

# SAINT KITTS AND NEVIS NATIONAL DISASTER PREPAREDNESS BASELINE ASSESSMENT

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





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## **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

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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/).

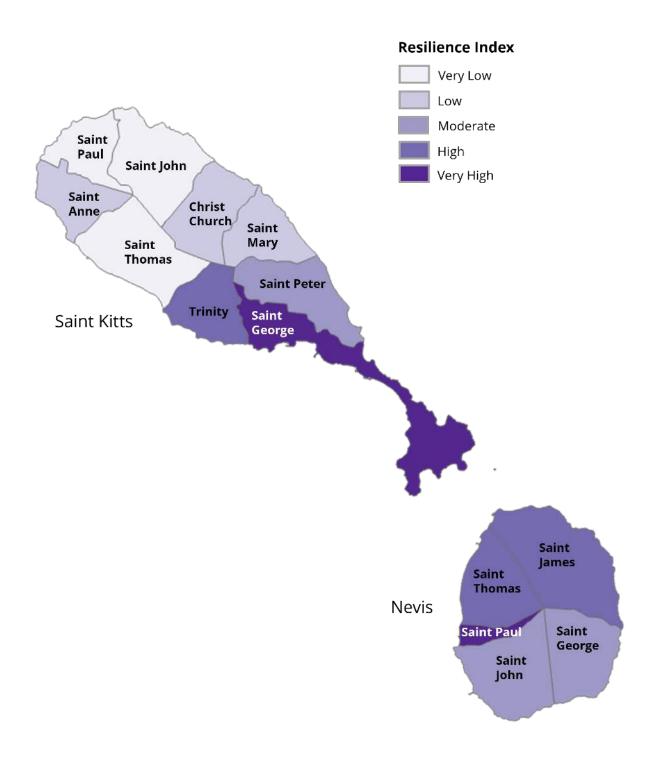








# **SUMMARY OF FINDINGS**

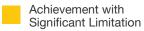




#### **DISASTER MANAGEMENT ANALYSIS**













**Enabling Environment** 



Capabilities and Resources



Institutional Arrangements



Capacity Development



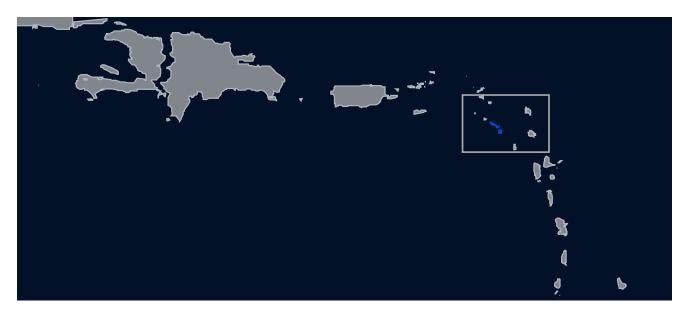
Disaster Governance Mechanisms



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:

- 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).
- Review and update the National Disaster Management Act (NDMA) 2002 to establish the legal foundation necessary for effective disaster management.
- Develop a national climate and disaster risk financing strategy to promote longterm economic and financial stability while adapting to climate change.
- Develop a volunteer policy that establishes mechanisms and provisions for the successful integration of individuals and organizations into the national response system.
- 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.
- Incorporate disaster risk reduction (DRR) into development plans, climate change adaptation (CCA) initiatives, and policies at all levels of government and community decision-making.



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.

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.

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

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

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

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

Formalize exercise ( centralize

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

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 decisionmaking by supporting a centralized multi-agency data repository for disaster management, risk reduction, and resilience.

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%

23%

Urban (231 sq km)

Agricultural (60 sq km)

Forest (110 sq km)

42%

**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

# 195 per sq km

Population density (2022)

30.7%

Urban population (2011)

69.3%

Rural population (2011)

90% African descent

2.7% Caucasian

2.5% Mixed

0.76%

Average annual population growth (2022 est.)

#### **ACCESS TO INFORMATION**

96%

97.9%

Net enrollment in primary school

Net enrollment in secondary education

79%

Population with internet connection



Physicians per 1k people

226 per sq km

St. Kitts (2022)



Nurses and midwives per 1k people

Hospital beds

per 1k people



Infant mortality rate per 1k live births.

Nevis only: 18



Teenage birth rate per 100 births.

Nevis only: 1.8

#### 141 per sq km

Average life expectancy

Nevis (2022)





New HIV diagnoses rate per 100,000 persons

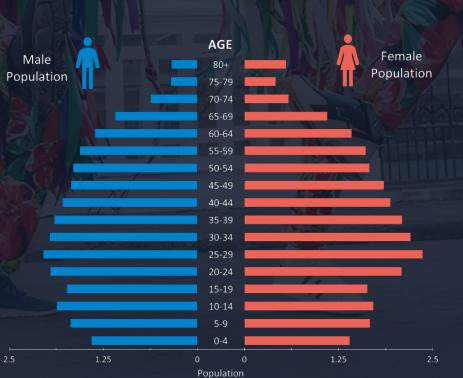


316.5

Maternal mortality ratio per 100,000 live births



Immunization coverage DPT3



(Thousands)

#### **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

478,184

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

4,045

Nevis only visitor arrivals (2019)



Tourism

#### 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)



#### 1.5%

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)



Imports (2020)

#### \$96 million

Exports (2020)

#### **KEY INFRASTRUCTURE**





Heliports



Seaports (includesmarinas, docks, and ferry terminals)

Airports Saint Kitts, Robert L. Bradshaw Nevis,

Vance W. Amory International Airport





#### **Saint Kitts**

Communication towers

Schools

Bridges

**Red Cross** 

Submarine cables

Submarine cable landing points

**Nevis** 

Bridges

Schools

Communication towers

**Red Cross** 

#### **EMERGENCY SERVICES**

#### **Saint Kitts**

Fire stations

Police stations

**EOCs** 

**Shelters** 

Hospitals

Clinics

Water & wastewater facilities

95%

Population using at least basic sanitation services (2017)

**Nevis** 

Fire stations

Shelters

Hospitals

Water & wastewater facilities

Police stations

**EOCs** 

Clinics

#### 99%

Population using at least basic drinking water services (2017)

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: <a href="https://www.pdc.org/wp-content/uploads/NDPBA-Data-Sharing-Guide-English-Screen.pdf">https://www.pdc.org/wp-content/uploads/NDPBA-Data-Sharing-Guide-English-Screen.pdf</a>

#### **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)

OUT OF 216 COUNTRIES / TERRITORIES ASSESSED

# Climate Exposure 2050 Rank (PDC Regional Climate Assessment)

OUT OF 20 COUNTRIES ATTERRITORIES 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

#### **LANDSLIDE**



**26%** Relative Population Exposure

**13,590** Raw Population Exposure

Exposed: 24% Built Environment 25% Crit. Infrastructure

#### **SEA LEVEL RISE**



2% Relative Population Exposure

**951** Raw Population Exposure

Exposed: 2% Built Environment 8% Crit. Infrastructure

#### **EXTREME HEAT**



**100%** Relative Population Exposure

**52,520** Raw Population Exposure

Exposed: 100% Built Environment 100% Crit. Infrastructure

#### **TSUNAMI**



**36%** Relative Population Exposure

**18,698** Raw Population Exposure

Exposed: 37% Built Environment 51% Crit. Infrastructure

#### **EARTHQUAKE**



**100%** Relative Population Exposure

**52,520** Raw Population Exposure

Exposed: 100% Built Environment 100% Crit.Infrastructure

#### **HURRICANE WINDS**



**100%** Relative Population Exposure

**52,520** Raw Population Exposure

Exposed: 100% Built Environment 100% Crit. Infrastructure

#### **VOLCANO**



**53%** Relative Population Exposure

**27,670** Raw Population Exposure

Exposed: 41% Built Environment 48% Crit. Infrastructure

#### **WILDFIRE**



18% Relative Population Exposure

**9,571** Raw Population Exposure

Exposed: 22% Built Environment 16% 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

Waste

1 (50%)

Management

22 (40%)

Resorts

Hotels &

0 (0%)

Fire Stations

1 (6%) Police Stations

0 (6%) Power Plants

Bridges

12 (43%)

3 (60%)

Fuel Terminals and Storage

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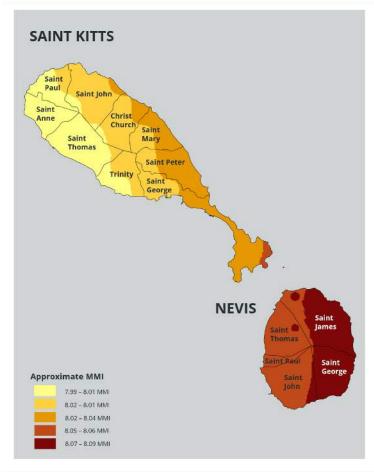


#### Saint Kitts and Nevis: Earthquake Hazard Exposure



VIEW IN <u>DISASTERAWARE</u>





#### 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

Power Plants

46 (100%) Shelters

22 (100%)

Hospitals & Clinics



Waste



Management



Hotels &

Resorts







Fire Stations





Police Stations





Bridges



280 (100%)

8 (100%)

Senior and Child Care Homes

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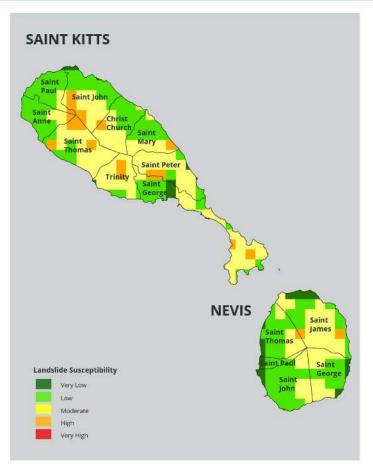


#### Saint Kitts and Nevis: Landslide Hazard Exposure









#### 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

Power Plants

1 (17%)

Bridges

51 (18%) 1 (13%)

Senior and Child Care Homes

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#### Saint Kitts and Nevis: Sea Level Rise Hazard Exposure









#### POTENTIAL POPULATION EXPOSURE



951 (2%)

People exposed to sea level rise



224 (2%)

Built environment exposed to sea level rise by 2050

#### CRITICAL INFRASTRUCTURE AND ASSETS EXPOSED















2 (33%) Airports and Heliports

22 (96%) Seaports

5 (7%) Schools & Colleges

**EOCs** 

0 (0%)

0 (0%) Warehouses

0 (0%) Shelters

0 (0%)

Hospitals & Clinics



1 (50%) Waste Management



17 (31%) Hotels &

Resorts

0 (0%) Fire Stations



1 (6%) Police Stations

0 (0%) Power Plants

11 (4%)

Bridges

2 (40%)

Fuel Terminals and Storage

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#### Saint Kitts and Nevis: Hurricane Wind Hazard Exposure







#### 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

Schools & Colleges

70 (100%)

2 (100%) **EOCs** 

2 (100%) Warehouses

46 (100%) Shelters

22 (100%)

Hospitals & Clinics











Police Stations







Care Homes

2 (100%) Waste

Management

Resorts

55 (100%) Hotels &

6 (100%) Fire Stations

16 (100%)

6 (100%) Power Plants 280 (100%) Bridges

8 (100%) Senior and Child

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#### Saint Kitts and Nevis: Tsunami Hazard Exposure







#### POTENTIAL POPULATION EXPOSURE



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

**EOCs** 

0 (0%)

0 (0%) Warehouses

14 (30%) Shelters

13 (59%)

Hospitals & Clinics



2 (100%)

Management

Waste





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

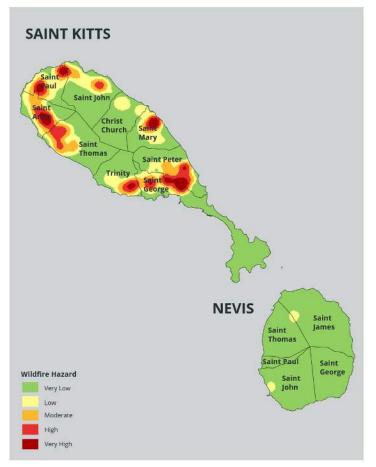
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#### Saint Kitts and Nevis: Wildfire Hazard Exposure







#### 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

Hospitals & Clinics



















1 (50%) Waste

1 (2%) Hotels & Management Resorts

1 (17%) Fire Stations 0 (0%) Police Stations

3 (50%) Power Plants 19 (7%) Bridges

1 (13%) Senior and Child Care Homes

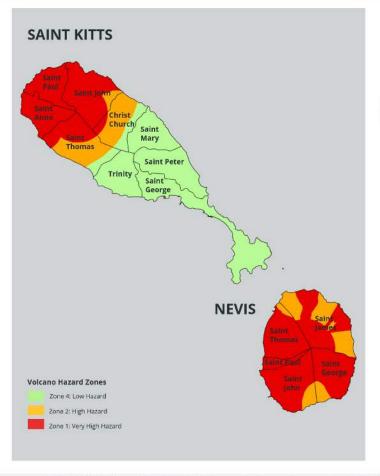
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#### Saint Kitts and Nevis: Volcano Hazard Exposure







#### 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











Bridges



1 (50%) Management

Waste Hotels &

22 (40%)

Resorts

Fire Stations

4 (67%)

9 (56%) Police Stations 3 (6%) Power Plants 197 (70%)

3 (38%) Senior and Child Care Homes

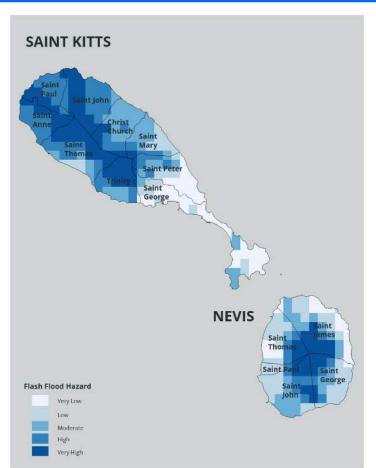
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#### Saint Kitts and Nevis: Flash Flood Exposure







#### 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%)

Heliports

Airports and



1 (4%)

Seaports



17 (24%)

Schools &

Colleges



0 (0%)

**EOCs** 







Warehouses



Shelters

11 (24%)



Hospitals & Clinics



0 (0%)

Management

Waste



7 (13%)

Hotels &

Resorts





0 (0%)

Fire Stations



4 (25%)

Police Stations





1 (17%)

Power Plants



Bridges



35 (13%) 2 (25%)

Senior and Child Care Homes

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#### Saint Kitts and Nevis: Extreme Heat Exposure







#### 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













Bridges



Care Homes

2 (100%) Waste Management 55 (100%)

Resorts

Hotels &

6 (100%)

Fire Stations

16 (100%) Police Stations

6 (100%) Power Plants 280 (100%)

8 (100%) Senior and Child

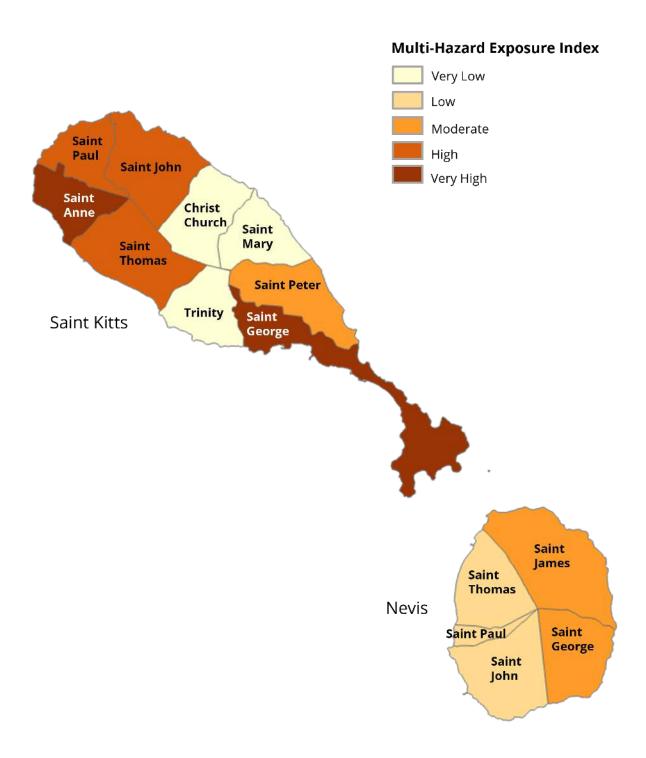
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### **MULTI-HAZARD EXPOSURE BY PARISH**

	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
пол	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)

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**

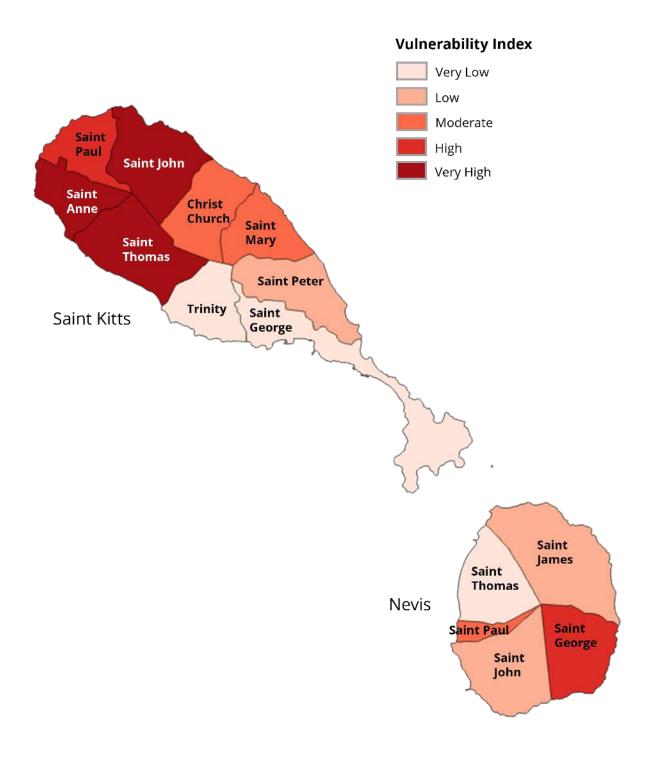
Coastline Exposure to Local/Global Threats Forest Loss Average Annual Population Change Population Density



#### **VULNERABILITY BY PARISH**

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



## **Health Care Capacity**Hospitals and Clinics per 1,000 Persons



# **Governance**Voter Participation Household Waste Disposal



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
VERY	2	Saint Anne Sandy Point	0.741
	3	Saint Paul Charlestown	0.740
HIGH	4	Saint James Windward	0.673
	5	Saint John Figtree	0.671
<b>2</b>	6	Saint George Gingerland	0.637
MODERATE	7	Saint Mary Cayon	0.584
	8	Trinity Palmetto Point	0.562
	9	Saint Peter Basseterre	0.504
LOW	10	Saint Thomas Lowland	0.478
	11	Saint Thomas Middle Island	0.423
>	12	Saint Paul Capisterre	0.352
VERY LOW	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
	3	Saint Thomas Lowland	0.699
HIGH	4	Saint James Windward	0.643
	5	Saint John Figtree	0.580
	6	Saint George Gingerland	0.476
MODERATE	7	Saint Peter Basseterre	0.474
	8	Trinity Palmetto Point	0.442
ПОМ	9	Saint Mary Cayon	0.413
	10	Saint Thomas Middle Island	0.335
	11	Saint John Capisterre	0.287
>	12	Saint Anne Sandy Point	0.281
VERY LOW	13	Christ Church Nichola Town	0.262
>	14	Saint Paul Capisterre	0.210







# THE RVA COPING CAPACITY



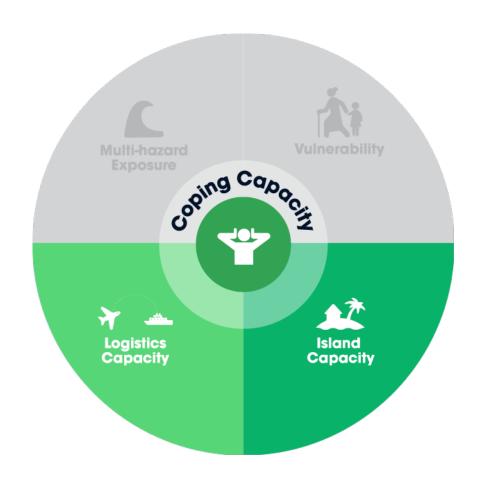
# **COPING CAPACITY**

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)



#### **COPING CAPACITY SUBCOMPONENTS**





#### **COPING CAPACITY BY PARISH**

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

OUT OF 194 COUNTRIES / TERRITORIES ASSESSED

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



#### **RESILIENCE COMPONENTS**







Island Capacity



**Logistics Capacity** 

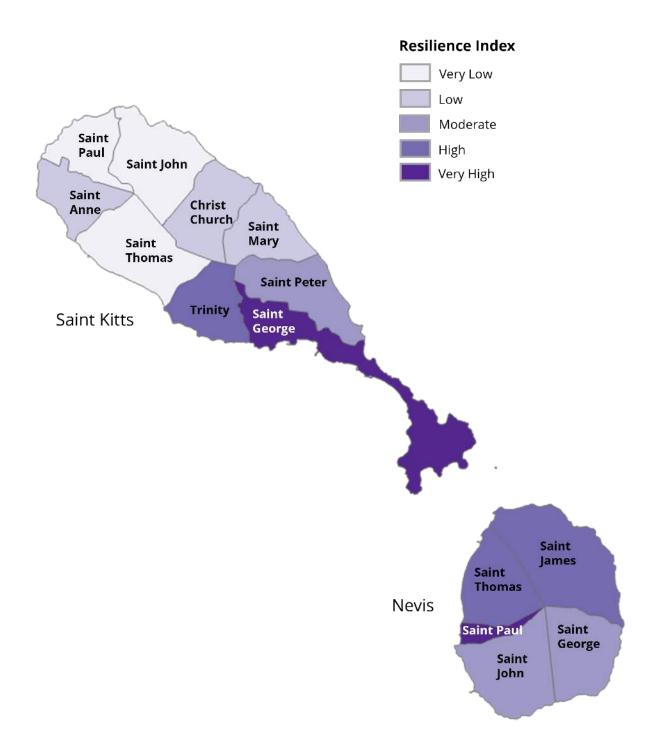




#### **RESILIENCE BY PARISH**

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

OUT OF 193 COUNTRIES AT TERRITORIES ASSESSED

#### **MULTI-HAZARD RISK COMPONENTS**



**Multi-Hazard Exposure** 



**Vulnerability** 



**Island Capacity** 



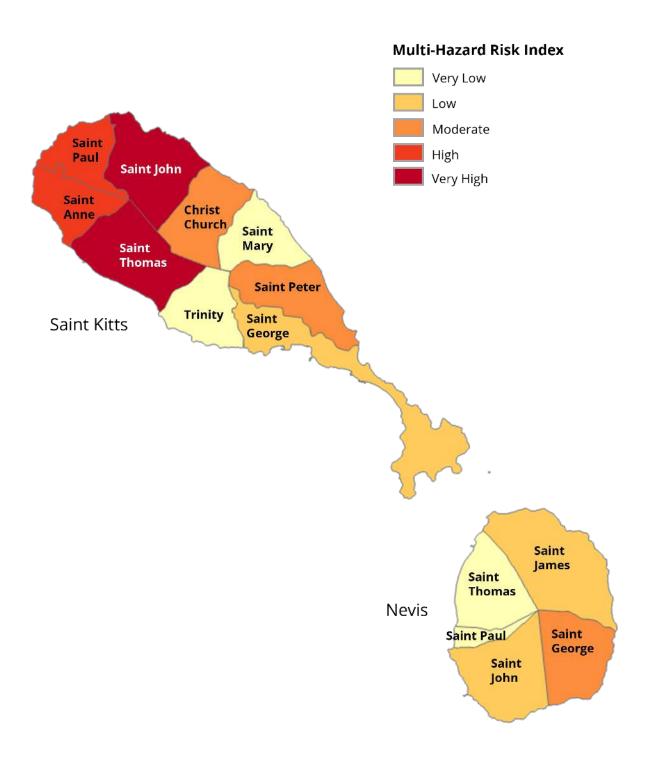
**Logistics Capacity** 



#### **MULTI-HAZARD RISK BY PARISH**

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





#### **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



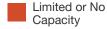
#### C. Disaster Governance Mechanisms

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

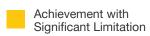


### F. Communication and Information Management

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













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.



#### **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.



#### **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





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.



# 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.

#### SENDAI 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**

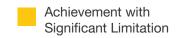
7, 11, 13, 15

#### **CDEMA CDM Priority Areas**

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

Limited or No Capacity













# 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





#### **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**

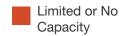
(a), (b), (c), (e), (f), (g), (h), (i), (j), (k), (m)

#### **SDGs**

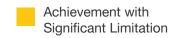
8, 9, 10, 12, 13, 15, 16

#### **CDEMA CDM Priority Areas**

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

















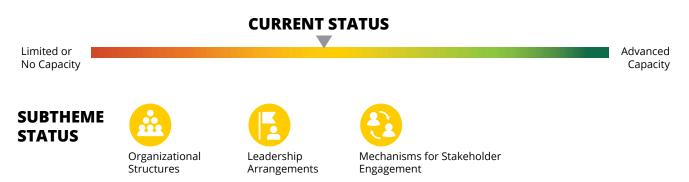
THE DMA

# INSTITUTIONAL ARRANGEMENTS





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



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



**FINDINGS** 

#### MECHANISMS FOR STAKEHOLDER ENGAGEMENT

# 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



Achievement with Significant Limitation







### **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**

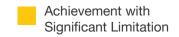
3, 7, 9, 10, 11, 13, 15, 16, 17

#### **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











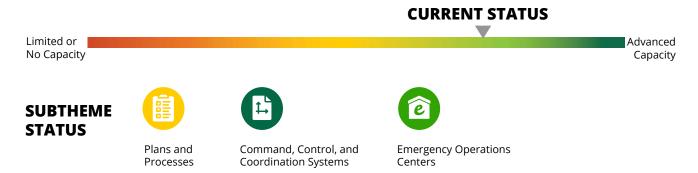
THE DMA

# 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.
  - o 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**

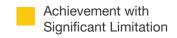
11, 13, 14, 15, 16, 17

#### **CDEMA CDM Priority Areas**

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

Limited or No Capacity











# **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



Achievement with Significant Limitation







### **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**

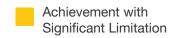
9, 11, 13, 15, 16

#### **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















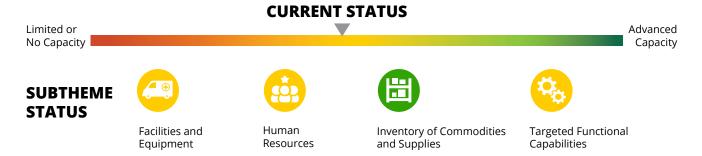
THE DMA

# 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.
  - o 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.

#### 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







### **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

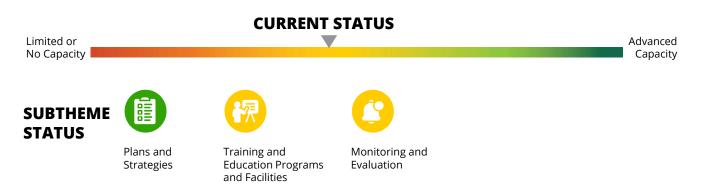
# CAPACITY DEVELOPMENT





# **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 lessonslearned 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

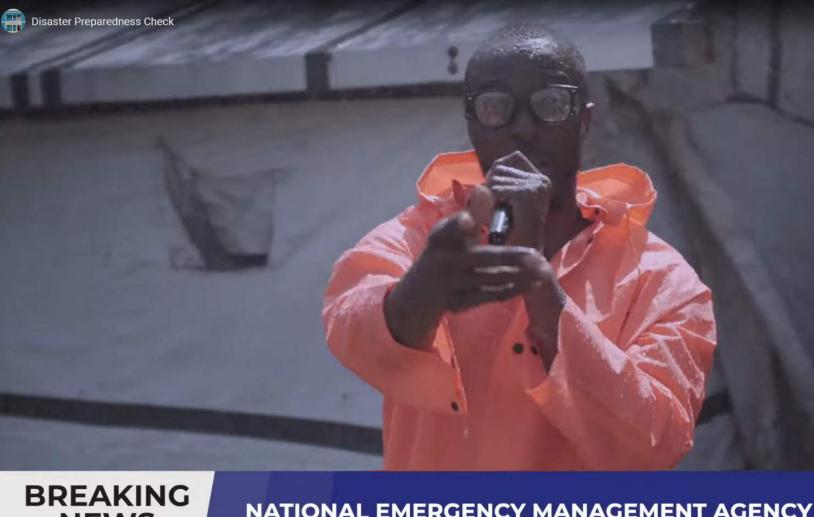






# **CAPACITY DEVELOPMENT**





**NEWS** 

NATIONAL EMERGENCY MANAGEMENT AGENCY

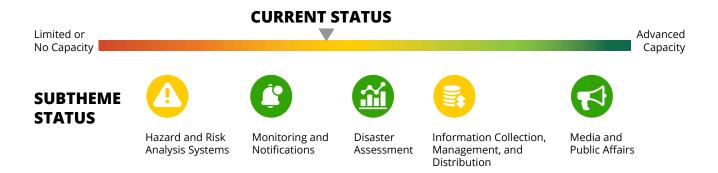
**THE DMA** 

# 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 preand 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**



#### HAZARD AND RISK ANALYSIS

#### **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.

#### **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**

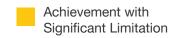
7.1, 8.1

#### **CDEMA CDM Priority Areas**

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













### **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.
  - o 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





THE NDPBA

# 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





# 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)





#### **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)





# 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



# THE NDPBA NATIONAL 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).

- 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.

Priorities for Action	SDGs
1, 2, 4	3, 11, 16
Global Target (s)	CDEMA CDM Priority Areas
A, B, C, D	1 (1.1, 1.2, 1.3, 1.4), 2, 3 (3.1, 3.2), 4 (4.2, 4.4)

# 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, S PRIORITY AREAS ADVANCED	SDGS, PARIS AGREEMENT, AND CDEMA CDM
Priorities for Action	SDGs
1, 2, 3, 4	3, 9, 11, 13, 14, 15, 16, 17
Global Target (s)	Paris Agreement Articles
<u>A, B, C, D, F, G</u>	7.1, 8.1
Guiding Principle(s)	CDEMA CDM Priority Areas
(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l)	1 (1.1, 1.2, 1.4), 2, 3 (3.1, 3.2), 4





# 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, SI PRIORITY AREAS ADVANCED	DGS, PARIS AGREEMENT, AND CDEMA CDM
Priorities for Action	SDGs
1, 2, 3, 4	9, 10, 11, 13, 16, 17
Global Target (s)	Paris Agreement Articles
<u>A, C, D, F</u>	7.1, 8.1
Guiding Principle(s)	CDEMA CDM Priority Areas
(a), (b), (c), (d), (e), (f), (g), (j), (h), (i), (j), (k), (l)	1 (1.2, 1.3), 2 (2.2, 2.3), 3 (3.1, 3.2), 4 (4.2, 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	SDGs
2, 3, 4	4, 11, 16
Global Target (s)	CDEMA CDM Priority Areas
<u>A, C, D, E</u>	1 (1.3, 1.4), 2 (2.1, 2.3, 2.4), 3 (3.1, 3.2),
Guiding Principle(s)	4 (4.2, 4.4)
(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)	





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 FRAMEWO PRIORITY AREAS ADVANCED	ORK, SDGS, PARIS AGREEMENT, AND CDEMA CDM
Priorities for Action 1, 2, 4	<b>SDGs</b> 9, 11, 13, 14, 15, 16
<b>Global Target (s)</b> 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)



# 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, PRIORITY AREAS ADVANCED	, SDGS, PARIS AGREEMENT, AND CDEMA CDM
Priorities for Action 1, 2, 4	<b>SDGs</b> 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 realtime data such as weather forecasts and disaster impact assessments, to aid decisionmaking 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	<b>SDGs</b> 11, 16
<b>Global Target (s)</b> 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)	



# 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.

ADVANCED	
Priorities for Action	SDGs
1, 2, 4	3, 9, 10, 11, 16
Global Target (s)	CDEMA CDM Priority Areas
A, B, C, D	1 (1.1, 1.2, 1.3, 1.4), 2 (2.2, 2.3), 3 (3.1),
Guiding Principle(s)	4 (4.2, 4.3, 4.4)
(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)	





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, SD PRIORITY AREAS ADVANCED	GS, PARIS AGREEMENT, AND CDEMA CD	
Priorities for Action	SDGs	
1, 2, 3, 4	9, 11, 13, 14, 15, 17	
Global Target (s)	Paris Agreement Articles	
<u>A, B, C, D, F, G</u>	7.1, 8.1	
Guiding Principle(s)	CDEMA CDM Priority Areas	
(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)	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

<b>ALIGNMENTS: SENDAI FRAMEWORK, SDGS, AND CDEMA CDM PRIORITY AREAS</b>	
ADVANCED	

#### **Priorities for Action**

1, 2, 3, 4

#### **Global Target (s)**

A, B, C, D, F

#### **Guiding Principle(s)**

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

#### **SDGs**

2, 6, 9, 11, 13, 17

#### **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)

PDC | GLGBAI





## 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 FRAMEN ADVANCED	WORK, SDGS, AND CDEMA CDM PRIORITY AREAS
Priorities for Action	SDGs
1 0 1	7 11 10 10 15 16

 Global Target (s)
 CDEMA CDM Priority Areas

 D, F
 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	SDGs	
1, 2, 3, 4	9, 10, 11	
Global Target (s)	CDEMA CDM Priority Areas	
A, B, C, D, G	1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2, 2.3), 3 (3.1, 3.2,	
Guiding Principle(s) (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k)	3.3), 4 (4.2, 4.3, 4.4)	

PDC | GLGBAR



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 SDGs			
1, 2, 3, 4	2, 6, 9, 11, 13,17		
Global Target (s)	CDEMA CDM Priority Areas		
A, B, C, D, F	1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.3, 2.4), 3 (3.1, 3.2),		
Guiding Principle(s)	4 (4.2)		
(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l)	_		

# 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.

Priorities for Action	SDGs
1, 2, 3, 4	4, 11, 16
Global Target (s)	CDEMA CDM Priority Areas
A, B, C, D, F	1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2), 3, 4 (4.2, 4.4)

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.

Priorities for Action	SDGs
1, 2, 3, 4	1, 2, 3, 6, 7, 9, 11, 13, 14, 15, 17
Global Target (s)	CDEMA CDM Priority Areas
A, B, C, D, E, F, G	1 (1.1, 1.2, 1.3, 1.4), 2 (2.1, 2.2, 2.3),
Guiding Principle(s) (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)	3 (3.1, 3.2), 4 (4.2, 4.3, 4.4)

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	SDGs		
1, 2, 3, 4	1, 2, 3, 4, 6, 7, 9, 11, 13, 14, 15, 16, 17		
Global Target (s)	Paris Agreement Articles		
A, B, C, D, E, F, G	7.1, 8.1		
Guiding Principle(s)	CDEMA CDM Priority Areas		
(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m)	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 FRAMEWOR PRIORITY AREAS ADVANCED	K, SDGS, PARIS AGREEMENT, AND CDEMA CDM
Priorities for Action 1, 2, 3, 4	<b>SDGs</b> 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 SDGs			
2, 4	4, 6, 7, 8, 9, 10, 11, 13, 17		
Global Target (s)	Paris Agreement Articles		
E, F	7.1, 8.1		
Guiding Principle(s)	CDEMA CDM Priority Areas		
(a), (b), (c), (e), (f), (g), (h), (j), (k), (l), (m)	1 (1.3, 1.4), 2, 3 (3.1, 3.2), 4 (4.1, 4.2, 4.4)		



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#### **5-YEAR PLAN**

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**YEAR** 

#### SAINT KITTS AND NEVIS NATIONAL RECOMMENDATIONS

**YEAR YEAR YEAR 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 polices 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 **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.

National Disaster Preparedness Baseline Assessment: Saint Kitts and Nevis



### **5-YEAR PLAN**

#### SAINT KITTS AND NEVIS NATIONAL RECOMMENDATIONS



year <b>1</b>	year 2	YEAR 3	YEAR 4	YEAR 5
		RECOMMENDATION 10	A CONTRACTOR A CON	
		Improve interoperability with international and local policy to govern and guide the NGOs' response to import to the policy to govern and guide the NGOs' response to import to the policy to govern and guide the NGOs' response to import to the policy to govern and guide the NGOs' response to import to the policy to govern and guide the NGOs' response to import to the policy to govern and guide the NGOs' response to import to the policy to govern and guide the NGOs' response to import to the policy to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to import to govern and guide the NGOs' response to govern and guide the	pacts on St Kitts and Nevis.	
		RECOMMENDATION 11  Support necessary technical upgrades to the National	l Emergency Operations Center (NEOC) for improved	
		response operability.		
		RECOMMENDATION 12  Strengthen all-hazards monitoring and communication warning systems (EWS) capabilities.	ons systems, translating data into comprehensive early	
		RECOMMENDATION 13		
		Review local and regional supply chains to ensure the efficient storage, movement, and delivery of relief sup	e speed and quality of response operations through oplies.	
			RECOMMENDATION 14	
			Formalize disaster training and exercise (T&E) initia	tives into a centralized program.
			RECOMMENDATION 15  Utilize GIS-mapping capabilities and systems to add	dress geospatial data and logistics to inform community-
			based disaster management and planning efforts.	
				orting a centralized multi-agency data repository for
			disaster management, risk reduction, and resilience	:- 
			RECOMMENDATION 17  Promote awareness and preparedness campaigns manmade hazards and climate change impacts.	among residents, visitors, and businesses for natural and
RECOMMENDATION 18				
Export successes and lessons learned through the ca	apacity-building efforts of Saint Kitts and Nevis, including the r	model Safe School Policy, SMART Hospital initiative, and implement	ntation of sustainable practices to support climate resilience	and risk reduction nationally and internationally.



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# SAINT KITTS AND NEVIS DISTRICT RISK PROFILES

**SUBNATIONAL ASSESSMENT RESULTS** 



# DISTRICT RISK PROFILES

The subnational report developed for each district 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-Merged.pdf





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