

SAINT MARK

**NDPBA SUBNATIONAL PROFILE** 



# DOMINICA SAINT MARK

Area: 13.5 km2



#### RISK AND VULNERABILITY

**COMPONENT SCORE** 



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

- Moderate

Score: 0.435 • Rank: 6/10



**Total Population (2011)** 

1,767



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

- High

Score: 0.613 • Rank: 4/10



Coastal Population Concentration

92.2%



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

- Very High

Score: 0.532 • Rank: 2/10



**Poverty Rate** 

27.3%



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

- Moderate

Score: 0.424 • Rank: 5/10



Households with Reduced Water Availability

32.6%



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

- Very High

Score: 0.650 • Rank: 2/10



Coastline Exposure to Local or Global Threats

57.1%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 2 / 10 PARISHES ASSESSED** 

**SCORE: 0.532** 



MHE 0.532

Raw MHE 0.064

Relative MHE 1.000

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



**Coastal Flooding** 

9%

**4** 153

Buildings Exposed: 16%

Critical Infrastructure Exposed: 28%



**Hurricane Winds** 

100%

**1,700** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**1,700** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

35%

**\$** 591

Buildings Exposed: 40%

Critical Infrastructure Exposed: 39%



**Extreme Heat** 

100%

**1,700** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Sea Level Rise

8%

**137** 

Buildings Exposed: 14%

Critical Infrastructure Exposed: 28%



Flash Flood

25%

**426** 

Buildings Exposed: 30%

Critical Infrastructure Exposed: 43%



Tsunami

4%

**2** 74

Buildings Exposed: 10%

Critical Infrastructure Exposed: 22%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 2 / 10 PARISHES ASSESSED** 

SCORE: 0.532

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



Volcano

100%

**\$1,700** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Wildfire

0%

**&** 0

Buildings Exposed: 0%

Critical Infrastructure Exposed: **0%** 



## **VULNERABILITY (V)**

**RANK: 5 / 10 PARISHES ASSESSED** 

**SCORE: 0.424** 

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



#### **Economic Constraints**



SCORE: 0.392 RANK: 5

**RANK: 5/10 PARISHES ASSESSED** 

**52.2**Economic
Dependency
Ratio

27.3% Poverty Rate



#### **Environmental Stress**



SCORE: 0.543 RANK: 3/10 PARISHES ASSESSED

92.2%
Coastal
Population
Concentration

**57.1%**Coastline
Exposure
to Local or
Global Threats

8.6% Tree Cover Loss



#### **Household Infrastructure Vulnerability**

1 \$

1 SCORE: 0.532 RANK: 3/10 PARISHES ASSESSED

11.3% Housing Built Prior to 2003 **32.6%**Households with Reduced Water Availability



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



SCORE: 0.411 RANK: 8/10 PARISHES ASSESSED

**5.2%**Prevalence of Disability (per 100 persons)

**0.3%**Institutionalized Population

14.3% Population Age 65 and Over 20.0% Population Under Age 15



#### **Population Pressures**



SCORE: 0.240 RANK: 8/10 PARISHES ASSESSED

**0.8%**Average Annual Population Change

130.9
Population
Density
(persons per
sq km)

15.2% Youth Bulge (population ages 15-24)



# **ISLAND CAPACITY (IC)**

**RANK: 1 / 10 PARISHES ASSESSED** 

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**SCORE: 0.661** 

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



#### **Environmental Capacity**

1 SCORE: 0.425 **RANK: 2/10 PARISHES ASSESSED** 

0.00%

-0.9 Croplands Net Carbon

1.0% 55.5% Protected Protected Terrestrial Area Coastlines



#### **Emergency Service and Health Care Capacity**

1 SCORE: 0.763 **RANK: 1/10 PARISHES ASSESSED** 

0.4

Average Distance to Shelter (km) Average Distance to Hospital or Clinic (km)

0.6

9.1 Average Distance to Fire Station (km)

1.2 Average Distance to Police Station (km)

1.2 Hospitals and Clinics per 1,000 Persons

**PDC** Global



## **LOGISTICS CAPACITY (LC)**

**RANK: 3 / 10 PARISHES ASSESSED** 

**SCORE: 0.638** 

**RANK: 3/10 PARISHES ASSESSED** 

**RANK: 5/10 PARISHES ASSESSED** 

**RANK: 2/10 PARISHES ASSESSED** 

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

**SCORE: 0.567** 

**SCORE: 0.639** 



#### **Maritime Logistics**

1.3 Average Distance to Seaport (km)

73.5 Distance to External Medium or Large Seaport (km)

1.0 Port Density (ports per 10 km of coastline)



#### Air Support

77.3 4.9

Distance to External C130 Airport (km)

0.6

Average Distance to Airport or Heliport (km)



#### Transportation Capacity

2.3 Gas Stations Road Density per 1,000 (km of roads Persons per sq km)



#### Warehouse Access

1

SCORE: 0.614

1 SCORE: 0.733

**RANK: 5/10 PARISHES ASSESSED** 

9.3 Average Distance to Warehouse

(km)

297.0 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 Dominica was calculated by using a combination of Island Capacity and Logistics Capacity.

RANK: 2 / 10 PARISHES ASSESSED

**SCORE: 0.650** 



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

RANK: 4 / 10 PARISHES ASSESSED

**SCORE: 0.613** 

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

Saint Mark's score and ranking are due to Moderate 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 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.



### **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.



#### 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.



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

	Coastal Flooding	RANK: 5 / 10 PARISHES ASSESSED SCORE: 0.444
-W/\-	Earthquake	RANK: 9 / 10 PARISHES ASSESSED SCORE: 0.446
	Extreme Heat	RANK: 3 / 10 PARISHES ASSESSED SCORE: 0.505
	Flash Flood	RANK: 9 / 10 PARISHES ASSESSED SCORE: 0.283
	Hurricane Winds	RANK: 9 / 10 PARISHES ASSESSED SCORE: 0.446
MÈ	Landslide	RANK: 6 / 10 PARISHES ASSESSED SCORE: 0.435
	Sea Level Rise	RANK: 3 / 10 PARISHES ASSESSED SCORE: 0.459
Ca Ca	Tsunami	RANK: 7 / 10 PARISHES ASSESSED SCORE: 0.285
\$	Volcano	RANK: 6 / 10 PARISHES ASSESSED SCORE: 0.461
	Wildfire	RANK: 8 / 10 PARISHES ASSESSED SCORE: 0.000



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

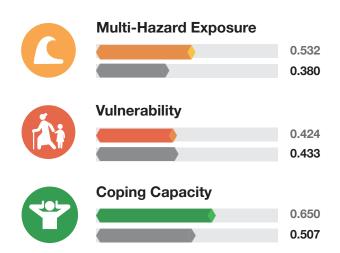
6/10

RANK AMONG PARISHES Score: 0.435

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

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







Better solutions. Fewer disasters.

# Safer World.

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