistics. The bar charts indicate the socioeconomic themes contributing to the overall Logistics Capacity score.



#### **Maritime Logistics**

1.8

Average Distance to Seaport (km)

193.4 Distance to External Medium or Large Seaport

0.6 Port Density (ports per 10km of coastline)



#### Air Support

3.4

(km)

**SCORE: 1.000** 

**SCORE: 0.365** 

**RANK: 1/7 ASSESSED** 

**RANK: 5/7 ASSESSED** 

19.6 Distance to External C130 Airport (km)

Average Distance to Airport or Heliport (km)



#### Transportation Capacity

2.3

1 SCORE: 0.655 **RANK: 2/7 ASSESSED** 

0.4 Gas Stations per 1,000 Persons

Road Density (km of roads per sq km)



#### Warehouse Access

**SCORE: 0.000** 

**RANK: 7/7 ASSESSED** 

58.3

Average Distance to Warehouse (km)

193.4 Distance to CDEMA Sub-Regional 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 Grenada was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 2 / 7 ASSESSED

**SCORE: 0.511** 



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

RANK: 3 / 7 ASSESSED

**SCORE: 0.489** 

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

Carriacou and Petite Martinique's score and ranking are due to Moderate Vulnerability combined with High Coping Capacity scores.

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



#### **Household Infrastructure Vulnerability**

Populations living in older housing, and prior to the enactment of modern building codes, are more susceptible to structural damage and losses as a result of hazard impacts. In addition, households experiencing access constraints to clean water and sanitation are challenged to maintain a standard of living that meets basic household needs, and face significant demands on daily routines that effectively limit their response and recovery capacity as well as the ability to maintain livelihoods. Increasing access to improved water and sanitation improves health outcomes and frees up resources to decrease further susceptibility to impacts.



#### **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.



#### **Warehouse Access**

Efficient storage, movement and delivery of resources are key to effective humanitarian assistance and disaster relief operations. Access to both local and regional supply chains can significantly improve the speed and quality of response operations, reducing the negative social and economic impacts of an emergency.

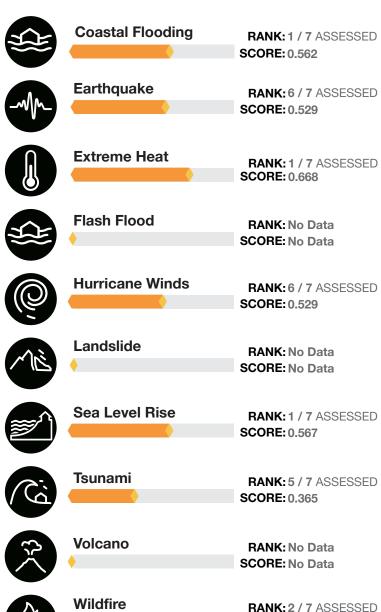


#### **Maritime Logistics**

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.



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



12 PDC Global www.pdc.org

SCORE: 0.389



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

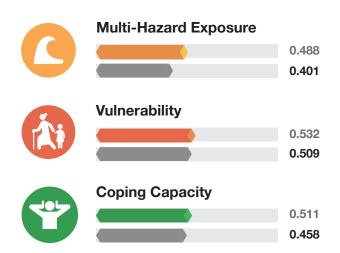
3/7

RANK AMONG PARISHES/DEPENDENCIES Score: 0.503

Carriacou and Petite Martinique's score and ranking are due to High Multi-Hazard Exposure combined with Moderate Vulnerability and High Coping Capacity scores.

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







Better solutions. Fewer disasters.

# Safer World.

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC\_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org



**GRENADA** 

## **SAINT ANDREW**

### **NDPBA SUBNATIONAL PROFILE**



# GRENADA SAINT ANDREW

Area: 99 km2





#### **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



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

- Very High

Score: 0.557 • Rank: 1/7



Household Population (2011 Census)

26,434



#### **RESILIENCE (R)**

- Low

Score: 0.398 • Rank: 5/7



Prevalence of Chronic Illness (per 100 persons)

21.0



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

- Moderate

Score: 0.467 • Rank: 3/7



**Unemployment Rate** 

32.7%



#### **VULNERABILITY (V)**

- High

Score: 0.634 • Rank: 2/7



Adults without Secondary Education

50.4%



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

- LOW

Score: 0.430 • Rank: 4/7



Population with No Internet Access

69.9%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 3 / 7 ASSESSED** 

**SCORE: 0.467** 



MHE 0.467

Raw MHE 0.411

Relative MHE 0.523

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



**Coastal Flooding** 

4%

**\$**1,100

Buildings Exposed: 5%

Critical Infrastructure Exposed: 25%



**Hurricane Winds** 

100%

**27,800** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**27,800** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

13%

**3,610** 

Buildings Exposed: 16%

Critical Infrastructure Exposed: 25%



**Extreme Heat** 

0%

**2** 0

Buildings Exposed: 0%

Critical Infrastructure Exposed: 0%



Sea Level Rise

3%

**&** 875

Buildings Exposed: 4%

Critical Infrastructure Exposed: 25%



Flash Flood

9%

**2.560** 

Buildings Exposed: 10%

Critical Infrastructure Exposed: 39%



Tsunami

9%

**2.560** 

Buildings Exposed: 10%

Critical Infrastructure Exposed: 51%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 3 / 7 ASSESSED** 

**SCORE: 0.467** 

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



Volcano **75%** 

**2**0,800

Buildings Exposed: 73%

Critical Infrastructure Exposed: 93%



Wildfire

1%

**275** 

Buildings Exposed: 1%

Critical Infrastructure Exposed: **0%** 



**RANK: 2 / 7 ASSESSED** 

**SCORE: 0.634** 

Vulnerability in Saint Andrew is primarily driven by Environmental Stress and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Information Access Vulnerability**

SCORE: 0.750 **RANK: 3/7 ASSESSED** 

98.0% School Attendance Rate (children

ages 5 to 16)

50.4% Adults without Secondary Education

24.1% Household Computer Access

69.9% Population with No Internet Access



#### **Economic Constraints**

**SCORE: 0.706 RANK: 2/7 ASSESSED** 

35.6 Economic Dependency

Ratio

32.7% Unemployment Rate

19.4% Youth Bulge (population ages 15-24)



#### **Environmental Stress**

**SCORE: 1.000 RANK: 1/7 ASSESSED** 

68.7% Coastline

Exposure to Local or Global Threats

7.8% Tree Cover



#### **Gender Inequality**

**SCORE: 0.805 RANK: 3/7 ASSESSED** 

0.19 Female to Male Labor Ratio

0.22 Parity in Secondary Education Attainment



**RANK: 2 / 7 ASSESSED** 

**RANK: 3/7 ASSESSED** 

**SCORE: 0.634** 



#### **Household Infrastructure Vulnerability**

1 SCORE: 0.649

51.4%

with Indoor

Toilets

30.4%

Housing Built Prior to 2000

Households

65.9% Households with Improved Sanitation

73.4%

Households with Treated Water



#### **Household Composition and Vulnerable Health**

9.5%

Over

Population

Age 65 and

1 SCORE: 0.401 **RANK: 5/7 ASSESSED** 

13.7

Prevalence of Disability (per 100 persons)

21.0

Prevalence of Chronic Illness (per 100 persons)

26.1%

Population Under Age 15



#### **Population Pressures**

1 SCORE: 0.129

**RANK: 6/7 ASSESSED** 

0.3% Average Annual Population Change

267.7

Population Density (persons per sq km)



### **ISLAND CAPACITY (IC)**

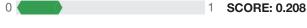
**RANK: 4/7 ASSESSED** 

**SCORE: 0.404** 

Saint Andrew exhibits weaker Island Capacity in the areas of Health Care Capacity and Communications Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



#### **Economic Capacity**



**67.0%**Labor Force Participation Rate

14.8% Households with Home Insurance 7.2%
Household
Content
Insured
(percent of
households)



#### **Environmental Capacity**



SCORE: 0.726

**RANK: 1/7 ASSESSED** 

**RANK: 4/7 ASSESSED** 

**RANK: 6/7 ASSESSED** 

0.27% Croplands **-20.5** Net Carbon

Flux

**22.3%**Protected
Terrestrial Area

68.6% Protected Coastlines

SCORE: 0.424



#### **Governance Capacity**



**3.5%**Prevalence of Crime

97.8% Household Waste Disposal **74.3%**Voter
Participation
Rate



**RANK: 4 / 7 ASSESSED** 

**SCORE: 0.404** 



#### **Infrastructure Capacity**

SCORE: 0.332 RANK: 5/7 ASSESSED



#### **Communications Capacity**

0

SCORE: 0.266 RANK: 4/7 ASSESSED

45.2%

Households with Fixed Phones 70.0% Households with Mobile Phones

### -<u>5</u>

#### **Emergency Services Capacity**

0

SCORE: 0.539

**SCORE: 0.323** 

**RANK: 6/7 ASSESSED** 

**RANK: 4/7 ASSESSED** 

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

1.3
Average
Distance to
Hospital or
Clinic (km)

2.3
Average
Distance to
Police Station
(km)

1.1 Average Distance to Shelter (km)



#### **Energy Capacity**

86.4% 88.8%

Household Electricity Access Households Using Gas for Cooking



#### **Health Care Capacity**

0

1 SCORE: 0.201

**RANK: 6/7** ASSESSED

53.5%

Health Insurance Coverage 0.25
Hospitals and Clinics per 1,000 Persons



### **LOGISTICS CAPACITY (LC)**

**RANK: 5 / 7 ASSESSED** 

**SCORE: 0.455** 

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



#### **Maritime Logistics**

0 (

154.8

SCORE: 0.471 R

**RANK: 4/7 ASSESSED** 

**3.3** Average Distance to

Seaport (km)

Distance to External Medium or Large Seaport (km) **0.7**Port Density (ports per 10km of coastline)



#### Air Support

0

SCORE: 0.247

**RANK: 6/7 ASSESSED** 

64.7
Distance to
External C130
Airport (km)

Average Distance to Airport or Heliport (km)

21.6



#### Transportation Capacity

2.3

0

1 SCORE: 0.269

**RANK: 7/7** ASSESSED

O.1
Gas Stations per 1,000
Persons

Road Density (km of roads per sq km)



#### Warehouse Access

0

SCORE: 0.831

**RANK: 3/7** ASSESSED

**14.7** Average

Average Distance to Warehouse (km) 154.8
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 Grenada was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 4 / 7 ASSESSED

**SCORE: 0.430** 



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

RANK: 5 / 7 ASSESSED

**SCORE: 0.398** 

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

Saint Andrew's score and ranking are due to High Vulnerability combined with Low 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.



#### **Gender Inequality**

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 in all phases of DM, ensuring the implementation at subnational and local levels. Courses of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.



#### Air Support

Air transport is a key component of timely response operations, supporting search and rescue, damage assessment efforts, and the delivery of relief supplies. Increasing air support capacity to accommodate C130 aircraft strengthens the ability to quickly deliver and disseminate emergency relief supplies to where they are most needed.



#### **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: 5 / 7 ASSESSED SCORE: 0.355
-Mr	Earthquake	RANK: 1 / 7 ASSESSED SCORE: 0.661
	Extreme Heat	RANK: 4 / 7 ASSESSED SCORE: 0.000
	Flash Flood	RANK: 1 / 7 ASSESSED SCORE: 0.767
	Hurricane Winds	RANK: 1 / 7 ASSESSED SCORE: 0.661
MÈ	Landslide	RANK: 6 / 7 ASSESSED SCORE: 0.191
	Sea Level Rise	RANK: 5 / 7 ASSESSED SCORE: 0.391
(G)	Tsunami	RANK: 2 / 7 ASSESSED SCORE: 0.521
\$\frac{1}{2}	Volcano	RANK: 1 / 7 ASSESSED SCORE: 0.675
	Wildfire	RANK: 5 / 7 ASSESSED SCORE: 0.212



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

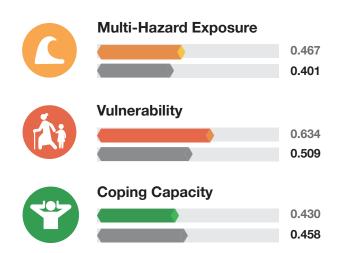
1 / 7

RANK AMONG PARISHES/DEPENDENCIES Score: 0.557

Saint Andrew'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:







Better solutions. Fewer disasters.

# Safer World.

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC\_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org



SAINT DAVID

### **NDPBA SUBNATIONAL PROFILE**



# GRENADA SAINT DAVID

Area: 44 km2





#### RISK AND VULNERABILITY

**COMPONENT SCORE** 



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

- Very Low

Score: 0.350 • Rank: 7/7



Household Population (2011 Census)

12,860



#### **RESILIENCE (R)**

- High

Score: 0.524 • Rank: 2/7



Prevalence of Chronic Illness (per 100 persons)

19.5



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

- Very Low

Score: 0.099 • Rank: 6/7



**Unemployment Rate** 

27.6%



#### **VULNERABILITY (V)**

- Very Low

Score: 0.428 • Rank: 6/7



Adults without Secondary

Education **50.8%** 



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

- Moderate

Score: 0.475 • Rank: 3/7



Population with No Internet Access

60.9%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 6 / 7 ASSESSED** 

**SCORE: 0.099** 



MHE 0.099

Raw MHE 0.140

Relative MHE 0.058

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



**Coastal Flooding** 

5%

**~** 728

Buildings Exposed: 3%

Critical Infrastructure Exposed: 25%



**Hurricane Winds** 

100%

**15,200** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**15,200** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

36%

**5,480** 

Buildings Exposed: 40%

Critical Infrastructure Exposed: 72%



**Extreme Heat** 

0%

**≗** 0

Buildings Exposed: 0%

Critical Infrastructure Exposed: 0%



Sea Level Rise

4%

**\$586** 

Buildings Exposed: 2%

Critical Infrastructure Exposed: 25%



Flash Flood

4%

**584** 

Buildings Exposed: 4%

Critical Infrastructure Exposed: 19%



Tsunami

6%

**848** 

Buildings Exposed: 4%

Critical Infrastructure Exposed: 21%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 6 / 7 ASSESSED** 

**SCORE: 0.099** 

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



Volcano

0%

**4** 

Buildings Exposed: <1%

Critical Infrastructure Exposed: 19%



Wildfire

4%

**\$** 594

Buildings Exposed: 2%

Critical Infrastructure Exposed: **0%** 



**RANK: 6 / 7 ASSESSED** 

**SCORE: 0.428** 

Vulnerability in Saint David is primarily driven by Environmental Stress and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Information Access Vulnerability**

0 1 SCORE: 0.525

98.1% School Attendance Rate (children ages 5 to 16) **50.8%**Adults without Secondary Education

30.8% Household Computer Access 60.9%
Population with No Internet Access



#### **Economic Constraints**

1 SCC

1 SCORE: 0.400

**RANK: 4/7 ASSESSED** 

**RANK: 5/7 ASSESSED** 

**32.8**Economic
Dependency
Ratio

27.6% Unemployment Rate 19.2% Youth Bulge (population ages 15-24)



#### **Environmental Stress**

0

SCORE: 0.979

**RANK: 2/7 ASSESSED** 

66.1%
Coastline
Exposure to
Local or Global
Threats

7.8% Tree Cover Loss



#### **Gender Inequality**

0

SCORE: 0.578

**RANK: 5/7 ASSESSED** 

**0.14**Female to Male

Female to Male Labor Ratio **0.25**Parity in
Secondary
Education
Attainment



Toilets

**RANK: 6 / 7 ASSESSED** 

**SCORE: 0.428** 



#### **Household Infrastructure Vulnerability**

1 **SCORE: 0.207 RANK: 7/7** ASSESSED

22.4%

Housing Built Prior to 2000 60.0% Households with Indoor wit

88.6%
Households How with Improved with Sanitation War

74.5% Households with Treated Water



#### **Household Composition and Vulnerable Health**

12.4

Prevalence of Disability (per 100 persons) 19.5
Prevalence of Chronic Illness (per 100

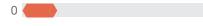
persons)

**9.4%**Population
Age 65 and
Over

23.5% Population Under Age 15



#### **Population Pressures**



1 SCORE: 0.149 R

**RANK: 5/7 ASSESSED** 

**0.2%**Average Annual Population Change

292.7
Population
Density
(persons per

sq km)



### **ISLAND CAPACITY (IC)**

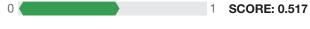
**RANK: 3 / 7 ASSESSED** 

**SCORE: 0.430** 

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



#### **Economic Capacity**



**70.9%**Labor Force Participation Rate

20.9% Households with Home Insurance 10.2% Household Content Insured (percent of households)



#### **Environmental Capacity**



SCORE: 0.563 RAN

**RANK: 3/7 ASSESSED** 

**RANK: 2/7 ASSESSED** 

0.07% Croplands **-8.7**Net Carbon Flux

**35.4%**Protected
Terrestrial Area

1.0% Protected Coastlines



#### **Governance Capacity**



SCORE: 0.369

**RANK: 5/7 ASSESSED** 

3.3%
Prevalence of Crime

97.6% Household Waste Disposal **72.7%**Voter
Participation
Rate



RANK: 3 / 7 ASSESSED

**SCORE: 0.430** 



# **Infrastructure Capacity**

SCORE: 0.350 RANK: 4/7 ASSESSED



#### **Communications Capacity**

0

SCORE: 0.435 RANK: 3/7 ASSESSED

46.7%

Households with Fixed Phones 75.7% Households with Mobile Phones

# F5.

#### **Emergency Services Capacity**

1

SCORE: 0.292

**RANK: 7/7 ASSESSED** 

**7.1**Average
Distance to
Fire Station

(km)

1.3
Average
Distance to
Hospital or
Clinic (km)

2.3 Average Distance to Police Station (km) 1.4 Average Distance to Shelter (km)



#### **Energy Capacity**

85.2% 89.0%

Household Households
Electricity Using Gas for
Access Cooking

SCORE: 0.281

**RANK: 5/7 ASSESSED** 

#### **Health Care Capacity**

0

1 SCORE: 0.392

**RANK: 3/7** ASSESSED

55.1%

Health Insurance Coverage O.20
Hospitals and Clinics per 1,000 Persons



# **LOGISTICS CAPACITY (LC)**

**RANK: 2 / 7 ASSESSED** 

**SCORE: 0.521** 

Saint David exhibits weaker Logistics Capacity in the areas of Transportation Capacity and Air Support.

The bar charts indicate the socioeconomic themes contributing to the overall Logistics Capacity score.



# **Maritime Logistics**

0 1

SCORE: 0.504

**RANK: 3/7 ASSESSED** 

2.9
Average
Distance to
Seaport (km)

150.9 Distance to External Medium or Large Seaport (km) O.4
Port Density
(ports per
10km of
coastline)



#### Air Support

0

SCORE: 0.331

**RANK: 3/7 ASSESSED** 

**78.0**Distance to
External C130
Airport (km)

11.8
Average
Distance to
Airport or
Heliport (km)



# Transportation Capacity

1 **SCORE: 0.307 RANK: 5/7** ASSESSED

O.1
Gas Stations per 1,000
Persons

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



#### Warehouse Access

0 1

SCORE: 0.941

RANK: 2/7 ASSESSED

**7.5**Average
Distance to
Warehouse

(km)

150.9
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 Grenada was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 3 / 7 ASSESSED

**SCORE: 0.475** 



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

RANK: 2 / 7 ASSESSED

SCORE: 0.524

# **KEY FACTORS INFLUENCING RESILIENCE**

Saint David's score and ranking are due to Very Low Vulnerability combined with Moderate 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.



# **Gender Inequality**

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 in all phases of DM, ensuring the implementation at subnational and local levels. Courses of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.



# **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.

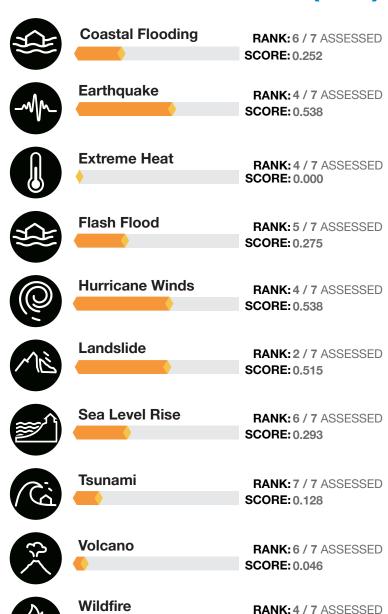


# Air Support

Air transport is a key component of timely response operations, supporting search and rescue, damage assessment efforts, and the delivery of relief supplies. Increasing air support capacity to accommodate C130 aircraft strengthens the ability to quickly deliver and disseminate emergency relief supplies to where they are most needed.



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



40 PDC Global www.pdc.org

SCORE: 0.301



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

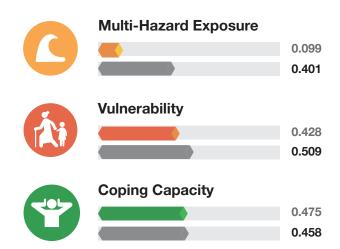
7/7

RANK AMONG PARISHES/DEPENDENCIES Score: 0.350

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

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







Better solutions. Fewer disasters.

# Safer World.

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC\_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org



**GRENADA** 

# **SAINT GEORGE**

# **NDPBA SUBNATIONAL PROFILE**



# GRENADA SAINT GEORGE

Area: 65 km2





# **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



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

- Very Low

Score: 0.456 • Rank: 6/7



Household Population (2011 Census)

37,402



#### **RESILIENCE (R)**

- Very High

Score: 0.729 • Rank: 1/7



Prevalence of Chronic Illness (per 100 persons)

23.6



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

- Very High

Score: 0.827 • Rank: 1/7



**Unemployment Rate** 

20.3%



#### **VULNERABILITY (V)**

- Very Low

Score: 0.290 • Rank: 7/7



Adults without Secondary

Education

38.7%



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

- Very High

Score: 0.747 • Rank: 1/7



Population with No Internet Access

53.7%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 1/7 ASSESSED** 

**SCORE: 0.827** 



MHE 0.827

Raw MHE 1.000

Relative MHE 0.653

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



**Coastal Flooding** 

8%

**2**,920

Buildings Exposed: 7%

Critical Infrastructure Exposed: 36%



**Hurricane Winds** 

100%

**38,900** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**38,900** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

28%

**11,000** 

Buildings Exposed: 38%

Critical Infrastructure Exposed: 47%



**Extreme Heat** 

**21%** 

**8.340** 

Buildings Exposed: 17%

Critical Infrastructure Exposed: 29%



Sea Level Rise

6%

**2.290** 

Buildings Exposed: 5%

Critical Infrastructure Exposed: 35%



Flash Flood

3%

**1.020** 

Buildings Exposed: 3%

Critical Infrastructure Exposed: 13%



Tsunami

13%

**5.060** 

Buildings Exposed: 11%

Critical Infrastructure Exposed: 44%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 1/7 ASSESSED** 

**SCORE: 0.827** 

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



Volcano

43%

**å** 16,900

Buildings Exposed: 50%

Critical Infrastructure Exposed: 64%



Wildfire

8%

**2**,960

Buildings Exposed: 6%

Critical Infrastructure Exposed: **15%** 



RANK: 7 / 7 ASSESSED

**SCORE: 0.290** 

Vulnerability in Saint George is primarily driven by Population Pressures and Environmental Stress. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



# **Information Access Vulnerability**

0 🛑 1

SCORE: 0.063 RANK: 7/7 ASSESSED

98.1% School Attendance Rate (children ages 5 to 16) **38.7%**Adults without Secondary Education

44.2% Household Computer Access 53.7% Population with No Internet Access



#### **Economic Constraints**

0 SCORE: 0.032 RANK: 7/7 ASSESSED

**32.0**Economic
Dependency
Ratio

20.3% Unemployment Rate 17.4% Youth Bulge (population ages 15-24)



# **Environmental Stress**

SCORE: 0.375 RANK: 5/7 ASSESSED

45.8%
Coastline
Exposure to
Local or Global
Threats

**4.2%**Tree Cover Loss



# **Gender Inequality**

0

**0.11 0.13** Female to Male Parity in

Female to Male Parity in Labor Ratio Secondary Education Attainment

SCORE: 0.147 RANK: 7/7 ASSESSED



**RANK: 7 / 7 ASSESSED** 

**SCORE: 0.290** 



# **Household Infrastructure Vulnerability**

1 **SCORE: 0.217 RANK: 6/7** ASSESSED

30.7%

Housing Built Prior to 2000 83.6% Households with Indoor Toilets 81.1% Households with Improved Sanitation 90.3% Households with Treated Water



# **Household Composition and Vulnerable Health**

0 SCORE: 0.196 RANK: 6/7 ASSESSED

11.4

Prevalence of Disability (per 100 persons) Prevalence of Chronic Illness (per 100 persons)

23.6

10.2% Population Age 65 and Over 21.8% Population Under Age 15



# **Population Pressures**

0 🕻

1 SCORE: 1.000 RANK: 1/7 ASSESSED

**2.4%**Average Annual Population

Change

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



# **ISLAND CAPACITY (IC)**

**RANK: 1 / 7 ASSESSED** 

**SCORE: 0.693** 

Saint George exhibits weaker Island Capacity in the areas of Health Care Capacity and Governance Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



# **Economic Capacity**

0

SCORE: 1.000 RANK: 1/7 ASSESSED

**73.8%**Labor Force Participation

Rate

30.8% Households with Home Insurance 17.5% Household Content Insured (percent of households)



# **Environmental Capacity**

0 1

Flux

SCORE: 0.569 RANK: 2/7 ASSESSED

0.10% Croplands **-18.3**Net Carbon

**18.7%**Protected
Terrestrial Area

89.7% Protected Coastlines



# **Governance Capacity**



SCORE: 0.351

**RANK: 6/7 ASSESSED** 

**3.4%**Prevalence of Crime

99.1% Household Waste Disposal **66.7%**Voter
Participation
Rate



**RANK: 1 / 7 ASSESSED** 

**SCORE: 0.693** 



# **Infrastructure Capacity**

SCORE: 0.772 RANK: 1/7 ASSESSED



#### **Communications Capacity**

1 SCORE: 0.746 RANK: 1/7 ASSESSED

54.1%

Households with Fixed Phones **82.4%**Households with Mobile Phones

# -<u>5</u>

## **Emergency Services Capacity**

1 **SCORE: 0.760 RANK: 1/7** ASSESSED

**3.5** Average

Average Distance to Fire Station (km) 0.9

Average Distance to Hospital or Clinic (km) **2.1** Average

Average Distance to Police Station (km) 8.0

Average Distance to Shelter (km)

#### **Energy Capacity**

1 **SCORE: 0.962 RANK: 1/7** ASSESSED

93.2%

Household Electricity Access Households Using Gas for Cooking

96.4%



#### **Health Care Capacity**

0

1 SCORE: 0.622

**RANK: 2/7 ASSESSED** 

55.8%

Health Insurance Coverage **0.44**Hospitals and Clinics per 1,000 Persons



# **LOGISTICS CAPACITY (LC)**

**RANK: 1 / 7 ASSESSED** 

**SCORE: 0.802** 

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



# **Maritime Logistics**

0 ( ) 1

SCORE: 1.000 RANK: 1/7 ASSESSED

1.5
Average
Distance to
Seaport (km)

149.4
Distance
to External
Medium or
Large Seaport
(km)

2.9 Port Density (ports per 10km of coastline)



### Air Support

0

SCORE: 0.454 RANK: 2/

**RANK: 2/7 ASSESSED** 

**76.0**Distance to
External C130
Airport (km)

Average Distance to Airport or Heliport (km)

6.5



# **Transportation Capacity**

0

1 SCORE: 0.754 RANK: 1/7 ASSESSED

**0.2**Gas Stations per 1,000
Persons

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



#### Warehouse Access

0 (

SCORE: 1.000 RANK: 1/7 ASSESSED

2.7
Average
Distance to
Warehouse

(km)

149.4
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 Grenada was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 1 / 7 ASSESSED

**SCORE: 0.747** 



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

RANK: 1 / 7 ASSESSED

**SCORE: 0.729** 

# **KEY FACTORS INFLUENCING RESILIENCE**

Saint George'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:



# **Population Pressures**

Rapid changes in population size and distribution can alter population vulnerability characteristics presenting planning challenges and destabilizing social, economic, and environmental systems. Increased population pressures require disaster managers to realign needs, institutional structures, and available resources to support delivery of basic resources before, during, and after an event.



## **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.



# Air Support

Air transport is a key component of timely response operations, supporting search and rescue, damage assessment efforts, and the delivery of relief supplies. Increasing air support capacity to accommodate C130 aircraft strengthens the ability to quickly deliver and disseminate emergency relief supplies to where they are most needed.



# **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: 2 / 7 ASSESSED SCORE: 0.446
\\rangle	Earthquake	RANK: 7 / 7 ASSESSED SCORE: 0.521
	Extreme Heat	RANK: 2 / 7 ASSESSED SCORE: 0.408
	Flash Flood	RANK: 3 / 7 ASSESSED SCORE: 0.293
	Hurricane Winds	RANK: 7 / 7 ASSESSED SCORE: 0.521
MÈ	Landslide	RANK: 3 / 7 ASSESSED SCORE: 0.464
	Sea Level Rise	RANK: 2 / 7 ASSESSED SCORE: 0.455
(G)	Tsunami	RANK: 3 / 7 ASSESSED SCORE: 0.475
\$	Volcano	RANK: 4 / 7 ASSESSED SCORE: 0.441
	Wildfire	RANK: 1 / 7 ASSESSED SCORE: 0.515



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

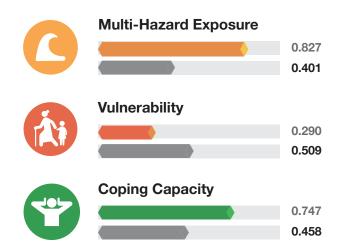
6/7

RANK AMONG PARISHES/DEPENDENCIES Score: 0.456

Saint George'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:







Better solutions. Fewer disasters.

# Safer World.

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC\_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org



GRENADA
SAINT JOHN

**NDPBA SUBNATIONAL PROFILE** 



# GRENADA SAINT JOHN

Area: 35 km2





# **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



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

- Moderate

Score: 0.503 • Rank: 3/7



Household Population (2011 Census)

8,405



#### **RESILIENCE (R)**

- Low

Score: 0.474 • Rank: 4/7



Prevalence of Chronic Illness (per 100 persons)

**27.0** 



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

- Low

Score: 0.458 • Rank: 4/7



**Unemployment Rate** 

24.7%



#### **VULNERABILITY (V)**

- Low

Score: 0.475 • Rank: 5/7



Adults without Secondary Education

50.4%



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

- LOW

Score: 0.424 • Rank: 5/7



Population with No Internet Access

63.8%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 4/7 ASSESSED** 

**SCORE: 0.458** 



MHE 0.458

Raw MHE 0.104

Relative MHE 0.812

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



**Coastal Flooding** 

5%

**383** 

Buildings Exposed: 7%

Critical Infrastructure Exposed: 38%



**Hurricane Winds** 

100%

**4** 7,590

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**4** 7,590

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

33%

**2,530** 

Buildings Exposed: 36%

Critical Infrastructure Exposed: 38%



**Extreme Heat** 

0%

**2** 0

Buildings Exposed: 0%

Critical Infrastructure Exposed: 0%



Sea Level Rise

4%

**334** 

Buildings Exposed: 6%

Critical Infrastructure Exposed: 38%



Flash Flood

4%

**282** 

Buildings Exposed: 7%

Critical Infrastructure Exposed: 13%



Tsunami

9%

**649** 

Buildings Exposed: 14%

Critical Infrastructure Exposed: 41%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 4/7 ASSESSED** 

**SCORE: 0.458** 

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



Volcano

100%

**2** 7,590

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Wildfire

<1%

**4** 7

Buildings Exposed: <1%

Critical Infrastructure Exposed: **0%** 



**RANK: 5 / 7 ASSESSED** 

**SCORE: 0.475** 

Vulnerability in Saint John is primarily driven by Information Access Vulnerability and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



# **Information Access Vulnerability**

1 SCORE: 0.846 RANK: 2/7 ASSESSED

96.7% School Attendance Rate (children

ages 5 to 16)

**50.4%**Adults without Secondary Education

27.2% Household Computer Access 63.8%
Population with No Internet Access



#### **Economic Constraints**

1 **SCORE: 0.300 RANK: 6/7** ASSESSED

**32.0**Economic Dependency

Ratio

24.7% Unemployment Rate 19.4% Youth Bulge (population ages 15-24)



## **Environmental Stress**

1

1 SCORE: 0.024

SCORE: 0.724

RANK: 7/7 ASSESSED

**RANK: 4/7 ASSESSED** 

7.1%
Coastline
Exposure to
Local or Global
Threats

3.9% Tree Cover Loss



# **Gender Inequality**

0

0.23

Female to Male Labor Ratio

0.17

Parity in Secondary Education Attainment



**RANK: 5 / 7 ASSESSED** 

**SCORE: 0.475** 



# **Household Infrastructure Vulnerability**

0 1 Se

58.2%

Households

with Indoor

Toilets

SCORE: 0.588 RANK: 5/7 ASSESSED

34.1%

Housing Built Prior to 2000 73.7% Household

Households with Improved Sanitation **69.3%**Households with Treated Water



# **Household Composition and Vulnerable Health**

0 1

SCORE: 0.554 RANK: 3/7 ASSESSED

18.9

Prevalence of Disability (per 100 persons) **27.0** 

Prevalence of Chronic Illness (per 100 persons) 10.3% 21.7% Population

Age 65 and

Over

Population Under Age 15



# **Population Pressures**



1 SCORE: 0.292 RANK: 2/7 ASSESSED

1.1%

Average Annual Population Change 242.0 Population Density (persons per sq km)



# **ISLAND CAPACITY (IC)**

**RANK: 5 / 7 ASSESSED** 

**RANK: 4/7 ASSESSED** 

**SCORE: 0.350** 

Saint John exhibits weaker Island Capacity in the areas of Communications Capacity and Health Care Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



# **Economic Capacity**

1 SCORE: 0.233

**68.1%**Labor Force Participation Rate

14.3% Households with Home Insurance 7.4% Household Content Insured (percent of households)



# **Environmental Capacity**

0 1

SCORE: 0.227 RANK: 6/7 ASSESSED

0.00% Croplands -13.4 Net Carbon Flux **16.1%**Protected
Terrestrial Area

61.6% Protected coastlines



# **Governance Capacity**

0

SCORE: 0.445

**RANK: 2/7 ASSESSED** 

2.6%

Prevalence of Crime

98.2% Household Waste Disposal **69.5%**Voter
Participation
Rate



**RANK: 5 / 7 ASSESSED** 

**SCORE: 0.350** 



# **Infrastructure Capacity**

SCORE: 0.422 RANK: 3/7 ASSESSED



#### **Communications Capacity**

0

1 SCORE: 0.256 RANK: 5/

**RANK: 5/7 ASSESSED** 

**RANK: 4/7 ASSESSED** 

**RANK: 3/7 ASSESSED** 

45.6%

Households with Fixed Phones

**69.3%**Households with Mobile Phones

# -<u>5</u>

## **Emergency Services Capacity**

0

. \_

Average Distance to Fire Station (km)

2.7

1.4
Average
Distance to
Hospital or
Clinic (km)

1.5 Average Distance to Police Station (km) 0.9

**SCORE: 0.665** 

Average Distance to Shelter (km)

**SCORE: 0.454** 



#### **Energy Capacity**

86.6% 91.5%

Household Electricity Access

Households Using Gas for Cooking



#### **Health Care Capacity**

0

1 SCORE: 0.315

**RANK: 4/7 ASSESSED** 

53.8%

Health Insurance Coverage Hospitals and Clinics per 1,000 Persons

0.40



# **LOGISTICS CAPACITY (LC)**

**RANK: 4 / 7 ASSESSED** 

**SCORE: 0.498** 

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



# **Maritime Logistics**

0 1

SCORE: 0.515 RANK: 2/7 ASSESSED

2.8
Average
Distance to
Seaport (km)

162.2 Distance to External Medium or Large Seaport (km) 1.0 Port Density (ports per 10km of coastline)



### Air Support



SCORE: 0.288

**RANK: 4/7 ASSESSED** 

Distance to External C130 Airport (km)

Average Distance to Airport or Heliport (km)



# Transportation Capacity

1.9

0

1 SCORE: 0.400 RANK: 4/7 ASSESSED

**0.3**Gas Stations per 1,000
Persons

Road Density (km of roads per sq km)



#### Warehouse Access

0

SCORE: 0.788 RANK: 4/7 ASSESSED

10.1
Average
Distance to
Warehouse

(km)

162.2
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 Grenada was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 5 / 7 ASSESSED

**SCORE: 0.424** 



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

RANK: 4 / 7 ASSESSED

**SCORE: 0.474** 

# **KEY FACTORS INFLUENCING RESILIENCE**

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

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



# **Information Access Vulnerability**

Limitations in information access can impede a population's ability to receive, understand, and take action. Emergency messages must take into account the unique information access constraints of the region. Emergency messages presented to the population must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.



# **Gender Inequality**

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 in all phases of DM, ensuring the implementation at subnational and local levels. Courses of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.



# Air Support

Air transport is a key component of timely response operations, supporting search and rescue, damage assessment efforts, and the delivery of relief supplies. Increasing air support capacity to accommodate C130 aircraft strengthens the ability to quickly deliver and disseminate emergency relief supplies to where they are most needed.



# **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 / 7 ASSESSED SCORE: 0.357
-M-	Earthquake	RANK: 4 / 7 ASSESSED SCORE: 0.538
	Extreme Heat	RANK: 4 / 7 ASSESSED SCORE: 0.000
	Flash Flood	RANK: 4 / 7 ASSESSED SCORE: 0.289
	Hurricane Winds	RANK: 4 / 7 ASSESSED SCORE: 0.538
MÈ	Landslide	RANK: 4 / 7 ASSESSED SCORE: 0.410
	Sea Level Rise	RANK: 4 / 7 ASSESSED SCORE: 0.395
(Ca)	Tsunami	RANK: 4 / 7 ASSESSED SCORE: 0.394
\$	Volcano	RANK: 2 / 7 ASSESSED SCORE: 0.589
	Wildfire	RANK: 6 / 7 ASSESSED SCORE: 0.043



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

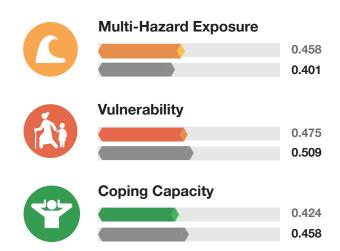
3/7

RANK AMONG PARISHES/DEPENDENCIES Score: 0.503

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

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







Better solutions. Fewer disasters.

# Safer World.

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC\_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org



GRENADA
SAINT MARK

**NDPBA SUBNATIONAL PROFILE** 



# GRENADA SAINT MARK

Area: 25 km2





#### RISK AND VULNERABILITY

**COMPONENT SCORE** 



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

- High

Score: 0.542 • Rank: 2/7



Household Population (2011 Census)

4.346



#### **RESILIENCE (R)**

- Very Low

Score: 0.381 • Rank: 6/7



Prevalence of Chronic Illness (per 100 persons)

23.4



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

- Low

Score: 0.386 • Rank: 5/7



**Unemployment Rate** 

36.4%



#### **VULNERABILITY (V)**

- Low

Score: 0.530 • Rank: 4/7



Adults without Secondary Education

44.5%



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

- Very Low

Score: 0.291 • Rank: 7/7



Population with No Internet Access

69.6%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 5 / 7 ASSESSED** 

**SCORE: 0.386** 



MHE 0.386

Raw MHE 0.000

Relative MHE 0.773

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



**Coastal Flooding** 

8%

**296** 

Buildings Exposed: 11%

Critical Infrastructure Exposed: 27%



**Hurricane Winds** 

100%

**3,890** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**3,890** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

42%

**1,620** 

Buildings Exposed: 46%

Critical Infrastructure Exposed: 53%



**Extreme Heat** 

0%

**≗** 0

Buildings Exposed: 0%

Critical Infrastructure Exposed: 0%



Sea Level Rise

**7%** 

**263** 

Buildings Exposed: 9%

Critical Infrastructure Exposed: 27%



Flash Flood

3%

**104** 

Buildings Exposed: 4%

Critical Infrastructure Exposed: 23%



Tsunami

14%

**541** 

Buildings Exposed: 27%

Critical Infrastructure Exposed: 47%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 5 / 7 ASSESSED** 

**SCORE: 0.386** 

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



Volcano **70%** 

**2**,730

Buildings Exposed: 74%

Critical Infrastructure Exposed: 90%



Wildfire

0%

**9** 0

Buildings Exposed: 0%

Critical Infrastructure Exposed: **0%** 



**RANK: 4 / 7 ASSESSED** 

**SCORE: 0.530** 

Vulnerability in Saint Mark is primarily driven by Gender Inequality and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Information Access Vulnerability**

SCORE: 0.689 **RANK: 4/7 ASSESSED** 

97.9% School

Attendance Rate (children ages 5 to 16)

44.5% Adults without Secondary Education

22.6% Household Computer Access

69.6% Population with No Internet Access



#### **Economic Constraints**

**SCORE: 0.756 RANK: 1/7 ASSESSED** 

33.3 Economic

Ratio

36.4% Unemployment Dependency Rate

20.8% Youth Bulge (population ages 15-24)



#### **Environmental Stress**

SCORE: 0.213 **RANK: 6/7 ASSESSED** 

33.4% Coastline Exposure to Local or Global Threats

Tree Cover

3.7%



#### **Gender Inequality**

SCORE: 0.832

**RANK: 2/7 ASSESSED** 

0.16 Female to Male Labor Ratio

0.32 Parity in Secondary Education Attainment



**RANK: 4 / 7 ASSESSED** 

**SCORE: 0.530** 



#### **Household Infrastructure Vulnerability**

1 **SCORE: 0.696 RANK: 2/7** ASSESSED

36.0%

Housing Built Prior to 2000 Households with Indoor Toilets

56.7%

66.8% Households with Improved Sanitation **72.2%**Households with Treated Water



#### **Household Composition and Vulnerable Health**

0 SCORE: 0.412 RANK: 4/7 ASSESSED

15.1

Prevalence of Disability (per 100 persons) Prevalence of Chronic Illness (per 100 persons)

23.4

8.8% Population Age 65 and Over **24.5%**Population
Under Age 15



#### **Population Pressures**

0

1 SCORE: 0.111 RAM

**RANK: 7/7 ASSESSED** 

**0.6%**Average Annual Population

Change

176.3 Population Density (persons per sq km)



# **ISLAND CAPACITY (IC)**

**RANK: 7 / 7 ASSESSED** 

**RANK: 5/7 ASSESSED** 

**RANK: 3/7 ASSESSED** 

**SCORE: 0.237** 

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



#### **Economic Capacity**

1 SCORE: 0.226

**69.7%**Labor Force Participation Rate

12.4% Households with Home Insurance

6.9%
Household
Content
Insured
(percent of
households)



#### **Environmental Capacity**

0 SCORE: 0.029 RANK: 7/7 ASSESSED

0.03% Croplands -8.9 Net Carbon Flux **13.5%**Protected
Terrestrial Area

**37.1%** Protected Coastlines

SCORE: 0.441



#### **Governance Capacity**



**1.4%** 

Prevalence of Crime

**97.7%**Household Waste Disposal

**67.3%**Voter
Participation
Rate



# **ISLAND CAPACITY (IC)**

**RANK: 7 / 7 ASSESSED** 

**SCORE: 0.237** 



#### **Infrastructure Capacity**

1 SCORE: 0.246

0.246 RANK: 7/7 ASSESSED



#### **Communications Capacity**

0

SCORE: 0.200 RANK: 6/7 ASSESSED

42.0%

Households with Fixed Phones 69.9%
Households with Mobile Phones

# **-**₹

#### **Emergency Services Capacity**

0

0.9

SCORE: 0.629

**RANK: 5/7 ASSESSED** 

**4.6**Average
Distance to
Fire Station

(km)

Average Distance to Hospital or Clinic (km) 1.0 Average Distance to Police Station (km) 3.9 Average Distance to Shelter (km)



#### **Energy Capacity**

00.40/

1 SCORE: 0.124

**RANK: 7/7 ASSESSED** 

82.4%

Household Electricity Access **88.2%**Households
Using Gas for
Cooking



#### **Health Care Capacity**

0

1 SCORE: 0.030

**RANK: 7/7 ASSESSED** 

52.3%

Health Insurance Coverage **0.26**Hospitals and Clinics per 1,000 Persons



## **LOGISTICS CAPACITY (LC)**

**RANK: 7 / 7 ASSESSED** 

**SCORE: 0.345** 

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



#### **Maritime Logistics**

0 1

4.0

Average Distance to Seaport (km) 166.6
Distance
to External
Medium or
Large Seaport

O.O
Port Density
(ports per
10km of



#### Air Support

0

23.7

(km)

SCORE: 0.204

**SCORE: 0.203** 

**RANK: 7/7 ASSESSED** 

**RANK: 6/7 ASSESSED** 

**RANK: 7/7 ASSESSED** 

64.7
Distance to
External C130
Airport (km)

Average Distance to Airport or Heliport (km)



#### **Transportation Capacity**

0

0.3 1.1
Gas Stations per 1,000 (km of roads Persons per sq km)

per 1,000 Persons

#### Warehouse Access

0

1 SCORE: 0.681

1 SCORE: 0.293

RANK: 5/7 ASSESSED

**16.5**Average
Distance to
Warehouse

(km)

166.6
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 Grenada was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 7 / 7 ASSESSED

SCORE: 0.291



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

RANK: 6 / 7 ASSESSED

**SCORE: 0.381** 

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

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

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



#### **Gender Inequality**

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 in all phases of DM, ensuring the implementation at subnational and local levels. Courses of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.



#### **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.



### **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.



#### Air Support

Air transport is a key component of timely response operations, supporting search and rescue, damage assessment efforts, and the delivery of relief supplies. Increasing air support capacity to accommodate C130 aircraft strengthens the ability to quickly deliver and disseminate emergency relief supplies to where they are most needed.



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

	Coastal Flooding	RANK: 3 / 7 ASSESSED SCORE: 0.385
-Mr	Earthquake	RANK: 3 / 7 ASSESSED SCORE: 0.556
	Extreme Heat	RANK: 4 / 7 ASSESSED SCORE: 0.000
	Flash Flood	RANK: 6 / 7 ASSESSED SCORE: 0.249
	Hurricane Winds	RANK: 3 / 7 ASSESSED SCORE: 0.556
	Landslide	RANK: 1 / 7 ASSESSED SCORE: 0.519
	Sea Level Rise	RANK: 3 / 7 ASSESSED SCORE: 0.424
(G)	Tsunami	RANK: 1 / 7 ASSESSED SCORE: 0.558
\$ <del>\$</del>	Volcano	RANK: 3 / 7 ASSESSED SCORE: 0.521
	Wildfire	RANK: 7 / 7 ASSESSED SCORE: 0.000



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

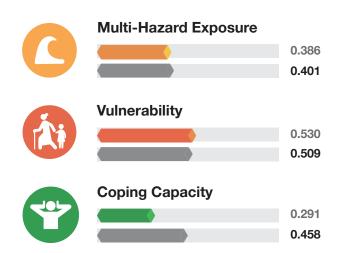
2/7

RANK AMONG PARISHES/DEPENDENCIES Score: 0.542

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

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







Better solutions. Fewer disasters.

# Safer World.

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC\_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org



# SAINT PATRICK

### **NDPBA SUBNATIONAL PROFILE**



# GRENADA SAINT PATRICK

Area: 42 km2





#### **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



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

- Low

Score: 0.476 • Rank: 5/7



Household Population (2011 Census)

10,461



#### **RESILIENCE (R)**

- Very Low

Score: 0.329 • Rank: 7/7



Prevalence of Chronic Illness (per 100 persons)

26.5



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

- Very Low

Score: 0.085 • Rank: 7/7



**Unemployment Rate** 

32.2%



#### **VULNERABILITY (V)**

- Very High

Score: 0.673 • Rank: 1/7



Adults without Secondary Education

48.6%



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

- Very Low

Score: 0.330 • Rank: 6/7



Population with No Internet Access

67.4%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 7 / 7 ASSESSED** 

**SCORE: 0.085** 



MHE 0.085

Raw MHE 0.148

Relative MHE 0.022

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



**Coastal Flooding** 

1%

**4** 175

Buildings Exposed: 3%

Critical Infrastructure Exposed: 21%



**Hurricane Winds** 

100%

**12,700** 

Buildings Exposed: **100%** 

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**12,700** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

15%

**1,950** 

Buildings Exposed: 22%

Critical Infrastructure Exposed: 42%



**Extreme Heat** 

0%

**25** 

Buildings Exposed: 0%

Critical Infrastructure Exposed: 0%



Sea Level Rise

1%

**134** 

Buildings Exposed: 2%

Critical Infrastructure Exposed: 11%



Flash Flood

8%

**997** 

Buildings Exposed: 9%

Critical Infrastructure Exposed: 31%



Tsunami

5%

**588** 

Buildings Exposed: 6%

Critical Infrastructure Exposed: 25%

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





# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 7 / 7 ASSESSED** 

**SCORE: 0.085** 

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



Volcano

19%

**2**,450

Buildings Exposed: 19%

Critical Infrastructure Exposed: 17%



Wildfire

3%

**337** 

Buildings Exposed: 2%

Critical Infrastructure Exposed: **2%** 



**RANK: 1 / 7 ASSESSED** 

**SCORE: 0.673** 

Vulnerability in Saint Patrick is primarily driven by Information Access Vulnerability and Gender Inequality. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



#### **Information Access Vulnerability**

0 SCORE: 0.917 RANK: 1/7 ASSESSED

**96.7%** 

School Attendance Rate (children ages 5 to 16) 48.6%
Adults without Secondary Education

23.0% Household Computer Access 67.4%
Population with No Internet Access



#### **Economic Constraints**

0 SCORE: 0.676 RANK: 3/7 ASSESSED

34.8

Economic Dependency Ratio 32.2%

Unemployment Rate 19.7% Youth Bulge (population ages 15-24)



#### **Environmental Stress**

1 SCORE: 0.670 RANK: 4/7 ASSESSED

62.5%

Coastline Exposure to Local or Global Threats 5.5% Tree Cover Loss



#### **Gender Inequality**

1 SCORE: 0.896 RANK: 1/7 ASSESSED

0.18

Female to Male Labor Ratio **0.28**Parity in
Secondary
Education
Attainment



**RANK: 1 / 7 ASSESSED** 

**SCORE: 0.673** 



#### **Household Infrastructure Vulnerability**

0 1 SC

1 SCORE: 0.638 RANK: 4/7 ASSESSED

34.5%

Housing Built Prior to 2000 Households with Indoor Toilets

53.2%

**72.3%**Households with Improved Sanitation

**71.0%**Households with Treated Water



#### **Household Composition and Vulnerable Health**

0 1

persons)

SCORE: 0.629 RANK: 2/7 ASSESSED

18.1

Prevalence of Disability (per 100 persons) 26.5
Prevalence of Chronic Illness (per 100

12.8% Population Age 65 and Over **22.0%**Population
Under Age 15



#### **Population Pressures**



1 SCORE: 0.283 RANK: 3/7 ASSESSED

1.0%

Average Annual Population Change 250.1
Population
Density
(persons per
sq km)



# **ISLAND CAPACITY (IC)**

**RANK: 6 / 7 ASSESSED** 

**SCORE: 0.239** 

Saint Patrick exhibits weaker Island Capacity in the areas of Communications Capacity and Energy Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



#### **Economic Capacity**

1 SCORE: 0.024

61.1%

Labor Force Participation Rate

13.4% Households with Home Insurance

7.1% Household Content Insured (percent of households)



#### **Environmental Capacity**

**SCORE: 0.324** 

**RANK: 5/7 ASSESSED** 

**RANK: 7/7 ASSESSED** 

**RANK: 7/7 ASSESSED** 

0.03% Croplands -14.7 Net Carbon Flux

15.2% Protected Terrestrial Area

75.3% Protected Coastlines

**SCORE: 0.203** 



#### **Governance Capacity**

3.3%

Prevalence of Crime

97.3% Household

Waste Disposal 70.6%

Voter Participation Rate



# **ISLAND CAPACITY (IC)**

**RANK: 6 / 7 ASSESSED** 

**SCORE: 0.239** 



#### **Infrastructure Capacity**

SCORE: 0.323

**RANK: 6/7 ASSESSED** 



#### **Communications Capacity**

0

1 SCORE: 0.168

**RANK: 7/7 ASSESSED** 

**RANK: 2/7 ASSESSED** 

**RANK: 6/7 ASSESSED** 

50.2%

Households with Fixed Phones 61.7% Households with Mobile Phones

#### -₹ (K

#### **Emergency Services Capacity**

0

**2.7**Average
Distance to
Fire Station

(km)

1.1
Average
Distance to
Hospital or
Clinic (km)

1.7 Average Distance to Police Station (km) 1.1

Average Distance to Shelter (km)

**SCORE: 0.749** 

**SCORE: 0.170** 



#### **Energy Capacity**

86.4% 85.5%

Household Electricity Access Households Using Gas for Cooking



#### **Health Care Capacity**

0

1 SCORE: 0.205

**RANK: 5/7 ASSESSED** 

53.1%

Health Insurance Coverage 0.39
Hospitals and Clinics per 1,000 Persons



## **LOGISTICS CAPACITY (LC)**

**RANK: 6 / 7 ASSESSED** 

**SCORE: 0.421** 

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



#### **Maritime Logistics**

0 1

3.1 168.0 0.2

Average Distance to Seaport (km) Distance to External Medium or Large Seaport (km) O.2
Port Density
(ports per
10km of



#### Air Support

0

SCORE: 0.261 RAN

**SCORE: 0.338** 

**RANK: 5/7 ASSESSED** 

**RANK: 6/7 ASSESSED** 

**47.6**Distance to
External C130
Airport (km)

**28.1**Average
Distance to
Airport or
Heliport (km)



#### Transportation Capacity

1 SCORE: 0.461 RANK: 3/7 ASSESSED

**0.2**Gas Stations per 1,000

Persons

Road Density (km of roads per sq km)

2.7



#### Warehouse Access

0 1

SCORE: 0.626 RANK: 6/7 ASSESSED

20.8
Average
Distance to
Warehouse

(km)

168.0 Distance to CDEMA Sub-Regional 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 Grenada was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 6 / 7 ASSESSED

**SCORE: 0.330** 



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

RANK: 7 / 7 ASSESSED

**SCORE: 0.329** 

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

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

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



#### **Information Access Vulnerability**

Limitations in information access can impede a population's ability to receive, understand, and take action. Emergency messages must take into account the unique information access constraints of the region. Emergency messages presented to the population must contain clear and simple information to ensure an appropriate response to save lives and reduce losses.



#### **Gender Inequality**

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 in all phases of DM, ensuring the implementation at subnational and local levels. Courses of action must recognize the role of women in society and support changes to policies and programs to promote gender-equal access.



#### Air Support

Air transport is a key component of timely response operations, supporting search and rescue, damage assessment efforts, and the delivery of relief supplies. Increasing air support capacity to accommodate C130 aircraft strengthens the ability to quickly deliver and disseminate emergency relief supplies to where they are most needed.

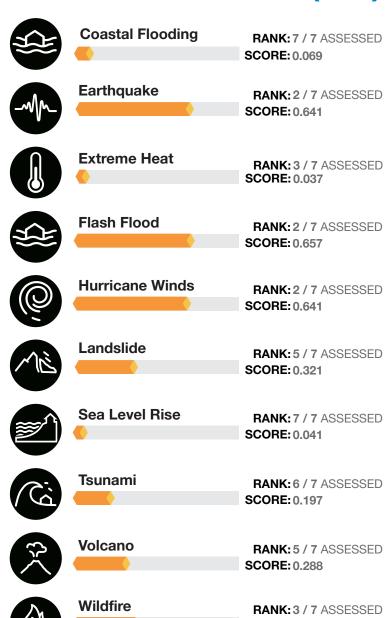


#### **Maritime Logistics**

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.



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



PDC Global www.pdc.org

SCORE: 0.340



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

5/7

RANK AMONG PARISHES/DEPENDENCIES Score: 0.476

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

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







Better solutions. Fewer disasters.

# Safer World.

1305 N. Holopono Street Suite 2, Kihei, HI 96753 | P: (808) 891-0525 | F: (808) 891-0526



@PDC\_Global



/PDCGlobal



www.pdc.org



ndpba.eci@pdc.org