

SAINT JOSEPH

NDPBA SUBNATIONAL PROFILE



# DOMINICA SAINT JOSEPH

Area: 118.4 km2



#### **RISK AND VULNERABILITY**

**COMPONENT SCORE** 



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

- Low

Score: 0.428 • Rank: 7/10



**Total Population (2011)** 

5,434



**RESILIENCE (R)** 

- Low

Score: 0.474 • Rank: 8/10



Coastal Population Concentration

32.1%



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

- Low

Score: 0.231 • Rank: 8/10



**Poverty Rate** 

47.2%



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

- Moderate

Score: 0.412 • Rank: 6/10



Households with Reduced Water Availability

50.7%



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

- LOW

Score: 0.359 • Rank: 8/10



**Coastline Exposure to Local or Global Threats** 

21.6%



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 8 / 10 PARISHES ASSESSED** 

**SCORE: 0.231** 



MHE 0.231

Raw MHE 0.283

Relative MHE 0.179

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



**Coastal Flooding** 

3%

**\$** 150

Buildings Exposed: 5%

Critical Infrastructure Exposed: 17%



**Hurricane Winds** 

100%

**5,430** 

Buildings Exposed: **100%** 

Critical Infrastructure Exposed: 100%



**Earthquake** 

100%

**5,430** 

Buildings Exposed: 100%

Critical Infrastructure Exposed: 100%



Landslide

21%

**1,140** 

Buildings Exposed: 19%

Critical Infrastructure Exposed: 43%



**Extreme Heat** 

11%

**593** 

Buildings Exposed: 24%

Critical Infrastructure Exposed: 12%



Sea Level Rise

2%

**4** 133

Buildings Exposed: 4%

Critical Infrastructure Exposed: 17%



Flash Flood

**12%** 

**4** 650

Buildings Exposed: 18%

Critical Infrastructure Exposed: 40%



Tsunami

2%

**108** 

Buildings Exposed: 6%

Critical Infrastructure Exposed: 16%

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



# MULTI-HAZARD EXPOSURE (MHE)

**RANK: 8 / 10 PARISHES ASSESSED** 

**SCORE: 0.231** 

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



Volcano

40%

**2**,160

Buildings Exposed: 45%

Critical Infrastructure Exposed: 40%



Wildfire

18%

**1,000** 

Buildings Exposed: 18%

Critical Infrastructure Exposed: **11%** 



## **VULNERABILITY (V)**

**RANK: 6 / 10 PARISHES ASSESSED** 

**RANK: 6/10 PARISHES ASSESSED** 

**SCORE: 0.412** 

Vulnerability in Saint Joseph 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.



#### **Economic Constraints**



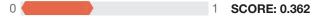
SCORE: 0.636 RANK: 4/10 PARISHES ASSESSED

**51.3**Economic
Dependency
Ratio

**47.2%**Poverty Rate



#### **Environmental Stress**



**32.1%** Coastal

Coastal
Population
Concentration

21.6%
Coastline
Exposure
to Local or
Global Threats

41.0% Tree Cover Loss



#### **Household Infrastructure Vulnerability**

0 1 SCORI

1 SCORE: 0.393 RANK: 6/10 PARISHES ASSESSED

9.3% Housing Built Prior to 2003 **50.7%**Households with Reduced Water Availability



#### Household Composition and Vulnerable Health



SCORE: 0.467 RANK: 5/10 PARISHES ASSESSED

**6.3%**Prevalence of Disability (per 100 persons)

**0.2%**Institutionalized Population

**13.6%**Population
Age 65 and
Over

20.4% Population Under Age 15



#### **Population Pressures**



SCORE: 0.201 RANK: 9/10 PARISHES ASSESSED

**0.7%**Average Annual Population Change

45.9
Population
Density
(persons per
sq km)

16.0% Youth Bulge (population ages 15-24)



# **ISLAND CAPACITY (IC)**

**RANK: 8 / 10 PARISHES ASSESSED** 

**SCORE: 0.430** 

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



#### **Environmental Capacity**

0

SCORE: 0.191 RANK: 8/10 PARISHES ASSESSED

0.00% Croplands 109.0 Net Carbon 25.7% Protected Terrestrial Area

0.0% Protected Coastlines



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

1.4 1.4 4.7

1 SCORE: 0.532

**RANK: 7/10 PARISHES ASSESSED** 

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**1.4**Average
Distance to
Shelter (km)

Average Distance to Hospital or Clinic (km) **4.7**Average
Distance to
Fire Station
(km)

Average
Distance to
Police Station
(km)

**1.3**Hospitals and Clinics per 1,000 Persons

PDC Global



# **LOGISTICS CAPACITY (LC)**

**RANK: 9 / 10 PARISHES ASSESSED** 

**SCORE: 0.289** 

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



#### **Maritime Logistics**

1

**SCORE: 0.313** 

**RANK: 8/10 PARISHES ASSESSED** 

4.3

Average Distance to Seaport (km) 82.2 Distance to External Medium or Large Seaport (km)

0.9 Port Density (ports per 10 km of coastline)



#### Air Support



**SCORE: 0.095** 

**RANK: 10/10 PARISHES ASSESSED** 

**RANK: 4/10 PARISHES ASSESSED** 

85.7 Distance to External C130 Airport (km)

Average Distance to Airport or Heliport (km)

10.8



## **Transportation Capacity**

1 SCORE: 0.540 1.6

0.6 Gas Stations per 1,000 Persons

Road Density (km of roads per sq km)



#### Warehouse Access

1

314.3

SCORE: 0.207

**RANK: 10/10 PARISHES ASSESSED** 

11.9 Average Distance to

(km)

Distance to CDEMA Sub-Regional Focal Warehouse 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: 8 / 10 PARISHES ASSESSED

**SCORE: 0.359** 



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

RANK: 8 / 10 PARISHES ASSESSED

**SCORE: 0.474** 

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

Saint Joseph's score and ranking are due to Moderate 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, and populations living in institutional settings 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.



### 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.



#### **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: 7 / 10 PARISHES ASSESSED SCORE: 0.388
-W-	Earthquake	RANK: 4 / 10 PARISHES ASSESSED SCORE: 0.589
	Extreme Heat	RANK: 6 / 10 PARISHES ASSESSED SCORE: 0.299
	Flash Flood	RANK: 6 / 10 PARISHES ASSESSED SCORE: 0.342
	Hurricane Winds	RANK: 4 / 10 PARISHES ASSESSED SCORE: 0.589
MÈ	Landslide	RANK: 4 / 10 PARISHES ASSESSED SCORE: 0.507
	Sea Level Rise	RANK: 7 / 10 PARISHES ASSESSED SCORE: 0.408
Cá.	Tsunami	RANK: 5 / 10 PARISHES ASSESSED SCORE: 0.309
\$	Volcano	RANK: 8 / 10 PARISHES ASSESSED SCORE: 0.392
	Wildfire	RANK: 2 / 10 PARISHES ASSESSED SCORE: 0.495



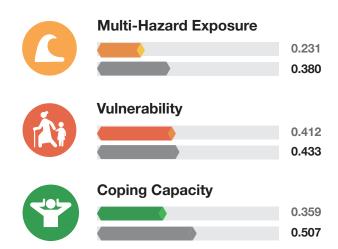
## **MULTI-HAZARD RISK (MHR)**

7 / 10 RANK AMONG PARISHES Score: 0.428

Saint Joseph's score and ranking are due to Low Multi-Hazard Exposure combined with Moderate 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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