DOMINICA

SAINT LUKE

NDPBA SUBNATIONAL PROFILE

PDC | GLOBAL

DOMINICA
SAINT LUKE

Area: 10.8 km2

RISK AND VULNERABILITY
COMPONENT SCORE

MULTI-HAZARD RISK (MHR)
- Very Low
Score: 0.356 • Rank: 9/10

RESILIENCE (R)
- Very High
Score: 0.632 • Rank: 2/10

MULTI-HAZARD EXPOSURE (MHE)
- Moderate
Score: 0.333 • Rank: 6/10

VULNERABILITY (V)
- Very Low
Score: 0.285 • Rank: 10/10

COPING CAPACITY (CC)
- Moderate
Score: 0.549 • Rank: 5/10

Total Population (2011)
1,565

Coastal Population Concentration
1.0%

Poverty Rate
17.5%

Households with Reduced Water Availability
20.8%

Coastline Exposure to Local or Global Threats
0.0%

MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 10 PARISHES ASSESSED
SCORE: 0.333

MHE
0.333

Raw MHE
0.024

Relative MHE
0.643

ESTIMATED EXPOSURE TO EACH HAZARD:

Coastal Flooding
8%
128
Buildings Exposed: **22%**
Critical Infrastructure Exposed: **30%**

Hurricane Winds
100%
1,620
Buildings Exposed: **100%**
Critical Infrastructure Exposed: **100%**

Earthquake
100%
1,620
Buildings Exposed: **100%**
Critical Infrastructure Exposed: **100%**

Landslide
29%
462
Buildings Exposed: **39%**
Critical Infrastructure Exposed: **40%**

Extreme Heat
3%
52
Buildings Exposed: **1%**
Critical Infrastructure Exposed: **3%**

Sea Level Rise
7%
107
Buildings Exposed: **18%**
Critical Infrastructure Exposed: **30%**

Flash Flood
52%
843
Buildings Exposed: **67%**
Critical Infrastructure Exposed: **63%**

Tsunami
3%
47
Buildings Exposed: **14%**
Critical Infrastructure Exposed: **3%**

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

MULTI-HAZARD EXPOSURE (MHE)

RANK: 6 / 10 PARISHES ASSESSED
SCORE: 0.333

ESTIMATED EXPOSURE TO EACH HAZARD *(CONTINUED)*:

Volcano
100%
👤 **1,620**
Buildings Exposed: **100%**
Critical Infrastructure Exposed: **100%**

Wildfire
0%
👤 **0**
Buildings Exposed: **0%**
Critical Infrastructure Exposed: **0%**

VULNERABILITY (V)

RANK: 10 / 10 PARISHES ASSESSED
SCORE: 0.285

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

Economic Constraints

0 ▬▬▬▬ 1   **SCORE: 0.288**   **RANK: 8/10** PARISHES ASSESSED

53.1
Economic Dependency Ratio

17.5%
Poverty Rate

Environmental Stress

0 ▬▬▬▬ 1   **SCORE: 0.333**   **RANK: 7/10** PARISHES ASSESSED

1.0%
Coastal Population Concentration

0.0%
Coastline Exposure to Local or Global Threats

4.3%
Tree Cover Loss

Household Infrastructure Vulnerability

0 ▬▬ 1   **SCORE: 0.116**   **RANK: 10/10** PARISHES ASSESSED

9.5%
Housing Built Prior to 2003

20.8%
Households with Reduced Water Availability

Household Composition and Vulnerable Health

0 ▬▬▬▬▬ 1   **SCORE: 0.398**   **RANK: 9/10** PARISHES ASSESSED

5.2%
Prevalence of Disability (per 100 persons)

0.2%
Institutionalized Population

10.2%
Population Age 65 and Over

24.5%
Population Under Age 15

Population Pressures

0 ▬▬▬▬ 1   **SCORE: 0.289**   **RANK: 6/10** PARISHES ASSESSED

0.0%
Average Annual Population Change

144.9
Population Density (persons per sq km)

16.9%
Youth Bulge (population ages 15-24)

ISLAND CAPACITY (IC)

RANK: 5 / 10 PARISHES ASSESSED
SCORE: 0.543

Saint Luke 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

0 [===   ] 1   **SCORE: 0.168**   **RANK: 10/10** PARISHES ASSESSED

0.00%
Croplands

-1.5
Net Carbon Flux

0.0%
Protected Terrestrial Area

0.0%
Protected Coastlines

Emergency Service and Health Care Capacity

0 [==========   ] 1   **SCORE: 0.704**   **RANK: 3/10** PARISHES ASSESSED

0.5
Average Distance to Shelter (km)

0.5
Average Distance to Hospital or Clinic (km)

5.0
Average Distance to Fire Station (km)

3.7
Average Distance to Police Station (km)

0.6
Hospitals and Clinics per 1,000 Persons

LOGISTICS CAPACITY (LC)

RANK: 4 / 10 PARISHES ASSESSED
SCORE: 0.555

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

Maritime Logistics

0 —————————— 1   **SCORE: 0.529**   **RANK: 5/10** PARISHES ASSESSED

1.3
Average Distance to Seaport (km)

77.2
Distance to External Medium or Large Seaport (km)

1.9
Port Density (ports per 10 km of coastline)

Air Support

0 —————————— 1   **SCORE: 0.636**   **RANK: 6/10** PARISHES ASSESSED

81.1
Distance to External C130 Airport (km)

3.2
Average Distance to Airport or Heliport (km)

Transportation Capacity

0 —————————— 1   **SCORE: 0.281**   **RANK: 6/10** PARISHES ASSESSED

0.0
Gas Stations per 1,000 Persons

2.5
Road Density (km of roads per sq km)

Warehouse Access

0 —————————— 1   **SCORE: 0.773**   **RANK: 2/10** PARISHES ASSESSED

5.2
Average Distance to Warehouse (km)

301.1
Distance to CDEMA Sub-Regional Focal Point (km)

COPING CAPACITY (CC)

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

RANK: 5 / 10 PARISHES ASSESSED
SCORE: 0.549

RESILIENCE (R)

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

RANK: 2 / 10 PARISHES ASSESSED
SCORE: 0.632

KEY FACTORS INFLUENCING RESILIENCE

Saint Luke'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:

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.

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.

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.
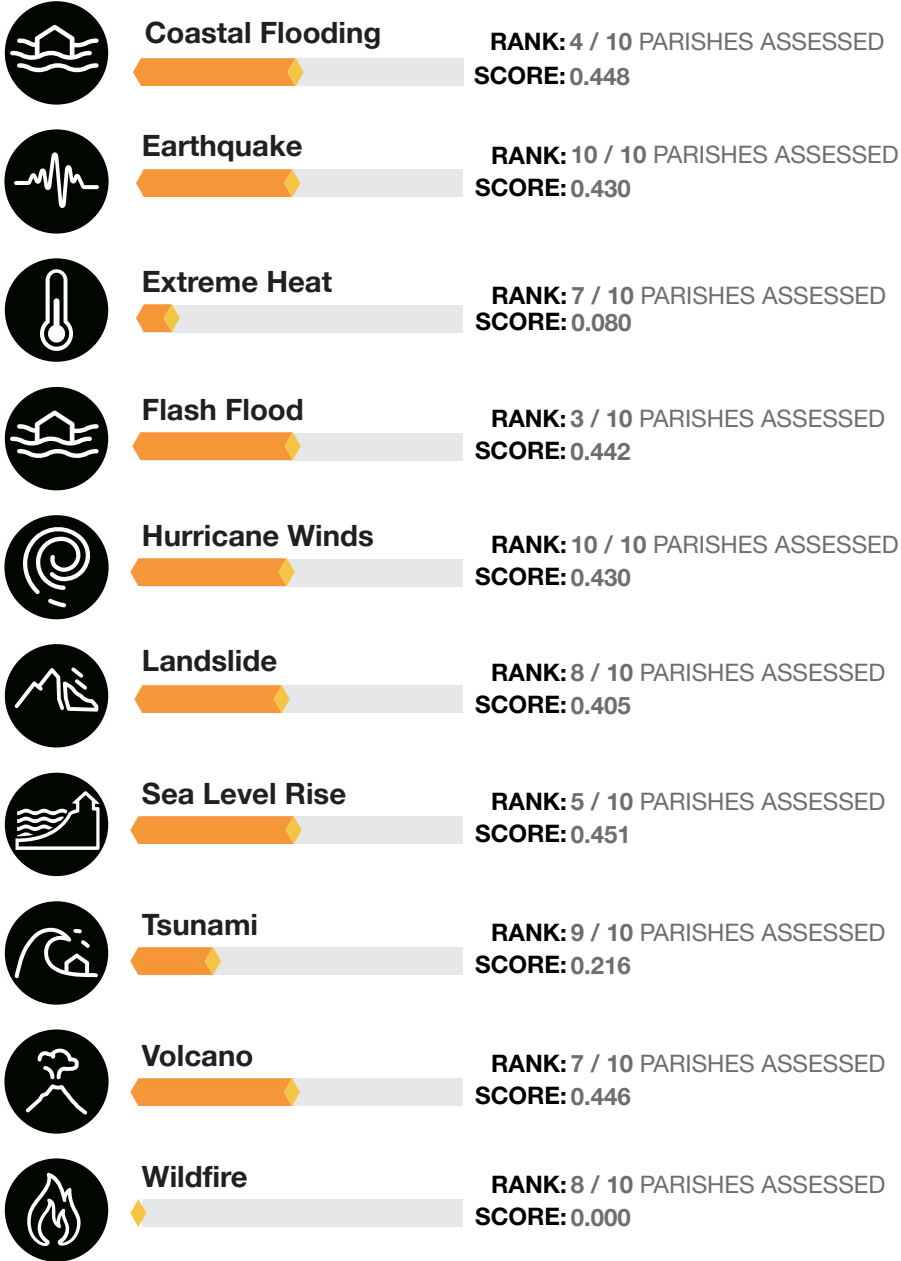
Maritime Logistics

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.
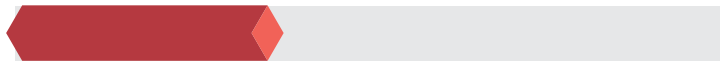
HAZARD-SPECIFIC RISK (HSR)

Coastal Flooding

RANK: 4 / 10 PARISHES ASSESSED
SCORE: 0.448

Earthquake

RANK: 10 / 10 PARISHES ASSESSED
SCORE: 0.430

Extreme Heat

RANK: 7 / 10 PARISHES ASSESSED
SCORE: 0.080

Flash Flood

RANK: 3 / 10 PARISHES ASSESSED
SCORE: 0.442

Hurricane Winds

RANK: 10 / 10 PARISHES ASSESSED
SCORE: 0.430

Landslide

RANK: 8 / 10 PARISHES ASSESSED
SCORE: 0.405

Sea Level Rise

RANK: 5 / 10 PARISHES ASSESSED
SCORE: 0.451

Tsunami

RANK: 9 / 10 PARISHES ASSESSED
SCORE: 0.216

Volcano

RANK: 7 / 10 PARISHES ASSESSED
SCORE: 0.446

Wildfire

RANK: 8 / 10 PARISHES ASSESSED
SCORE: 0.000

MULTI-HAZARD RISK (MHR)

9 / 10
RANK AMONG PARISHES
Score: 0.356

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

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

■ PARISH SCORE
■ COUNTRY SCORE

Multi-Hazard Exposure

0.333
0.380

Vulnerability

0.285
0.433

Coping Capacity

0.549
0.507

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