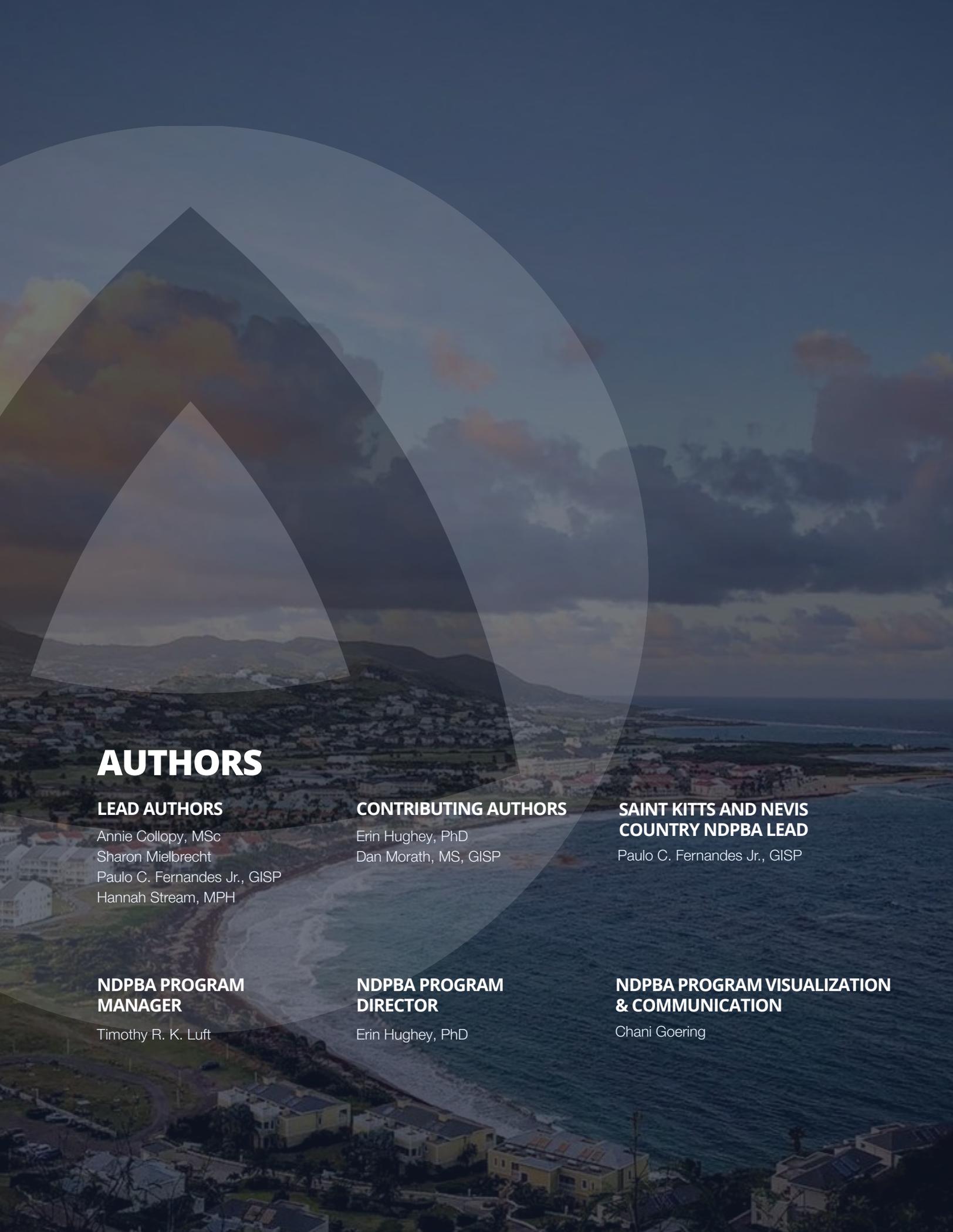




SAINT KITTS AND NEVIS NATIONAL DISASTER PREPAREDNESS BASELINE ASSESSMENT

**A DATA-DRIVEN TOOL FOR
ASSESSING RISK AND BUILDING
LASTING RESILIENCE**





AUTHORS

LEAD AUTHORS

Annie Collopy, MSc
Sharon Mielbrecht
Paulo C. Fernandes Jr., GISP
Hannah Stream, MPH

NDPBA PROGRAM MANAGER

Timothy R. K. Luft

CONTRIBUTING AUTHORS

Erin Hughey, PhD
Dan Morath, MS, GISP

NDPBA PROGRAM DIRECTOR

Erin Hughey, PhD

SAINT KITTS AND NEVIS COUNTRY NDPBA LEAD

Paulo C. Fernandes Jr., GISP

NDPBA PROGRAM VISUALIZATION & COMMUNICATION

Chani Goering

ACKNOWLEDGEMENTS

Pacific Disaster Center (PDC) would like to offer a heartfelt “thank you” and acknowledge all the agencies and organizations who provided insightful inputs and guidance leading to the completion of this report, including all of the representatives who contributed to the National Disaster Preparedness Baseline Assessment workshops, surveys, interviews, data validation, and analyses. A special thanks to the National Emergency Management Agency (NEMA) and the Nevis Disaster Management Department (NDMD) for their exemplary leadership throughout the project and their remarkable commitment to saving lives, reducing losses, and building a safer, more disaster-resilient Saint Kitts and Nevis.

- National Emergency Management Agency (NEMA)
- Nevis Disaster Management Department (NDMD)
- Clarence Fitzroy Bryant College (CFBC)
- Customs and Excise Department (SKNCED)
- Department of Agriculture (DOA)
- Department of Environment (DOE)
- Department of Gender Affairs (DOGA)
- Department of Physical Planning (DPP)
- Immigration Department (SKNID)
- Labour Department (LD)
- Ministry of Agriculture, Fisheries & Forestry
- Ministry of Finance (MOF)
- Ministry of Health (MOH)
- Ministry of Tourism
- Nevis Air and Sea Ports Authority (NASPA)
- NEVLEC (Nevis Electricity Company Ltd.)
- Public Works Department (PWD)
- Red Cross (IFRC)
- Ross University CRUSM
- Royal St Christopher and Nevis Police Force (RSCNPF)
- Saint Kitts and Nevis Defence Force (SKNDF)
- Saint Kitts and Nevis Fire and Rescue Services (SKNFRS)
- Saint Kitts and Nevis Information Service (SKNIS)
- Saint Kitts Met Services
- SKN Red Cross Society
- Statistics Department
- VON Radio
- Water Department (WD)
- ZBC Broadcasting (ZIZ/ZBC)

LIST OF ABBREVIATIONS

CARICOM: Caribbean Community

CARPHA: Caribbean Public Health Agency

CCA: Climate Change Adaptation

CDEMA: Caribbean Disaster Emergency Management Agency

CDM: Comprehensive Disaster Management

CEP: Caribbean Environment Programme

CIMH: Caribbean Institute for Meteorology and Hydrology

COOP: Continuity of Operations

COG: Continuity of Government

COP: Conference of the Parties (United Nations Climate Change Conference)

CSO: Central Statistical Office

DRR: Disaster Risk Reduction

ECLAC: Economic Commission for Latin America and the Caribbean

ESC: Eastern and Southern Caribbean

EOC: Emergency Operations Center

FCDO: Foreign, Commonwealth & Development Office

GDP: Gross Domestic Product

GFDRR: Global Facility for Disaster Reduction and Recovery

GIS: Geographic Information System

IADB: Inter-American Development Bank

IFRC: International Federation of Red Cross and Red Crescent Societies

ITU: International Telecommunications Union

MEOW: Maximum Envelopes of Water

MOU: Memorandum of Understanding

NDC: Nationally Determined Contributions

NDMA: National Disaster Management Act

NDMO: National Disaster Management Organization

NDMD: Nevis Disaster Management Department

NEMA: National Emergency Management Agency

NHC: National Hurricane Center

NOAA: National Oceanic and Atmospheric Administration

OCHA: Office for the Coordination of Humanitarian Affairs

ODM: Office of Disaster Management

OECS: Organization of Eastern Caribbean States

PAHO: Pan American Health Organization

PDC: Pacific Disaster Center

SDG: Sustainable Development Goal

SELA: Latin American and the Caribbean Economic System

SME: Subject Matter Expert

SOP: Standard Operating Procedures

T&E: Training and Exercise

UN DESA: United Nations Department of Economic and Social Affairs

UNDP: United Nations Development Programme

UNEP: United Nations Environment Programme

UNISDR: United Nations Office for Disaster Risk Reduction

USAID: United States Agency for International Development

WFP: World Food Programme

WHO: World Health Organization

WMO: World Meteorological Organization

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
.....	
COUNTRY BACKGROUND	14
.....	
RISK AND VULNERABILITY ASSESSMENT RESULTS	20
MULTI-HAZARD EXPOSURE	23
VULNERABILITY	37
COPING CAPACITY	49
RESILIENCE	53
MULTI-HAZARD RISK	57
.....	
DISASTER MANAGEMENT ANALYSIS	60
ENABLING ENVIRONMENT	67
INSTITUTIONAL ARRANGEMENTS	73
DISASTER GOVERNANCE MECHANISMS	77
CAPABILITIES AND RESOURCES	81
CAPACITY DEVELOPMENT	85
COMMUNICATION AND INFORMATION MANAGEMENT	89
.....	
COMMENDATIONS FOR BEST PRACTICES	95
.....	
NATIONAL RECOMMENDATIONS	100
5-YEAR PLAN	118
.....	
REFERENCES	120
.....	
SAINT KITTS AND NEVIS DISTRICT RISK PROFILES	125



NDPBA

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Pacific Disaster Center (PDC) completed the Saint Kitts and Nevis National Disaster Preparedness Baseline Assessment (NDPBA) in partnership with the National Emergency Management Agency (NEMA) and the Nevis Disaster Management Department (NDMD) and the support of in-country stakeholders. The NDPBA examines each country's unique hazard profile, cultural characteristics, geographical and geopolitical context, historical events, and other factors that could impact, both positively and negatively, a country's ability to manage disasters. Recommendations, at strategic and tactical levels, are developed based on the findings of the assessment and are aligned with the United Nations Sustainable Development Goals (SDGs) and the Sendai Framework for Disaster Risk Reduction.

The Assessment consists of two components: the Risk and Vulnerability Assessment (RVA) and the Disaster Management Analysis (DMA). The RVA looks at the multi-hazard exposure, social-economic vulnerabilities, island capacities and internal and external logistics capacities. The DMA takes a qualitative approach to assess six thematic areas -- Enabling Environment; Institutional Arrangements; Disaster Governance Mechanisms; Capabilities and Resources; Capacity Development; and Communication and Information Management. The DMA results are used to contextualize the results of the RVA, providing a comprehensive understanding of the current disaster management landscape. In coordination with NEMA and NDMD, PDC leverages the assessment findings to build recommendations and a Disaster Risk Reduction 5-Year Action Plan that allows for better targeted use of limited resources and identification of additional funding opportunities.

The RVA results for Saint Kitts and Nevis show significant exposure to numerous hazards, most notably hurricane winds, earthquakes, extreme heat, and coastal flooding. The detailed hazard exposure analysis reveals that critical infrastructure and densely populated urban areas are particularly susceptible, highlighting the need for robust preparedness strategies as well risk reduction and climate adaptation initiatives. In addition, socioeconomic vulnerabilities related to household infrastructure and economic dependence were identified across multiple parishes. These vulnerabilities, along with reduced capacities in health care and emergency services, transportation, and maritime logistics have the potential to increase susceptibility to the negative effects of future disasters. Endeavors to address these gaps will strengthen the nation's overall resilience to disasters.

The DMA findings highlight significant advancements in the completion of the Tsunami Ready Programme, participation in the Caribbean Safe School Initiative, and engagement with the Pan American Health Organization's Smart Hospitals Initiative. However, critical needs remain in the

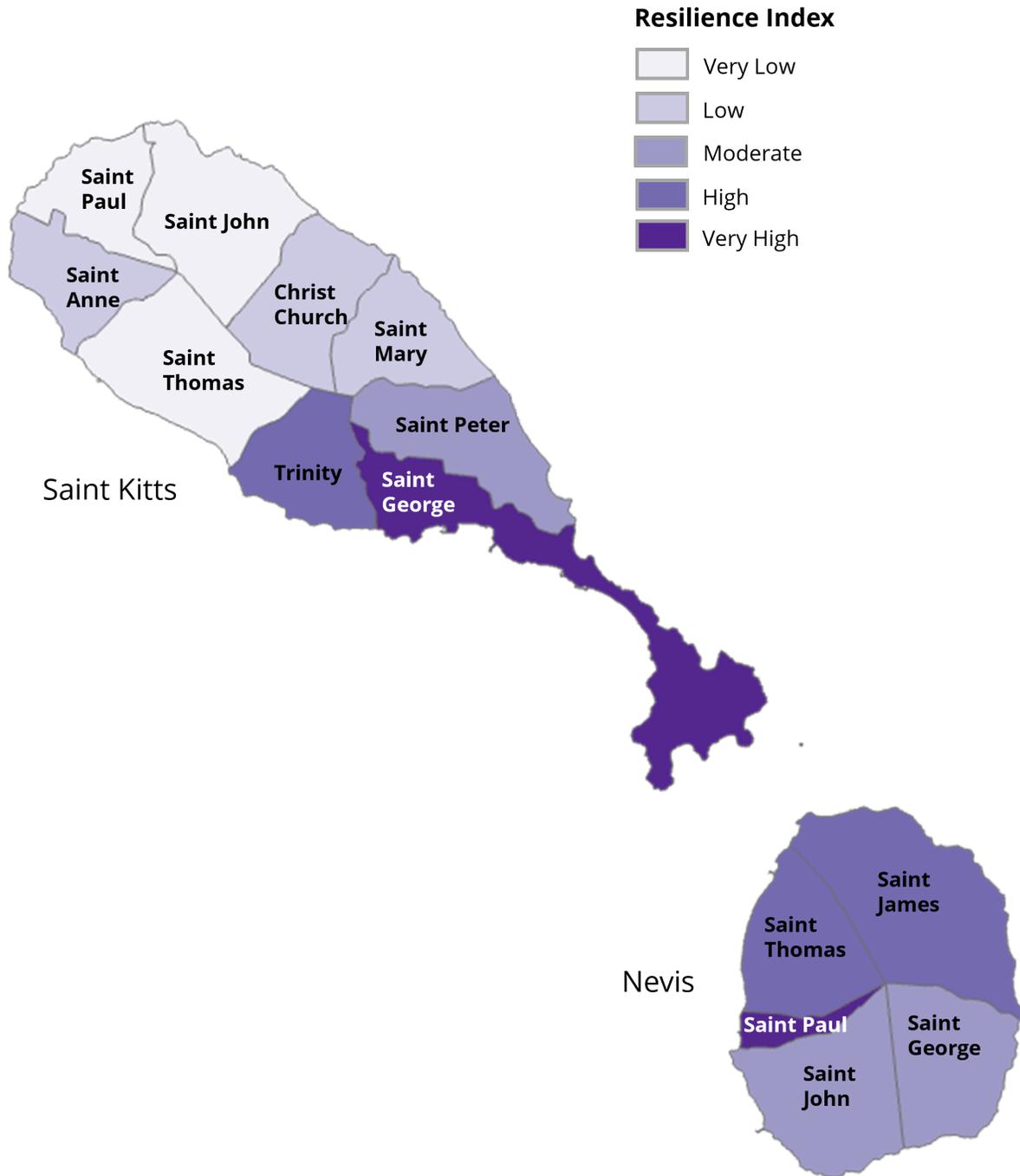
Institutional Arrangements and Enabling Environment thematic areas, especially the need for more effective communication and coordination between NEMA and NDMD. Strengthening these areas will significantly enhance resilience to climate change impacts and other existing hazards within Saint Kitts and Nevis, improving the efficacy of disaster response and recovery operations.

The NDPBA was funded by the United States Government through the US Southern Command and was conducted in coordination with the U.S. Embassy in Barbados. Although NEMA and NDMD were PDC's in-country partners during this project, the Center also developed relationships with multiple government and non-governmental agencies in Saint Kitts and Nevis that supported the data gathering and vetting process. A complete list of PDC's valued partners in the NDPBA effort is included in this report.

To access findings, recommendations, and data developed for this analysis, please visit PDC's all-hazard early warning and decision support application for disaster managers and humanitarian assistance practitioners, DisasterAWARE Pro® (<https://disasteraware.pdc.org/>).

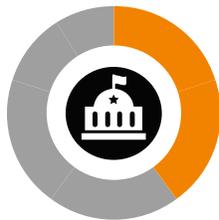


SUMMARY OF FINDINGS

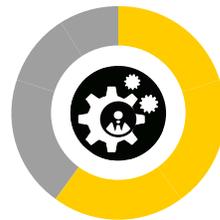


DISASTER MANAGEMENT ANALYSIS

■ Limited or No Capacity ■ Early Capacity Development ■ Achievement with Significant Limitation ■ Substantial Progress with Some Limitation ■ Advanced Capacity



Enabling Environment



Capabilities and Resources



Institutional Arrangements



Capacity Development



Disaster Governance Mechanisms



Communication and Information Management

RECOMMENDATIONS



These recommendations are included in greater detail in the body of the report. Leveraging the results of this comprehensive assessment may allow the Government of Saint Kitts and Nevis and key development and disaster management partners to enable a more robust and sustainable disaster risk-reduction effort in Saint Kitts and Nevis that will contribute to saving lives and property.

IN LIGHT OF OUR FINDINGS, PDC MAKES THE FOLLOWING RECOMMENDATIONS:

1

Realign the disaster management structure to enable direct lines of communication and coordination between the National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD).

2

Review and update the National Disaster Management Act (NDMA) 2002 to establish the legal foundation necessary for effective disaster management.

3

Develop a national climate and disaster risk financing strategy to promote long-term economic and financial stability while adapting to climate change.

4

Develop a volunteer policy that establishes mechanisms and provisions for the successful integration of individuals and organizations into the national response system.

5

Strengthen communication and collaboration among the National Emergency Management Agency (NEMA), the Nevis Disaster Management Department (NDMD), through integration of unified national committees engaged in disaster management.

6

Incorporate disaster risk reduction (DRR) into development plans, climate change adaptation (CCA) initiatives, and policies at all levels of government and community decision-making.

7

Conduct a comprehensive planning audit to identify gaps in and among existing plans and update outdated ones.

8

Ensure that disaster management plans account for the complexities and potential cascading impacts associated with response to emergencies in densely populated communities and urban areas.

9

Increase the annual budgets for the National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD) to support the growing need for technical staff and expanded programs required to address the predicted rise in climate-related hazards.

10

Improve interoperability with international and local non-governmental organizations (NGOs) by creating policy to govern and guide the NGOs' response to impacts on Saint Kitts and Nevis.

11

Support necessary technical upgrades to the National Emergency Operations Center (NEOC) for improved response operability.

12

Strengthen all-hazards monitoring and communications systems, translating data into comprehensive early warning systems (EWS) capabilities.

13

Review local and regional supply chains to ensure the speed and quality of response operations through efficient storage, movement, and delivery of relief supplies.

14

Formalize disaster training and exercise (T&E) initiatives into a centralized program.

15

Utilize GIS-mapping capabilities and systems to address geospatial data and logistics to inform community-based disaster management and planning efforts.

16

Promote evidence-based decision-making by supporting a centralized multi-agency data repository for disaster management, risk reduction, and resilience.

17

Promote awareness and preparedness campaigns among residents, visitors, and businesses for natural and manmade hazards and climate change impacts.

18

Export successes and lessons learned through the capacity-building efforts of Saint Kitts and Nevis, including the model Safe School Policy, SMART Hospital initiative, and implementation of sustainable practices to support climate resilience and risk reduction nationally and internationally.



NDPBA

COUNTRY BACKGROUND

GEOGRAPHY

261 sq km

Land area

168 sq km

Saint Kitts

93 sq km

Nevis

135 km

Coastline length

Basseterre

Capital city

Land Use

89%

Urban (231 sq km)

23%

Agricultural (60 sq km)

42%

Forest (110 sq km)

East Caribbean Dollar (XCD)

Currency

Number of administrative units: 14 parishes (9 on Saint Kitts, 5 on Nevis).

Saint Kitts:

- Christ Church Nichola Town
- Saint Anne Sandy Point
- Saint George Basseterre
- Saint John Capisterre
- Saint Mary Cayon
- Saint Paul Capisterre
- Saint Peter Basseterre
- Saint Thomas Middle Island
- Trinity Palmetto Point

Nevis:

- Saint George Gingerland
- Saint James Windward
- Saint John Figtree
- Saint Paul Charlestown
- Saint Thomas Lowland

DEMOGRAPHICS

51,320

Total population (2022)

St. Kitts: 38,138

Nevis: 13,182



26

Physicians per 1k people



72

Average life expectancy



6.1

Teenage birth rate per 100 births.
Nevis only: 1.8

195 per sq km

Population density (2022)

226 per sq km

St. Kitts (2022)

141 per sq km

Nevis (2022)

30.7%

Urban population (2011)

69.3%

Rural population (2011)



4.2

Nurses and midwives per 1k people



12.7

Infant mortality rate per 1k live births.
Nevis only: 18



15.6

New HIV diagnoses rate per 100,000 persons

90% African descent

2.7% Caucasian

2.5% Mixed



4.3

Hospital beds per 1k people



316.5

Maternal mortality ratio per 100,000 live births



96%

Immunization coverage DPT3

0.76%

Average annual population growth (2022 est.)

ACCESS TO INFORMATION

96%

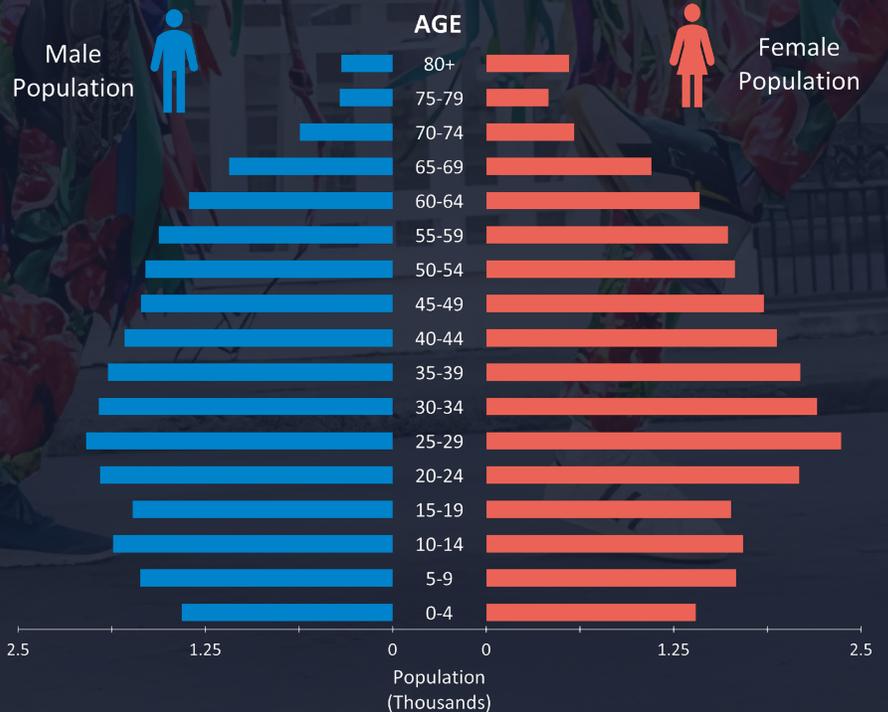
Net enrollment in primary school

97.9%

Net enrollment in secondary education

79%

Population with internet connection



ECONOMY

Major economic sectors

11.7%

Real estate/renting and business activities

12.7%

Financial services

13.9%

Transport, storage, and communication

15.9%

Construction

Key exports (2020)

US \$63.3 mil Machinery and transport equipment

US \$12.9 mil Beverages and tobacco

US \$12.5 mil Manufactured articles

Key imports (2020)

US \$190.5 mil Machinery and transport equipment

US \$175.6 mil Food and live animals

US \$113.6 mil Manufactured goods

KNA no longer has a sizeable productive sector after the abandonment of the sugar industry in 2005. What remains of the sector consists mainly of electrical and electronic equipment assembly on Saint Kitts for the Boeing Aerospace Company, along with one brewery. Agriculture takes place mainly on the island of Nevis.

Main driver of economy

60% of GDP

Tourism

478,184

Arrivals (Jan-March 2023): 478,184
(Saint Kitts: 469,498) (Nevis: 8,686)

4,045

Nevis only visitor arrivals (2019)



US \$961.5 million

Gross domestic product (GDP) in current prices (2022)



20,176.70

GDP per capita (2022)



2.1%

Inflation consumer prices, annual (2021)



-0.9%

Average annual growth in GDP (2021)



75%

Labor force participation rate (2016)



2.0%

Unemployment rate (2016)



4.5%

Youth unemployment rate (2016)



21.8%

Poverty rate (2007)



EC\$1,560

Monthly minimum wage (2022)



72.4%

Population covered by at least one social protection benefit (2020)



\$32,952,812

Remittances received (2022)

\$728 million

Imports (2020)

\$96 million

Exports (2020)

KEY INFRASTRUCTURE



2

Airports
Saint Kitts,
Robert L. Bradshaw
Nevis,
Vance W. Amory International Airport



4

Heliports



23

Seaports
(includes marinas, docks, and ferry terminals)



383 km

Roads



50 km

Railways

Saint Kitts

128

Bridges

9

Communication towers

33

Schools

1

Red Cross

3

Submarine cables

4

Submarine cable
landing points

Nevis

152

Bridges

4

Communication towers

12

Schools

1

Red Cross

EMERGENCY SERVICES

Saint Kitts

3

Fire stations

11

Police stations

24

Shelters

1

EOCs

3

Hospitals

12

Clinics

1

Water & wastewater
facilities

99%

Population using at least basic
drinking water services (2017)

Nevis

3

Fire stations

5

Police stations

22

Shelters

1

EOCs

1

Hospitals

6

Clinics

4

Water & wastewater
facilities

95%

Population using at least basic
sanitation services (2017)

4

Water and wastewater facilities:
1 (Saint Kitts), 3 (Nevis)

DISASTER MANAGEMENT

MAJOR CAPACITY IMPROVEMENTS/MILESTONES

- Federation's Sustainable Island State Agenda, presented most at the 28th United Nations Climate Change Conference (COP28).
- On February 4, 2022, Saint Kitts and Nevis were nationally and internationally recognized for completing and adhering to the Tsunami Ready Programme.

MAJOR DISASTER IMPACTS

Tropical Cyclone Omar (2008)

Deaths: 0

Affected: unknown

Losses: \$6.3 million USD

Severely damaged the Four Seasons Hotel - closed for more than 1 year

Tropical Cyclone Earl (2010)

Affected: unknown

Losses: 3 million USD

Tropical Storm Otto (2010)

Affected: unknown

Losses: 20 million USD

Tropical Cyclone Irma (2017)

Deaths: 0

Affected: 500

Losses: \$23.9 million USD



THE RVA

RISK AND VULNERABILITY ASSESSMENT RESULTS

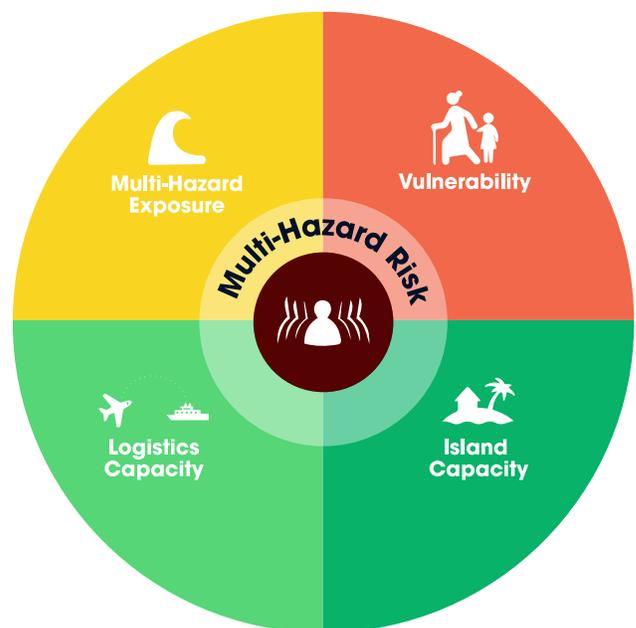
RISK AND VULNERABILITY

ASSESSMENT RESULTS

Provided in this section are the Risk and Vulnerability Assessment (RVA) results conducted by the Pacific Disaster Center as part of the National Disaster Preparedness Baseline Assessment.

For more information about PDC’s NDPBA Methodology, please visit: <https://www.pdc.org/wp-content/uploads/NDPBA-Data-Sharing-Guide-English-Screen.pdf>

SAINT KITTS AND NEVIS



COMPONENTS OF RISK



Multi-Hazard Exposure



Vulnerability



Island Capacity



Logistics Capacity



THE RVA

MULTI-HAZARD EXPOSURE

MULTI-HAZARD EXPOSURE

The following hazards were assessed by PDC as part of the National Disaster Preparedness Baseline Assessment:

Global Multi-hazard Exposure Rank (PDC Global RVA)

62 OUT OF 216 COUNTRIES / TERRITORIES ASSESSED

Climate Exposure 2050 Rank (PDC Regional Climate Assessment)

19 OUT OF 20 COUNTRIES / TERRITORIES ASSESSED

SAINT KITTS AND NEVIS HAZARD ZONES

COASTAL FLOODING

 **2.3%** Relative Population Exposure
1,202 Raw Population Exposure
 Exposed: **2%** Built Environment **10%** Crit. Infrastructure

EARTHQUAKE

 **100%** Relative Population Exposure
52,520 Raw Population Exposure
 Exposed: **100%** Built Environment **100%** Crit. Infrastructure

LANDSLIDE

 **26%** Relative Population Exposure
13,590 Raw Population Exposure
 Exposed: **24%** Built Environment **25%** Crit. Infrastructure

HURRICANE WINDS

 **100%** Relative Population Exposure
52,520 Raw Population Exposure
 Exposed: **100%** Built Environment **100%** Crit. Infrastructure

SEA LEVEL RISE

 **2%** Relative Population Exposure
951 Raw Population Exposure
 Exposed: **2%** Built Environment **8%** Crit. Infrastructure

VOLCANO

 **53%** Relative Population Exposure
27,670 Raw Population Exposure
 Exposed: **41%** Built Environment **48%** Crit. Infrastructure

EXTREME HEAT

 **100%** Relative Population Exposure
52,520 Raw Population Exposure
 Exposed: **100%** Built Environment **100%** Crit. Infrastructure

WILDFIRE

 **18%** Relative Population Exposure
9,571 Raw Population Exposure
 Exposed: **22%** Built Environment **16%** Crit. Infrastructure

TSUNAMI

 **36%** Relative Population Exposure
18,698 Raw Population Exposure
 Exposed: **37%** Built Environment **51%** Crit. Infrastructure

FLASH FLOOD

 **24%** Relative Population Exposure
12,558 Raw Population Exposure
 Exposed: **11%** Built Environment **13%** Crit. Infrastructure

Saint Kitts and Nevis: Coastal Flooding Hazard Exposure



VIEW IN DISASTERAWARE



POTENTIAL POPULATION EXPOSURE



1,202 (2.3%)
People exposed to coastal flooding

POTENTIAL BUILT ENVIRONMENT EXPOSURE



266 (2.3%)
Built environment exposed to coastal flooding

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



2 (33%)
Airports and Heliports



22 (96%)
Seaports



5 (7%)
Schools & Colleges



0 (0%)
EOCs



0 (0%)
Warehouses



0 (0%)
Shelters



0 (0%)
Hospitals & Clinics



1 (50%)
Waste Management



22 (40%)
Hotels & Resorts



0 (0%)
Fire Stations



1 (6%)
Police Stations



0 (6%)
Power Plants



12 (43%)
Bridges



3 (60%)
Fuel Terminals and Storage

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment exposure calculated using building footprints (OSM). Data: PDC, Climate Central, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Earthquake Hazard Exposure



VIEW IN DISASTERAWARE



POTENTIAL POPULATION EXPOSURE



52,520 (100%)

People exposed to earthquakes of an estimated MMI VII and above

POTENTIAL BUILT ENVIRONMENT EXPOSURE



11,495 (100%)

Built environment exposed to earthquakes of an estimated MMI VII and above

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



6 (100%)
Airports and Heliports



23 (100%)
Seaports



70 (100%)
Schools & Colleges



2 (100%)
EOCs



2 (100%)
Warehouses



46 (100%)
Shelters



22 (100%)
Hospitals & Clinics



2 (100%)
Waste Management



55 (100%)
Hotels & Resorts



6 (100%)
Fire Stations



16 (100%)
Police Stations



6 (100%)
Power Plants



280 (100%)
Bridges



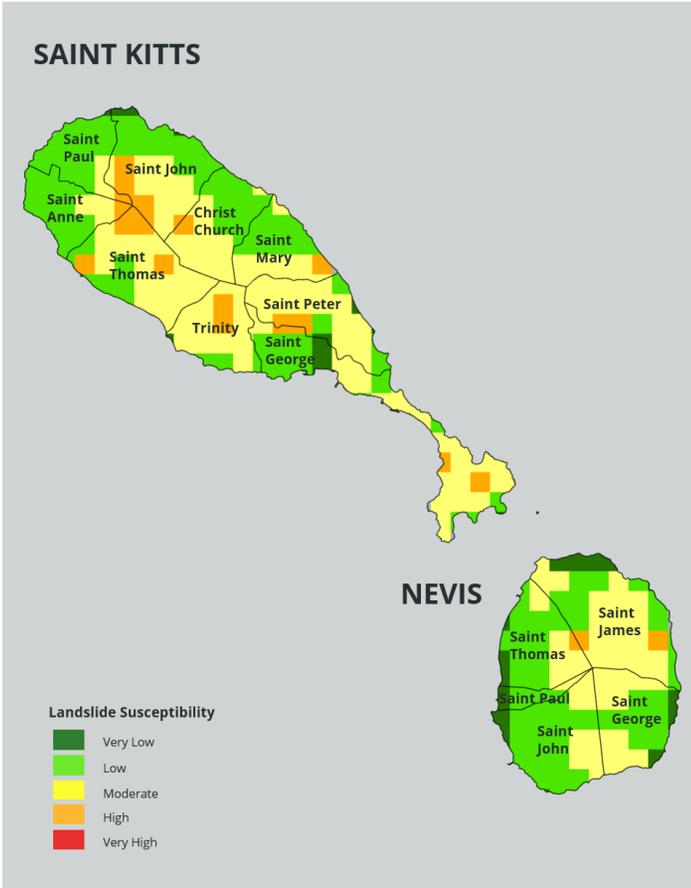
8 (100%)
Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment exposure calculated using building footprints (OSM). Data: PDC, Seismic Research Centre UWI, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Landslide Hazard Exposure



VIEW IN DISASTERAWARE



POTENTIAL POPULATION EXPOSURE



13,590 (26%)
 People exposed to moderate to very high landslide susceptibility

POTENTIAL BUILT ENVIRONMENT EXPOSURE



2,706 (23.5%)
 Built environment exposed to moderate to very high landslide susceptibility

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



1 (17%)
 Airports and Heliports



11 (48%)
 Seaports



10 (14%)
 Schools & Colleges



0 (0%)
 EOCs



0 (0%)
 Warehouses



10 (22%)
 Shelters



1 (5%)
 Hospitals & Clinics



1 (50%)
 Waste Management



17 (31%)
 Hotels & Resorts



0 (0%)
 Fire Stations



3 (19%)
 Police Stations



1 (17%)
 Power Plants



51 (18%)
 Bridges



1 (13%)
 Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment exposure calculated using building footprints (OSM). Data: PDC, NASA – LHASA 2.0, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Sea Level Rise Hazard Exposure



VIEW IN DISASTERWARE



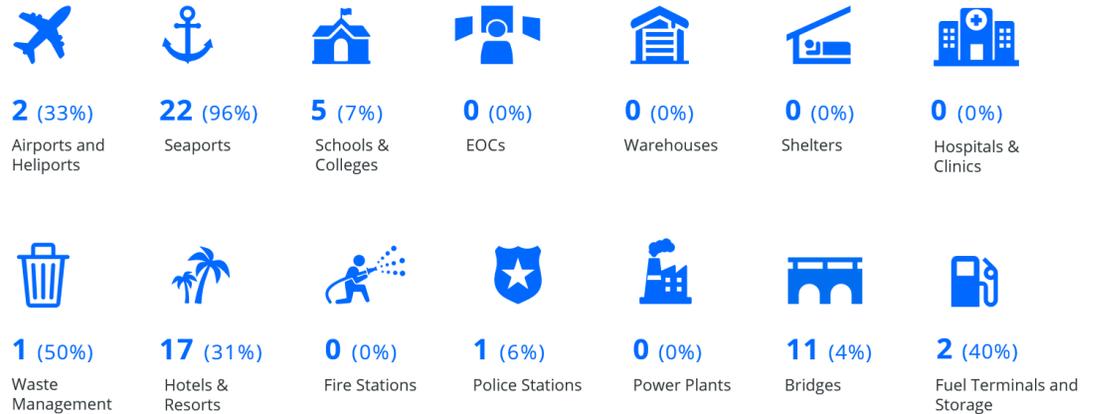
POTENTIAL POPULATION EXPOSURE



POTENTIAL BUILT ENVIRONMENT EXPOSURE



CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED

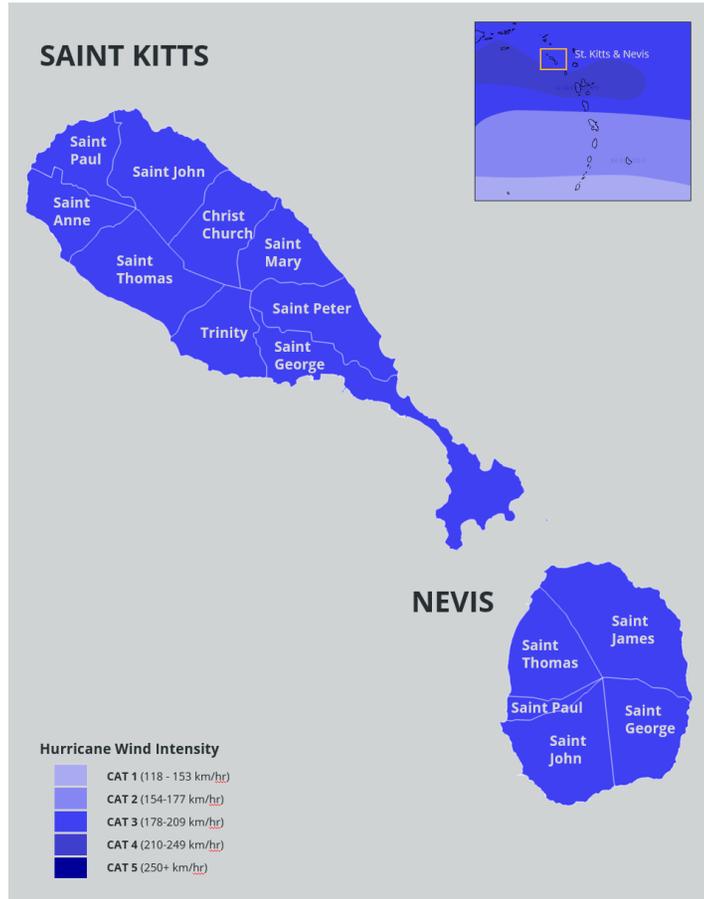


© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment exposure calculated using building footprints (OSM). Data: PDC, Climate Central, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Hurricane Wind Hazard Exposure



VIEW IN DISASTERAWARE



POTENTIAL POPULATION EXPOSURE



52,520 (100%)

People exposed to hurricane force winds of Category 3 and above

POTENTIAL BUILT ENVIRONMENT EXPOSURE



11,495 (100%)

Built environment exposed to hurricane force winds of Category 3 and above

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



6 (100%)
Airports and Heliports



23 (100%)
Seaports



70 (100%)
Schools & Colleges



2 (100%)
EOCs



2 (100%)
Warehouses



46 (100%)
Shelters



22 (100%)
Hospitals & Clinics



2 (100%)
Waste Management



55 (100%)
Hotels & Resorts



6 (100%)
Fire Stations



16 (100%)
Police Stations



6 (100%)
Power Plants



280 (100%)
Bridges



8 (100%)
Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment exposure calculated using building footprints (OSM). Data: PDC, Munich Reinsurance Company (Munich Re), OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Tsunami Hazard Exposure



VIEW IN DISASTERAWARE



POTENTIAL POPULATION EXPOSURE



18,698 (36%)

People exposed to tsunami

POTENTIAL BUILT ENVIRONMENT EXPOSURE



4,294 (37.4%)

Built environment exposed to tsunami

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



4 (67%)
Airports and Heliports



23 (100%)
Seaports



42 (60%)
Schools & Colleges



0 (0%)
EOCs



0 (0%)
Warehouses



14 (30%)
Shelters



13 (59%)
Hospitals & Clinics



2 (100%)
Waste Management



45 (81%)
Hotels & Resorts



4 (67%)
Fire Stations



12 (75%)
Police Stations



4 (67%)
Power Plants



121 (43%)
Bridges



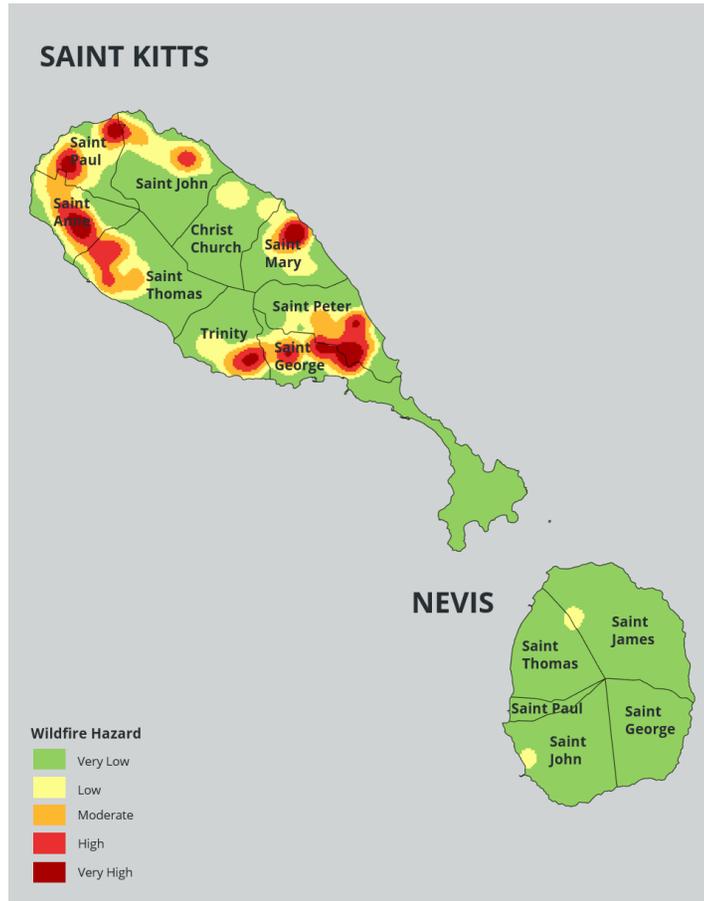
4 (50%)
Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment exposure calculated using building footprints (OSM). Data: PDC, NEMA, International Tsunami Information Center (ITIC) in the Caribbean, Nevis Disaster Management Department (NDMD), NASA, [OurAirports](#), Sky Vector, World Port Index, Saint Kitts Tourism, USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Wildfire Hazard Exposure



VIEW IN DISASTERWARE



POTENTIAL POPULATION EXPOSURE



9,571 (18%)

People exposed to wildfire (moderate to very high severity)

POTENTIAL BUILT ENVIRONMENT EXPOSURE



2,509 (22%)

Built environment exposed to wildfire (moderate to very high severity)

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



2 (33%)
Airports and Heliports



0 (0%)
Seaports



13 (19%)
Schools & Colleges



0 (0%)
EOCs



0 (0%)
Warehouses



6 (13%)
Shelters



1 (25%)
Hospitals & Clinics



1 (50%)
Waste Management



1 (2%)
Hotels & Resorts



1 (17%)
Fire Stations



0 (0%)
Police Stations



3 (50%)
Power Plants



19 (7%)
Bridges



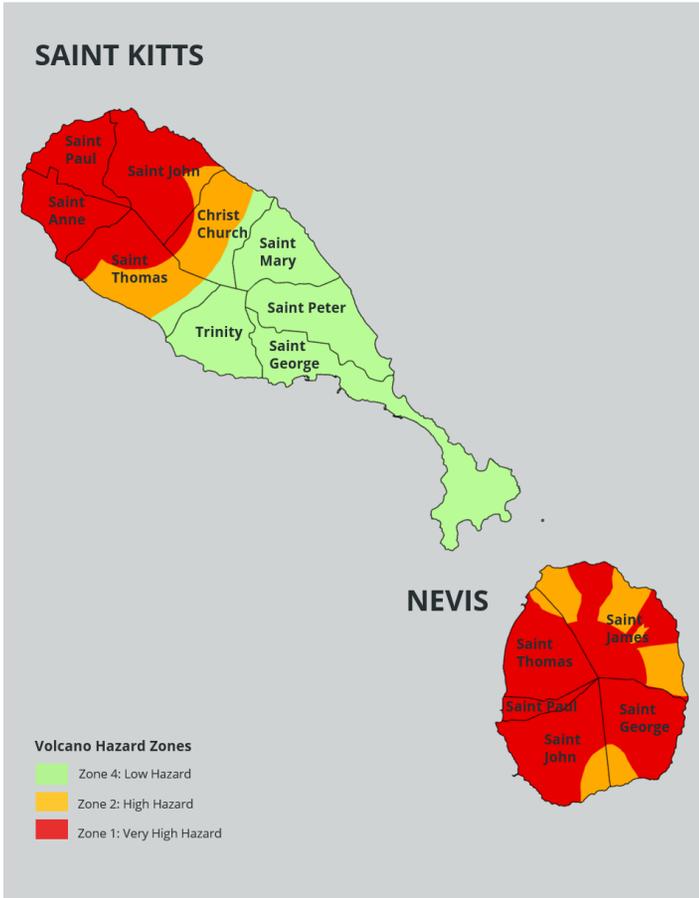
1 (13%)
Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment calculated using building footprints (OSM). Data: PDC, NASA – MODIS, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Volcano Hazard Exposure



VIEW IN DISASTERAWARE



POTENTIAL POPULATION EXPOSURE



27,670 (53%)

People exposed to volcano zones of high to very high

POTENTIAL BUILT ENVIRONMENT EXPOSURE



4,700 (41%)

Built environment exposed to volcano zones of high to very high

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



2 (33%)
Airports and Heliports



10 (43%)
Seaports



32 (46%)
Schools & Colleges



1 (50%)
EOCs



1 (50%)
Warehouses



29 (63%)
Shelters



9 (41%)
Hospitals & Clinics



1 (50%)
Waste Management



22 (40%)
Hotels & Resorts



4 (67%)
Fire Stations



9 (56%)
Police Stations



3 (6%)
Power Plants



197 (70%)
Bridges



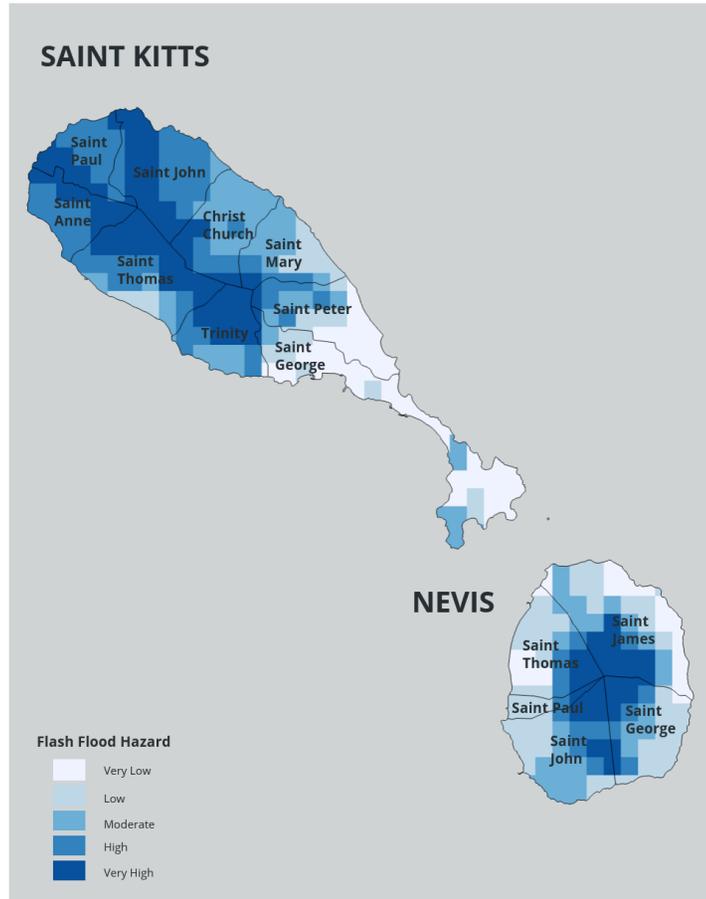
3 (38%)
Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment exposure calculated using building footprints (OSM). Data: PDC, UWI Seismic Research Unit, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Flash Flood Exposure



VIEW IN DISASTERAWARE



POTENTIAL POPULATION EXPOSURE



12,558 (24%)

People exposed to flash flooding (high and very high severity)

POTENTIAL BUILT ENVIRONMENT EXPOSURE



1,268 (11%)

Built environment exposed to flash flooding (high and very high severity)

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



0 (0%)

Airports and Heliports



1 (4%)

Seaports



17 (24%)

Schools & Colleges



0 (0%)

EOCs



0 (0%)

Warehouses



11 (24%)

Shelters



1 (25%)

Hospitals & Clinics



0 (0%)

Waste Management



7 (13%)

Hotels & Resorts



0 (0%)

Fire Stations



4 (25%)

Police Stations



1 (17%)

Power Plants



35 (13%)

Bridges



2 (25%)

Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) - All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment calculated using building footprints (OSM). Data: PDC, Joint Research Centre, European Commission, WorldClim, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

Saint Kitts and Nevis: Extreme Heat Exposure

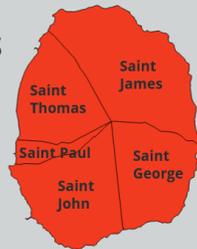


[VIEW IN DISASTERAWARE](#)

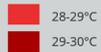
SAINT KITTS



NEVIS



Extreme Heat Hazard



POTENTIAL POPULATION EXPOSURE



52,520 (100%)

People exposed to extreme heat (28°C and above)

POTENTIAL BUILT ENVIRONMENT EXPOSURE



11,495 (100%)

Built environment exposed to extreme heat (28°C and above)

CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED



6 (100%)
Airports and Heliports



23 (100%)
Seaports



70 (100%)
Schools & Colleges



2 (100%)
EOCs



2 (100%)
Warehouses



46 (100%)
Shelters



22 (100%)
Hospitals & Clinics



2 (100%)
Waste Management



55 (100%)
Hotels & Resorts



6 (100%)
Fire Stations



16 (100%)
Police Stations



6 (100%)
Power Plants



280 (100%)
Bridges



8 (100%)
Senior and Child Care Homes

© 2015-2024 Pacific Disaster Center (PDC) – All rights reserved. Commercial use is permitted only with explicit approval of PDC | 1 FEB 2024 | <https://disasteraware.pdc.org> | Population exposure calculated using PDC's All Hazards Impact Model (AIM). Built environment calculated using building footprints (OSM). Data: PDC, GFDRR, OurAirports, Sky Vector, World Port Index, Saint Kitts Tourism, NEMA, Nevis Disaster Management Department (NDMD), USAID, PAHO, Clean Power Nevis, OpenCellID, OpenStreetMap, Google Maps.

MULTI-HAZARD EXPOSURE BY PARISH

	RANK	PARISH	INDEX SCORE
VERY HIGH	1	Saint George Basseterre	0.650
	2	Saint Anne Sandy Point	0.542
HIGH	3	Saint Thomas Middle Island	0.483
	4	Saint John Capisterre	0.459
	5	Saint Paul Capisterre	0.389
MODERATE	6	Saint George Gingerland	0.381
	6	Saint James Windward	0.381
	8	Saint Peter Basseterre	0.368
LOW	9	Saint John Figtree	0.336
	10	Saint Thomas Lowland	0.332
	11	Saint Paul Charlestown	0.302
VERY LOW	12	Trinity Palmetto Point	0.203
	13	Christ Church Nichola Town	0.064
	14	Saint Mary Cayon	0.050





THE RVA

VULNERABILITY

VULNERABILITY

Vulnerability measures the physical, environmental, social, and economic conditions and processes that increase susceptibility of communities and systems to the damaging effects of hazards. Vulnerability data is designed to capture the multi-dimensional nature of poverty, the inequality in access to resources, and the ability of a given area to adequately support the population. In coordination with stakeholders, the following indicators were selected to measure vulnerability subcomponents in the country. Breaking down each vulnerability subcomponent to the indicator level allows users to identify the key drivers of vulnerability to support risk reduction efforts and policy decisions.

Global Vulnerability Rank (PDC Global RVA)

108 OUT OF 204 COUNTRIES /
TERRITORIES ASSESSED

VULNERABILITY SUBCOMPONENTS AND INDICATORS



Household Infrastructure Vulnerability

- Households with Piped Water
- Household Access to Flush Toilets
- Housing Built Prior to 2000
- Households without Home Insurance



Economic Dependence

- Economic Dependency Ratio
- Population Age 65 and Over
- Population Under Age 15
- Youth Bulge

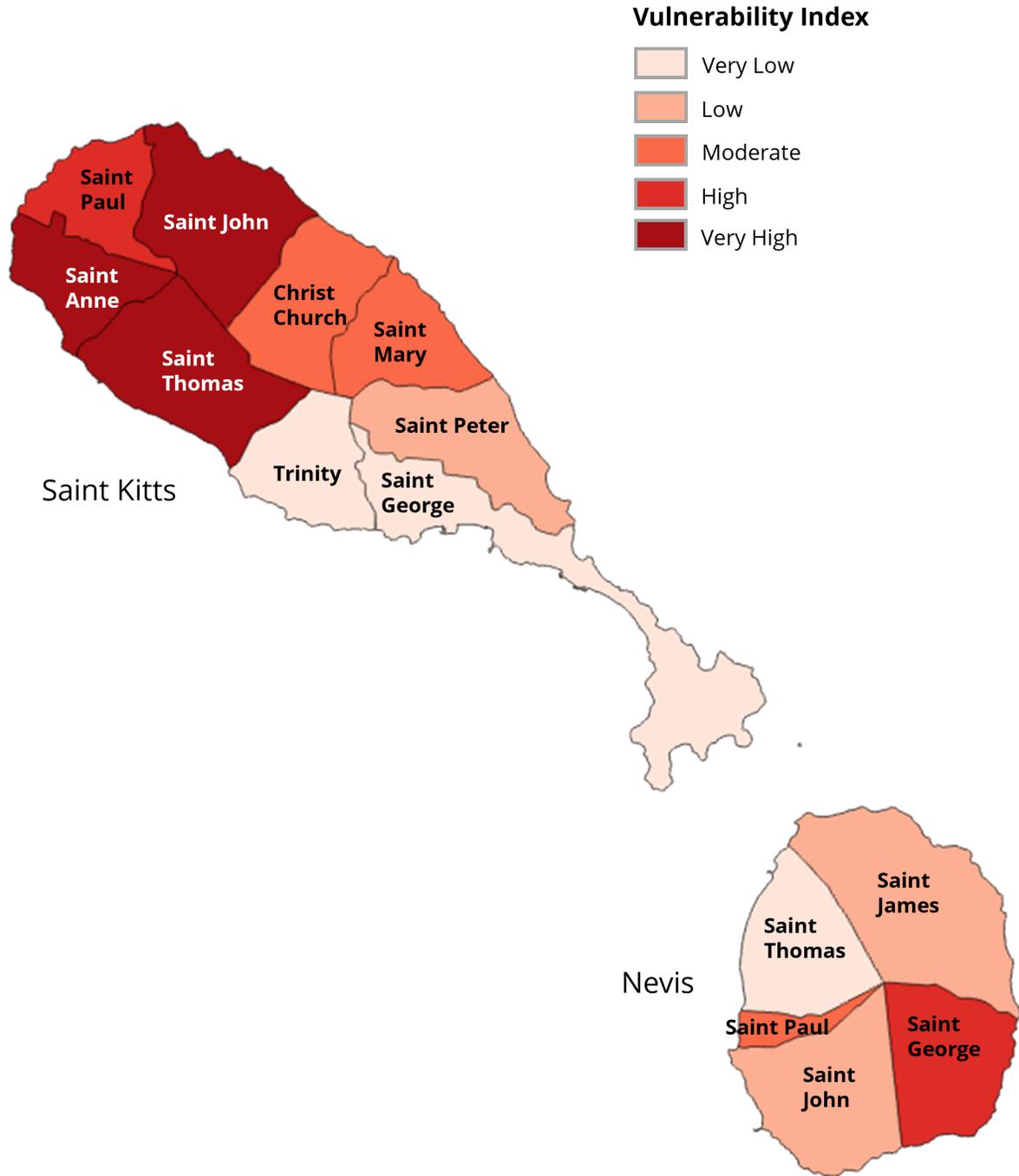


Environmental Pressures

- Coastline Exposure to Local/Global Threats
- Forest Loss
- Average Annual Population Change
- Population Density

VULNERABILITY BY PARISH

	RANK	PARISH	INDEX SCORE
VERY HIGH	1	Saint Anne Sandy Point	0.701
	2	Saint John Capisterre	0.669
	3	Saint Thomas Middle Island	0.651
HIGH	4	Saint Paul Capisterre	0.635
	5	Saint George Gingerland	0.559
MODERATE	6	Christ Church Nichola Town	0.552
	7	Saint Mary Cayon	0.540
	8	Saint Paul Charlestown	0.491
LOW	9	Saint Peter Basseterre	0.447
	10	Saint James Windward	0.426
	11	Saint John Figtree	0.401
VERY LOW	12	Saint Thomas Lowland	0.348
	13	Saint George Bassaterre	0.311
	14	Trinity Palmetto Point	0.257





THE RVA

ISLAND CAPACITY

ISLAND CAPACITY

Island Capacity represents the societal and institutional resources that the country can leverage and mobilize to prepare for and bear disaster impacts.

ISLAND CAPACITY SUBCOMPONENTS AND INDICATORS



Environmental Capacity

Protected Terrestrial Area
Net Carbon Flux
Croplands



Governance

Voter Participation
Household Waste Disposal



Health Care Capacity

Hospitals and Clinics per 1,000 Persons



Energy Capacity

Households with Electric Lighting
Households Using Gas for Cooking



Emergency Services Capacity

Average Distance to Police Station
Average Distance to Fire Station
Average Distance to Hospital or Clinic
Average Distance to Shelter



ISLAND CAPACITY BY PARISH

	RANK	PARISH	INDEX SCORE
VERY HIGH	1	Saint George Basseterre	0.833
	2	Saint Anne Sandy Point	0.741
HIGH	3	Saint Paul Charlestown	0.740
	4	Saint James Windward	0.673
	5	Saint John Figtree	0.671
MODERATE	6	Saint George Gingerland	0.637
	7	Saint Mary Cayon	0.584
	8	Trinity Palmetto Point	0.562
LOW	9	Saint Peter Basseterre	0.504
	10	Saint Thomas Lowland	0.478
	11	Saint Thomas Middle Island	0.423
VERY LOW	12	Saint Paul Capisterre	0.352
	13	Saint John Capisterre	0.344
	14	Christ Church Nichola Town	0.309





THE RVA

LOGISTICS CAPACITY

LOGISTICS CAPACITY

Logistics Capacity assesses the ability of the country to ensure efficient storage, movement, and delivery of resources key to effective humanitarian assistance and disaster relief operations.

LOGISTICS CAPACITY SUBCOMPONENTS AND INDICATORS



Maritime Logistics

- Average Distance to Seaport
- Ports per km of Coastline
- Distance to External Medium or Large Seaport



Air Support

- Average Distance to Airport or Heliport
- Distance to External C130 Airport



Transportation Capacity

- Road Density
- Gas Stations per 1,000 Persons



Warehouse Access

- Average Distance to Warehouse
- Distance to CDEMA Sub-Regional Focal Point



LOGISTICS CAPACITY BY PARISH

	RANK	PARISH	INDEX SCORE
VERY HIGH	1	Saint Paul Charlestown	0.764
	2	Saint George Basseterre	0.741
HIGH	3	Saint Thomas Lowland	0.699
	4	Saint James Windward	0.643
	5	Saint John Figtree	0.580
MODERATE	6	Saint George Gingerland	0.476
	7	Saint Peter Basseterre	0.474
	8	Trinity Palmetto Point	0.442
LOW	9	Saint Mary Cayon	0.413
	10	Saint Thomas Middle Island	0.335
	11	Saint John Capisterre	0.287
VERY LOW	12	Saint Anne Sandy Point	0.281
	13	Christ Church Nichola Town	0.262
	14	Saint Paul Capisterre	0.210





THE RVA

COPING CAPACITY

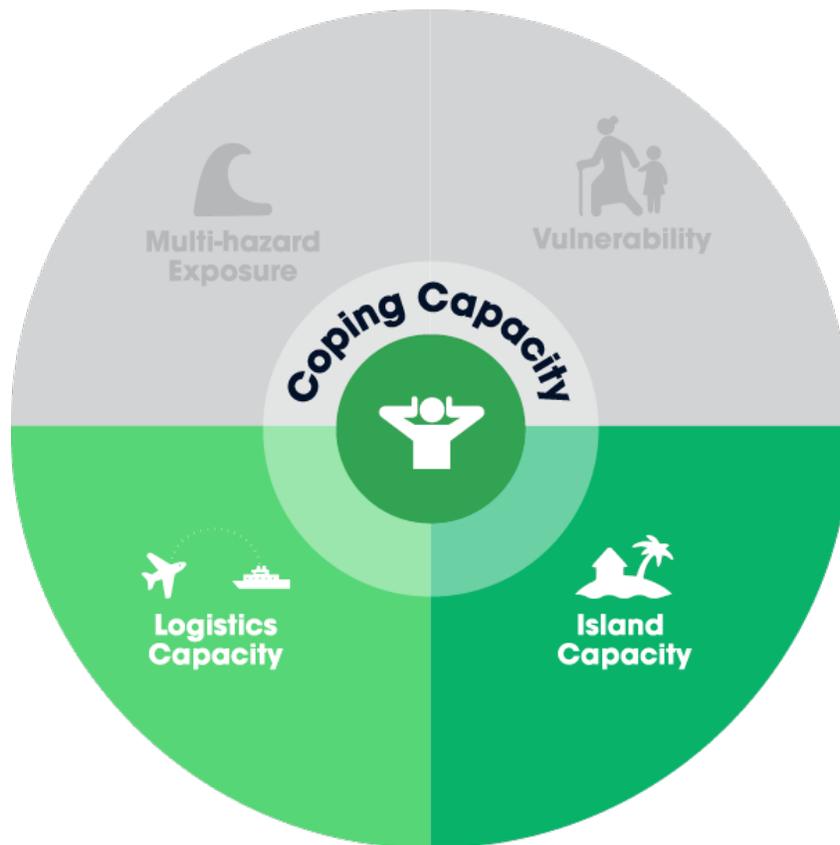
COPING CAPACITY

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

Global Coping Capacity Rank (PDC Global RVA)

50 OUT OF 198 COUNTRIES /
TERRITORIES ASSESSED

COPING CAPACITY SUBCOMPONENTS



COPING CAPACITY BY PARISH

	RANK	PARISH	INDEX SCORE
VERY HIGH	1	Saint George Basseterre	0.787
	2	Saint Paul Charlestown	0.752
HIGH	3	Saint James Windward	0.658
	4	Saint John Figtree	0.626
	5	Saint Thomas Lowland	0.588
MODERATE	6	Saint George Gingerland	0.556
	7	Saint Anne Sandy Point	0.511
	8	Trinity Palmetto Point	0.502
LOW	9	Saint Mary Cayon	0.498
	10	Saint Peter Basseterre	0.489
	11	Saint Thomas Middle Island	0.379
VERY LOW	12	Saint John Capisterre	0.316
	13	Christ Church Nichola Town	0.286
	14	Saint Paul Capisterre	0.281





THE RVA

RESILIENCE

RESILIENCE

Resilience was calculated by averaging Vulnerability and Coping Capacity. Results are displayed for Saint Kitts and Nevis below, while the main drivers of resilience and recommendations are provided in the detailed subnational profiles.

**Global Resilience Rank
(PDC Global RVA)**

59 OUT OF 194 COUNTRIES /
TERRITORIES ASSESSED

**Climate Resilience Rank
(PDC Regional Climate Assessment)**

6 OUT OF 15
COUNTRIES

RESILIENCE COMPONENTS



Vulnerability



Island Capacity

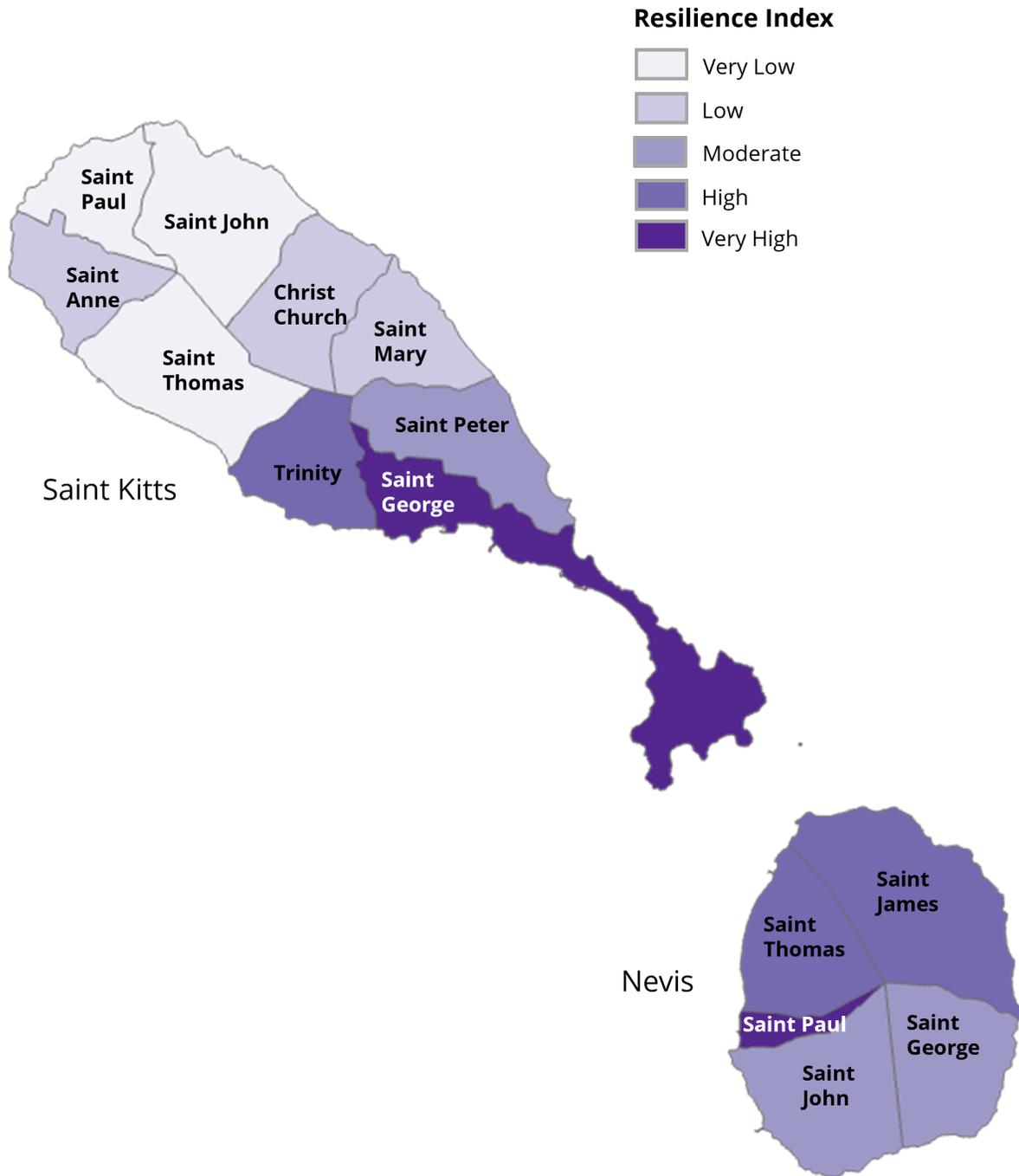


Logistics Capacity



RESILIENCE BY PARISH

	RANK	PARISH	INDEX SCORE
VERY HIGH	1	Saint George Basseterre	0.738
	2	Saint Paul Charlestown	0.631
HIGH	3	Trinity Palmetto Point	0.623
	4	Saint Thomas Lowland	0.620
	5	Saint James Windward	0.616
MODERATE	6	Saint John Figtree	0.612
	7	Saint Peter Basseterre	0.521
	8	Saint George Gingerland	0.499
LOW	9	Saint Mary Cayon	0.479
	10	Saint Anne Sandy Point	0.405
	11	Christ Church Nichola Town	0.367
VERY LOW	12	Saint Thomas Middle Island	0.364
	13	Saint John Capisterre	0.324
	14	Saint Paul Capisterre	0.323





THE RVA

MULTI-HAZARD RISK

MULTI-HAZARD RISK

Multi-hazard risk combines hazard exposure, susceptibility to impact, and the relative inability to absorb negative disaster impacts to provide a collective measure of how each parish may be affected by hazards and disasters as a whole over time. Analyzing risk information throughout all phases of disaster management – mitigation, preparedness, response, recovery – improves operations and promotes efficient resource allocation.

Multi-hazard risk was calculated by averaging multi-hazard exposure, vulnerability, and coping capacity. Results are displayed below, while additional detailed analysis of risk is provided in the subnational profiles report.

Global Multi-Hazard Risk Rank (PDC Global RVA)

112 OUT OF 193 COUNTRIES /
TERRITORIES ASSESSED

MULTI-HAZARD RISK COMPONENTS



Multi-Hazard Exposure



Vulnerability



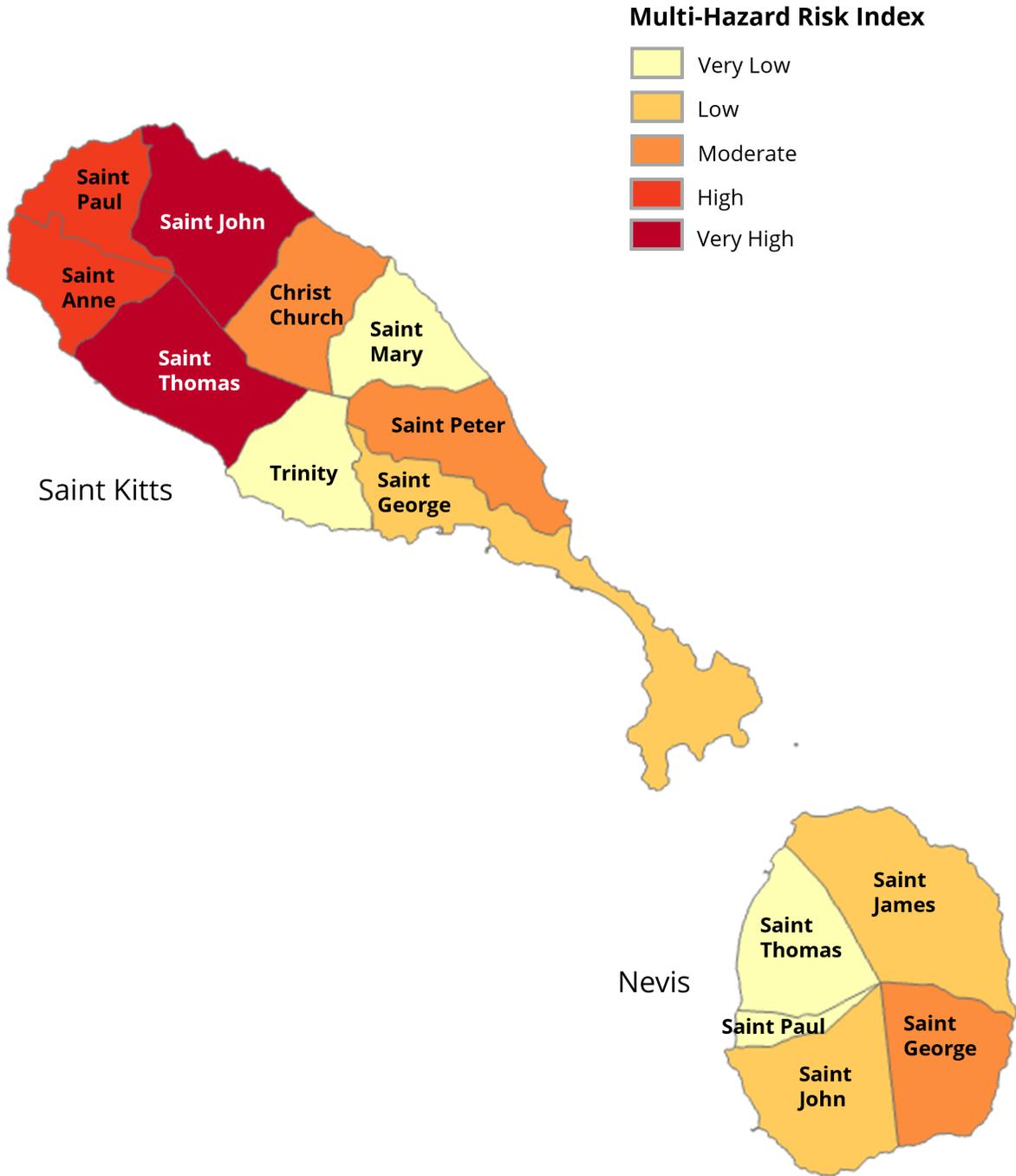
Island Capacity



Logistics Capacity

MULTI-HAZARD RISK BY PARISH

	RANK	PARISH	INDEX SCORE
VERY HIGH	1	Saint John Capisterre	0.604
	2	Saint Thomas Middle Island	0.585
HIGH	3	Saint Paul Capisterre	0.581
	4	Saint Anne Sandy Point	0.577
MODERATE	5	Saint George Gingerland	0.461
	6	Christ Church Nichola Town	0.444
	7	Saint Peter Basseterre	0.442
LOW	8	Saint George Basseterre	0.391
	9	Saint James Windward	0.383
	10	Saint John Figtree	0.370
VERY LOW	11	Saint Thomas Lowland	0.364
	11	Saint Mary Cayon	0.364
	13	Saint Paul Charlestown	0.347
	14	Trinity Palmetto Point	0.319





THE DMA

DISASTER MANAGEMENT ANALYSIS

SUMMARY OF FINDINGS

DISASTER MANAGEMENT ANALYSIS

Provided in this section are the results of the Disaster Management Analysis (DMA) conducted as part of the Saint Kitts and Nevis National Disaster Preparedness Baseline Assessment (NDPBA). The recommendations presented as part of this analysis support opportunities to enable more effective prioritization of risk-reduction and resilience-building initiatives and investments.

Considering a spectrum of operational achievements and challenges, the DMA examined six core disaster management themes: Enabling Environment; Institutional Arrangements; Disaster Governance Mechanisms; Capabilities and Resources; Capacity Development; and Communication and Information Management.



DISASTER MANAGEMENT ANALYSIS RESULTS

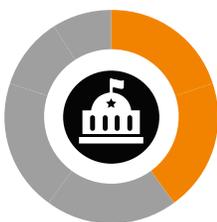
CURRENT STATUS

Limited or No Capacity



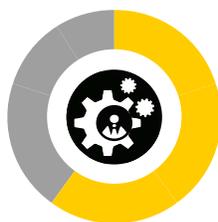
Advanced Capacity

DISASTER MANAGEMENT ANALYSIS THEME AND SUBTHEMES



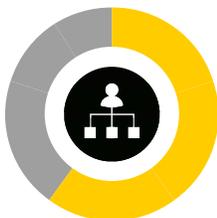
A. Enabling Environment

- Legal Instruments
- Financial Resources
- Strategies
- Public Confidence and Political Support
- Attitudes and Experience



D. Capabilities and Resources

- Dedicated Facilities and Equipment
- Human Resources
- Inventory of Commodities and Supplies
- Targeted Functional Capabilities



B. Institutional Arrangements

- Organizational Structures
- Leadership Arrangements
- Mechanisms for Stakeholder Engagement



E. Capacity Development

- Capacity Development Plans and Strategies
- Training and Education Programs and Facilities
- Monitoring and Evaluation Processes and Systems



C. Disaster Governance Mechanisms

- Plans and Processes
- Command, Control, and Coordination Systems
- Emergency Operations Centers



F. Communication and Information Management

- Hazard and Risk Analysis Systems
- Monitoring and Notifications
- Disaster Assessment
- Information Collection, Management, and Distribution
- Media and Public Affairs

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

DISASTER MANAGEMENT ANALYSIS RESULTS

The disaster management analysis (DMA) was conducted for both Saint Kitts and Nevis. Findings and recommendations presented in this section represent the unique challenges faced by the country as a whole and by each island.

Notable Achievements

Saint Kitts and Nevis received recognition for completing and adhering to the United Nations Educational, Scientific and Cultural Organization Intergovernmental Oceanographic Commission (UNESCO/IOC) Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazard Warning Systems for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS) Tsunami Ready Programme. This compliance has empowered vulnerable coastal communities within the nation to take effective measures in the face of potential tsunami threats.

In 2017, Saint Kitts and Nevis signed the Declaration of School Safety, forming the cornerstone for the systematic implementation of strategies focused on disaster risk reduction and the enhancement of climate change resilience within the broader context of the Caribbean Safe School Initiative. A particular focus of this declaration lies in enhanced coordination and cooperation mechanisms among stakeholders, extending from the community, regional, national, and international levels. Emphasis is also placed on cultivating collaboration among Caribbean Ministries of Education, relevant private sector, non-governmental organizations, and various regional and international entities.

In addition, Saint Kitts and Nevis engaged in the “Smart Hospital Initiative” pilot project in collaboration with the Pan American Health Organization (PAHO). This initiative retrofits hospitals and health centers to improve their structural, non-structural, and functional standards to support climate change mitigation and enhance disaster resilience across the country. Collectively, these initiatives steer the nation towards a trajectory of sustainability and resilience.

DISASTER MANAGEMENT ANALYSIS RESULTS

Unique Disaster Management Environment

Although both the National Emergency Management Agency (NEMA) and the Nevis Disaster Management Department (NDMD) are guided by the National Disaster Management Act of 2002, there is a divergence in structures, hierarchies, frameworks, and processes. This dynamic has contributed to complex bureaucratic and logistical difficulties in the implementation of disaster risk reduction and management efforts that impede effective coordination between the islands.

Saint Kitts and Nevis have a unique governmental and operational environment not seen in the region. Each island has unique capabilities and challenges that require thoughtful consideration. However, when disaster strikes it is imperative that a coordinated and unified response is implemented to save lives and reduce losses. The section below highlights the operational environment and considers a key structural change to improve service delivery during times of disaster.

National Emergency Management Agency (NEMA)

The National Emergency Management Agency (NEMA), as the federal authority, serves as the official representative in regional and international disaster management structures. In addition, NEMA serves as the central entity that collaborates with CDEMA, the United Nations International Strategy for Disaster Reduction (UNISDR), the Association of Caribbean States, and the United States Southern Command (US SOUTHCOM).

NEMA is headed by the National Disaster Coordinator, who reports directly to the Prime Minister and to the Permanent Secretary, Ministry of National Security. As such, NEMA's disaster management efforts enjoy access to the highest levels of government.

DISASTER MANAGEMENT ANALYSIS RESULTS

Nevis Disaster Management Department (NDMD)

In recognition of the island's individual and unique disaster management environments with challenges that require a heightened level of preparedness and planning for response and recovery operations, the Nevis Disaster Management Department (NDMD) has been proactive in their efforts to reduce the vulnerabilities and increase the coping capacities of the five island parishes.

The Disaster Management Framework on Nevis Island is made up of various entities:

- Nevis Island Assembly Cabinet of Ministers
- Nevis Disaster Management Committee (NDMC)
- Nevis Disaster Management Department (NDMD)
- Disaster Management Sub Committees
- District Chairpersons
- Community Emergency Response Teams
- Volunteers

As of December 2022, The NDMD is now positioned under the Ministry of Communications, Works, Water Services, Physical Planning and Environment, Posts, Labour, and Disaster Management.

National Disaster Management

Disaster management best practices support a well-structured and seamless alignment of agencies to improve all phases of disaster management. In the event of an emergency encompassing both islands the current structure will hinder effective disaster management and lead to cascading logistical difficulties, with potentially catastrophic outcomes in lost lives and property.

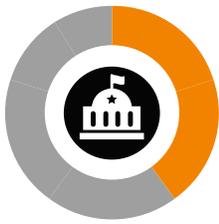
It is highly recommended that efforts to improve the institutional arrangements and necessary governance mechanisms to enable more effective communication and coordination between NEMA and NDMD be prioritized. A focus on clarifying and right sizing the roles and responsibilities of all disaster management functions would help in achieving a formal harmonization of the frameworks.

The operationalization of disaster management will be further enhanced by provisions for integration and mandatory data exchange, regular joint training and exercises, and a melding of island stakeholders, such as NGOs, the private sector, and CBOs, in every phase of the disaster management cycle. These provisions will ensure a more seamless disaster management process, contributing to the overall resilience of the community and providing vital support and services during all disaster management phases.



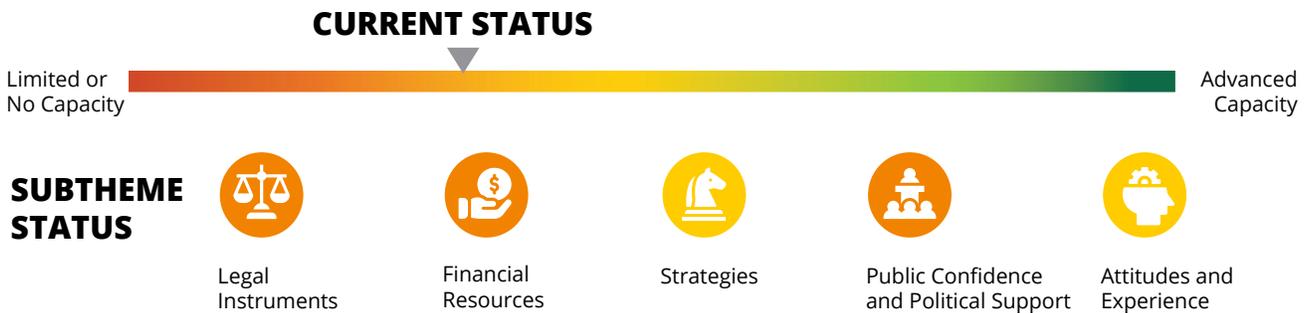
THE DMA

ENABLING ENVIRONMENT



ENABLING ENVIRONMENT

Findings indicate the Saint Kitts and Nevis current Enabling Environment shows early capacity development.



Saint Kitts and Nevis shows early capacity development to support increasing the capacity of the disaster management structures, authorities, processes, and capabilities enabled by their legal, institutional, financial, and social instruments. These rules, laws, policies, and other instruments allow capacity to develop and to achieve an effective risk reduction vision. Characterization of an enabling environment covers a range of issues from the existence and applicability of legislation to disaster management stakeholders’ attitudes and experience. The DMA analyzed the following sub-themes that characterize the enabling environment of Saint Kitts and Nevis: Legal Instruments; Financial Resources; Strategies; Public Confidence and Political Support; and Attitudes and Experiences.

ENABLING ENVIRONMENT



LEGAL INSTRUMENTS

FINDINGS

The National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD) is currently facing significant challenges in fulfilling its mission requirements due in part to the notable legacy of bureaucratic hinderances in governing disaster management.

In its current state the National Disaster Management Act (NDMA) 2002, is insufficient to facilitate effective management of disasters due to the overarching complexities of processes and structures within and between Saint Kitts and Nevis.

An overhaul of the NDMA 2002 is needed to eliminate unnecessary red tape and enhance NEMA and NDMD's ability to collectively engage in effective disaster management (DM).

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Conduct a multistakeholder audit of the NDMA, to address bureaucratic complexities and better operationalize DM structures with a focus on improved delivery of service.
- ✔ Expand provisions to support NEMA/NDMD, including technical staffing capabilities, and support for extensive outreach and logistical demands.
- ✔ Ensure NEMA/NDMD has the necessary jurisdiction to enforce minimum compliance standards on the private sector, thereby promoting disaster management, response, and recovery principles across the whole of society.
- ✔ Prioritize the movement of the CDM Bill through the necessary legislative process.

SEDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

A, B, C, F

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

7, 11, 13, 15

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

ENABLING ENVIRONMENT



FINANCIAL RESOURCES

FINDINGS

Saint Kitts and Nevis has championed initiatives focused on “Disaster Risk Financing Strategies” and optimizing financial frameworks to enhance the nation’s resilience. As these initiatives are implemented, it is important that funding is prioritized and allocated to meet the disaster management (DM) needs of the National Emergency Management Agency (NEMA) and the Nevis Disaster Management Department (NDMD).

In directing adequate funding to support NEMA and NDMD, the country is investing in overall enhanced capacity building. These efforts include ensuring timely communication and coordination mechanisms, improving cross-collaboration among national and international partners, and promoting community resilience-building activities.

These committed investments supported by direct funding will strengthen the nation’s readiness to anticipate, respond to, and recuperate from disasters.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Establish a framework for a National Climate and Disaster Risk Financing Strategy that allows for financing in the event of a disaster. Include establishment of formal programs for:
 - National Flood Insurance
 - Catastrophe Insurance
 - Public Assets Financial Protection
- ✔ Augment financial needs with micro-loans if the criteria for conventional loan options are not met.
- ✔ Explore formal National Incentive Policies offered to regional and national partners and tailored to sector specific needs.
- ✔ Appeal to the Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC) to expand insurance holdings with inclusion of Excessive Rainfall policies.

SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

Global Targets

D, F

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

7, 8, 9, 10, 11, 12, 13, 15, 17

Paris Agreement

7.1, 8.1

CDEMA CDM Priority Areas

1, 2, 3, 4 (4.2, 4.3, 4.4)

Limited or No Capacity

Early Capacity Development

Achievement with Significant Limitation

Substantial Progress with Some Limitation

Advanced Capacity

ENABLING ENVIRONMENT



STRATEGIES

FINDINGS

The Federation’s business environment is marked by notable differences from other Caribbean jurisdictions in terms of insurance requirements, safety compliance, and evacuation exercise clauses.

Businesses maintain insurance without requisite provisions mandating safety compliance or the integration of evacuation exercise. However, there has been a commendable initiative within the banking sector to establish uniform processes and procedures for building inspections, administered by the Physical Planning Department.

Saint Kitts and Nevis would benefit from extending safety measures to all businesses and incorporating legislative clauses that make safety compliance and mandatory evacuation exercises an integral component of insurance requirements with regulation authority under the NDMD and NEMA. This legislation would contribute significantly to enhancing safety standards within the Federation.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Introduce legislation to require businesses to incorporate mandatory safety compliance and evacuation exercise within insurance coverage.
- ✔ Expand standardized building inspections with uniform safety practices and compliance, using the banking sector as a model.
 - Collaborate with the Physical Planning Department to provide a comprehensive framework for building inspections.
- ✔ Review and align the regulatory framework with safety and compliance standards prevalent in other Caribbean jurisdictions.
 - Identify gaps and discrepancies and harmonize practices.

SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

Global Targets

B, C, D, E

Guiding Principles

(a), (b), (c), (e), (f), (g), (h), (i), (j), (k), (m)

SDGs

8, 9, 10, 12, 13, 15, 16

CDEMA CDM Priority Areas

1(1.2, 1.4), 2(2.1, 2.2), 3, 4(4.1, 4.4)

Limited or No Capacity

Early Capacity Development

Achievement with Significant Limitation

Substantial Progress with Some Limitation

Advanced Capacity

ENABLING ENVIRONMENT





THE DMA

INSTITUTIONAL ARRANGEMENTS



INSTITUTIONAL ARRANGEMENTS

Findings indicate Saint Kitts and Nevis’ Institutional Arrangements show some progress with significant limitations.



SUBTHEME STATUS



Organizational Structures



Leadership Arrangements



Mechanisms for Stakeholder Engagement

The organizational and institutional structures through which disaster management capacity forms are indicators of Saint Kitts and Nevis’ Institutional Arrangements. By examining the organization and composition of diverse agencies and individuals that constitute a nation’s disaster management capacity—detailing the relationships and collaboration between them — tangible opportunities for increased effectiveness are often revealed. Saint Kitts and Nevis has shown progress within the organizational and institutional structures, leadership, and their engagement with disaster management stakeholders.

INSTITUTIONAL ARRANGEMENTS



MECHANISMS FOR STAKEHOLDER ENGAGEMENT

FINDINGS

Volunteers are a critical component to the success of disaster management. The Federation currently operates an effective community resilience program featuring 8 Community District Committees and 11 key areas of focus. Volunteers serve as key liaisons between the community, the Red Cross, the National Emergency Management Agency (NEMA), and the Nevis Disaster Management Department (NDMD).

The need has been identified to integrate volunteers and volunteer organizations more systematically into the disaster management structure to improve efficiency, coordination, and credibility of emergency response initiatives while also ensuring quality service delivery.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Establish a formalized role for volunteers and volunteer organizations to engage in preparedness and response efforts.
- ✔ Develop the necessary volunteer policy and mechanisms for successful integration of individuals/organizations into the formalized national response system.
- ✔ Secure proper recruitment, training, and tracking of both volunteers and their credentials for guaranteed reliability and availability.
- ✔ Ensure accreditation of volunteers involved in technical responsibilities and providing direct support to NEMA and NDMD.
 - Volunteers should undergo training and/or receive accreditations for technical tasks if they are directly supporting the government's disaster management efforts.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

D, F

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

3, 7, 9, 10, 11, 13, 15, 16, 17

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.3, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

INSTITUTIONAL ARRANGEMENTS: NEVIS



ORGANIZATIONAL STRUCTURES

FINDINGS

As of December 2022, The NDMD is now positioned under the Ministry of Communications, Works, Water Services, Physical Planning and Environment, Posts, Labour, and Disaster Management.

This dynamic complicates the already complex bureaucratic nuances present in the collaborative efforts between DM within Nevis and Saint Kitts.

A more direct alignment of organizations would facilitate a unified and consistent approach to critical information sharing between both NDMD and NEMA. Such a move would also assist in improved coordination and enhanced decision-making processes promoting a more cohesive environment to engage in DM planning throughout the two regions.

RECOMMENDATIONS

To support NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Realign the national disaster management structure to enable direct lines of communication and coordination between NEMA and NDMD.
- ✔ Integrate mandatory data exchange as part of a collaborative effort between NEMA and NDMD to facilitate seamless sharing of critical information and real-time data.
- ✔ Engage stakeholders to enhance efficiency and integration through discussions and decision-making processes related to the granting of federal authority and data exchange. Input will be crucial in implementing these changes effectively.
- ✔ Ensure regular joint NDMD-NEMA training and exercises to facilitate multi-level collaboration and coordination.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

D, F

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

3, 7, 9, 10, 11, 13, 15, 16, 17

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.3, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity



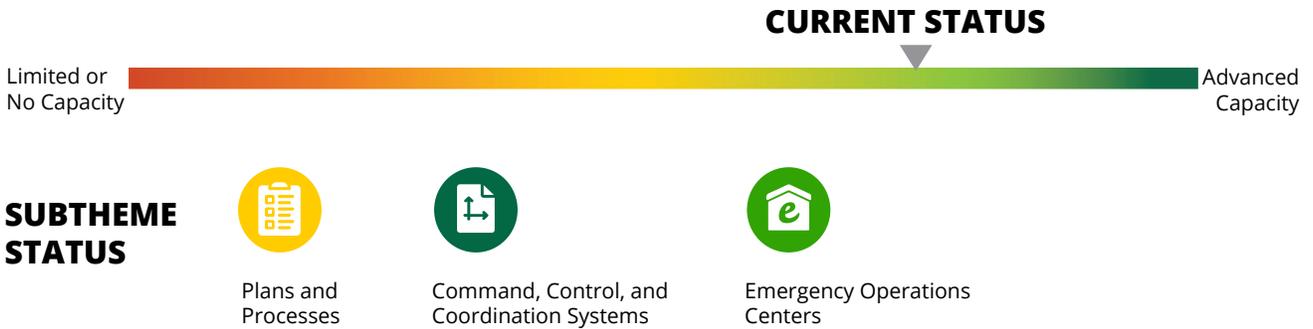
THE DMA

DISASTER GOVERNANCE MECHANISMS



DISASTER GOVERNANCE MECHANISMS

Findings indicate that Saint Kitts and Nevis' Disaster Governance Mechanisms show substantial progress with some limitations.



Disaster management efforts are most effective when guided by standardized, formalized systems and procedures that dictate how and by whom activities are conducted. The effectiveness of all disaster management phases, including disaster preparedness, hazard mitigation, response, and recovery, is dependent on the establishment and documentation of such mechanisms. The DMA analyzed the following sub-themes that characterize the Disaster Governance Mechanisms of Saint Kitts and Nevis: Plans and Processes; Command, Control, and Coordination Systems; and Emergency Operations Centers.

DISASTER GOVERNANCE MECHANISMS



PLANS AND PROCESSES

FINDINGS

The Saint Kitts National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD) has made progress towards strengthening capacity to prepare for, respond to, and recover from disasters.

The designation of an official program within NEMA and NDMD dedicated to overseeing and bolstering disaster management (DM) and disaster risk reduction (DRR) capabilities would be beneficial for the implementation of focused and collaborative strategies necessary to augment existing capacity. This centralized responsibility between NEMA/NDMD will improve coordination, streamline initiatives, and optimize asset allocation to address and advance DM and DRR capacity and resource requisites.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Formulate and disseminate DM and DRR development plans and/or strategies to drive initiatives towards advanced capacity.
- ✔ Establish a designated program within NEMA and NDMD to oversee and facilitate coordination and support of capacity development efforts for DM and DRR.
 - Provision of authority to support key sectors and requirements on incorporation of DRR into plan development, implementation, and maintenance.
 - Integrate vulnerability and gender-based assessments into national and district-level planning processes.
 - Include mechanisms for public engagement on national and local DRR strategies.
- ✔ Conduct systemic evaluations to assess current capacity and improve resource requirements across sectors for DM and DRR on a predetermined basis.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

D, F

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

11, 13, 14, 15, 16, 17

CDEMA CDM Priority Areas

1 (1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.3, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

DISASTER GOVERNANCE MECHANISMS



PLANS AND PROCESSES

FINDINGS

Saint Kitts National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD) would benefit from formally integrating succession planning into Continuity of Government (COG) plans and policies. It would benefit all stakeholders in Saint Kitts and Nevis for NEMA and NDMD to provide leadership, planning templates, and training resources to promote COG and BCP planning among government and private sector enterprises.

Additionally, harmonizing COG and BCP efforts throughout the Federation is essential to ensure the provision of critical services, while upholding the objectives of disaster management. This focus on promoting sustainable governance principles results in enhanced standards and systematic oversight of vital personnel and infrastructure.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Develop and disseminate a standardized template for COG and BCP, led by NEMA and NDMD to facilitate consistency in planning throughout Saint Kitts and Nevis.
- ✔ Build upon the relationships already established with local volunteers, NGOs, and the private sector through joint working groups and dedicated points of contact to facilitate discussions and information sharing.
- ✔ Create formal mechanisms for sharing critical information, data, and resources to include access to real-time data, such as weather forecasts and disaster impact assessments, which can be crucial for decision-making during a crisis.
- ✔ Establish and integrate into plans and protocols memorandums of understanding (MOUs) for effective resource allocation.
- ✔ Develop joint COG/BCP training and exercises to ensure alignment in response and recovery procedures.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

F

Guiding Principles

(b), (d), (e), (f), (g), (h), (j), (k), (l), (m)

SDGs

4, 7, 11, 12, 13, 15, 16

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

DISASTER GOVERNANCE MECHANISMS: NEVIS



PLANS AND PROCESSES

FINDINGS

Memorandums of Understanding (MOUs) are essential to secure limited assets and resources vital for operational capacity and comprehensive disaster preparedness, response, and recovery efforts. The Nevis Disaster Management Department (NDMD) would benefit by securing focused MOUs in critical areas such as medical provisions and services, transportation needs, and information governance and communication coordination.

The Federation, owing to its extensive engagement with stakeholders, volunteers, and community responders, possesses a significant capacity for swift and effective response, as well as mobilization. This heightened level of community involvement is necessary for reinforcing support during critical phases of disaster management. Securing MOUs would further provide NDMD with a framework to allocate and optimize resources, strategically directing efforts where they are most needed and enhancing collaboration and coordination across crucial sectors for effective disaster management.

RECOMMENDATIONS

To support NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Secure MOUs to provide NDMD with a systematic approach to securing assets and resources, ensuring a coordinated response within the following areas:
 - Medical
 - Transportation
 - Information/Communication
- ✔ Outline clear roles and responsibilities within the MOUs to enable efficient mobilization of volunteers, responders, and resources.
- ✔ Define protocols within MOUs for efficient and timely information management, ensuring the prompt dissemination of critical information during a disaster.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

D, F

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (k), (l), (m)

SDGs

9, 11, 13, 15, 16

CDEMA CDM Priority Areas

1 (1.1, 1.4), 2 (2.1, 2.2, 2.3), 3 (3.2), 4 (4.2, 4.3, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

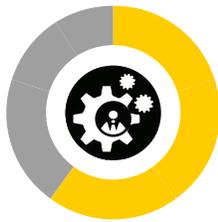
■ Advanced Capacity





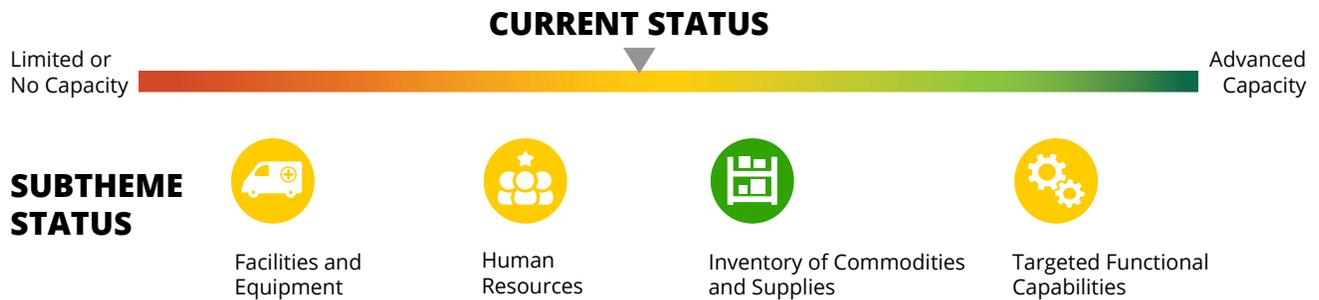
THE DMA

CAPABILITIES AND RESOURCES



CAPABILITIES AND RESOURCES

Findings indicate Saint Kitts and Nevis' current Capabilities and Resources show achievement with significant limitations.



The nature and extent of skills, knowledge, supplies, resources, equipment, facilities, and other capacity components dedicated to meeting disaster management needs is an indication of Saint Kitts and Nevis' overall capabilities and resources. The DMA examines these components, the source and size of surge capacities available in times of disaster, and a broad array of disaster-focused functional capabilities like search and rescue, sanitation, and security. For this analysis, the following core thematic areas were reviewed: Dedicated Facilities and Equipment; Human Resources; Inventory of Commodities and Supplies; Targeted Functional Capabilities.

CAPABILITIES AND RESOURCES



HUMAN RESOURCES

FINDINGS

Saint Kitts National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD) has demonstrated commendable dedication in their capacity-building and community engagement efforts, despite facing chronic understaffing and financial limitations. Streamlining bureaucratic processes through legal provisions, to allow for consistent funding mechanisms for disaster management (DM), would serve as a pivotal measure in Saint Kitts and Nevis and elevate the overall resilience of the nation.

A properly staffed and funded NEMA/NDMD would optimize evidence-based decision making through evaluation of data analytics and research opportunities related to disaster risk reduction (DRR), sustainable development goals (SDGs), and climate change adaptation (CCA) efforts.

Staffing shortages often present challenges to effectively fulfill crucial disaster management roles. Additional technical staffing would augment existing capacities providing both NEMA and NDMD the ability to continue to advance their sustainable energy and renewable resource initiatives by 2030.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Advocate for increased budget allocations to enhance staffing and program capabilities.
- ✔ Prioritize augmentation of volunteer resources, such as Youth Programs and Volunteer Corps, to create a more robust DM system.
- ✔ Streamline legal provisions for human resource and material requisitions to improve efficiency and effectiveness through all phases of DM.
- ✔ Recruit additional technical staffing within NEMA/NDMD to augment the department's existing capacity.
 - Focus recruitment expertise on data analytic and research skills to contribute to analyzing data and conducting research relating to the alignment of DRR, SDGs, and CCA efforts.

SEDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

F

Guiding Principles

(b), (d), (e), (f), (g), (h), (j), (l), (m)

SDGs

4, 7, 13, 16

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

CAPABILITIES AND RESOURCES: NEVIS



HUMAN RESOURCES

FINDINGS

The Nevis Disaster Management Department (NDMD) has demonstrated commendable dedication in their capacity-building and community engagement efforts, despite facing chronic understaffing and financial limitations. In addition, NDMD has successfully conducted vital outreach and public engagement activities to further enhance the agency's capabilities.

A properly staffed NDMD would help optimize evidence-based decision making through evaluation of data analytics and research opportunities related to DRR, SDGs, and CCA efforts. To further advance the capabilities of NDMD, Nevis would benefit from securing funding to simultaneously support the recruitment of technical personnel within the department. Additionally, streamlining bureaucratic processes through legal provisions represents a pivotal measure in elevating the overall effectiveness of future disaster management initiatives and fortifying the nation's resilience.

Staffing shortages often present challenges to effectively fulfill crucial disaster management roles. Additional technical staffing would augment existing capacities providing NDMD the ability to continue to advance their sustainable energy and renewable resource initiatives by 2030.

RECOMMENDATIONS

To support NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Advocate for increased budget allocations to enhance staffing and program capabilities.
- ✔ Identify funding allocations and resources available to support the recruitment and hiring of additional NDMD personnel.
- ✔ Secure additional technical staffing within NDMD to augment the department's existing capacity and effectively execute mandated requirements.
- ✔ Prioritize increased support for Youth Programs and Volunteer Corps to create a more robust disaster management system.
- ✔ Streamline legal provisions for human resources and material requisitions to improve efficiency and effectiveness through all phases of disaster management.
- ✔ Ensure capabilities include specialized expertise to contribute to evidence-based decision-making processes through analyzing data and conducting research related to the alignment of DRR, SDGs, and CCA efforts.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

F

Guiding Principles

(b), (d), (e), (f), (g), (h), (j), (l), (m)

SDGs

4, 7, 13, 16

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity



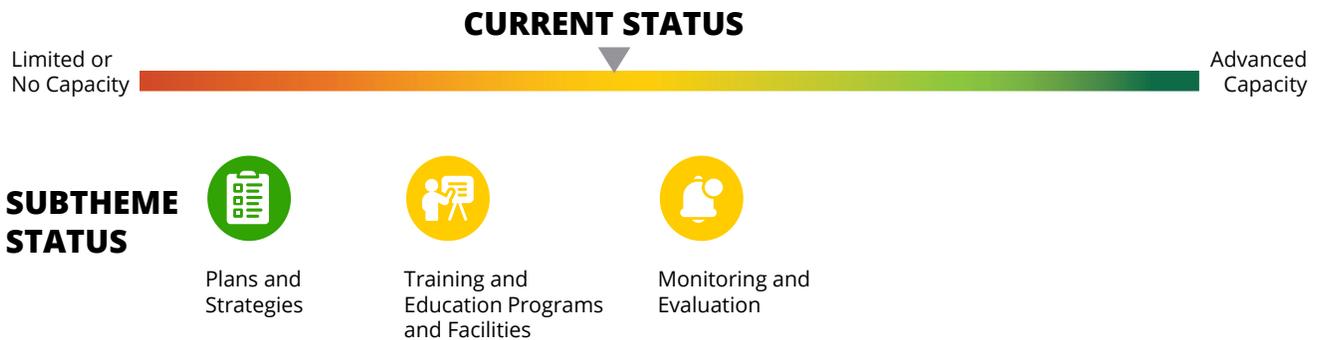
THE DMA

CAPACITY DEVELOPMENT



CAPACITY DEVELOPMENT

Findings indicate Saint Kitts and Nevis’ current Capacity Development efforts are at achievement with significant limitations.



Saint Kitts and Nevis’ ability to advance disaster management strategies that achieve risk reduction and resilience goals is ultimately dependent on its ability to support capacity development. From training and education that supports the advancement of knowledge and skills to the institutionalization of appropriate attitudes and cultures, capacity development requires the continuous advancement of assessments, strategic plans, programs, facilities, and many other components of the sub-themes examined in this report. The DMA analyzes resources and opportunities for all stakeholders and all sectors, from individuals and vulnerable populations to government responders. This DMA’s sub-themes include Capacity Development Plans and Strategies; Training and Education Programs and Facilities; Monitoring and Evaluation Processes and Systems.

CAPACITY DEVELOPMENT



TRAINING AND EDUCATION

FINDINGS

Within their respective agencies, Saint Kitts National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD) have established disaster management (DM) and disaster risk reduction (DRR) training and education curriculums to secure a state of readiness and effectively mitigate disaster risks.

For more effective harmonization of training and exercise (T&E) initiatives throughout the country, it would be beneficial for NEMA and NDMD to create and oversee an official disaster training and exercise (T&E) program within their agency.

A centralized training and information initiative within both NEMA and NDMD would further foster interagency collaboration and communication among the Federation leading to a more effective and coordinated response to disasters.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Identify staff within both NEMA and NDMD to oversee and manage the T&E program with primary responsibilities of exercise logistics, coordination, and alignment with multi-agency calendars.
 - Increase simulation and scenario-based exercises, particularly among response agencies, to enhance collaboration and capacity building across communities.
- ✔ Create a master training schedule and oversee communication channels and social media platforms to augment visibility, facilitate information sharing, and optimize collaboration.
- ✔ Implement a digital record management system accessible to all participating agencies to align and track T&E schedules, participants, evaluations, and lessons-learned for both review and real-time updates.
- ✔ Implement a standardized T&E reporting framework for consistent data collection to encompass key metrics, observation, and feedback mechanisms for formal performance evaluations and after-action reporting.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

D, E, F

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

4, 11, 16, 17

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.3, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

CAPACITY DEVELOPMENT





**BREAKING
NEWS**

NATIONAL EMERGENCY MANAGEMENT AGENCY

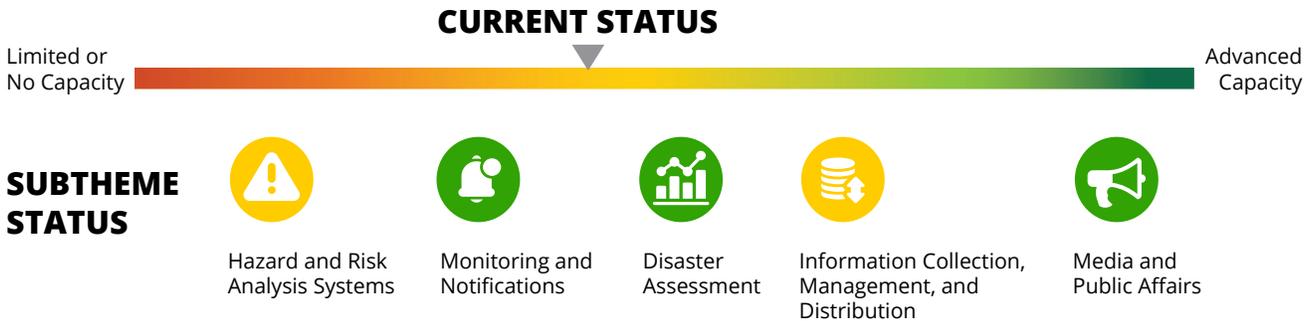
THE DMA

COMMUNICATION AND INFORMATION MANAGEMENT



COMMUNICATION AND INFORMATION MANAGEMENT

Findings indicate Saint Kitts and Nevis' Communication and Information Management capacity shows achievement with significant limitation.



Disaster management is a risk-based endeavor, and as such the capacity of stakeholders to generate, manage, and share risk and incident related information is critical. This area of analysis looks at the systems, processes, and procedures that have been established in Saint Kitts and Nevis to inform pre- and post-disaster activities. From hazard mapping and event monitoring, to warning and notification, communication and information management sub-themes address a broad range of topics that highlight effective practices.

COMMUNICATION AND INFORMATION MANAGEMENT



FINDINGS

Saint Kitts and Nevis has robust data holdings; however, they are not easily accessible to support the disaster management mission of the National Emergency Management Agency (NEMA) or the Nevis Disaster Management Department (NDMD).

The data in current form are not uniform, centralized or easily applied without extensive statistical or GIS knowledge and skills.

The completed NDPBA provides Saint Kitts and Nevis with a baseline and starting point. The Risk and Vulnerability Assessment (RVA) can support planning for critical infrastructure identification and exposure analysis and can provide NEMA, NDMD, and disaster management stakeholders with the necessary scientific information to prioritize strengthening existing physical infrastructures. The data can also be used to plan, justify, and budget for local mitigation projects.

HAZARD AND RISK ANALYSIS

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Consider utilizing the NDPBA data alongside GIS-mapping capabilities and systems to address geospatial data and logistics to inform community-based DM and planning efforts.
- ✔ Leverage resources within the RVA, including hazard mapping for population exposures, critical infrastructure locations, and evacuation/shelter identification, to drive sector-based community planning, improved infrastructure for facilities, and profiling of vulnerable groups.
- ✔ Generate local hazard and risk maps to facilitate and advance data-driven and scenario-based training, exercise planning, and preparedness activities.
- ✔ Utilize GIS-based mapping systems to assist in risk assessments, management, and decision-making processes, determining necessary requirements for risk and vulnerability assessments in DM and DRR planning.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

A, B, C, D, G

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

7, 11, 12, 13, 15

Paris Agreement

7.1, 8.1

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.3, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity

COMMUNICATION AND INFORMATION MANAGEMENT



INFORMATION COLLECTION AND MANAGEMENT

FINDINGS

Saint Kitts and Nevis has made progress in communication and infrastructure investment, prioritizing this initiative to stay ahead in the digital arena. To address lingering infrastructure gaps, Saint Kitts and Nevis would benefit from establishing a robust and collaborative data management framework with integration of existing GIS capabilities. While specific sectors are equipped with databases, a central repository for facilitating coordinated efforts is lacking. There is a need for the national operational information plan to include information sharing mechanisms among essential services and systems, encompassing water, wastewater, electricity, fuels, and transportation. Such integration would guide effective communication and coordination within these critical lifeline systems.

To further fortify disaster management (DM) capabilities a data framework would ensure a digital platform for collectively addressing the critical aspects of data collection, sharing, integration, and accessibility, fundamental for informed decision-making.

RECOMMENDATIONS

To support NEMA and NDMD in meeting mission requirements, the following activities are recommended:

- ✔ Harmonize national data collection and storage standards with the overarching digital agenda of Saint Kitts and Nevis.
- ✔ Collaborate with National Disaster Management Organizations (NDMOs) to assess, amend, and enhance disaster-related plans, policies, and strategies, integrating the centralized information hub into these frameworks.
- ✔ Facilitate the sharing of data among governmental entities, non-governmental disaster management stakeholders, and with the general public.
- ✔ Implement a centralized, GIS-based data management system and utilize to leverage a common operating picture.
 - Identify priority needs, conduct risk assessments/losses, and disaster data for capacity development.
 - Integrate into the national operational information plan.
 - Include backup strategies in Continuity and succession planning efforts.

SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

Global Targets

D, F, G

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

11, 12, 13, 15, 16

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3, 4 (4.2, 4.4)

■ Limited or No Capacity

■ Early Capacity Development

■ Achievement with Significant Limitation

■ Substantial Progress with Some Limitation

■ Advanced Capacity



THE NDPBA

COMMENDATIONS FOR BEST PRACTICES

COMMENDATIONS FOR BEST PRACTICES



STRATEGIES AND LEGAL INSTRUMENTS

Highlighting Saint Kitts and Nevis: Standards of Practice for a Sustainable Future

Saint Kitts and Nevis have achieved notable accomplishments that set the country on a path toward sustainability and resilience given recent and impending climate change events. This strategic shift highlights the commitment to environmental stewardship and establishes a foundation for long-term financial stability in the context of reconstruction and rehabilitation efforts following a disaster.

The incorporation of a “pause-clause” into financial policy language presents a novel approach to managing debt during times of crisis. This clause allows for the temporary halting of debt servicing for a duration of two years. This paused payment reinstates at the original interest rate, ensuring that both the borrower and the creditor are not disadvantaged. These innovative finance models are not only applicable to smaller climate-vulnerable states but also stands at the forefront of global financial models crucial for ensuring that developing nations have an equitable chance and access to improve their resilience and adapt to climate change.

Another pivotal achievement has been the island’s transition to a more sustainable and environmentally friendly energy model, exploring alternative geothermal energy sources within Nevis. This forward-thinking initiative is geared towards providing both Saint Kitts and Nevis with innovative energy solutions. Investment in geothermal energy exploration will contribute significantly to regional sustainability efforts, showcasing a commitment to cutting-edge solutions for a more resilient and self-reliant future.

The commitment of Saint Kitts and Nevis to sustainability is further exemplified by its adherence to the key pillars outlined in the Federation’s Sustainable Island State Agenda, as presented most recently at the 28th United Nations Climate Change Conference (COP28). These seven pillars encompass critical aspects of food security, green energy transition, economic diversification, sustainable industries, development of a creative economy, effective COVID-19 recovery measures, and a robust social protection framework. By focusing on these pillars, the country can solidify its position as a sustainable island state, demonstrating a holistic approach to societal, economic, and environmental well-being.

SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

2, 3

Global Targets

C, D

Guiding Principles

(a), (h), (j), (k)

SDGs

1, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17

Paris Agreement

7.1, 8.1

CDEMA CDM Priority Areas

3

COMMENDATIONS FOR BEST PRACTICES



DISASTER GOVERNANCE MECHANISMS

Highlighting Saint Kitts and Nevis Declaration of School Safety

In 2017, Saint Kitts and Nevis signed the Declaration of School Safety and secured the endorsement of the twelve Ministries of Education. Serving as an instrumental document for the country, this declaration forms the cornerstone for the systematic implementation of strategies focused on disaster risk reduction and the enhancement of climate change resilience within the broader context of the Caribbean Safe School initiative.

A particular focus of this declaration lies in enhanced coordination and cooperation mechanisms among stakeholders, extending from the community, regional, national, and international levels. Emphasis is also placed on cultivating collaboration among Caribbean Ministries of Education, relevant private sector, non-governmental organizations, and various regional and international entities.

The Declaration of School Safety outlines a comprehensive framework designed to monitor and assess progress in the implementation of initiatives outlined in the Road Map on School Safety. This framework is authorized under the Minister of Education, symbolizing a concerted commitment to fortify school safety protocols and regional resilience against potential adversities. Such proactive measures highlight the dedication to creating a safe and secure educational environment throughout the region.

SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

B, D, E

Guiding Principles

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

SDGs

4, 11, 12, 13, 15

Paris Agreement

7.1, 8.1

CDEMA CDM Priority Areas

1 (1.3, 1.4), 2, 3 (3.1, 3.2), 4 (4.2, 4.4)

COMMENDATIONS FOR BEST PRACTICES



CAPABILITIES AND RESOURCES

Highlighting Smart Hospitals & Regional Health Project's Implemented in Saint Kitts and Nevis

As the global community collectively addresses the escalating impacts of climate change, the imperative to foster climate resilience becomes increasingly urgent. Demonstrating foresight, Saint Kitts and Nevis engaged in the “Smart Hospital” pilot project initiative in 2012, collaborating with the Pan American Health Organization (PAHO) and the United Kingdom’s Foreign, Commonwealth & Development Office (FCDO). This initiative fully retrofits hospitals and health centers to improve their structural, non-structural, and functional standards to support climate change mitigation and enhance disaster resilience across the country. The Saint Kitts and Nevis Smart Hospitals project has not only been noted to enhance staff well-being, but also contributes to capacity-building initiatives while in compliance with the ‘green’ construction practices. The multifaceted approach is formed through strategic actions, including the enhancements of infrastructure, promotion of sustainable resource management practices, and the advancement of innovative technologies designed to mitigate and adapt to changing climate conditions. These collective initiatives steer the nation towards a trajectory of sustainability and resilience.

The persistent pursuit of a climate-resilient Saint Kitts and Nevis is a visionary and proactive approach. This approach addresses the challenges and vulnerabilities presented by impending climate change, safeguards the citizens and ecosystems, and contributes meaningfully to environmental stewardship and sustainable development.

SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

D, F

Guiding Principles

(b), (e), (h), (j), (k), (l), (m)

SDGs

7, 11, 12, 13, 15, 16

Paris Agreement

7.1, 8.1

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.3, 2.4), 3, 4 (4.3, 4.4)

COMMENDATIONS FOR BEST PRACTICES



COMMUNICATION AND INFORMATION MANAGEMENT

Enhancing Tsunami Preparedness and Community Resilience in Saint Kitts and Nevis: Tsunami Ready Programme

On February 4, 2022, Saint Kitts and Nevis received recognition for completing and adhering to the Tsunami Ready Programme. This compliance has empowered vulnerable coastal communities within the nation to take effective measures in the face of potential tsunami threats. This initiative involved tailoring inundation and evacuation maps to every community, installing evacuation route signage and assembly points, as well as clear demarcation of tsunami hazard zones. Additionally, extensive public outreach and communication awareness campaigns were conducted to disseminate critical information.

The successful recognition and renewal of Saint Kitts and Nevis’s Tsunami Ready achievement was acknowledged by international partners who validated and encouraged their ongoing commitment to preparedness. These efforts not only strengthened the country’s ability to respond to tsunamis effectively but also contributed to the overall resilience of the coastal communities.

By improving awareness, knowledge, and response capabilities, these initiatives empower residents to take decisive action during tsunami events, ultimately saving lives and minimizing the impact of disasters on the community.

SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

Global Targets

D

Guiding Principles

(b), (h), (j), (k)

SDGs

11, 13, 15

Paris Agreement

7.1, 8.1

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.3, 2.4), 3, 4 (4.3, 4.4)





THE NDPBA

NATIONAL RECOMMENDATIONS

NATIONAL RECOMMENDATIONS

THE NDPBA NATIONAL RECOMMENDATIONS



REALIGN THE DISASTER MANAGEMENT STRUCTURE TO ENABLE DIRECT LINES OF COMMUNICATION AND COORDINATION BETWEEN THE NATIONAL EMERGENCY MANAGEMENT AGENCY (NEMA) AND NEVIS DISASTER MANAGEMENT DEPARTMENT (NDMD).

- Align processes and plans to facilitate effective operationalization of all disaster management functions and to eliminate overlap and inefficiencies among NEMA and NDMD.
- Integrate mandatory data exchange between NEMA and NDMD to facilitate seamless sharing of information in all phases of disaster management, and especially time-critical, real-time data during response operations.
- Ensure regular joint NEMA-NDMD training and exercises to facilitate multi-level collaboration and coordination.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

SDGs

3, 11, 16

Global Target (s)

A, B, C, D

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3 (3.1, 3.2), 4 (4.2, 4.4)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)

2

REVIEW AND UPDATE THE NATIONAL DISASTER MANAGEMENT ACT (NDMA) 2002 TO ESTABLISH THE LEGAL FOUNDATION NECESSARY FOR EFFECTIVE DISASTER MANAGEMENT.

- Reinforce the National Disaster Management Act (2002) to better operationalize disaster management (DM) and incorporate disaster risk reduction (DRR) across all levels of government and sectors.
- Support NEMA and NDMD administrative and operational expenditures for financial long-term stability.
 - Guarantee the necessary financing to recruit technical staff.
- Prioritize the movement of the Draft NDMA through the legislative process.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

3, 9, 11, 13, 14, 15, 16, 17

Global Target (s)

A, B, C, D, F, G

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l)

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.4), 2, 3 (3.1, 3.2), 4

3

DEVELOP A NATIONAL CLIMATE AND DISASTER RISK FINANCING STRATEGY TO PROMOTE LONG-TERM ECONOMIC AND FINANCIAL STABILITY WHILE ADAPTING TO CLIMATE CHANGE.

- Implement comprehensive insurance programs that cover primary hazards, including.
 - National Flood Insurance
 - Catastrophe Insurance
 - Public Assets Financial Protection
- Provide rapid financing in case of disaster.
- Urge the Caribbean Catastrophic Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC) to expand insurance coverage by including Excessive Rainfall policies.
- Develop a climate change impacts mitigation fund designed to improve existing infrastructure protections.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

9, 10, 11, 13, 16, 17

Global Target (s)

A, C, D, F

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (j), (h), (i), (j), (k), (l)

CDEMA CDM Priority Areas

1 (1.2, 1.3), 2 (2.2, 2.3), 3 (3.1, 3.2), 4 (4.2, 4.4)

4

DEVELOP A VOLUNTEER POLICY THAT ESTABLISHES MECHANISMS AND PROVISIONS FOR THE SUCCESSFUL INTEGRATION OF INDIVIDUALS AND ORGANIZATIONS INTO THE NATIONAL RESPONSE SYSTEM.

- Define formal roles for volunteers and volunteer organizations to engage effectively in preparedness and response efforts aligned with NEMA and NDMD.
 - Implement appropriate recruiting, training, and tracking of volunteers to ensure reliability and availability.
 - Verify volunteer accreditations for technical tasks if in direct support of the government’s disaster management efforts.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

2, 3, 4

SDGs

4, 11, 16

Global Target (s)

A, C, D, E

CDEMA CDM Priority Areas

1 (1.3, 1.4), 2 (2.1, 2.3, 2.4), 3 (3.1, 3.2),
4 (4.2, 4.4)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)

5

STRENGTHEN COMMUNICATION AND COLLABORATION AMONG THE NATIONAL EMERGENCY MANAGEMENT AGENCY (NEMA), THE NEVIS DISASTER MANAGEMENT DEPARTMENT (NDMD), THROUGH INTEGRATION OF UNIFIED NATIONAL COMMITTEES ENGAGED IN DISASTER MANAGEMENT.

- Strengthen oversight of coordination and support of capacity-building efforts for disaster management (DM) and disaster risk reduction (DRR).
 - Assist key sectors with incorporating DRR into plan development, implementation, and maintenance.
- Ensure information-sharing mechanisms are established to provide a more harmonious approach to planning, to ensure efficiency of resources and prevent duplication of effort.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

SDGs

9, 11, 13, 14, 15, 16

Global Target (s)

A, B, C, D

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (e), (f), (g), (h), (k)

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2, 2.3), 3 (3.1, 3.2), 4 (4.2, 4.4)

6

INCORPORATE DISASTER RISK REDUCTION (DRR) INTO DEVELOPMENT PLANS, CLIMATE CHANGE ADAPTATION (CCA) INITIATIVES, AND POLICIES AT ALL LEVELS OF GOVERNMENT AND COMMUNITY DECISION-MAKING.

- Develop and distribute disaster management (DM) and disaster risk reduction (DRR) plans and strategies to drive initiatives towards advanced capacity.
 - Perform regular evaluations to assess current capacity and enhance resource needs across sectors for disaster management (DM) and DRR.
 - Integrate risk and vulnerability profiles into all plans and strategies.
- Institutionalize DRR integration into national and sectoral development strategies.
- Coordinate with the Ministry of Sustainable Development to assess building infrastructure given the expected rise in hazard frequency and intensity due to climate change.
- Unify DRR, Sustainable Development Goals (SDGs), and Climate Change Adaptation (CCA) initiatives to ensure efforts are streamlined, and duplication is avoided.
 - Identify DRR, SDG, and CCA project leads and develop a standing committee, with regularly scheduled meetings, to review current and planning actions.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

SDGs

1, 2, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

Global Target (s)

A, B, C, D, E

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2, 2.3), 3 (3.1, 3.2), 4 (4.2, 4.4)

7

CONDUCT A COMPREHENSIVE PLANNING AUDIT TO IDENTIFY GAPS IN AND AMONG EXISTING PLANS AND UPDATE OUTDATED ONES.

- Harmonize Continuity of Government (COG) and Business Continuity Planning (BCP) efforts to maintain critical services and support disaster management and sustainable governance for greater national resilience.
 - Establish mechanisms for sharing critical information, data, and resources including real-time data such as weather forecasts and disaster impact assessments, to aid decision-making during crises.
 - Develop joint COG/BCP training and exercises to for coordinated response and recovery procedures.
- Working with lead ministries, agencies, and private sector entities, secure targeted Memorandums of Understanding (MOUs) in critical areas such as medical provisions and services, transportation, and information governance and communication coordination.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

SDGs

11, 16

Global Target (s)

A, C, D

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3 (3.1, 3.2), 4 (4.2, 4.4)

Guiding Principle(s)

(a), (b), (d), (e), (f), (g), (h), (i), (j), (k)

8

ENSURE THAT DISASTER MANAGEMENT PLANS ACCOUNT FOR THE COMPLEXITIES AND POTENTIAL CASCADING IMPACTS ASSOCIATED WITH RESPONSE TO EMERGENCIES IN DENSELY POPULATED COMMUNITIES AND URBAN AREAS.

- Utilize up-to-date hazard maps to identify locations where hazard impacts may interfere with ingress and egress routes.
- Identify locations of vulnerable populations that may require more time or assistance with evacuation.
- Engage communities in planning efforts to identify challenges and proactive solutions in advance of a disaster situation.
 - Conduct annual (at least) exercises involving community engagement.
- Engage public transportation companies in disaster management planning processes.
- Establish formal arrangements to assist disaster-affected populations with transportation needs related to evacuation and sheltering.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

SDGs

3, 9, 10, 11, 16

Global Target (s)

A, B, C, D

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.2, 2.3), 3 (3.1),
4 (4.2, 4.3, 4.4)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)

9

INCREASE THE ANNUAL BUDGETS FOR THE NATIONAL EMERGENCY MANAGEMENT AGENCY (NEMA) AND NEVIS DISASTER MANAGEMENT DEPARTMENT (NDMD) TO SUPPORT THE GROWING NEED FOR TECHNICAL STAFF AND EXPANDED PROGRAMS REQUIRED TO ADDRESS THE PREDICTED RISE IN CLIMATE-RELATED HAZARDS.

- Provide annual funding to cover operating costs and meet program requirements.
- Secure funding to support human resources, programs, equipment, infrastructure, capacity building, and response operations.
- Develop detailed project proposals showing how NEMA and NDMD projects align with climate change adaptation, with an emphasis on future climate impacts of coastal hazards and maritime infrastructure.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

9, 11, 13, 14, 15, 17

Global Target (s)

A, B, C, D, F, G

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

CDEMA CDM Priority Areas

1, 2 (2.2, 2.3), 3 (3.1, 3.2) 4 (4.2, 4.3, 4.4)

10

IMPROVE INTEROPERABILITY WITH INTERNATIONAL AND LOCAL NON-GOVERNMENTAL ORGANIZATIONS (NGOS) BY CREATING POLICY TO GOVERN AND GUIDE THE NGOS' RESPONSE TO IMPACTS ON SAINT KITTS AND NEVIS.

- Align with the CDEMA / OCHA Joint Interoperability Manual
- Increase operational presence of vetted NGOs in all relevant sectors where there are gaps including:
 - Education
 - Food Security
 - Logistics
 - Protection
 - Early recovery
 - Shelter
 - Emergency telecommunications

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

2, 6, 9, 11, 13, 17

Global Target (s)

A, B, C, D, F

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.3, 2.4), 3 (3.1, 3.2), 4 (4.2)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l)

11

SUPPORT NECESSARY TECHNICAL UPGRADES TO THE NATIONAL EMERGENCY OPERATIONS CENTER (NEOC) FOR IMPROVED RESPONSE OPERABILITY.

- Strengthen IT /Communications Infrastructure
- Ensure communication capabilities to support NEOC’s ability to communicate with:
 - All levels of government
 - Departments
 - Agencies
 - Regional partners
 - Organizations and partners
 - First responders
 - First receivers
 - Public health personnel
 - Transportation
 - Public works
 - Private sector
 - The general public.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 4

SDGs

7, 11, 12, 13, 15, 16

Global Target (s)

D, F

CDEMA CDM Priority Areas

1(1.1, 1.2, 1.3, 1.4), 2, 3, 4(4.2, 4.3, 4.4)

Guiding Principle(s)

(b), (d), (e), (f), (g), (h), (j), (k), (l), (m)

12

STRENGTHEN ALL-HAZARDS MONITORING AND COMMUNICATIONS SYSTEMS, TRANSLATING DATA INTO COMPREHENSIVE EARLY WARNING SYSTEMS (EWS) CAPABILITIES.

- Conduct regular evaluations of the notification and EWS to identify areas for improvement and ongoing effectiveness.
- Invest in advanced communication technologies to address challenges within “dead zones” and improve communication reliability.
- Customize EWS to meet the specific demographic needs of communities and ensure the effectiveness of reaching exposed and vulnerable communities promptly during emergencies.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

9, 10, 11

Global Target (s)

A, B, C, D, G

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2, 2.3), 3 (3.1, 3.2, 3.3), 4 (4.2, 4.3, 4.4)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)

13

REVIEW LOCAL AND REGIONAL SUPPLY CHAINS TO ENSURE THE SPEED AND QUALITY OF RESPONSE OPERATIONS THROUGH EFFICIENT STORAGE, MOVEMENT, AND DELIVERY OF RELIEF SUPPLIES.

- Strategically locate additional disaster management warehouses in secure, underserved, and densely populated areas.
- Establish MOUs to implement a systematic approach for securing assets and resources, ensuring a coordinated District response within the following areas:
 - Medical
 - Transportation
 - Information and Communications
- Conduct training and exercises with national, island, and community stakeholders to ensure that the plans and MOUs provide capabilities as designed.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

2, 6, 9, 11, 13,17

Global Target (s)

A, B, C, D, F

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.3, 2.4), 3 (3.1, 3.2), 4 (4.2)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l)

NATIONAL RECOMMENDATIONS

14

FORMALIZE DISASTER TRAINING AND EXERCISE (T&E) INITIATIVES INTO A CENTRALIZED PROGRAM.

- Appoint dedicated staff within NEMA and NDMD to lead a formal T&E program focused on exercise logistics, coordination, and multi-agency scheduling.
- Develop a master training schedule and manage communication channels, including social media, to enhance visibility, share information, and improve collaboration.
- Implement a digital record management system accessible to all participating agencies to organize T&E schedules, participant tracking, evaluations, and lessons-learned for both review and real-time updates.
- Establish a standardized T&E reporting framework for consistent data collection, including key metrics, observation, and feedback mechanisms for performance evaluations and after-action reports.
- Expand simulation and scenario-based exercises, particularly for response agencies, to boost collaboration and capacity-building across communities.
- Create a disaster management credentialing system to ensure appropriate benchmarks for personnel in each function.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

4, 11, 16

Global Target (s)

A, B, C, D, F

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2), 3, 4 (4.2, 4.4)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

15

UTILIZE GIS-MAPPING CAPABILITIES AND SYSTEMS TO ADDRESS GEOSPATIAL DATA AND LOGISTICS TO INFORM COMMUNITY-BASED DISASTER MANAGEMENT AND PLANNING EFFORTS.

- Leverage resources, including hazard mapping for population exposures, critical infrastructure locations, and evacuation/shelter identification to drive sector-based community planning, improved infrastructure for facilities, and provide for vulnerable groups.
- Generate local hazard and risk maps to facilitate and advance data-driven and scenario-based training, exercise planning, and preparedness activities.
- Utilize GIS-based mapping systems to assist in risk assessments, management, and decision-making processes, determining necessary requirements for risk and vulnerability assessments in Disaster Management and Disaster Risk Reduction planning.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

1, 2, 3, 6, 7, 9, 11, 13, 14, 15, 17

Global Target (s)

A, B, C, D, E, F, G

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2, 2.3),
3 (3.1, 3.2), 4 (4.2, 4.3, 4.4)

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

16

PROMOTE EVIDENCE-BASED DECISION-MAKING BY SUPPORTING A CENTRALIZED MULTI-AGENCY DATA REPOSITORY FOR DISASTER MANAGEMENT, RISK REDUCTION, AND RESILIENCE.

- Promote data sharing among governmental entities, non-governmental disaster management stakeholders, academia, and with the public to ensure that the best and latest information is available to all stakeholders.
- Implement a centralized, GIS-based data management system and utilize to leverage a common operating picture that supports identification of high-risk areas, priority needs, resource tracking, and damage/loss data to promote response and recovery capacity development.
- Harmonize the national data collection and storage standards with the overarching digital agenda of Saint Kitts and Nevis.
- Consider institutionalizing DisasterAWARE Pro as the repository.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

1, 2, 3, 4, 6, 7, 9, 11, 13, 14, 15, 16, 17

Global Target (s)

A, B, C, D, E, F, G

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2, 3 (3.1, 3.2),
4 (4.2, 4.3, 4.4)

17

PROMOTE AWARENESS AND PREPAREDNESS CAMPAIGNS AMONG RESIDENTS, VISITORS, AND BUSINESSES FOR NATURAL AND MANMADE HAZARDS AND CLIMATE CHANGE IMPACTS.

- Employ a multi-faceted, multi-stakeholder strategy involving disaster managers, schools, media, non-governmental organizations, and other key agencies.
- Strengthen messaging to increase public understanding of hazards and their potential impacts, alert and warning messages, and the safety and preparedness measures that can be taken to protect lives and livelihoods.
- Expand implementation of the model Safe School Programme for Caribbean Schools Toolkit across the educational system in Saint Kitts and Nevis.
- Promote incentives such as grants, loans, and programs through outreach campaigns aimed at increasing resilience and reducing vulnerability to homeowners, communities, and businesses.
- Advocate for community-based programs and projects that promote climate adaptation and disaster risk reduction (e.g., replanting mangroves, dune restoration, community clean-up efforts).

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

1, 2, 3, 4

SDGs

4, 10, 11, 13, 16

Global Target (s)

A, B, C, D, E

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (d), (e), (f), (h), (i), (j), (k)

CDEMA CDM Priority Areas

1 (1.1, 1.2, 1.3, 1.4), 2 (2.3, 2.4), 3 (3.2, 3.3), 4 (4.2, 4.4)

18

EXPORT SUCCESSES AND LESSONS LEARNED THROUGH THE CAPACITY-BUILDING EFFORTS OF SAINT KITTS AND NEVIS, INCLUDING THE MODEL SAFE SCHOOL POLICY, SMART HOSPITAL INITIATIVES, AND IMPLEMENTATION OF SUSTAINABLE PRACTICES TO SUPPORT CLIMATE RESILIENCE AND RISK REDUCTION NATIONALLY AND INTERNATIONALLY.

ALIGNMENTS: SENDAI FRAMEWORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM PRIORITY AREAS ADVANCED

Priorities for Action

2, 4

SDGs

4, 6, 7, 8, 9, 10, 11, 13, 17

Global Target (s)

E, F

Paris Agreement Articles

7.1, 8.1

Guiding Principle(s)

(a), (b), (c), (e), (f), (g), (h), (j), (k), (l), (m)

CDEMA CDM Priority Areas

1 (1.3, 1.4), 2, 3 (3.1, 3.2), 4 (4.1, 4.2, 4.4)

[THIS PAGE LEFT INTENTIONALLY BLANK]



5-YEAR PLAN

SAINT KITTS AND NEVIS NATIONAL RECOMMENDATIONS

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
RECOMMENDATION 1				
Realign the disaster management structure to enable direct lines of communication and coordination between the National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD).				
RECOMMENDATION 2				
Review and update the National Disaster Management Act (NDMA) 2002 to establish the legal foundation necessary for effective disaster management.				
RECOMMENDATION 3				
Develop a national climate and disaster risk financing strategy to promote long-term economic and financial stability while adapting to climate change.				
RECOMMENDATION 4				
Develop a volunteer policy that establishes mechanisms and provisions for the successful integration of individuals and organizations into the national response system.				
RECOMMENDATION 5				
Strengthen communication and collaboration among the National Emergency Management Agency (NEMA), the Nevis Disaster Management Department (NDMD), through integration of unified national committees engaged in disaster management.				
RECOMMENDATION 6				
Incorporate disaster risk reduction (DRR) into development plans, climate change adaptation (CCA) initiatives, and policies at all levels of government and community decision-making.				
RECOMMENDATION 7				
Conduct a comprehensive planning audit to identify gaps in and among existing plans and update outdated ones.				
RECOMMENDATION 8				
Ensure that disaster management plans account for the complexities and potential cascading impacts associated with response to emergencies in densely populated communities and urban areas.				
RECOMMENDATION 9				
Increase the annual budgets for the National Emergency Management Agency (NEMA) and Nevis Disaster Management Department (NDMD) to support the growing need for technical staff and expanded programs required to address the predicted rise in climate-related hazards.				

5-YEAR PLAN

SAINT KITTS AND NEVIS NATIONAL RECOMMENDATIONS



YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
		RECOMMENDATION 10		
		Improve interoperability with international and local non-governmental organizations (NGOs) by creating policy to govern and guide the NGOs' response to impacts on St Kitts and Nevis.		
		RECOMMENDATION 11		
		Support necessary technical upgrades to the National Emergency Operations Center (NEOC) for improved response operability.		
		RECOMMENDATION 12		
		Strengthen all-hazards monitoring and communications systems, translating data into comprehensive early warning systems (EWS) capabilities.		
		RECOMMENDATION 13		
		Review local and regional supply chains to ensure the speed and quality of response operations through efficient storage, movement, and delivery of relief supplies.		
			RECOMMENDATION 14	
			Formalize disaster training and exercise (T&E) initiatives into a centralized program.	
			RECOMMENDATION 15	
			Utilize GIS-mapping capabilities and systems to address geospatial data and logistics to inform community-based disaster management and planning efforts.	
			RECOMMENDATION 16	
			Promote evidence-based decision-making by supporting a centralized multi-agency data repository for disaster management, risk reduction, and resilience.	
			RECOMMENDATION 17	
			Promote awareness and preparedness campaigns among residents, visitors, and businesses for natural and manmade hazards and climate change impacts.	
RECOMMENDATION 18				
Export successes and lessons learned through the capacity-building efforts of Saint Kitts and Nevis, including the model Safe School Policy, SMART Hospital initiative, and implementation of sustainable practices to support climate resilience and risk reduction nationally and internationally.				

REFERENCES

BIBLIOGRAPHY

1. Bleeker, A., Escribano, P., Gonzales, C., Liberati, C., Mawby, B., & Economic Commission for Latin America and the Caribbean (ECLAC). (2021). Advancing Gender Equality in Environmental Migration and Disaster Displacement in the Caribbean.
2. Bollers, E., Deyal, Z., Gauto, V., Giles Álvarez, L., Khadan, J., Mooney, H., Smets, L., Waithe, K., Wright, A., & Inter-American Development Bank (IADB). (2019). Country Infrastructure Briefs: Caribbean Region.
3. Buter, C., World Health Organization (WHO), & Pan American Health Organization (PAHO). (2018). Health Facilities and Disaster-Resilience: The PAHO Smart Hospital Project.
4. Canada Caribbean Disaster Risk Management Fund. (n.d.). Emergency Communications, Lessons Direct from Our Partners Across the Region.
5. Caribbean Disaster Emergency Management Agency (CDEMA). (2011). Model SRCC SOPs Model Standard Operating Procedures for the Sub-Regional Coordination Centre (SRCC).
6. Caribbean Disaster Emergency Management Agency (CDEMA). (2013). The CDEMA Sub-Regional Warehousing Guidelines.
7. Caribbean Disaster Emergency Management Agency (CDEMA). (2015b). Strengthening Regional Emergency Communications Capability in CDEMA Participating States Regional Emergency Telecommunications Plan.
8. Caribbean Disaster Emergency Management Agency (CDEMA) & United Nations Children's Fund (UNICEF). (n.d.). Protocol for an Integrated Protection for Children and Adolescents during Disasters.
9. Caribbean Disaster Management Agency (CDEMA). (2014). Regional CDM Strategy and Results Framework 2014 – 2024 (pp. 84–84). https://www.cdema.org/CDM_Strategy_2014-2024.pdf
10. Caribbean Natural Resources Institute (CANARI) & United Nations Development Programme (UNDP). (n.d.). Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER) Project.
11. Caribbean Public Health Agency (CARPHA). (2020a). Emergency Shelter Management in the Caribbean during the COVID-19 Pandemic.
12. Caribbean Public Health Agency (CARPHA). (2020b). Water Sanitation Hygiene and Waste Management during the COVID-19 Pandemic. Caribbean Public Health Agency Technical Guidance: COVID-19 Series No 21.
13. CARICOM Regional Statistics Program. (2020). Caribbean Community (CARICOM) Climate Change Statistics.
14. Carmine, T. J., De, P., Shik, O., Boyce, R., Foster Christian, W., Agen, D., Muñoz, G., De, J., Santos, L., Nuenninghoff, S., Bayard, B., Gachot, S., Pavilus, C., & Inter-American Development Bank (IADB). (2018). Agricultural Policies in the Caribbean.
15. Davoli, M. Z. & Pan American Health Organization (PAHO). (2012). Disaster Management Structures in the Caribbean. In Mental Health and Psychosocial Support in Disaster Situations in the Caribbean.
16. Economic Commission for Latin America and the Caribbean (ECLAC). (2021). Disasters and Inequality in a Protracted Crisis: Towards Universal, Comprehensive, Resilient and Sustainable Social Protection Systems in Latin America and the Caribbean.

REFERENCES

BIBLIOGRAPHY

17. Environmental Solutions Limited. (2020c). School Policy Safe Implementation of the Model Safe School Programme in the Caribbean: Saint Kitts and Nevis.
18. Fontes de Meira, L., Bello, M. O., & Economic Commission for Latin America and the Caribbean (ECLAC). (2020). The Use of Technology and Innovative Approaches in Disaster and Risk Management.
19. GFDRR. (2010). GFDRR Country Notes St. Kitts and Nevis. <https://www.gfdr.org/sites/default/files/publication/drm-country-note-2010-st-kitts-and-nevis.pdf>
20. Global Facility for Disaster Reduction and Recovery (GFDRR) & World Bank. (2010). Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes—St. Kitts and Nevis.
21. Government of Haiti, the D. of C. P. (DPC), United Nations Office for Disaster Risk Reduction (UNISDR), United Nations Development Programme (UNDP) in Haiti, L. pour la G. des R. et la C. des A. (AGERCA), Cooperazione Internazionale (COOPI), & World Bank (WB). (2016). Regional Road Map for Urban Seismic Risk Management in the Caribbean.
22. Government of Saint Christopher and Nevis. (n.d.). National Disaster Management Act, No. 5 of 1998, Laws of Saint Christopher and Nevis. Revision Date: 31 Dec 2002.
23. Government of Saint Christopher and Nevis. (2019). National Report on Progress in the Application of the Montevideo Strategy for Implementation of the Regional Gender Agenda within the Sustainable Development Framework by 2030, Saint Kitts and Nevis.
24. Guerrero, R., Sergio, C., Ayuso, L., & Inter-American Development Bank (IADB). (2020). Disasters and Loss of Life: New Evidence on the Effect of Disaster Risk Management Governance in Latin America and the Caribbean.
25. Hansen, L., Hellmuth, M., Potter, J., Wong, A., Heisch, S., Consultants, N. B., Thongs, G., Bynoe, P., Collymore, J., Bissada, C., & United States Agency for International Development (USAID) Eastern and Southern Caribbean Mission (USAID/ESC). (2020). Resilience Assessment: Eastern and Southern Caribbean.
26. IFRC. (2020). Emergency Appeal Final Report Antigua and Barbuda and St. Kitts & Nevis: Hurricane Irma (2017000132). <https://reliefweb.int/sites/reliefweb.int/files/resources/MDR49009fr.pdf>
27. Info, C., Testolin, G., Barreto, M., & Information, F. (2018). Supply Chain and Emergency Telecommunications Augmentation and Coordination in Support of the Eastern Caribbean Islands Impacted by Hurricanes Irma and Jose Standard Project Report 2018. <https://docs.wfp.org/api/documents/WFP-0000103888/download/>
28. Inter-American Development Bank Climate Change Division & Value for Women. (2020). Study of the Impacts of Climate Change on the Women and Men of the Caribbean.
29. Inter-American Development Bank, Masson, M., Ehrhardt, D., & Lizzio, V. (2020). Sustainable Energy Paths for the Caribbean.
30. Inter-American Development Bank Water and Sanitation Division, Janson, N., Burkhard, L. N., Jones, S., Cayetano, E. S., & Cathala, C. (2021). Caribbean Water Study. <https://publications.iadb.org/publications/english/document/Caribbean-Water-Study.pdf>
31. International Bank for Reconstruction and Development/World Bank. (2022). Disability Inclusion in Disaster Risk Management—Assessment in the Caribbean Region.

REFERENCES

BIBLIOGRAPHY

32. International Federation of Red Cross and Red Crescent Societies (IFRC). (2021a). Dutch and English-Speaking Caribbean IFRC Country Cluster.
33. International Organization for Migration Global Migration Data Analysis Centre (IOM GMDAC), Andreola Serraglio, D., S. Adaawen, & B. Schraven. (2021). Migration, Environment, Disaster and Climate Change Data in the Eastern Caribbean—Regional Overview (9789292680725). <https://gmdac.iom.int/>
34. International Organization for Migration (IOM). (2021). Evacuations And Disaster Risk Reduction in the Caribbean.
35. Island Planning Services. (n.d.). Government of Saint Kitts and Nevis. Third International Conference on Small Island Developing States (SIDS) National Preparatory Process—St. Kitts and Nevis.
36. Island Planning Services. (2012). UN Conference on Sustainable Development (Rio+20) National Preparatory Process—St. Kitts and Nevis Stocktaking Report.
37. Joseph-Brown, L., Tuiloma-Sua, D., Caribbean Risk Management Initiative – UNDP Cuba, UNDP Barbados and OECS, & UNDP Pacific Centre. (2012). Integrating Gender in Disaster Management in Small Island Developing States: A Guide.
38. Latin American and the Caribbean Economic System (SELA). (2013). Continuity of Operations (COOP) and Continuity of Government (COG): Proposal for their implementation in Latin America and the Caribbean.
39. Louis, S. & International Telecommunications Union (ITU). (2017). Assessment of Emergency Telecommunications in the Caribbean.
40. National Disaster Management Agency (NEMA) and Nevis Disaster Management Department (NDMD). (2022). CDM Country Audit Report for Saint Kitts and Nevis.
41. National Emergency Management Agency (NEMA). (2013a). Saint Kitts and Nevis National Disaster Plan 2013 PART 1 Basic Plan.
42. National Emergency Management Agency (NEMA). (2013b). The St. Kitts-Nevis National Disaster Plan, Part 1 Basic Plan. http://ndmd.kn/docs/SKN_National_Disaster_Plan_Part1.pdf
43. National Emergency Management Agency (NEMA), S. K. and N. (2015). National Emergency Operations Center (NEOC) Standing Operating Procedures (SOPs). http://ndmd.kn/docs/SKN_EOC_SOP_2015.pdf
44. Nevis Department of Statistics. (2021). Annual Digest.
45. ODI, Red Cross Red Crescent Climate Centre, & Ramboll. (2019). Strengthening Forecast-Based Early Action in the Caribbean.
46. Office for Coordination of Humanitarian Affairs (OCHA), United Nations Development Programme (UNDP), Caribbean Disaster Emergency Management Agency (CDEMA), & International Federation of Red Cross and Red Crescent Societies (IFRC). (n.d.). OCHA-CDEMA Joint Interoperability Manual.
47. Organization of Eastern Caribbean States (OECS) Commission. (2020). Social Inclusion and Social Protection Strategic Framework.

REFERENCES

BIBLIOGRAPHY

48. Pan American Health Organization (PAHO). (2012). Mental Health and Psychosocial Support in Disaster Situations in the Caribbean; Core Knowledge for Emergency Preparedness and Response.
49. Pan American Health Organization (PAHO). (2021). Concepts of Incident Command System for the Caribbean region: A manual for participants. (9789275123270).
50. Powell, L., Chakalall, Y., Hori, T., & Inter-American Development Bank (IADB). (2020). Disaster Recovery Planning in the Caribbean: Revisiting the Challenge.
51. Rozenberg, J., Browne, N., De, S., Robbé, V., Kappes, M., Lee, W., & Prasad, A. (2021). 360° Resilience A Guide to Prepare the Caribbean for a New Generation of Shocks.
52. Saavedra, J. J., Alleng, G. P., & Inter-American Development Bank (IADB). (2020). Sustainable Islands: Defining a Sustainable Development Framework Tailored to the Needs of Islands.
53. UNDRR. (2022). UN Office for Disaster Risk Reduction. Sendai Framework Voluntary Commitments Synthesis and Analysis Report. <https://www.undrr.org/publication/sendai-framework-voluntary-commitments-synthesis-and-analysis-report-2022>
54. United Nations Department of Economic and Social Affairs (UN DESA). (2020). MIGRATION DATA PORTAL. Total number of international migrants at mid-year 2020.
55. United Nations Environment Programme (UNEP) & Caribbean Environment Programme (CEP). (2012). Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region and its Protocols.
56. United States Agency for International Development (USAID) Eastern and Southern Caribbean Mission (USAID/ESC). (2021d). Refresh, Renew, And Re-Pivot for Climate Action USAID Eastern and Southern Caribbean Regional Climate Symposium.
57. USACE. (2004). Water Resources Assessment of Dominica, Antigua, Barbuda, St. Kitts and Nevis.
58. Van Alphen, D., McCaskie, S., Dabreo, S., Jagnarine, S., & Vlugman, A. (2020). Caribbean Shelter Guide COVID-19 Considerations.
59. White, G. (2019). Final evaluation IFRC Hurricane Irma Response Operation (Antigua & Barbuda and St Kitts & Nevis). <https://adore.ifrc.org/Download.aspx?FileId=288644&.pdf>
60. World Bank, Global Facility for Disaster Reduction and Recovery (GFDRR, Romero, H., Timothy O'keefe, ; M, Stock, A., George, P. ;, Huey, H. H., Kober, C., Wakem, M., Runkel, M., & Lemmens, F. (2021). Gender-Responsive Disaster Preparedness and Recovery in the Caribbean: Desk Review.
61. World Bank, T. & Caribbean Regional Communications Infrastructure Program (CARCIP). (2020). Stakeholder Engagement Plan Caribbean Digital Transformation Program.
62. World Health Organization (WHO) & Pan American Health Organization (PAHO). (2016). Preparedness and Mitigation in the Americas.
63. World Health Organization (WHO) & Pan American Health Organization (PAHO). (2019a). Hospital Safety Index. Guide for Evaluators. Second Edition. (9789275320297). Organizacion Panamericana de la Salud.

REFERENCES

BIBLIOGRAPHY

64. World Health Organization (WHO) & Pan American Health Organization (PAHO). (2019b). Improving Health Disaster Risk Management with Indigenous Peoples: Methodology for Simulation Exercises Using Parallel Perspectives.
65. World Health Organization (WHO) & Pan American Health Organization (PAHO). (2019c). Preparedness Index for Health Emergencies and Disasters (9789275320747).
66. World Health Organization (WHO), Pan American Health Organization (PAHO), & 158th Session of the Executive Committee. (2016). Plan of Action for Disaster Risk Reduction 2016-2021.
67. World Meteorological Organization (WMO) & UNDRR Regional Office for the Americas. (2022). Caribbean Regional Workshop Measuring Effectiveness of Early Warning Systems through Sendai Framework Target (g) and Custom Indicators.



NDPBA

SAINT KITTS AND NEVIS PARISH RISK PROFILES

SUBNATIONAL ASSESSMENT RESULTS

PARISH RISK PROFILES

The subnational report developed for each parish offers a more detailed understanding of risk in Saint Kitts and Nevis. These are provided separately from this report (linked below), and include drivers of vulnerability, coping capacity, and resilience; a comparison of each district within overall country; and strategic, data-driven, actionable recommendations.

Download Here:

<https://www.pdc.org/wp-content/uploads/NDPBA-Saint-Kitts-and-Nevis-Subnational-Profiles-merge-vf.pdf>





**Better solutions.
Fewer disasters.**

Safer world.

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



@PDC_Global



/PDCGlobal



www.pdc.org/ndpba



ndpba@pdc.org