

# The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030

A report from the Caribbean  
Vol 1 – Summary Report



## **ABSTRACT**

This document presents the context, context shifts and emerging issues in the Caribbean region in relation to disaster risk reduction. It presents the results of the regional review in relation to the progress in implementing the Sendai Framework for Disaster Risk reduction from 2015 to date (2022), as well as explores the prospective views towards 2030 and beyond identifying key recommendations to accelerate the implementation of the Sendai Framework for Disaster Risk Reduction in the region.

## **DISCLAIMER**

The designations employed and the presentation of the material in this publication do not necessarily imply the expression of opinion or official views on the part of the United Nations, the United Nations Office for Disaster Risk Reduction (UNDRR) or the Caribbean Disaster Emergency Management Agency (CDEMA).

## **ACKNOWLEDGEMENTS**

Research for and writing of the report was undertaken by Maria Kontro, UNDRR Consultant for the Midterm Review of the implementation of the Sendai Framework in the Caribbean region. This report benefitted from the feedback of several partners. Thank you also to everyone who participated in interviews, consultations and surveys and provided inputs throughout the process; the full list of participants is included at the end of the report.

For more information, please contact UNDRR Regional Office for the Americas and the Caribbean:  
<https://www.undrr.org/contact-us>

Copyright ©UNDRR 2022. All rights reserved.

## **ABOUT UNDRR**

UNDRR is the United Nations focal point for disaster risk reduction. UNDRR oversees the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, supporting countries in its implementation, monitoring and sharing what works in reducing existing risk and preventing the creation of new risk.



## Table of Contents – Vol 1

### ACRONYMS

<b>EXECUTIVE SUMMARY .....</b>	<b>6</b>
<b>I. METHODOLOGY AND PROCESS .....</b>	<b>8</b>
<b>II. CONTEXT .....</b>	<b>9</b>
A. The Caribbean context.....	9
B. Context Shifts and Emerging Issues .....	10
<b>III. IMPLEMENTATION OF THE SENDAI FRAMEWORK.....</b>	<b>14</b>
A. The Outcome and Goal .....	14
B. Risk Assessment, Information and Understanding.....	16
C. Risk Governance and Management.....	19
D. Investment in Risk Reduction and Resilience .....	24
E. Disaster Preparedness, Response and ‘Build Back Better’ .....	28
F. Achieving the Targets of the Sendai Framework.....	30
G. Collaboration, Partnership and Cooperation.....	33
<b>IV. GENDER EQUALITY IN DISASTER RISK REDUCTION.....</b>	<b>35</b>

### SOURCES

## Table of Contents – Vol 2

<b>Annex 1:</b>	Caribbean Multi-Hazard Early Warning Systems (MHEWS) Thematic Case View
<b>Annex 2:</b>	Caribbean Safe School Initiative (CSSI) Thematic Case View
<b>Annex 3:</b>	Methodology of the Caribbean review
<b>Annexes 4-10:</b>	Consultation and Result Reports (evidence base)



## ACRONYMS

ARISE	Private Sector Alliance for Disaster Resilient Societies
BBB	Build Back Better
BCP	Business Continuity Plan
CARICHAM	Caribbean Network of Caribbean Chambers of Commerce
CARICOM	Caribbean Community
CARPHA	Caribbean Public Health Agency
CCA	Climate Change Adaptation
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CFFR	Caribbean Facility for Recovery
CMO	Caribbean Meteorological Organisation
COP	Conference of the Parties (UN Climate Change Conference)
COVID-19	Coronavirus disease
CREWS	Climate Risk and Early Warning Systems initiative
CRI	Climate Risk Index
CSO	Civil Society Organization
CSSI	Caribbean Safe School Initiative
CSW66	Sixty-sixth Session of the Commission on the Status of Women
CU	Coordinating Unit
CWP	Country Work Programme
DIPECHO	European Commission Humanitarian Aid department's Disaster Preparedness Programme
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRRC	Disaster Risk Reduction Centre (of the University of the West Indies)
ECHO	European Civil Protection and Humanitarian Aid Operations
ECLAC	United Nations Economic Commission for Latin America and the Caribbean
EDF	European Development Fund
EIE	Education in Emergencies
EnGenDER	Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (CDEMA-UN Programme)
EUD	European Union Delegation
EWS	Early Warning System
GADRRRES	Global Alliance on Disaster Risk Reduction Education and Resilience in the Education Sector
GAR	Global Assessment Report on Disaster Risk Reduction
GCCA	Global Climate Change Alliance
GCF	Green Climate Fund
GDP	Gross Domestic Product
GIS	Geographic Information System
GP22	Global Platform for Disaster Risk Reduction 2022
IFRC	International Federation of Red Cross and Red Crescent Societies



INTPA	Directorate-General for International Partnerships (of the European Union)
LAC	Latin America and the Caribbean
LDCs	Least Developed Countries
MCR	Making Cities Resilient (initiative)
MER	Monitoring, Evaluation and Research
MHEWS	Multi-Hazard Early Warning Systems
MHIEWS	Multi-Hazard Impact-based Early Warning Systems
MOE	Ministry of Education
MoU	Memorandum of Understanding
MTR SF	Mid-Term Review of the implementation of the Sendai Framework
NAP	National Adaptation Plan (for climate change)
NEMO	National Emergency Management Office
NOAA	National Oceanic and Atmospheric Administration
ODA	Official Development Assistance
OECS	Organization of Eastern Caribbean States
OT	Overseas Territory
PAHO	Pan American Health Organization
PMF	Performance Monitoring Framework
PPP	Public-Private Partnership
PS	Participating State (of CDEMA)
RAR	Regional Assessment Report on Disaster Risk Reduction
REWSC	Regional Early Warning Systems Consortium
ROAC	Regional office for the Americas and the Caribbean
RP21	Regional Platform for Disaster Risk Reduction 2021
RRM	Regional Response Mechanism
SADDD	Sex-, age- and disability disaggregated data
SAMOA	Small Island Developing States Accelerated Modalities of Action
SDG	Sustainable Development Goals
SEI	Stockholm Environment Institute
SFM	Sendai Framework Monitor
SMEs	Small and Medium-sized Enterprises
SIDS	Small Island Developing States
SSFP	Safe School Focal Point
TAC	Technical Advisory Committee (of CDEMA)
UN	United Nations
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNMGCY	UN Major Group for Children and Youth
USAID	United States Agency for International Development
UWI	University of the West Indies
WISS	Worldwide Initiative for Safe Schools
WMO	World Meteorological Organization



## EXECUTIVE SUMMARY

The Caribbean region is one of the most disaster-prone regions in the world. In the Caribbean, the Sendai Framework for Disaster Risk Reduction 2015 – 2030 is being implemented through the Comprehensive Disaster Management (CDM) Strategy 2014 – 2024, which has systematized alignments with the Sendai Framework. The CDM Strategy is coordinated by the Caribbean Disaster Emergency Management Agency (CDEMA) Coordinating Unit. In line with the change from the Hyogo Framework for Action 2005-2015 to the Sendai Framework, the focus in the Caribbean region has shifted from *what* needs to be done in disaster risk reduction (DRR) towards *how* it needs to be done.

The Caribbean Mid-Term Review of the implementation of the Sendai Framework (MTR SF) has been developed in close collaboration with CDEMA. The inputs, findings, conclusions and recommendations contained herein are guided by the relevant literature, documents, studies and policies, and a broad variety of consultations conducted with regional and national partners, including DRR and Sendai Framework national focal points, key sectors and government offices to DRR, regional intergovernmental organizations, the private sector, academia, civil society, DRR advisors and specialists, gender actors, children and youth, development banks, donors and other development partners. The opportunities for engagement within this process fostered participation from all the countries and overseas territories within the scope of the Caribbean MTR SF.

In addition to the methodology, the Caribbean MTR SF report focuses on two main sections. **The section on context** recognizes that the Caribbean is highly exposed to natural hazards and the region's livelihood structure is dominated by only a few main livelihood sectors, which are among the most vulnerable ones to disasters, such as tourism and agriculture. While this has long been an issue with the traditional hazards, it caused a severe materialization of risks particularly in the context of the COVID-19 pandemic and related containment measures. As a consequence, the region fell into deeper debt and poverty, that is also considered to increase the future disaster vulnerability.

Climate change is creating new and expanding existing risks. In the Caribbean, there is no sustainable development without climate resilient development. A key consideration of the coherence approach between DRR, climate change and sustainable development from the Caribbean perspective is that if the world doesn't adhere to the 1.5-degree climate goal, the Caribbean region will face severe obstacles for sustainable development and existential threats posed by climate-related hazards. The coherence agenda is not only efficient for the Caribbean, but it is also about their survival.

Due to the context changes and lessons learned, there is no risk blind development in the Caribbean. The various emerging issues and future threats will be intensifying the cascading effects also to the key sectors and financial systems. Sustainable tourism and nature-based solutions are becoming even more important to cope with the climate induced hazards.

The second main section of the report focuses on **the achieved progress during 2015-2022, and on the future prospects towards 2030 and beyond, on the implementation of the Sendai Framework**. The MTR SF review results show that progress has been made in the Caribbean in the implementation of the Sendai Framework since 2015 and the prospects for achieving the Sendai Framework's objective and goal for the Caribbean are possible in theory. However, when estimating the prospects towards 2030 and beyond, it is important to assess the situation with future foresight. In this light, the increasing and interconnected effects of climate change will present considerable challenges in meeting this ambition. Therefore, a future-oriented long-term systemic and holistic vision is needed.



*In risk understanding and information*, the drivers of risk and systemic risk are now better understood than in 2015, however, this priority for action is considered having experienced least progress among the four Sendai priorities, mainly due to the gaps in data and information. *Disaster risk governance*, on the other hand, has been progressing well in the Caribbean. There is a strong regional integration on DRR, which enables countries with limited capacity to act together when facing large-scale events that exceed their national capacity to respond. The development process of the national DRR strategies is considered important in the region, and with the multi-sectoral approach, they are fostering a culture of resilience. In the recent years, these strategies have been increasingly informed by simultaneous hazards, the coherence approach and the acknowledgement of the systemic nature of risk.

Since 2015 there has been limited increase in the region's own ability to *invest in DRR*, but there is an increase in donor support towards resilience and multi-hazard early warning systems (MHEWS). *Build back better and lessons learned* are consistently applied in the Caribbean. However, the Caribbean system remains more in the reactive side than in strategic DRR approach, mainly due to the frequent need to direct limited resources to respond to the increasing number of hazards and disasters. On *partnerships and collaboration*, inter-government and private sector collaboration on DRR have advanced the most since 2015.

*Looking towards 2030 and beyond*, increased focus is recommended to be placed on multi-sectoral data availability. In light of the changing risk patterns in the Caribbean, it is recommended to use technology and future foresight in understanding of risk, for which greater collaboration between the academia, public and the private sectors is needed. To advance *risk governance*, a more comprehensive alignment of regional and international DRR strategies is recommended. The risk governance approach is also recommended to be increasingly developed towards an adaptive system, continuously informed by understanding risk, with stronger participation of all governance sectors and all actors in a strengthened coordination platform, coordinated by an entity that holds an official convening and coordinating mandate. It is also recommended to constantly develop DRR and response systems through efficient learning, best practices and lessons learned.

Aligned with many of these steps, there is an urgent need to scale up *risk financing* in the Caribbean. Therefore, it is recommended to raise DRR awareness at the highest level to develop a multisectoral disaster risk financing strategy. Considering the current and future effects of climate change in the Caribbean, it is also recommended to support the Caribbean small island developing states towards increased access to global climate change adaptation funds. *New and emerging partnerships* are recommended to be developed or strengthened, to complement the government efforts on DRR towards 2030 and beyond. In addition to the private sector and academia, it is also recommended to increasingly integrate local knowledge in risk information, and to strengthen public awareness on DRR.

While data and reporting gaps in the Caribbean have limited the quantitative reporting of the progress towards the Sendai Global Targets, there are excellent examples of the region's progress. **Two thematic case views** focusing on MHEWS (target g) and on the Caribbean Safe Schools Initiative (target d) are summarized in this report. Full versions of the thematic case views are available in Vol 2 of this report.

The Caribbean MTR SF also looks into **gender equality in DRR**. While the region has taken some important steps from 2015 to date, the understanding of gender in DRR is limited to specific actors and actions. Going towards 2030 it is important to collect and use sex-disaggregated data and gender analysis in DRR decision making, to pave the way also for a broader gender transformative approach.



## I. METHODOLOGY AND PROCESS

### **MTR SF adapted for the Caribbean region**

In the Caribbean, the disaster risk reduction (DRR) approach is regionally very integrated among the countries and overseas territories (OTs), with strong shared efforts and solidarity, in which the Caribbean Disaster Emergency Management Agency (CDEMA) Coordinating Unit (CU) is responsible of the overall coordination. This regional DRR-related integration is particularly beneficial for the small countries and territories, where the limited national capacity supports the approach to act together in the face of tremendous hazards affecting the region.

In the Caribbean, the regional Comprehensive Disaster Management (CDM) Strategy 2014 – 2024 and the related national level diagnostic and implementation strategies are the main strategies to implement the Sendai Framework for Disaster Risk Reduction 2015 – 2030.

These have been some of the core considerations in planning the methodology for the Mid-Term Review of the implementation of the Sendai Framework (MTR SF) in the Caribbean.

### **Scope and limitations**

The geographic scope of the Caribbean MTR SF is the 19 CDEMA Participating States (PSs)<sup>1</sup>, including Anguilla\*, Antigua and Barbuda, Cayman Islands\*, Commonwealth of the Bahamas, Barbados, Belize, Commonwealth of Dominica, Grenada, Republic of Guyana, Haiti, Jamaica, Montserrat\*, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, Republic of Trinidad and Tobago, Turks and Caicos Islands\* and the British Virgin Islands\*. Through consultations and interviews with Caribbean regional actors of a slightly different scope, the exact country scope may vary to a certain degree.

Due to many competing priorities and small size of the National Emergency Management Offices (NEMOs) among the small island developing states (SIDS), the participation in the Caribbean to the MTR SF represented at times some challenges. As such challenges were recognized early in the process, it was possible to factor in and thus mitigate this limitation.

### **The process**

The Caribbean MTR SF reflects an inclusive and participatory process throughout the planning, data collection and report development phases, with active engagement and leadership by CDEMA CU and meaningful participation of a diverse variety of partners and interested parties. Data collection included literature review, a variety of consultations (online and in-person workshops), key informant interviews, surveys and integration of findings from other relevant consultations that took place during the data collection phase or prior to it. A full list of participation opportunities and complete methodology can be found in annex 3 (Vol 2) of this report.

---

<sup>1</sup> The other Caribbean countries, such as Cuba and Dominican Republic, are included in the MTR SF Latin America and Caribbean regional report.

\*Overseas Territory.





## II. CONTEXT

### A. The Caribbean Context

***The Caribbean is one of the most disaster-prone regions in the world.*** According to the long-term Climate Risk Index (CRI), three out of the ten countries most affected by extreme weather events are located in the Caribbean<sup>2</sup>. The region is exposed to a diverse set of hazards. Most of the countries are within the hurricane belt and the region has experienced repeated losses from hurricanes, including recent major events such as the 2017 hurricane season, with never-before seen category 5 hurricanes Irma and Maria, as well as the 2019 Hurricane Dorian. The region is experiencing worsening effects of climate change, while being responsible only of a minimal fraction of global greenhouse gas emissions<sup>3</sup>. There are also multiple other hazards throughout the Caribbean, such as seismic activity, including a very recent 2020-2021 volcanic activity of La Soufrière Volcano in Saint Vincent and the Grenadines. The different events and related disasters have at times exceeded the countries' annual gross domestic product (GDP), as well as caused large evacuations and migration within the region.

***The Caribbean region consists mainly of SIDS,*** as well as other countries and territories of similar characteristics in relation to disaster risk. SIDS have some unique development challenges, including small size (and related limited capacity), extreme vulnerability to climate and natural hazards, narrow resource-based economies, geographical isolation, dependence on trade and tourism, high cost of transport, communication and energy, fragility of island ecosystems, limited access to financing and a debt situation. The Caribbean risk situation is characterized by these factors, and it interacts closely with the overall sustainable development process of the region. ***The SIDS Accelerated Modalities of Action Pathway (SAMOA Pathway)*** recognizes the increasing vulnerability of SIDS to disasters and the need to build resilience, for example, by implementing the Sendai Framework, as the SAMOA Pathway has several interconnections to disaster risk in its focus areas. It reaffirms that SIDS remain a “special case” for sustainable development, “in view of their unique and particular vulnerabilities”. It also highlights that SIDS priorities need to be recognized in international agendas and calls on all development partners and likewise the SIDS regional agencies to coordinate and harmonize funding and aid mechanisms to strengthen national financial mechanisms.

During the VII session of the ***Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean*** in 2021 (RP21), Ministers and Heads of Delegations from the Caribbean highlighted the importance of strengthening the risk governance mechanisms, DRR plans and strategies with a coherence approach between climate change, DRR and development, promoting resilient economies with public and private investments, strengthening science-based national and local tools, enabling recovery from the coronavirus disease (COVID-19) pandemic, upscaling social protection systems, and including the active participation of marginalized groups, as part of the DRR efforts.

It is from these context and policy considerations that the Caribbean region started to review its progress from 2015 to date, context shifts, emerging issues and future prospects towards 2030 and beyond in implementing the Sendai Framework for DRR 2015 – 2030.

---

<sup>2</sup> These three countries/territories are Haiti, Dominica and Puerto Rico (Eckstein et al, 2019).

<sup>3</sup> All SIDS together contribute less than one per cent of global greenhouse gas emissions (e.g. Dubrie et al, 2019).



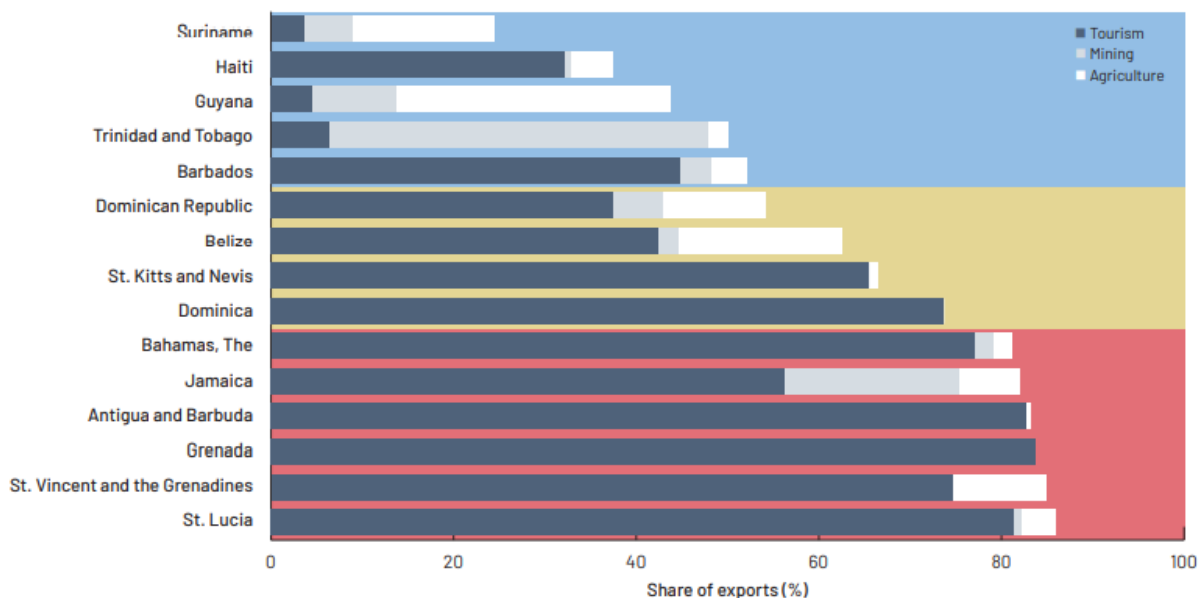
## B. Context Shifts and Emerging Issues

It is evident that in the Caribbean there have been context shifts from 2015 to date, of which the main ones include COVID-19 pandemic, its containment measures and related consequences, the increasing effects of climate change and changes in the ecosystems.

**The Caribbean economy is focused on only few livelihood sectors**, which are also among the most vulnerable livelihood sectors in disasters. This caused a severe materialization of the risks in the context of the COVID-19 pandemic and related global and regional response measures, causing the region to fall into deeper debt and poverty, which also increases the region's future vulnerability to disasters.

Under the World Bank country classifications by income level, Caribbean countries rank in the middle-income, upper-middle income and high-income economies, with the exception of Haiti. Between 2015-2020, prior to the onset of the COVID-19 pandemic, the economies of the Caribbean countries were characterized by slow economic growth, high indebtedness, significant vulnerability to different hazards —notably natural hazards— and dependence on tourism and food imports. In November 2019, the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) forecasted that the Caribbean economy was projected to grow by 2.3 per cent.

Figure 1: Share of agriculture, tourism and commodities in Caribbean exports 2016-2018

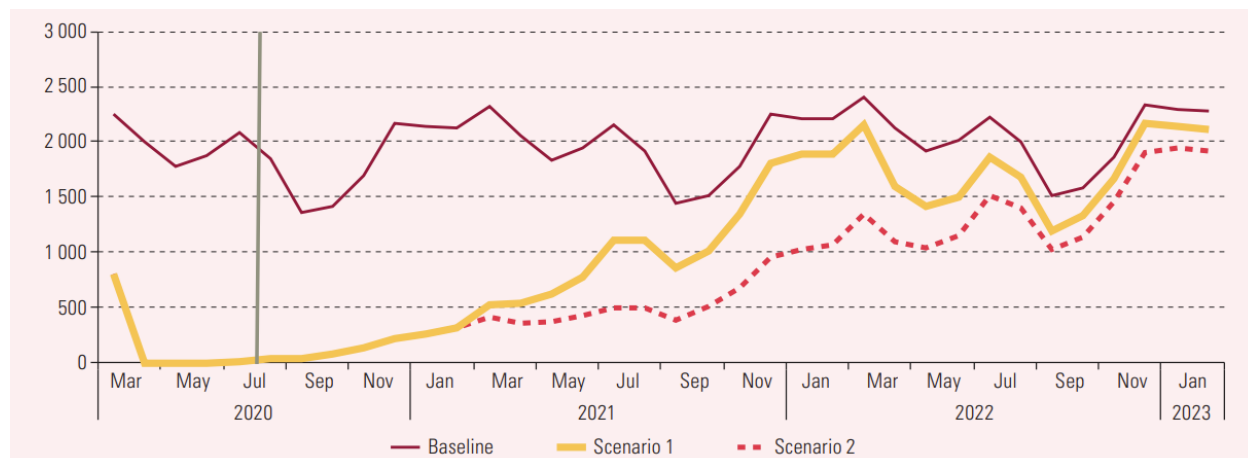


Source: Rozenberg et al, 2021.

**COVID-19 demonstrated the extensive nature and extent of systemic risk in the Caribbean.** In addition to the direct effects of the pandemic, the region was affected by the decline in the economic activity of its main trading partners and the spin-off effects of this, such as a decline in remittances and a drop in commodity prices, the interruption of global value and supply chains and a lower demand for tourism services due to travel restrictions. Tourism, a key sector for the Caribbean, was hit particularly hard in the pandemic and tourist activity could take several years to return to pre-pandemic 2019 levels. The pandemic also severely affected all the other sectors, most notably agriculture and food security.



Figure 2: Caribbean countries tourism losses in millions of dollars. Gross income in tourism.



Source: ECLAC & UNDRR 2021.

With a declining economy as a consequence, the COVID-19 pandemic and the related mitigation and response mechanisms have therefore deteriorated also the debt situation with cascading and long-lasting effects. These effects have led to increased poverty and exacerbated existing inequalities, thus aggravating disaster vulnerability and compounding the vicious cycles. The pandemic also proved that new, complex risk patterns are emerging in the region.

Figure 3: GDP growth 2019 and projections for 2020 in the Caribbean and other subregions, in percentages.

	2019	2020 projections in November 2019, pre-COVID-19	2020 projections in December 2020, including COVID-19 effects
Antigua and Barbuda	6.2	6.5	-18.3
Bahamas	0.9	-0.6	-14.5
Barbados	0	1.3	-16.0
Cuba	0.5	0.5	-8.5
Dominica	9	4.9	-15.4
Grenada	3.3	4	-12.4
Haiti	-0.7	0.3	-3.0
Jamaica	1.7	1.6	-9.0
Dominican Republic	4.8	4.7	-5.5
Saint Kitts y Nevis	3	3.5	-15.1
Saint Vincent and the Grenadines	2.5	2.4	-6.3
Saint Lucia	2	3.2	-26.6
Trinidad and Tobago	0.6	1.9	-6.8
<b>The Caribbean</b>	<b>2.1</b>	<b>2.3</b>	<b>-6.7</b>

Source: ECLAC & UNDRR 2021.

*“As a region we are getting comfortable getting uncomfortable. Global trends have definitely been a driver for us to change our understanding of risk and what we are doing to influence resilience building behavioral change”.*

*Dr. Evangeline Inniss-Springer, Director of the Disaster Risk Reduction Centre, University of West Indies*



**Climate change has already increased the intensity and frequency of the related hazards in the Caribbean.** The Caribbean actors that participated in this MTR SF process report that they have seen the rapid intensification of weather-related hazards, which is of great concern. Whereas category 5 hurricanes were previously a rare event in the Caribbean, due to the effects of climate change such events are becoming more frequent. As described by a DRR official from the region: “now we experience such an event every year, every second year, or twice a year”. In the worst cases, entire islands are already being evacuated in the event of a hurricane<sup>4</sup> and the countries find themselves almost in a constant state of recovery. As the effects of climate change are increasing with higher intensity of events, these context changes are continuously changing the risk profile and understanding in the Caribbean (Sendai priority for action 1).

In the future, **climate change is the main concern for the region as it poses an existential threat to the Caribbean SIDS** and will be intensifying the cascading effects to key sectors. As climate change is increasing in its effects, so will disasters and their consequences. This will cause various spin-off effects to the region, such as inter-island migration, and increasing challenges to infrastructure, services and various sectors<sup>5</sup>. The failure to meet the global 1.5-degree climate goal would have severe implications to the entire Caribbean region and have an impact on the region’s abilities to implement the Sendai Framework.

A recent World Bank Report "360° Resilience: A Guide to Prepare the Caribbean for a New Generation of Shocks" (Rozenberg et al, 2021) assesses the historical and future impacts of shocks in the Caribbean, policy responses to those shocks, and gaps in resilience building, offering two main findings. As its first finding it states that Caribbean countries have achieved resilience levels that have allowed them to support economic development despite large recurring damages and losses from multiple hazards and shocks. However, as its second finding, it states that the Caribbean countries are not prepared for the new challenges posed by climate change, compounded by uncertainty on future tourism markets and a lack of fiscal space.

This shows that **the strategies that have worked in the past will be insufficient in the future.** Climate change threatens to intensify the occurrence of natural hazards and brings new sources of volatility though impacts on health, agriculture yields, food security, growing migration, sea-level rise and coastal landscapes, while the post-COVID-19 situation brings more uncertainty on prospects for tourism.

**The changes in the biological diversity and ecosystems health in the region have also created yet even more challenges.** Civil society representatives in particular highlight the need to focus on environmental degradation, as they are seeing the effects on the ground. Civil Society Organizations (CSOs) also warn of the tendency to see tourism as a short-term investment in the region; while it is a good livelihood and economic opportunity, the tourism establishments are also located close to the beaches and wetlands that need to be protected to prevent any further damage and vulnerability created by improper land use. Tourism may also harm other traditional livelihoods particularly of the vulnerable populations such as fishing and agriculture and contribute to the overuse of vital sectors such as water and food security, which are essential sectors also in risk reduction. The deterioration of coastal ecosystems in past events

---

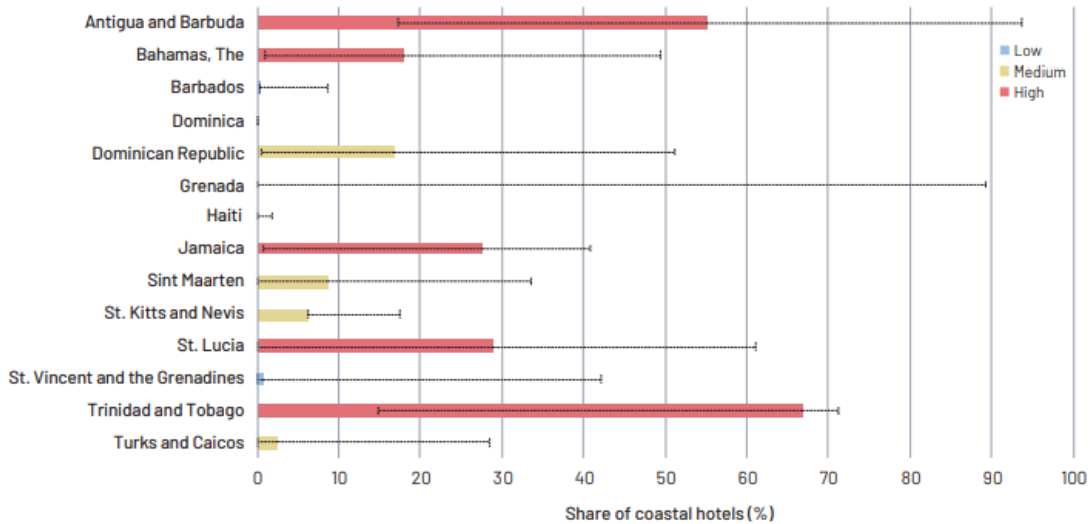
<sup>4</sup> E.g. with 90 per cent of the housing stock in Barbuda damaged or destroyed by Hurricane Irma, Antigua and Barbuda's prime minister ordered a full evacuation of Barbuda at the approach of another hurricane, José, in 2017 (e.g. Independent 2017; UNICEF 2017).

<sup>5</sup> Including, but not limited to, the rise in food prices, loss of tourism and livelihoods, degradation of ecosystems affecting several sectors, sea-level rise influence to demographic pressure and issues in land use.



are showing no sign of easing and will pose an internal risk within the islands, that contributes to the already extreme external threats of climate-related and other hazards. **Sustainable tourism and nature-based solutions are therefore rising in their importance to be able to cope with the increasing risks for the region**, and to be able to ensure the resilience of the key traditional livelihood sectors.

Figure 4: Hotels in the Caribbean countries experiencing beach loss by 2050 under a moderate climate change scenario.



Source: Rozenberg et al, 2021.



### III. IMPLEMENTATION OF THE SENDAI FRAMEWORK

#### A. Outcome and Goal of the Sendai Framework

---

*“Assessment of progress on achieving the outcome of the Sendai Framework is a two-fold matter. We are very proactive in the region and have a good strategy. But we also have hurricanes that are intensifying in their strength and frequency. Years 2017 and 2019 were devastating. The islands are small, and we need solidarity among the Member States to face the changing climate context.”*

*Kareem Sabir, Senior Project Officer on DRR and Sustainable Development, the Caribbean Community (CARICOM)*

---

The progress since 2015 in realising the outcome and goal of the Sendai Framework in the Caribbean is mainly described to be a result of two factors. First, ***the efforts and progress made by the region are mainly described as positive and enabling success***. The region is considered to be proactive, with many efforts being made from both government and non-state actors, which allows the region to be better prepared to face new and emerging risks, as well as to respond to disasters through improved practices.

On the success of implementing the guiding principle on shared responsibility<sup>6</sup>, it is generally considered that while there is support by the CDM Strategy towards this approach, not all the relevant sectors have been systematically included, and there are limitations to include all the relevant actors to the extent that would be needed for an all-of-society approach to DRR. On the success of implementing the guiding principle on all-of-society approach and inclusive, accessible and non-discriminatory participation<sup>7</sup>, while advances are reported, there is also concerns on whether local communities, indigenous people, marginalized groups and individuals overall are sufficiently consulted on disaster related decisions that concern their lives. There is, however, motivation and progress towards the right direction on both guiding principles.

As a second factor, and as seen in the previous chapter, ***the intensifying effects of climate change make the outcome and the goal of the Sendai Framework a moving target***. Given the small size of SIDS, there is an associated limited capacity on human and other resources, which limits the ability of countries to handle the situations and its development by themselves; the regional intergovernmental organizations highlight the importance of solidarity and cooperation in the region and beyond to cope with the situation. Furthermore, these climate-related hazards and the related disasters are noted to cause

---

<sup>6</sup> Paragraph 19.b of the Sendai Framework states that DRR requires that responsibilities be shared by central Governments and relevant national authorities, sectors and stakeholders, as appropriate to their national circumstances and systems of governance.

<sup>7</sup> Paragraph 19.d of the Sendai Framework states that DRR requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted.



damage far beyond the immediate effects. As one survey respondent describes: “A hazardous event can wipe out society, culture, history and their biodiversity overnight in small island economies”.

As a conclusion, climate change and the negative effects of climate-related hazards in the Caribbean are considered to undermine the advances made in DRR, as in many cases the negative effects of the climate change are increasing faster and with stronger intensity than the progress in DRR efforts.

The prospects for achieving the Sendai Framework’s outcome and goal for the Caribbean are possible in theory as the situation presents itself today. However, when estimating the prospects towards 2030 and beyond, it is important to assess the situation with future foresight, as the risk profile of the Caribbean is estimated to deteriorate considerably by 2030, thus affecting the achievability of the of this ambition. The Caribbean has only limited abilities to advance climate change mitigation since the SIDS overall are responsible of less than 1 per cent of the global greenhouse emissions. ***The changes in context and emerging issues therefore pose a question on whether the region can be well positioned to realistically confront the risk for the Caribbean towards 2030 and beyond*** if no urgent change of direction is done at the global level.

---

***“The International Community needs to commit to the 1.5-degree goal. If we don’t limit the global temperature, then the effectiveness of the Sendai Framework will be compromised”***

*Kareem Sabir, Senior Project Officer on DRR and Sustainable Development, CARICOM*

---

To respond to the situation within the region, ***a long-term systemic and holistic vision is needed, where climate change and DRR are viewed together as a matter affecting the overall development and interlinking with all sectors***, with emphasis on priority sectors such as financial systems, livelihoods, energy, food and migration.

To highlight some of the regional priorities in reaching the outcome and the goal of the Sendai Framework, a large majority (90,6 per cent) of the actors participating to the Caribbean MTR SF<sup>8</sup> considered that it is of high importance to integrate climate change adaptation and mitigation strategies into DRR strategies and that the coherence between DRR, climate change and sustainable development agendas need to be accelerated in the period towards 2030. Majority of the state actors consider that it is of high importance to transform DRR to be understood and managed as a crosscutting among sectors rather than treated as a separate “sector” in and of itself. In accelerating the implementation of the Sendai Framework, the Caribbean DRR actors place value particularly to the systemic and interconnected nature of risk, strengthening early warning systems (EWS) and effective reconstruction and 'build back better' practices<sup>9</sup>. Half of the Caribbean actors consider that migration processes in their country or region are of high importance for DRR. It is also highlighted that financial and technical capacity constraints in the region need to be addressed in order to achieve the outcome and goal of the Sendai Framework<sup>10</sup>. Children and youth are also important agents of change and the key

---

<sup>8</sup> The results in this report are divided by the “state actors” participating to the Caribbean countries consultation, and the “Caribbean actors” including both state and non-state actors that participated to the consultation survey. In this case, the result of 85,7 per cent of the state actors and 93,7 per cent of the Caribbean actors are combined.

<sup>9</sup> For each, 87,5 per cent of Caribbean actors consider these a priority.

<sup>10</sup> According to the state actors (results of the Caribbean countries consultation).





areas of importance by the Caribbean children and the youth to include the humanitarian response, essential services and resilient infrastructure, post-disaster mental health, participation of schools to disaster risk management (DRM), decentralization of resources to the local level and feeling of community in DRR<sup>11</sup>.

## B. Risk Assessment, Information and Understanding (Sendai Priority 1)

In the Sendai priority for action 1 on risk assessment, information and understanding, ***the drivers of risk and the interconnected nature of risk are now better understood in the Caribbean in comparison to the situation in 2015***. This is partially due to the several shocks occurring in the region. The containment measures to COVID-19, for example, were considered having raised awareness of risk concerns and highlighted many previously unconsidered linkages. There is an increased use of climate risk tools and the use of geographic information system (GIS) mapping is also considered to be expanding.

The understanding of the systematic risk is considered a new area of focus that requires greater understanding also across different sectors. The Caribbean Community (CARICOM) technical agencies provide direct technical support to their member countries to undertake risk-informed decision making. The knowledge is also increasingly being used to inform decision making where feasible.

***The scientific and technological insights have increasingly contributed to and guided risk assessment.*** Important advancements have been made particularly through the University of the West Indies (UWI) Disaster Risk Reduction Centre (DRRC), that is currently continuing its development. The DRRC emerged out of an initiative to mobilize expertise from the UWI to assist Caribbean countries devastated by hurricane in 2004. The center is currently involved in disaster-related progress in the region. For example, as per a Memorandum of Understanding (MOU) from 2021, efforts are currently underway between UWI's DRRC and CDEMA to establish a regional training center and to jointly develop a Caribbean risk information tool, that will help to guide expertise and knowledge on risk.

***The private sector has also made significant improvements in understanding the importance of resilience to their business operations.*** This is due to many lessons learned from disasters that affected the private sector in the region, and from the related understanding towards the need to be resilient and operate in a resilient environment. In 2020, due to the pandemic, it became evident that an improved analysis of risk by businesses is needed to better understand also the systemic and interconnected nature of risk. Several trainings have taken place to strengthen knowledge among the private sector on how to access and use different resilience tools, business continuity planning (BCP) and for digitalization of businesses. The process has also led to enhanced understanding that businesses need increased flexibility to be resilient. The Caribbean private sector stands out for the large proportion of small and medium sized enterprises (SMEs), which have a unique profile for resilience, and the Caribbean private sector is actively advocating towards the regional and international levels for an understanding of resilience from a SME perspective to better benefit from such cooperation.

***In DRR knowledge and awareness rising, the Caribbean Safe School Initiative (CSSI) has made some important progress on the matter.*** Within the 19 CSSI signatory countries, short of half of the schools are indicating significant progress or achievement in the inclusion of DRM subjects into a formal

---

<sup>11</sup> According to an MTR SF consultation conducted by the United Nations Major Group for Children and Youth (UNMGCY) prior to the GP22.





curriculum. This, however, currently appears to be a result of individual or one-off country efforts rather than a coordinated initiative. There is frequent mention of community training being carried out, but this has been implemented by the DRM authorities rather than by the education side. Overall, there is more potential of the education sector to be used as a platform to strengthen DRR awareness-raising. A full CSSI thematic view can be found in the Vol 2 of this report.

***Despite some good achievements, priority for action 1 is considered as having experienced the least progress among the four Sendai Framework priorities for action. There is concern particularly on the limited data availability***, including sector-specific data and limited access to sex-, age- and disability disaggregated data (SADDD) to support this priority and to better understand who are affected by disasters. Some data exists in the Caribbean region to support risk understanding. Many donors also support development of DRR focused analyses. However, the data is not sufficient, and the availability of the data, its systematic analysis and the exchange of data among sectors for DRR decision-making is an area of concern. There are several topics contributing to the challenges in data sharing, including data having a political nature (such data that could reflect the development trends negatively), bureaucracy, lack of platforms and technology for data to be collected, accessed and used by different actors and for different purposes. There is also a gap in data alignment both at global and national levels to make the data serve multiple needs and the country level DRR strategies.

***There are limitations within the inclusion of traditional, indigenous and local communities' knowledge in risk understanding.*** A large part (42.9 per cent) of the state actors considers that there is only very little inclusion of traditional, indigenous and local knowledge in regard to how they participate and guide risk assessment, risk-informed decision making and investment. Some cooperation exists to link UWI and community level knowledge, and to foster local knowledge in furthering understanding risk. CDEMA CU has been supporting the countries in applying community-based risk management and disaster planning approaches. Focus group discussions, workshops and specific actions have been carried out to some extent. However, there is not much concrete evidence indicating that traditional and local knowledge is systematically influencing DRR decision making. Despite the difficulties in the progress, there is an understanding of the importance to localize action. As stated by one MTR SF contributor: “the local groups have the knowledge on what will happen if this (climate) development continues and, in the Caribbean, the local conditions are the ones that matter”.

***Gaps in technical capacities and human resources persist***, which represent a challenge to be able to properly address these limitations.

#### Prospective views and recommendations towards 2030 and beyond

As Sendai Priority 1 on understanding risk can be conceived as the basis for supporting all the other priorities for action, ***increased focus is recommended to be placed on multi-sectoral data availability and disaggregated data***, in collaboration with different stakeholders that collect, possess, analyse and use disaster related data. The Caribbean actors themselves also highlight the need to address knowledge and insight on risk reduction by developing data availability, multi-hazard risk assessments, as well as regular collaboration with and meetings of the different stakeholders to enable understanding of all the dimensions of systemic risk. There is also a need for development and/or dissemination of good practices, for example, to share different methodologies as a region, as well as to learn and strengthen the systems and data collection on risk. These efforts are considered to have a positive effect to all the



SAMOA Pathway priority areas and to the Sustainable Development Goals (SDGs), thus also contributing to the coherence of DRR with sustainable development.

***It is also recommended to use technology and future foresight in understanding systemic risk.*** There is a need to go beyond data to create a meaningful risk understanding in light of future challenges. The situation of risk in the Caribbean is likely to be different (and worse) in 2030, for which countries and different actors contributing to understanding risk should already be thinking ahead towards future changes for dealing with understanding of risk, instead of focusing on the current situation alone, and to use this knowledge for decision making to enable adaptive foresight.

---

***“Planning towards resilience and the implementation of the Sendai Framework in the Caribbean requires understanding of a context with high inter-dependency of sectors and actors. We work in the center of the systemic risk and with the impacts of climate change, and this needs to be considered in risk understanding. But these phenomena are also in constant change and increase. Therefore, it is important to plan with future foresight – not to plan a system to work in the current reality, but to work in the context what the situation of the SIDS and the Caribbean will be like in 5-10 years”.***

*Elizabeth Riley, Executive Director, CDEMA*

---

***Greater collaboration between the public and the private sectors and academia is recommended,*** considering that it is mainly academia and the private sector that are progressing most in the areas of foresight and technology. To move forward, understanding the needs of the users of scientific research is required, which can be enabled by the government-academia collaboration. A Center of Excellence is expected to be launched in the second half of 2022 by the Caribbean Network of Chambers of Commerce (CARICHAM), that will foster business continuity and private sector operational efficiency, to support the proper functioning of resilient businesses. Collaboration with different actors in relation to the center may present a very useful opportunity to map all the different possibilities that the center can offer to risk understanding.

Considering that risk impacts materialize mostly at the local level, it is also ***recommended to increasingly integrate local knowledge in risk information, as well as to connect risk knowledge to public awareness for an all-of-society understanding of risk.*** Firstly, there is a need for improved integration of indigenous and local knowledge within risk assessments. Local CSOs and local communities should be actively engaged in the consultative processes. Secondly, it is important for the Caribbean region to orient risk information and understanding towards the population. In this, demystifying the concept of resilience to an understandable discourse becomes important, as well as packaging it in a way that it becomes part of public education and awareness. This will also facilitate all-of-society action on DRR and influence behavioural change, with the notion that resilience is not only for the DRM professionals, but a way to get the average citizen to understand what their personal responsibility is for their own resilience and that of their families. This requires commitment both of the highest and the most local levels, and these levels need to be connected with a continuous feedback and action loop to enable public awareness and participation. The CSSI is an opportunity for this type of risk understanding, as it is ensuring efforts to include and sustain DRR in the formal education curricula, as



well as community level interventions. For more information, please see the CSSI thematic case view in Vol 2 of this report.

**Financing and capacity development** is recommended to be directed towards these core areas to enable the development of the Sendai Priority 1 in the Caribbean.

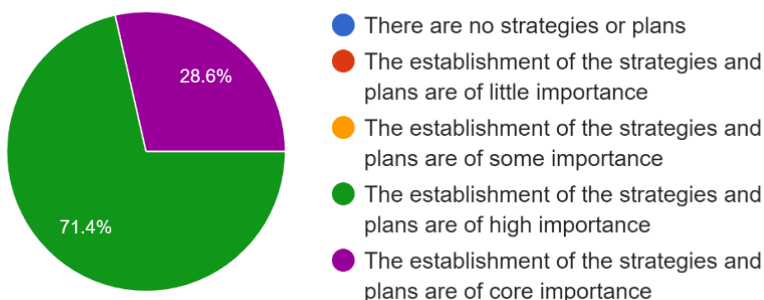
### C. Risk Governance and Management (Sendai Priority 2)

The Sendai priority for action 2 on **strengthening disaster risk governance to manage disaster risk has been progressing well in the Caribbean since 2015**. There is a strong impetus towards regional integration on DRR, as the 19 CDEMA PSs are cooperating as a unified region through CDEMA CU.

The Caribbean regional DRR structure consists of CDEMA PSs and the CDEMA CU. DRR efforts are guided by the regional CDM Strategy 2014 – 2024, which was developed prior to the adoption of the Sendai Framework<sup>12</sup>. The mapping and systematization of common priorities between the CDM Strategy and the Sendai Framework shows good alignment, and among the CDEMA PSs **the Sendai Framework is being implemented through the CDM Strategy**. CDEMA CU has also developed a basket of indicators which reflect numerous Sendai Framework indicators, in this way assisting countries in reporting on those indicators.

A good proportion (42.9 per cent) of state actors estimate that since 2015 national and local public policy, legislation, planning and organisation have changed either to a good extent or with significant changes to become better aligned with the Sendai Framework. All the participating Caribbean countries have national disaster laws that govern how disaster risks are managed by the State. **The Sendai Framework and the CDM Strategy are jointly embraced and implemented at the country level through the CDM Country Work Programmes (CWPs)**. The **CWP fulfils the requirements of the Sendai global target E**. Having regional and national DRR strategies in place are considered important in the region, and the multi-sector process of the CWPs development is fostering a culture of resilience.

As shown in the graph, all of the state actors that participated in the MTR SF estimate that the establishment of CWPs as DRR strategies and plans are of high or core importance for the achievement of the expected outcome and goal of the Sendai Framework. The CWPs are also considered to form the basis for national planning, project development, resources allocation by ministries, and to enable direct donor support on DRR to be in line with nationally defined priorities.



<sup>12</sup> Besides preceding the Sendai Framework, the CDM Strategy is also legally binding for the PSs.



**The CWP development has traditionally been guided by the development of the CDM Audit**, which is a Caribbean assessment tool. Recent **Situational Analyses**<sup>13</sup> have also taken place for the same purpose, which is part of the shift towards a more systemic risk management. Overall, 79 per cent of the PSs have conducted the related analysis that leads and guides the CWP development. Of these, 37 per cent of CDEMA PSs have met the Sendai Framework target E by completing the development of the CWP, and another 21 per cent are currently in the process of finalizing their CWPs. The following table details the situation of each PS on their current status of an active CWP<sup>14</sup>:

Figure 5. CWP status per country/territory. Source: Author, based on CDEMA 2022b and UNDRR 2022j.

Country	CDM Audit / Situational Analysis	CWP
Anguilla (OT)	N/A	2018: CWP expired
Antigua and Barbuda	2018: CDM Audit Situational analysis	2020: CWP 2020-2024 draft, pending endorsement
Barbados	2018: CDM Audit Situational analysis in progress	2019: CWP 2019-2023
Belize	N/A	2019: CWP expired
Grenada	Situational analysis	2019: CWP expired. New CWP development in progress
Haiti	2018: CDM Audit	2020: CWP 2019-2030
Jamaica	2020: CDM Audit	2019: CWP expired
Montserrat (OT)	N/A	N/A
Saint Lucia	2018: CDM Audit Situational analysis	2020: CWP 2020-2024
Saint Kitts and Nevis	Situational analysis	2020: CWP expired
Saint Vincent and the Grenadines	2018: CDM Audit Situational analysis	2020: CWP 2020-2024
Suriname	Situational analysis	N/A
The British Virgin Islands (OT)	2019: CDM Audit	2020: CWP 2019-2025
Dominica	2020: CDM Audit Situational analysis	2020: CWP 2021-2026
Bahamas	Situational analysis	2021: CWP expired. New CWP development in progress.
Guyana	2018: CDM Audit Situational analysis	2020: CWP 2021-2025
Trinidad and Tobago	2015: CDM Audit Situational analysis	CWP in progress.
Turks and Caicos Islands (OT)	N/A	2021: CWP expired
Cayman Islands (OT)	CDM Audit	N/A

\*Green reflects “developed and adopted”, yellow reflects “processes currently underway” and pink reflects “no advancement or outdated”.

<sup>13</sup> Between 2020 and 2021, UNDRR partnered with CDEMA to support NEMOs with the development of Situational Analyses. A model analysis can be found [here \(https://www.undrr.org/publication/disaster-risk-reduction-saint-lucia-situational-analysis-2022\)](https://www.undrr.org/publication/disaster-risk-reduction-saint-lucia-situational-analysis-2022).

<sup>14</sup> As of December 2021. For pending country-CWPs, CDEMA has ensured funding through the European Development Fund (EDF). For overseas territories funding is being identified through other sources.



However, a larger proportion (78,1 per cent) of the Caribbean actors consider that their country currently has a national DRR strategy. This indicates that even though there might not be an officially approved CWP, countries' DRR activities are guided by another development strategy or a CWP draft that does not yet have an official approval.

Due to the heavy interconnectedness and the influence of climate change, **CARICOM has a priority focus on bringing resilience to the centre of the development agendas**, considering that any given hurricane or other such threat could potentially fully destroy the crops and cause recurring damages to all sectors. Many countries are increasingly incorporating DRR as part of their long-term planning objectives. This is reflected in their recent national development plans highlighting the role of DRR in achieving socioeconomic development and creating national risk management agencies.

**The CWP development have also had an increasing focus on coherence with climate change and sustainable development.** The degree of coherence between national policies and plans focusing on the SDGs, DRR and climate change adaptation (CCA) in the Caribbean Region has identified that all 16 Caribbean countries assessed in this regard<sup>15</sup> have signed on to and adopted the SDGs, the Paris Agreement on Climate Change, and the Sendai Framework, and identified the need to promote coherence in their CWPs. Many of the selected Caribbean countries demonstrate an understanding of the linkages between sustainable development, DRR, and CCA, and the need for further integration and policy coherence.

Since the 2020 start of the COVID-19 pandemic and the related measures taken in the Caribbean, **the CWPs have also been increasingly informed by multiple hazards, as well as highlighting the interconnectedness and the notion of systemic risk.** This has accelerated the existing change process from a reactive disaster governance towards a holistic risk reduction approach, with related tools starting to align in this direction. Health agencies in the region<sup>16</sup>, for example, developed COVID-19 tracking and projection software mechanisms in an attempt to facilitate the region's easy access to information to combat the pandemic, while simultaneously responding to the hurricane season.

---

***“The COVID-19 pandemic was not only a wakeup call, but it was a boost to another level of complexity and understanding of the systemic risk”.***

*Nicolas Louis, Disaster Preparedness Expert, European Civil Protection and Humanitarian Aid Operations (ECHO) Regional Office*

---

However, despite progress, **many challenges remain in the risk management governance structure continuing to be more on the reactive side** and thus having room for development in the root causes and systemic approaches to risk reduction and management.

Despite progress in political alignment and understanding, **strengthening coherence between DRR, climate and development is still seeking its form in practical implementation and coordination.** Few policies and plans truly represent systems thinking and tend to focus on resilience as an outcome rather

---

<sup>15</sup> Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

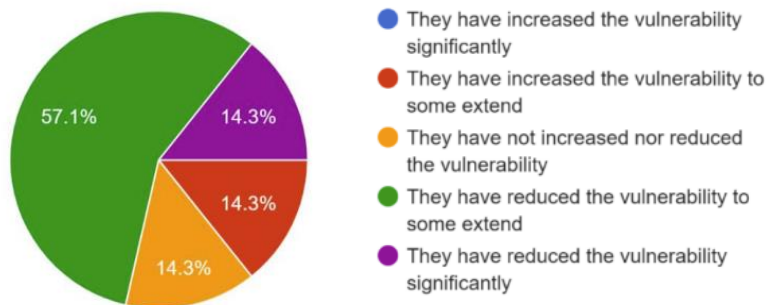
<sup>16</sup> Including the Caribbean Public Health Agency (CARPHA) and the Pan American Health Organization (PAHO).



than a process. Policies and institutions remain mostly siloed with conflicting mandates and competing interests, as the responsibilities for sustainable development, DRR and CCA are mandated to different agencies. In practice, the NEMOs are often left implementing DRR as a separate sector, rather than coordinating joint cross-sectoral actions. The NEMOs are often not even in the position to convene or mandate any other government sector or institution. In some countries the Cabinet may approve the Sendai Framework for implementation and assign the task solely to the NEMO; while the other sectors therefore understand it as NEMO responsibility alone. Therefore, the roles and responsibilities are not adequate or clearly defined to reflect the systemic approach and coherence, and the current communication and information exchange between sectors is limited. National multi-stakeholder decision-making and corresponding platforms are needed to allow for the multi-sectoral approach to work in practice, and to have the resilience agenda within the mandate of all sectors; an approach that does not yet exist for a functional multi-sectoral DRR governance.

***The private sector has been increasingly organized in its own risk governance and has cooperated with the public sector for greater resilience.*** All the state actors involved consider that there have been advances in the cooperation

between the public and private sectors for an improved and extended risk governance. As seen in the graph, a large majority of the state actors also consider that the government, business and industry sectors in their country have reduced vulnerability since 2015.



As the most important step on organizing the private sector for DRR, the executive directors of 16 Chambers of Commerce across the Caribbean region signed an MoU in the official launch and first meeting of the CARICHAM on April 2019, to establish CARICHAM. One of the four pillars was decided to focus on DRR, due to the core importance that the private sector placed on its own resilience and beyond. Today CARICHAM covers 100,000 businesses<sup>17</sup>.

CARICHAM has been invited and participates within the CDM group of multi-stakeholder actors. A similar public-private structure in DRR is encouraged by the regional actors to be established at the national level. Steps have been taken in many countries. For example, ARISE<sup>18</sup> national chapters are strong in the Caribbean, and continuously expanding to establish national networks. Some of the ARISE national networks have also developed a public-private-partnership (PPP) action plan. There is also a regional ARISE chapter through CARICHAM.

The national Chambers of Commerce report progress in private sector resilience. The private sector strategies and plans are increasingly linked to DRR and business continuity, but the private sector representatives in the region also highlight that these cannot work in silos. Ensuring a proper business environment from the public side for businesses during disasters is also key and needs to be improved.

<sup>17</sup> Characterized largely by SME:s and diversity of the businesses.

<sup>18</sup> ARISE, the Private Sector Alliance for Disaster Resilient Societies, is a network of private sector entities. In joining the ARISE, private sector companies voluntarily commit to support and implement the Sendai Framework.





The CARICHAM Centre of Excellence on business continuity and private sector operational efficiency (priority for action 1) will include thematic areas that will help the proper functioning of businesses.

On local DRR governance, ***there are both existing efforts since 2015, as well as concerns that remain in regard to the local level inclusion within risk governance.*** The governments are often supporting district emergency organizations and CSOs working with the local level. In many countries, social protection mechanisms have also progressed to address some of the underlying drivers of risk. The Making Cities Resilient (MCR) initiative has been adopted particularly in Jamaica and Tobago. However, it is reported that the risk governance processes have not included the majority of the locally registered CSOs, which would be essential actors considering the specific vulnerabilities and the inclusion of persons with disabilities, all genders, individuals and groups. It is considered that there is room for improvement in this aspect for DRR to be truly people-centered and to enable an all-of-society approach in risk governance.

#### Prospective views and recommendations towards 2030 and beyond

Considering the limited capacity of individual countries in the Caribbean, ***it is recommended to continue the good regional integration and collaboration among the countries and OTs on DRR as a regional effort.*** However, due to the emerging issues, there is ***a need for a comprehensive change in the way risk governance is structured,*** as the current institutional setting does not enable progress as fast as the emerging issues would demand. This would require a strong-all-of-society effort and commitment.

To support the existing harmonization efforts, a ***more comprehensive alignment of the regional and international DRR strategies is recommended in strategy and practice,*** to facilitate their application, reporting and the overall legal status and coherence for the national level.

It is ***recommended that the risk governance approach be increasingly developed towards an adaptive and flexible system with consideration of simultaneous hazards and systemic risk, which is to be continuously informed by risk understanding.*** Given the experiences of the COVID-19 pandemic (including interconnected or indirect impacts) the Caribbean actors also highlight the importance of increasing flexibility in order to account for unplanned impacts. Adjusting governance arrangements to this reality implies strengthening coordination and collaboration mechanisms, including enhancing agility and flexibility to change according to the lessons learned and emerging issues. Accordingly, ***it is recommended that legal frameworks and government processes be adapted to become more flexible and to ensure coordination among different sectors.***

To support the previous point, ***a high-level mandate is needed for the entity responsible of coordinating the DRR and/or the coherence approach.*** This can be done, for example, by strengthening the mandate of the current entities (NEMOs, CDEMA) so that they can have the needed all-of-government and all-of-society convening and coordinating power, or by repositioning them as thematic advisors for a high-level entity that is responsible for DRR coordination. There should also be a dedicated secretariat and sufficient human resources and capacities to support this coordination.

***It is recommended that the DRR/DRM coordinating system include participation of all governance sectors, with particular focus on the coherence between DRR, climate change and sustainable development.*** To ensure that responsibilities are shared among stakeholders having high-level commitment, clear roles and responsibilities, structures for participation, adequate human resources,



sectoral resilience policies and more comprehensive and holistic planning, as well as implementation and reporting are needed to enable success.

***Within the scope of the coordination system, a stronger participation of all actors is recommended.*** It is recommended to align donor funding with the priorities of the CWP and support the different elements of DRR. Embracing and strengthening the role of academia and the private sector for improving risk governance is important for areas of research, innovation, technology and information. The private sector and academia should also be considered at the policy level and systematically be part of the PPP multi-actor collaboration mechanism, that could facilitate, for example, an enabling environment for resilient businesses. This enabling environment would respond to the needs and realities of the Caribbean private sector, while simultaneously supporting its role to strengthen DRR through contributing to more resilient livelihoods, infrastructure and basic services. Longer-term PPP strategies and collaborative PPP planning are also recommended, to strengthen the private sector's role in risk reduction and disaster preparedness, instead of being considered only in post-disaster response efforts.

***It is recommended that the most local level also be integrated within such a coordination system*** through active cooperation with civil society, local churches and through strengthening the feedback loop with the population at risk. To empower local authorities and local partnerships for strengthened risk governance, greater cooperation with the local level actors is recommended focusing particularly on connecting the local vulnerability profiles to the risk management needs (such as land use, protection in shelters, etc). Continued stakeholder mapping and more participation opportunities for all population groups are recommended to strengthen the culture of resilience in which no one is left behind.

To ensure that 'no ecosystem is left behind', legal and regulatory enforcement is considered by the Caribbean actors to be a good step forward.

#### D. Investment in Risk Reduction and Resilience (Sendai Priority 3)

For Sendai priority for action 3 on Investing in disaster risk reduction, ***since 2015 there has only been a moderate increase in the Caribbean region's own investments in DRR.*** The majority (71,4 per cent) of state actors consider that ***the investments by the public and private sectors are to some extent increasingly risk informed.*** The progress in integrating DRR has happened mostly in the areas of risk transfer and asset assurance mechanisms, and to budget assignments to DRR or to related sectors (figure 6). Some good practices include the World Bank support to risk financing mechanisms for the Caribbean region and the existence of the Caribbean Catastrophe Risk Insurance Facility (CCRIF)<sup>19</sup>.

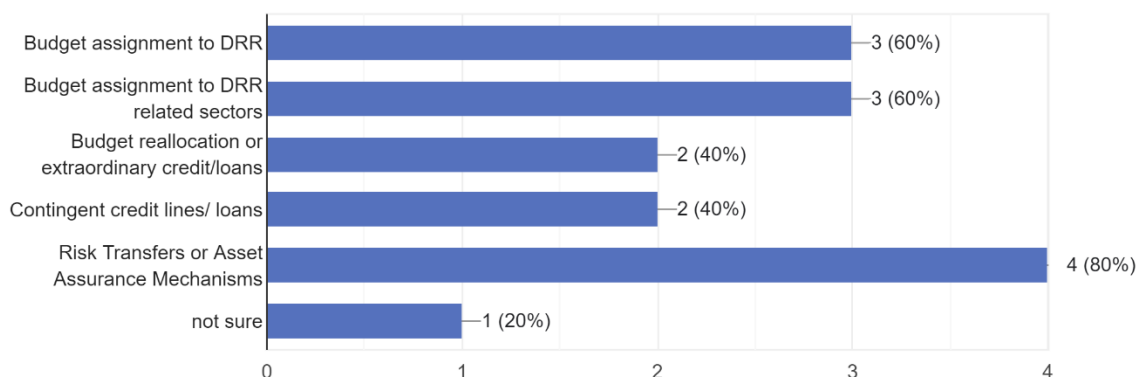
---

<sup>19</sup> Established in 2007 but growing since 2015.





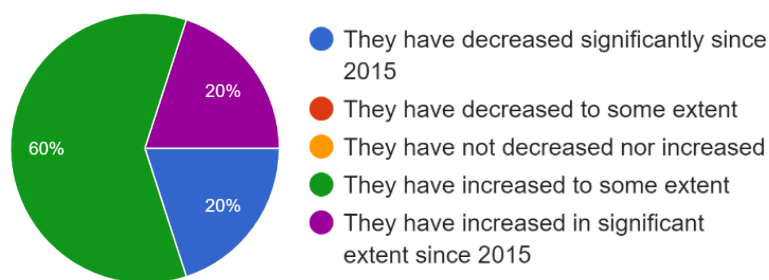
Figure 6. The progress that has been implemented in fiscal instruments or financial regulation mechanisms to integrate DRR considerations and measures, according to the Caribbean state actors.



The recent declining economic situation in the Caribbean and the related shifts in priorities have led to a decline in budget allocations and limited the region's opportunities to invest in DRR. As a consequence, this has **forced efforts and limited resources to be on the reactive side of risk management and investment**. Another key obstacle for the national investment in DRR is the **lack of a consolidated view on what that financing looks like for complex risk and a multi-sectoral approach**.

As a consequence to the challenges in investing to resilience, several limitations are reported in operationalizing DRR actions. These include lack of financing to implement existing strategies and plans (such as the CWP:s), challenges in acquiring technical capacities to develop and sustain DRR initiatives and limitations in gender sensitive risk investment in DRR.

**There has been an increase in donor support towards resilience.** As shown in the following graph, 80 per cent of state actors consider that financial resources provided to their country for DRR through international cooperation has increased since 2015. CDEMA has increasingly supported its PSs with the regional mobilisation of resources for DRR on behalf of the countries, while the existence of national DRR strategies, CWP:s, are considered to help align investments towards national priorities.



Several development partner agencies also report on increased support for technical cooperation, technology transfer and financial resources for capacity building in DRR in the region. For example, the Delegation of the European Union to Barbados and the Eastern Caribbean States (EUD) has increasingly supported the regional resilience agenda<sup>20</sup>. The EUD reports a current 590 million Euros invested in projects in the region, which is a significant increase from the pre-2015 levels. This increase is affected

<sup>20</sup> Through the EU 2014-2020 Caribbean Regional Indicative Programme, the EUD has cooperated on the impacts of climate change and disasters affecting sustained economic and social development of the region. This has included, for example, support to the CWP:s to enable regional and national ownership in the long run.



mainly by the 2017 hurricane season<sup>21</sup> and the recognition of the growing importance of resilience as an enabler for other development areas in the region.

The SAMOA Pathway also supports the efforts of SIDS to access technical assistance and financial support for DRR systems. The region has increasingly received investments in multi-hazard early warning systems (MHEWS). For further information, please see the MHEWS Thematic Case View of this report (annex 1, Vol 2). However, the Caribbean actors also express concerns of reliance on external support. There are also concerns of the **low levels of investments reaching the local level and the environmental sectors**. The CSOs report the need for donors to consider and reach out to the local level with related processes in place.

Despite consisting mainly of SIDS, **the Caribbean region faces obstacles in accessing global climate financing for climate change adaptation**. Progress in this regard would be important, particularly with a view towards the coherence approach between DRR, climate change and development. For the Caribbean region, several actors report that climate change and the Sendai Framework are integral parts of the same issue. Thus, global climate financing is considered important and justified for the Caribbean region to enable investing in resilience. This topic has continuously been on the regional and global agenda, as the Caribbean region is advocating for their access to these funds (e.g. as a permanent CARICOM agenda item). The region reports the following constraints in accessing climate financing from 2015 to date:

- **Climate financing is inadequate and unpredictable.** The Caribbean receives only a fraction of the climate financing, while the region considers that trillions of dollars a year are needed to cope with the context changes and emerging issues related to climate change.
- **Climate financing applies the official development assistance (ODA) criteria.** The region considers that ODA criterion should not be a restriction for SIDS. Although the Caribbean has mostly graduated to middle-income status, entire annual GDPs are still being lost as a result of disasters, which is not sufficiently taken into account.
- **Limited capacity and lack of data for the application processes** also influence the access to climate financing. The preparation of proposals is considered complex, while also requiring a type of data that is not currently available. The limited size of institutions among the SIDS typically means that the resources and expertise are not widely available for the processes, as the SIDS have small offices with multiple responsibilities. Donors provide short capacity building initiatives, but the matter is considered a larger issue, to which longer-term capacity building and data is needed to truly enable better access to climate financing and to understand the resilience complexity overall (for more information, please see the priority for action 1).
- **Climate financing is largely directed towards mitigation rather than adaptation at the global level.** Given that SIDS contribute minimally to climate change yet suffer much of the consequences, the more appropriate climate change financing for the region would be on the adaptation side.

**The private sector in the Caribbean is increasingly investing in their own resilience and beyond.** Since the establishment of CARICHAM and the ARISE initiative in the region (priority for action 2), there have been several ways in which the private sector has been investing in DRR. The Caribbean private sector is interested in investing towards their own resilience through BCPs, but also in the resilient operational

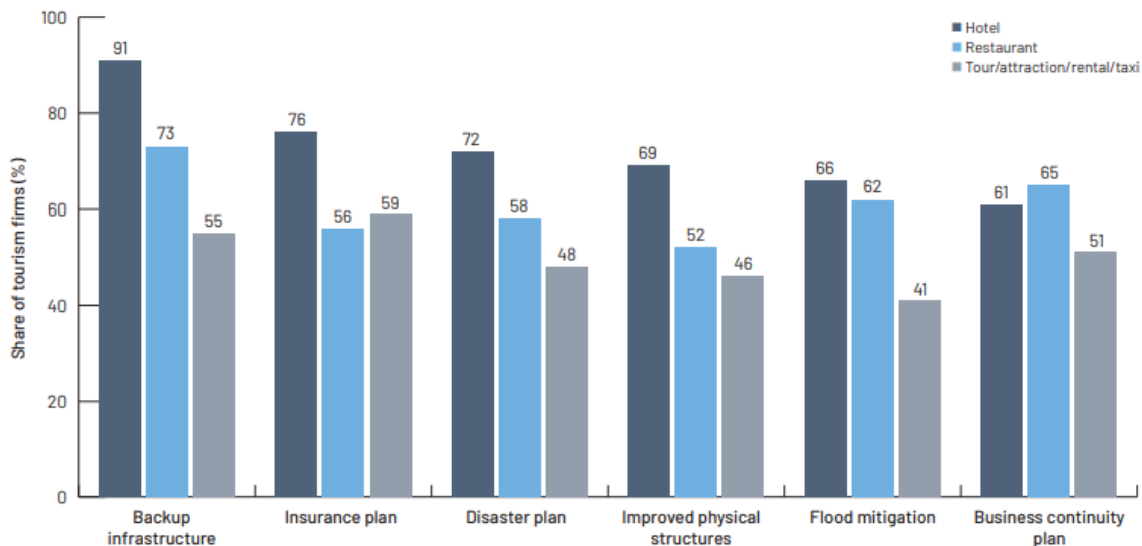
---

<sup>21</sup> 60 million EUR mobilized in the immediate aftermath of the 2017 hurricane season.



environment and in the resilience of the region’s livelihoods, infrastructure and basic services. There is good preparedness, for example, in tourism industry firms across the Caribbean (figure 7).

Figure 7. Disaster preparedness in tourism industry firms in the Caribbean.



Source: Rozenberg et al. 2021

**The Caribbean private sector has also invested in response to disaster events.** For example, in the Saint Vincent and the Grenadines volcanic efforts in 2020-2021, with private businesses mobilizing emergency supplies and SMEs often being first respondents in communities. The lessons on investment have come through efforts on building back better. Particularly during and after the 2017 hurricane season, businesses became more aware of where they should operate, what the risks are and learned to invest accordingly. In 2020, the Caribbean Chambers were supporting SMEs on changing their business models to adapt to the COVID-19 pandemic and to digitalize business practices, which had a positive effect on the countries’ economic resilience. Recognition of the importance of the private sector’s role in MHEWS and multi-stakeholder investments is also growing in the region.

However, **the full ability to invest in resilience is limited by the nature of the Caribbean business profile, which is characterized by SMEs and their often informal nature.** The SMEs, including micro-SMEs, are the bedrock of regional, national, and local markets, but they have a different investment status and character than larger companies. When disaster strikes, SMEs are hit harder, suffer longer and are slower to recover than larger businesses. The same applies to informal businesses and commercial endeavors, which are also typical in the region but more difficult to assess due to their informal nature and lack of access to social protection mechanisms. Applying a gender lens is also needed, as the women-led SMEs face unique barriers, particularly in the context of disasters.

---

***“Resilience is a luxury that those who expect to be around tomorrow can debate”***

*Brian Louisy, Executive Director, St. Lucia Chamber of Commerce Industry and Agriculture, in regard to the situation of micro- and small enterprises in a region of increasing risks*

---



Barriers include that ***few standard or international models are designed according to the realities of the islands, SMEs and the informal sector.*** The Caribbean private sector highlights the understanding of the private sector diversity. While some are better informing their investments towards resilience, others are in reactive survival mode. This should be taken into account in all private sector trainings, BCPs and other guidance materials at all levels.

#### Prospective views and recommendations towards 2030 and beyond

There is an urgent need to scale up risk financing in the Caribbean. ***It is recommended to raise awareness at the highest level to develop a multisectoral disaster risk financing strategy that addresses both the resilient and recovery sides, and to support that existing investments be increasingly risk-informed,*** as supported by findings on cost-benefit ratios. Investing further in insurance schemes is also considered an essential priority, particularly for agriculture insurance. There is, however, concern that since insurance schemes are calculated based on their own interest, due to future risk scenarios and other emerging issues, the insurance costs are also likely to increase.

As stated above, considering the current and future effects of climate change in the Caribbean, it is ***recommended to support the Caribbean SIDS for greater access to global climate change adaptation funds that would enable them to invest in adaptation.*** This would mean addressing the ODA eligibility requirements, which currently also apply to SIDS and to other countries that may be losing entire annual GDP equivalents due to the occurrence of a disaster. Another channel to address Caribbean SIDS access to climate finance is to address the insufficient data availability and capacity that would allow them to apply for such funding. For the Caribbean, given the particularities noted herein, climate financing should increasingly look to support adaptation, instead of the current global trend to direct such funding towards mitigation.

***Collaboration with different DRR stakeholders in the region is also recommended, to discover and enable new investment opportunities for resilience.*** Knowledge and mapping of opportunities for collaboration is considered the first step forward, as well as partnering with the private sector in resource mobilization. For example, to strengthen the resilience of business and industry sectors, awareness is also needed in this field so that the companies themselves increasingly understand the benefit of investing in resilience for their own wellbeing and stability, as well as that of society. As noted above, addressing the specific difficulties of SMEs to invest in resilience is important at all levels, as the region's business profile is characterized by SMEs and the informal sector. The enforcement of disaster risk related legislation and PPP for an enabling environment is also recommended.

#### E. Disaster Preparedness, Response and 'Building Back Better' (Sendai Priority 4)

Sendai Priority for Action 4 on ***Disaster Preparedness, Response and Build Back Better (BBB) continues to be of high importance in the Caribbean,*** considering the recurring hazards and the region's vulnerability. This priority for action has experienced considerable progress since 2015, however, partially due to the fact that the Caribbean DRR/DRM system continues to be more on the reactive side.

***A BBB approach is consistently applied in the Caribbean.*** Since the devastating hurricane season in 2017, greater importance is being placed on preparedness by the different ministries and high-level



actors across the countries. The Caribbean preparedness, response and recovery has also been severely impacted by the COVID-19 pandemic, as the existing DRR efforts focused largely on surviving the pandemic and all its cascading impacts. However, COVID-19 also presented opportunities to foster a vision of adopting quickly to changed situations and to look into digital resilience in which COVID-19 provided an unprecedented scenario for BBB.

As noted above, the pandemic and its response amplified the complexity and complicated the response efforts of other simultaneous disasters in the region. Examples of this include the preparedness and response to the 2020 and 2021 hurricane seasons throughout the region and in the response to La Soufrière volcanic eruption in Saint Vincent and the Grenadines in 2021. However, it also **taught the region and countries to better respond to simultaneous disasters**, with several important learning opportunities that are currently being integrated into the response and recovery systems.

**The region has some good mechanisms in place in relation to priority for action 4. The Regional Response Mechanism (RRM)<sup>22</sup> is specifically appreciated** in a region where one country may not have the necessary capacity to respond alone to a major event. As the RRM has constantly developed and evolved with the occurrence of several hazards and disasters, there have been several improvements since 2015. These include better prepositioning of emergency supplies, technical experts and anticipatory financing. A sub-committee of donors support these regional efforts. Progress in EWS is also considered good, as it has supported both early warning and early response (for more information, please see the MHEWS thematic case view in Vol 2).

**A focus on recovery was adopted by the CARICOM Heads of Governments in July 2018** as a logical pillar of the Caribbean resilience framework. It has a focus on the social protection of the most vulnerable, enhancing economic opportunity, safeguarding infrastructure, environmental protection, and operational readiness. **The Caribbean Facility for Recovery (CFFR) was launched at the end of 2021 and is considered a gamechanger for recovery efforts** in the region. CRRF focuses on building national recovery capacity for recovery prior to a disaster, bridging the void between response and early recovery, enabling more rapid recovery and building further resilience through BBB. It has convening mechanisms, leverages partnerships between institutions and deploys regional teams to support recovery. As the recovery financing is currently considered to be overly determined by the donor, strengthening the leadership role of national authorities is deemed necessary to strengthen progress.

**Ensuring dignity and human rights during response efforts is an area needing improvements**, as noted by the MTR SF participants from the local level. This particularly concerns how the differentiated needs of persons with disabilities are taken into account, and how shelters are not currently always safe from violence for women and children. The community actors (CSOs, religious centres such as churches) have good knowledge of the needs at the local level and demonstrate being willing and eager to play a more active role in the preparedness, response and recovery efforts, as well as for BBB.

As seen in the previous sections, **the Caribbean private sector focus on DRR and resilience has grown since 2015 due to the hard lessons learned in disasters and they too are applying BBB**. This was seen in the aftermath of the 2017 and 2019 hurricane seasons, as well as in the COVID-19 pandemic and response measures. The increasing threats and emerging issues, and an acknowledgement that the private sector also needs to progress more on preparedness, response and recovery due to the speed of

---

<sup>22</sup> A harmonized approach led by CDEMA CU, which coordinates a Caribbean regional response to disasters.



the future threats, means that the survival of the Caribbean private sector requires greater PPP-cooperation also in regard to this priority for action.

#### Prospective views and recommendations towards 2030 and beyond

Effective response and BBB require preparation in countries with recurring disasters. ***It is recommended to constantly develop these systems and existing response and recovery mechanisms through efficient learning and BBB practices.*** The preparatory measures to be prioritized include investing in and further developing the regional RRM and CFFR disaster response and recovery mechanism and extend them to ensure a stronger local feedback loop and inclusion mechanisms.

***The preparedness, response and recovery mechanisms should be increasingly adopted to the increasingly complex nature of risk and in line with enhanced monitoring, risk modelling and future risk scenarios.*** Emphasis on recovery plans with a broader understanding of complex risks and on the systemic nature of risk is also encouraged.

---

***“Though June 1 remains the official start date of the hurricane season, in the Caribbean, because of climate change, a hurricane can now happen anytime”.***

*Nicolas Louis, Disaster Preparedness Expert, ECHO Regional Office*

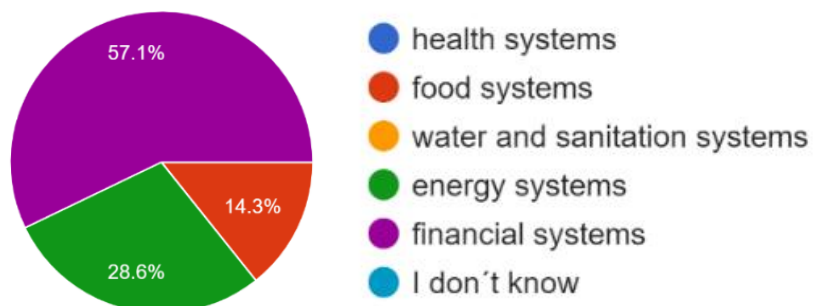
---

Emphasis should also be placed on ***documenting existing good practices to strengthen information sharing and learning*** from one country to another across the region and beyond. This would be part of the effort to move away from the disaster-reconstruct-repeat cycle, a move advocated for by the Sendai Framework.

#### F. The Targets of the Sendai Framework

In relation to the targets of the Sendai Framework, all the state actors consider that ***there has been some progress in achieving the global targets of the Sendai Framework.***

In relation to target d on critical infrastructure and basic services, as seen in the graph, the majority (57,1 per cent) of the Caribbean actors consider that ***financial systems are a priority***, while energy systems and food systems are also considered important.



With regards to monitoring and reporting on progress towards the internationally agreed indicators of the Sendai Framework's seven global targets through the online Sendai Framework Monitor (SFM), there are considerable challenges in terms of the availability of data and human resources that affect the region and SIDS in general (for more information, please see priority for action 1). Although some individual countries have progressed



more than others, ***there are no representative statistics available on the accumulative progress towards the Sendai Framework Global Targets in the Caribbean region***, that would enable reporting on the advances at the regional level.

For prospective views in relation to the global targets, the previous chapters' recommendations on data availability (priority for action 1) and greater alignment of the regional and international DRR strategies (priority for action 2) will support the Caribbean in enabling the national reporting on the global targets through SFM.

Despite such deficiencies on the data side, there are advances being made in meeting the targets of the Sendai Framework. ***Two qualitative highlights of the Caribbean region with regard to the progress and prospects on the global targets are included as stand-alone thematic case views***, which are available in annex 1 and annex 2 (Vol 2) of this report and summarized in the following text box.





## **A qualitative view towards the Sendai Global Targets in the Caribbean**

### **Caribbean Multi-Hazard Early Warning Systems (MHEWS): Global Target g**

From 2015 to date, the Caribbean region has experienced several major climate-related, biological and geological events. These events, however, have also triggered new thinking and investments in the Caribbean MHEWS and the international investments on Caribbean MHEWS have significantly increased in recent years. The region has become better organized with regards to EWS, particularly with an increasing focus on multi-hazards, strengthened EWS governance mechanisms and adoption of the 4-pillar MHEWS approach; which, instead of only using the traditional monitoring and warnings service, extends the focus to include risk knowledge, dissemination and communication of alerts, as well as to the preparedness to respond to the warnings received.

It is evident that the systemic nature of risk and the Caribbean's exposure to multiple hazards, including the negative effects of climate change, are posing a major challenge to MHEWS in the future. The trend of MHEWS is increasingly on impact-based forecasting. The future recommendations are to focus increasingly at a more balanced progress among the four pillars, together with impact-based forecasting and community involvement with gender and inclusion considerations. These aspects are recommended to be advanced through a common strategy and application of governance mechanisms. To respond to the related needs, cooperation among institutions, islands and with international partners is needed to enable keeping up with the ongoing process, including a more integrated role of the private sector.

### **Caribbean Safe School Initiative (CSSI): Global target d with focus on indicators D-3 and D-6**

The CSSI is the main framework to advance school safety in the Caribbean and it is a contribution of the region to the 'Worldwide-Initiative on Safe Schools (WISS)'. Supported by the international and regional strategies, CSSI was launched in April 2017 during the First Caribbean Ministerial Forum on School Safety. It is currently endorsed by 19 Caribbean countries and overseas territories that joined the initiative during the First, Second and Third Caribbean Ministerial Forums on School Safety (2017, 2019 and 2022 respectively).

CSSI is supported by the Sint Maarten Declaration with an increasing focus on pandemics, systemic nature of risk, increasing climate concerns, the specific situation of the small island developing states (SIDS), as well as on multi-stakeholder participation and the role of youth. The CSSI Roadmap guides these efforts in enabling systems, as well as in the three priority areas of 1) safe learning environment; 2) school disaster management, and; 3) risk reduction in education. For example, in risk reduction and resilience in education, short of half of the schools are indicating significant progress or achievement in the inclusion of DRM subjects into a formal curriculum. The CSSI is therefore educating the next generation towards an increased understanding of resilience starting from the most local level and forming part of the all-of-society approach on resilience.

*Box 1. As part of the Caribbean MTR SF, two thematic case views were developed in cooperation with the regional and national actors. The box presents a summary of each case view. The Caribbean thematic case views are available in full length in Vol 2 of this report.*





## G. Collaboration, Partnership and Cooperation

On collaboration, partnerships and cooperation<sup>23</sup>, ***the inter-government cooperation and private sector collaboration on DRR have strengthened the most since 2015.*** Inter-government cooperation on DRR in the Caribbean is continuously strengthened through CDEMA. CDEMA CU has also established many durable partnerships with development partners, other regional institutions, non-governmental organisations, academia and the private sector. There has also been the establishment of new platforms and groups for cooperation (e.g. Regional EWS Consortium, donors groups, etc.). Cooperation for disaster response has worked particularly well in the region. It is reported that previously different donors may have been donating the same emergency supplies, whereas currently this is more country driven, need-based and therefore better coordinated.

As viewed in the priority for action 2, the inter-sector cooperation on risk reduction in implementing the relevant international agendas, frameworks and conventions has evolved since the adoption of the Sendai Framework. ***Despite the existing progress, it is considered that there is a lot of room for improvement in the inter-sector collaboration.***

The increased understanding and interest of the Caribbean private sector in recent years on their role in DRR has resulted in ***successful PPP cooperation*** particularly with CDEMA and the NEMOs. Strengthened partnerships and ***active engagement beyond the Caribbean region*** is facilitating exchange of knowledge and strengthening the role of the private sector in DRR, with several new innovative ideas for future work. CARICHAM has played an important role in the VII session of the Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean in 2021 and in the 2022 Global Platform for Disaster Risk Reduction (GP22), all the while liaising with the national networks of ARISE Canada, ARISE Dominica and ARISE St. Lucia. ARISE Canada has also cooperated with CARICHAM on a BCP tool. The previous CARICHAM Chair is now part of the ARISE global board and advocating towards a greater understanding of the Caribbean and SIDS private sector realities in the global discussions. However, the Caribbean private sector notes that ARISE mainly helps to establish a PPP, but is not yet supporting the implementation of actions, while further cooperation would also be welcomed in this aspect to capitalize upon existing opportunities.

***As many actors contribute to the Caribbean DRR efforts, there is a growing need for a more comprehensive mapping and systematizing of interventions. Cooperation on data is also needed.*** This would contribute to decision-making and improve cost-efficiency due to better coherence and avoiding duplication. It is important to place the priorities and needs of the countries themselves at the center and align the agendas of development partners as well at the operational level, which would foster more cost-effective action.

***There are more opportunities for cooperation in relation to improved DRR than are currently being applied in practice.*** The potential of academia for collaboration on DRR is growing but is considered underutilized. The private sector seeks incorporation within international projects on DRR. The local level actors also wish to be more closely integrated into national and regional DRR mechanisms.

---

<sup>23</sup> Collaboration, partnership and cooperation has been addressed extensively in the previous chapters, as relevant to them. This chapter therefore focuses only on a brief overview and remaining matters.



Prospective views and recommendations towards 2030 and beyond

***New or emerging initiatives and partnerships are recommended to be developed or strengthened to support governments in implementing the four priorities and guiding principles of the Sendai Framework and thus in achieving resilience towards 2030 and beyond.*** The Caribbean actors consider that partnerships provide lead to increase resilience and increase action, which are much needed to respond to the growing risks. ***A holistic mapping of DRR interventions is recommended*** to guide an improved strategic vision and cost-efficiency of actions.

Considering the diversity of actors, ***a cooperation mechanism and a multi-stakeholder platform for DRR is recommended to be developed, as described in the priority for action 2 recommendations.*** It should be designed according to the multi-sectoral nature of systemic risk, the coherence approach and to enable stronger all-of-society DRR. A core aspect is to have the needed mandates in place at all levels and across all sectors to implement this system in practice. This type of multi-stakeholder dialogue is also an enabler for greater understanding of all the dimensions of the systemic nature of risk, as well as for innovative ideas and practices on how to cope with the emerging issues. This type of structure is recommended to be adopted at the highest level and with support of the ministries responsible for planning and finance, as well as at the local level.

---

***“The people at the local level are the main disaster risk reduction stakeholders”***

*Ruth Spencer, Board Member of the Yale International Alliance Caribbean women's network and Antigua and Barbuda local community representative*

---



## IV. GENDER EQUALITY IN DISASTER RISK REDUCTION

There is increasing emphasis in the Caribbean with respect to ensuring inclusion of all population groups in DRR. As the region is also working through the impacts of the COVID-19 containment measures, it is highlighted by several actors and regional publications that building back better in the Caribbean must be done by rebuilding with equality, and by strengthening gender equality, social equity, inclusion, and rights-based approaches.

The Caribbean state actors consider that the *DRR strategies and initiatives developed in their geographic area are promoting an inclusive and participatory DRR approach to a moderate degree*.

Gender is one of the core aspects of an inclusive DRR approach. Within the Caribbean MTR SF, seven components on gender in DRR were measured and analyzed<sup>24</sup>. The results are summarized below, detailed by each of the seven components:



Figure 8. Key considerations in gender-responsive Sendai Framework Implementation. Source: UNDRR 2022, based on UN Women.

### a) Inclusion of women and women's voices in disaster risk reduction leadership

Almost all Caribbean MTR SF participants consider that during 2015-2022, gender-related progress has happened in terms of the inclusion of women and women's voices in DRR leadership. There is a good high-level example of this with CDEMA and various NEMOs having female leadership. Specific focus is considered to be needed in which the *diversity* of women's voices is being considered, as this is very relevant looking at risk vulnerability of the most disadvantaged and their voices being heard. Therefore, *an intersectional approach to gender*<sup>25</sup> is recommended for the Caribbean DRR.

### b) Systemic collection, use and reporting of gender analysis and sex-disaggregated data

This gender component was considered as a priority for the future in advancing gender in DRR. CARICOM is already collecting sex-disaggregated data. However, capacity strengthening for disaggregated data and analysis is still needed, as well as advocating towards the policy makers to fully understand the importance of the gender focus. This can be enabled with the evidence of the disaggregated data, as it often highlights the gendered impact of disasters. The disaggregated data

<sup>24</sup> The state and non-state actors were requested to select maximum three of the seven gender components on which gender considerations have been most included from 2015 to date and which are priorities towards 2030.

<sup>25</sup> Intersectionality refers to the ways in which systems of inequality based on gender, race, ethnicity, sexual orientation, gender identity, disability, etc. "intersect" to create unique discrimination dynamics and effects.



component was particularly highlighted also in the GP22 by Caribbean representatives, to enable making the DRR and climate actions gender transformative.

**c) Gender responsive plans and policies**

*The CDM Strategy* has gender mainstreaming as a cross-cutting element for the analysis of differences in vulnerability between men and women, girls and boys, and how these vulnerabilities must be taken into account in the design of DRR policies, strategies, and programmes, as well as in recovery and reconstruction processes. CDEMA also has a gender working group that provides technical guidance and has developed practical manuals for mainstreaming gender into disaster risk reduction and management. There is, however, a concern in the region of how well the gender considerations of the strategies and plans are reflected in the implementation, or in other words, how well they are translated into action as they are often not tied to broader financial tools or indicators.

**d) Assigning financial resources to gender responsive DRR**

Assigning financial resources to gender responsive DRR was considered having *experienced the least progress* during 2015-2022 of the several gender components in DRR. There is a significant need for gender responsive budgeting in DRR in the region.

**e) Gender responsive mechanisms for cooperation and partnerships**

There are initiatives and projects to integrate gender equality and human rights perspectives in DRR. To highlight some examples, the Latin American and Caribbean Women's Network for DRR has been established. Also, the EnGenDER regional Caribbean programme, implemented by UNDP, UN Women, WFP and CDEMA, recognizes that different populations respond and react to disasters differently and that groups with less knowledge and capacity are often the ones hit the hardest. 77 per cent of the participants in the 2015 community hazard mapping of the project "Climate Risk Atlas in Negril, Jamaica" were women who helped to identify high-risk areas and critical facilities and infrastructure that could be affected by a disaster. In addition to women, this project included older persons and youth in a collective construction process.

**f) Gender responsive preparedness and early warning systems**

The MHEWS have also started to advance on gender consideration in the region. For more information, please see the gender chapter of the MHEWS thematic case view in Vol 2 of this report.

**g) Enabling women's access to financing and basic services**

Despite some progress in this gender component, there remain serious concerns, for example, in relation to gender responsive social protection. Many women work in the informal sector, and therefore do not have the access to work-based social protection. Impact of COVID-19 has really opened a gateway to some of the considerations on women's access to basic services. Gender-based violence, which increases in disasters, places a particular burden also to women's access. For the future, it is important to ensure that people who are affected are able to access the services on an equal basis.

Conclusion and recommendations: The understanding of the importance of gender equality in DRR has started to emerge in the region and it has taken some important steps from 2015 to date. However, this understanding is currently being limited to specific actors and actions. Going towards 2030 it is important to enable sex-disaggregated data and gender analysis in DRR and to use it in DRR related decision-making. This enables a better targeting of DRR actions, broader understanding of the importance of gender and paves way for the focus on all seven gender components in DRR.



## SOURCES

### MTR SF guidance documents

UN (2021). *Letter to All Permanent Missions to the United Nations in Geneva and in New York*. Ref: UNDRR/OUT/2021/00480. Geneva, 7 October 2021. United Nations.

UN (2022). *Letter to All Permanent Missions to the United Nations in Geneva and in New York*. Ref: UNDRR/OUT/2022/00051. Geneva, 04 February 2022. United Nations.

UNGA (2021). *Resolution adopted by the General Assembly on 17 December 2021*. Resolution A/RES/76/204. United Nations General Assembly. Retrieved from: <https://sendaiframework-mtr.undrr.org/key-documents-mtr>

UNDRR (2022a). *The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. Concept Note*. Retrieved from: <https://sendaiframework-mtr.undrr.org/key-documents-mtr>

UNDRR (2022b). *The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. Guidance for member states*. Retrieved from: <https://sendaiframework-mtr.undrr.org/key-documents-mtr>

UNDRR (2022c). *The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. Guidance for stakeholders*. Retrieved from: <https://sendaiframework-mtr.undrr.org/key-documents-mtr>

UNDRR (2022d). *The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. Supplementary Recommendations and Guidance for a gender-responsive MTR SF*. Retrieved from: <https://sendaiframework-mtr.undrr.org/key-documents-mtr>

UNDRR (2022e). *The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. Template for Voluntary National Report*. Retrieved from: <https://sendaiframework-mtr.undrr.org/key-documents-mtr>

UNDRR (2022f). *The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. National country selection criteria*.

### Global documents

Binet et al (2021). *Independent evaluation of the adaptation portfolio and approach of the Green Climate Fund*. Green Climate Fund. Retrieved from: [Final report on the Independent evaluation of the adaptation portfolio and approach of the Green Climate Fund | Independent Evaluation Unit | Green Climate Fund](#)

UNDRR (2015). *Sendai Framework for Disaster Risk Reduction 2015-2030*. United Nations Office for Disaster Risk Reduction. Retrieved from: [Sendai Framework for Disaster Risk Reduction 2015-2030 | UNDRR](#)

GAR (2019). *UN Global Assessment Report on Disaster Risk Reduction 2019*. United Nations Office for Disaster Risk Reduction. Retrieved from: [Global Assessment Report on Disaster Risk Reduction \(GAR\) | GAR \(undrr.org\)](#)

GAR (2022). *UN Global Assessment Report on Disaster Risk Reduction 2019*. United Nations Office for Disaster Risk Reduction. Retrieved from: [Global Assessment Report on Disaster Risk Reduction 2022 | UNDRR](#)

### Latin America and the Caribbean regional documents (only the most essential for the Caribbean)



Alcántara-Ayala & Lopez (2022). **Key recommendations for a strengthened use of science and technology in Disaster Risk Reduction in the Americas and the Caribbean**. United Nations Office for Disaster Risk Reduction. Retrieved from: <https://www.undrr.org/publication/key-recommendations-strengthened-use-science-and-technology-disaster-risk-reduction>

UNDRR ROAC (2019). **Partnerships Annual Report 2019**. United Nations Office for Disaster Risk Reduction. Regional Office for the Americas and the Caribbean. Retrieved from: <https://www.undrr.org/publication/roamc-partnerships-annual-report-2019>

UNDRR ROAC (2021a). **Regional Assessment Report on Disaster Risk in Latin America and the Caribbean**. United Nations Office for Disaster Risk Reduction.

UNDRR ROAC (2021b). **UNDRR Regional Annual Progress Report 2021**. United Nations Office for Disaster Risk Reduction.

UNDRR (2022g). **Sendai Voluntary Commitments**. Retrieved from: <https://sendaicommitments.undrr.org/commitments?scopeTypes=REGIONAL&regionLocations=region.analysis.americas>

UNDRR & UN Women (2022). **Towards Gender Equality and Women's Leadership for Resilience to Disaster Risks in Latin America and the Caribbean. Regional Consultation prior to the sixty-sixth session of the Commission on the Status of Women**. Retrieved from: [csw66 - disaster risk reduction - en vf.pdf \(cepal.org\)](#)

UNDRR (2022h). **Latin American and Caribbean Network of Women for Disaster Risk Reduction**. United Nations Office for Disaster Risk Reduction. Retrieved from: <https://www.undrr.org/latin-american-and-caribbean-network-women-disaster-risk-reduction>

#### Caribbean documents

CDEMA (2014). **CARICOM Comprehensive Disaster Management (CDM) Strategy 2014 – 2024**. Available in documentation.

CDEMA (2022a). **Manuals for mainstreaming gender into disaster risk reduction and management**. Retrieved from: [Manuals and Strategies for Mainstreaming Gender in CDM - CDEMA](#)

CDEMA (2022b). **Short status reports on CWP progress**. Available in documentation.

CDEMA, UNDRR & UWI (2022). **Comprehensive Climate and Disaster Risk Management**. Participant list. Online training course - February 1-3, 2022. Available in documentation.

Dubrie et al. (2019). **Synthesis of the Caribbean subregion midterm review report of the Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway**. Studies and Perspectives series. No. 83 (LC/TS.2019/117-LC/CAR/TS.2019/6), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC) Subregional Headquarters for the Caribbean. Retrieved from: [Synthesis of the Caribbean subregion midterm review report of the Small Island Developing States \(SIDS\) Accelerated Modalities of Action \(SAMOA\) Pathway | Publication | Economic Commission for Latin America and the Caribbean \(cepal.org\)](#)

Eckstein et al (2019). **Global Climate Risk Index 2019: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018 and 1999 to 2018**. Berlin. Retrieved from: [https://www.cdema.org/CDM\\_Strategy\\_2014-2024.pdf](https://www.cdema.org/CDM_Strategy_2014-2024.pdf)





ECLAC & UNDRR (2021). *The coronavirus disease (COVID-19) pandemic - an opportunity for a systemic approach to disaster risk for the Caribbean*. Retrieved from: [UNDRR & ECLAC Report: The coronavirus disease \(COVID-19\) pandemic - an opportunity for a systemic approach to disaster risk for the Caribbean | UNDRR](#)

Independent (2017). *Hurricane Irma: For first time in 300 years, there is no one living on the island of Barbuda*. News article. Retrieved from: [Hurricane Irma: For first time in 300 years, there is no one living on the island of Barbuda | The Independent | The Independent](#)

Kizzann S (2022). *The Status of Women and Men Report: Innovating Financing, Climate Change and Disaster Risk Reduction in the Caribbean*. United Nations Entity for Gender Equality and the Empowerment of Women. Retrieved from: [The Status of Women and Men Report: Innovating Financing, Climate Change and Disaster Risk Reduction in the Caribbean | Publications | UN Women – Multi-Country Office – Caribbean](#)

NEMO (2022). *Disaster risk reduction in Saint Lucia: Situational analysis 2022*. National Emergency Management Organization of Saint Lucia. Retrieved from: <https://www.undrr.org/publication/disaster-risk-reduction-saint-lucia-situational-analysis-2022>

NEMOs (2022). *All CWP's and Situational analysis (drafts)*. Available in documentation.

Reupena, F. *Introducing the SAMOA pathway*. Ministry of Natural Resources and Environment (MNRE) of SAMOA.

Rozenberg J. et al (2021). *Report "360° Resilience: A Guide to Prepare the Caribbean for a New Generation of Shocks"*. World Bank Group. Retrieved from: <https://openknowledge.worldbank.org/handle/10986/36405>

SAMOA (2014). *Small Island Developing States Accelerated Modalities of Action (SAMOA Pathway)*. [Small Island Developing States Accelerated Modalities of Action \(Samoa Pathway\) | PreventionWeb](#)

Thomolla, Arosio & Torres (2022). *Disaster Risk Reduction and Climate Change Adaptation: Pathways for Sustainable Development Policy Coherence in the Caribbean Region*. Draft. Available in documentation.

UNDRR (2021a). *UNDRR activities in the Caribbean Region*. PowerPoint. 30 September 2021. Available in documentation.

UNDRR (2022i). *Advancements and way forward for the implementation of the Four Priorities of the Sendai Framework for Disaster Risk Reduction in the Caribbean Region*. United Nations Office for Disaster Risk Reduction. Internal document. Available in documentation.

UNDRR (2022j). *Summary of Situational Analyses Progress in Informing CWP's*. Available in documentation.

UNICEF (2017). *In the wake of Hurricane Irma, families flee the ravaged island of Barbuda ahead of the next storm*. News article. Retrieved from: [In the wake of Hurricane Irma, families flee the ravaged island of Barbuda ahead of the next storm | UNICEF](#)

UN-OHRLS. *SAMOA Pathway – A guide for Island Journalists*. Available in documentation.

World Bank (2015). *Profiling Caribbean Women Entrepreneurs: Business Environment, Sectoral Constraints and Programming Lessons*. Retrieved from: <https://thedocs.worldbank.org/en/doc/6679edb973d3937219fea94a32ff4d48-0350072015/original/Profiling-Caribbean-Women-Entrepreneurs.pdf>

World Bank (2021). The World Bank document "Gender-Responsive Disaster Preparedness and Recovery in the Caribbean": [Gender-Responsive Disaster Preparedness and Recovery in the Caribbean | Other papers \(worldbank.org\)](#)

RP21 documents



UNDRR (2021b). *Proceedings of the VII Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean*. United Nations Office for Disaster Risk Reduction. Retrieved from: <https://rp-americas.undrr.org/publication/rp21-proceedings>

UNDRR (2021c). *Ministerial Declaration on the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in LAC*. United Nations Office for Disaster Risk Reduction. Retrieved from: [https://rp-americas.undrr.org/sites/default/files/inline-files/Ministerial%20Declaration\\_EN.pdf](https://rp-americas.undrr.org/sites/default/files/inline-files/Ministerial%20Declaration_EN.pdf)

UNDRR (2021d). *Regional Action Plan for the Implementation of the Sendai Framework for Disaster Risk Reduction 20-203 in the Americas and the Caribbean*. United Nations Office for Disaster Risk Reduction. Retrieved from: [https://rp-americas.undrr.org/sites/default/files/inline-files/Regional%20Action%20Plan\\_EN.pdf](https://rp-americas.undrr.org/sites/default/files/inline-files/Regional%20Action%20Plan_EN.pdf)

UNDRR (2021e). *Statement of Youth of the Americas and the Caribbean on Disaster Risk Reduction within the framework of the VII Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean*. United Nations Office for Disaster Risk Reduction. Retrieved from: <https://rp-americas.undrr.org/sites/default/files/inline-files/Statement%20of%20Youth.pdf>

UNDRR (2021f). *Civil Society Organizations statement at the VII Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean*. United Nations Office for Disaster Risk Reduction. Retrieved from: <https://rp-americas.undrr.org/sites/default/files/inline-files/CSOs%20Statement.pdf>

UNDRR (2021g). *Chair's Summary of the VII Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean*. United Nations Office for Disaster Risk Reduction. Retrieved from: <https://rp-americas.undrr.org/sites/default/files/inline-files/Chair%27s%20Summary.pdf>

UNDRR (2021h). *The statement of the Inclusive Disaster Risk Management and Disability Network of Latin America and the Caribbean*. United Nations Office for Disaster Risk Reduction. Retrieved from: <https://consent.youtube.com/m?continue=https://www.youtube.com/watch%3Fv%3D9vSVyv7V-VU%26cbrd%3D1&gl=FI&m=0&pc=yt&uxe=23983171&hl=en&src=1>

#### MHEWS thematic sources

Actionaid & UNDRR (2022): *INCLUSIVE AND ACCESSIBLE MULTI-HAZARD EARLY-WARNING SYSTEMS: LEARNING FROM WOMEN-LED EARLY-WARNING SYSTEMS IN THE PACIFIC*. Retrieved from: [Inclusive and accessible multi-hazard early-warning systems: learning from women-led early-warning systems in the Pacific | PreventionWeb](https://www.preventionweb.net/publications/2022/04/inclusive-and-accessible-multi-hazard-early-warning-systems-learning-from-women-led-early-warning-systems-in-the-pacific)

CDEMA (no date). *Terms of Reference. Regional EWS Consortium*. Available in documentation.

CDEMA (2018). *Early Warning Systems Checklists*. World Meteorological Organization. Available in documentation.

Collymore J (no date). *THE MODEL NATIONAL MULTI-HAZARD EARLY WARNING SYSTEMS (MHEWS) POLICY*. Available in documentation.

Collymore, J (2016). *EWS in the Caribbean: A Desk Review*. Available in documentation.

CREWS (2020). *A Situation Analysis of the Caribbean Multi-Hazard End-to-End Early Warning System*. Climate Risk and Early Warning Systems Initiative. Available in documentation.

CREWS (2022). *A Strategic Roadmap for Advancing Multi-hazard Impact-based Early Warning Systems and Services in the Caribbean*. Climate Risk and Early Warning Systems Initiative. Available in documentation.





Guardian (2022). ***UWI, UNDRR Launches Survey To Study Knowledge & Perception Of Risk & Early Warning Systems In The Caribbean.*** Trinidad and Tobago Guardian. 1 April 2022. Retrieved from: [UWI, UNDRR Launches Survey To Study Knowledge & Perception Of Risk & Early Warning Systems In The Caribbean - Trinidad Guardian](#)

Mertz B. et al (2020). ***Impact Forecasting to Support Emergency Management of Natural Hazards. Reviews of Geophysics.*** Review article 10.1029/2020RG000704. AGU Advancing Earth and Space Science. Retrieved from: [Impact Forecasting to Support Emergency Management of Natural Hazards - Merz - 2020 - Reviews of Geophysics - Wiley Online Library](#)

NODS (2019). ***Roadmap to strengthening the integration of early warning systems in Antigua and Barbuda for more effective disaster risk reduction.*** National Office of Disaster Services of Antigua and Barbuda. In cooperation with UNDP, CDEMA, IFRC, ECHO. Retrieved from: [1062-Systematization SSC Antigua & Barbuda DIPECHO I ENG.pdf \(dipecholac.net\)](#)

Pudmenzky C. et al (2022). ***Gender equality in the context of multi-hazard early warning systems and disaster risk reduction.*** Retrieved from: [Gender equality in the context of multi-hazard early warning systems and disaster risk reduction | World Meteorological Organization \(wmo.int\)](#)

Rahat, S. (2020). ***Desk review of Early Warning Systems (EWS) in the Caribbean. An Examination of the Level of Investment Established to Strengthen the 4 Pillars of EWS at the Regional, National and Community Levels.*** United National Development Programme. Retrieved from: [1054-DESK REVIEW-OF-EARLY-WARNING-SYSTEMS-EWS-IN-THE-CARIBBEAN.pdf \(dipecholac.net\)](#)

REWSC (2022). ***Regional Early Warning Systems Consortium (REWSC) Meeting.*** Bridgetown, Barbados, 1-2 September 2022. Information retrieved from: [The Caribbean consolidates its partnership for advancing multi hazard early warning systems in the region | UNDRR](#)

UN (2017). ***The UN General Assembly Resolution A/71/644.*** United National General Assembly.

UNDP, CDEMA, IFRC, ECHO (2018). ***Multi-hazard Early Warning Systems: A Checklist.*** Retrieved from: [EWS Toolkit - Multi-hazard Early Warning Systems: A Checklist \(cdema.org\)](#)

UNDRR (2021a). ***Country-level MHEWS assessments.*** United Nations Office for Disaster Risk Reduction. Available in documentation.

UNDRR (2021b). ***Regional Assessment Report on Disaster Risk in Latin America and the Caribbean.*** United Nations Office for Disaster Risk Reduction. Retrieved from: [UNDRR ROAMC: Regional assessment report on disaster risk in Latin America and the Caribbean \(RAR 2021\) | UNDRR](#)

UNDRR (2022a). ***Caribbean Regional Workshop on Measuring Effectiveness of Early Warning Systems through Sendai Framework Target (g) and Custom Indicators.*** 10-12 May 2022. Trinidad and Tobago. United Nations Office for Disaster Risk Reduction. Available in documentation.

UNDRR (2022b). ***CREWS commits additional funding to strengthen EWS in the Caribbean.*** Retrieved from: [CREWS commits additional funding to strengthen Early Warning Systems in the Caribbean | UNDRR](#)

UNDRR (2022c). ***Regional Early Warning Systems (EWS) Consortium Meeting (news article).*** United Nations Office for Disaster Risk Reduction. Retrieved from: [Regional Early Warning Systems \(EWS\) Consortium Meeting | UNDRR](#)

UNDRR-ACS (2022). ***Regional MHEWS report*** (draft). United Nations Office for Disaster Risk Reduction and the Secretariat of the Association of Caribbean States. Available in documentation.



WMO (2018). *The Caribbean 2017 Hurricane Seasons – An Evidence-Based Assessment of the EWS*. World Meteorological Organization. Retrieved from: [Caribbean 2017 Hurricane Season an evidence-based ... | E-Library \(wmo.int\)](#)

#### CSSI thematic sources

CDEMA (2014). *CARICOM Comprehensive Disaster Management (CDM) Strategy 2014 – 2024*. Available in documentation.

CSSI (2017). *Antigua and Barbuda Declaration on School Safety*. Retrieved from: [Declaration CSS Ministerial Forum ENG.pdf \(undrr.org\)](#)

CSSI (2019). *Caribbean Safe School Initiative Updated Roadmap*. Retrieved from: [63939\\_cssiupdatedroadmapapril2019.pdf \(preventionweb.net\)](#)

CSSI (2022a). *Caribbean Roadmap on School Safety Monitoring (2022)*. Constructed in collaboration with the MTR SF Caribbean methodology. Available in documentation.

CSSI (2022b). *Caribbean Safe School Initiative*. Retrieved from: [Caribbean Safe School Initiative \(CSSI\) \(undrr.org\)](#)

CSSI (2022c). *Caribbean Safe School Initiative Third Caribbean Ministerial Forum on School Safety*. Concept Note for the Focal Point Working Session, 27 June 2022, Sint Maarten. Available in documentation.

CSSI (2022d). *Saint Maarten Declaration on School Safety (2022)*. Available in documentation.

CSSI (2022e). *Technical Support Package for the Caribbean Safe Schools Initiative*. Retrieved from: [technical-package-online.pdf \(eird.org\)](#)

RAP (2021). *Regional Action Plan for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in the Americas and The Caribbean (Updated November 2021)*. Retrieved from: [https://rp-americas.undrr.org/sites/default/files/inline-files/Regional%20Action%20Plan\\_EN.pdf](https://rp-americas.undrr.org/sites/default/files/inline-files/Regional%20Action%20Plan_EN.pdf)

UNDRR & CDEMA (2020). *UNDRR Americas & Caribbean/CDEMA COVID-19 BRIEF: COVID-19, Systemic Risk and Education Sector Resilience in the Caribbean Region (2020)*. Retrieved from: [UNDRR Americas & Caribbean/CDEMA COVID-19 BRIEF: COVID-19, Systemic Risk and Education Sector Resilience in the Caribbean Region | UNDRR](#)

UNDRR (2021). *VII Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean*. Retrieved from: [VII Regional Platform for Disaster Risk Reduction in the Americas and the Caribbean - Home | RP Americas & Caribbean \(undrr.org\)](#)

WISS (2022). *Worldwide Initiative for Safe Schools (WISS)*. Retrieved from: [Worldwide Initiative for Safe Schools \(WISS\)](#)

#### Key informant interviews:

- Elizabeth Riley, Executive Director, CDEMA
- Sharon Layne-Augustine, Planning & Business Development Manager (ag), CDEMA
- Brendon Taylor, Technical Assistant to Support the Development of Multi-Year Country Work Programme, CDEMA
- Jeremy Collymore, DRR influencer and leader
- Kareem Sabir, Senior Project Officer for Sustainable Development and lead for DRR, CARICOM,
- Dr. Evangeline Inniss-Springer, Director of the Disaster Risk Reduction Centre (DRRC), University of West Indies



- Anna-Maria Bogdanova, Caribbean CREWS Programme Manager, The World Bank Group
- Melanie Kappes, previous Caribbean CREWS Programme Manager, The World Bank Group
- Pascal Ledroit, Programme Officer, Green Economy, Energy and Resilience, European Union Delegation to Barbados and Eastern Caribbean
- Nicolas Louis, Disaster Preparedness Expert and the Caribbean focal point, ECHO
- Tonni-Ann Brodber, Deputy Director, UN Women Multi-Country Office, Barbados and Eastern Caribbean
- Kyana Bowen, UN Women Multi-Country Office, Barbados and Eastern Caribbean
- Riina Haavisto, Programme Analyst (Climate Change and DRR), UN Women Multi-country Office Barbados and Eastern Caribbean (inputs provided in writing)
- Ruth Spencer, MEPA Trust/zero waste Antigua Barbuda/ Board Member-Yale International Alliance Caribbean women's network, Alliance for Actions
- Anwar Baksh, Planning and Development Officer, Mitigation, Planning and Research Unit, Office of Disaster Preparedness and Management, Trinidad and Tobago
- Alana Lewis, Making Cities Resilient, Caribbean consultant, UNDRR Regional Office for the Americas and the Caribbean (ROAC)
- Kerry Hinds, Director, Department of Emergency Management, Barbados
- Tyrone Brathwaite, Senior Foreign Service Officer (Ag.), Ministry of Foreign Affairs and Foreign Trade, Barbados
- Jennifer Guralnick, Programme Officer, UNDRR ROAC
- Saskia Carusi, External Relation Officer, UNDRR ROAC
- Jair Torres, DRR Advisor for the Caribbean, UNDRR ROAC
- Carlos Uribe, Programme Officer, UNDRR ROAC
- Melany Riquetti, Partnerships Officer, UNDRR ROAC

#### Country consultation:

- Ministry of Agriculture, Grenada
- Department of Emergency Management, Barbados
- Le Groupe-conseil baastel Itée, Jamaica
- Hazard Management Office, Cayman Islands
- The Office of Disaster Preparedness and Management, Trinidad and Tobago
- Caribbean Disaster Emergency Management Agency
- National Emergency Management Office, St. Vincent and the Grenadines

#### Private sector consultation:

Members of the CARICHAM Executive Board and representative of national Chambers of Commerce:

- Brian Louisy, St. Lucia; CARICHAM Chair
- Cinthia Jeremy, Martinique; Coordinator of CARICHAM
- Lizra Fabien, Dominica (also previous CARICHAM coordinator and member of ARISE board)
- Misha Lobban Clarke, Barbados
- Dax Driver, Trinidad and Tobago
- Andrew Satney, St Kitts and Nevis

#### Survey on perceptions:

- Turks and Caicos Islands Airports Authority
- Grenada Airports Authority, Meteorological Department
- World Meteorological Organization (Belize)
- Sustainable Development Unit, Ministry of Sustainable Development, Belize
- Civil Defence Commission, Guyana
- NOAA Tsunami Program, International Tsunami Information Center, UNESCO IOC CARIBE EWS (Tsunami), UNESCO/IOC IOCARIBE, UN Decade of Ocean Science
- NEMA, Saint Kitts and Nevis



- UNDP Trinidad and Tobago
- Ministry of Public Works, Suriname
- Caribbean Development Bank
- University of West Indies
- University of Guyana
- Civil society organization, Haiti
- AGERCA - Alliance pour la Gestion des Risques et la Continuité des Activités, Haiti
- Disaster Management, British Virgin Islands
- Statistics Department, Montserrat
- National Disaster Management Agency, Grenada
- National Office of Disaster Services, Antigua and Barbuda
- Pacific Disaster Centre (covering several Caribbean islands)
- Groupe d'Appui Psychosocial et Réponses aux Urgences, GAPRU, Haiti
- Wetlands International / Plataforma Inter Universitaria Guatemalteca para la Gestión del Riesgo InterU GRD (covering Grenada and St. Vincent and the Grenadines)
- MEPA Trust/zero waste Antigua Barbuda/ Board Member-Yale International Alliance Caribbean women's network, Alliance for Actions (covering Antigua and Barbuda and Saint Lucia)

CSSI survey:

***Caribbean Roadmap on School Safety 2022 Monitoring, combined with the MTR SF methodology.*** June 2022.  
Participation from:

- Arthur Selwood, Safe Schools Focal Point (SSFP), Education, British Virgin Islands.
- Rolston Nickeo, Education Officer and Focal Point for School Safety, Ministry of Education, Antigua and Barbuda.
- David Maximea, Safe school focal point/ District Education Officer, Ministry of Education, Dominica.
- Idelia Ferdinand, Senior Education Officer, Ministry of Education, St. Vincent and the Grenadines .
- Ansil Frederick, School Safety Officer, Ministry of Education, Saint Lucia.
- Petrina Clarke, Health, Safety and Environment Coordinator, Ministry of Education, Trinidad and Tobago.
- Joy Adamson, Deputy Chief Education Officer, Focal Point Barbados, Ministry of Education Technological and Vocational Training, Barbados.
- Olga Mussington-Service, Manager Student Support Services Division and SSFP, Ministry of Education, Culture, Youth and Sport, Sint Maarten.
- Daisry Higgs, Sr. Administrator, Ministry of Education, Bahamas.
- M. Julius, Director of Education, Ministry of Education, Montserrat.
- Tricia Esdaille, Senior Assistant Secretary, Ministry of Education, St. Kitts and Nevis.
- Sandra Fahie, Education Officer, Curriculum (CSSI focal point), Department of Education, Anguilla.

***CSSI Third Ministerial Meeting.*** June 2022. Validation of the Monitor results.

MHEWS consultation:

- EWS delegation of Dominica
- EWS delegation of Curacao
- EWS delegation of Guyana
- EWS delegation of Anguilla
- EWS delegation of Grenada
- EWS delegation of St. Kitts and Nevis
- EWS delegation of Dominican Republic
- EWS delegation of St. Maarten



- EWS delegation of Cayman Islands
- EWS delegation of St. Lucia
- EWS delegation of Suriname
- EWS delegation of St. Vincent and the Grenadines
- Support from the regional and international development partners

Comments and views from the Caribbean actors in DRR-related events and consultation processes:

- The Major Group for Children and Youth (UNMGCY) – MTR SF consultation 2022 (only Caribbean responses included to this report)
- SIDS' Regional Workshop: Challenges & Best Practices in Implementing the Sendai Framework. Caribbean workshop/consultation, 6 July 2022.
- Caribbean representation at the Global Platform for Disaster Risk Reduction 2022 (comments from the regional and country delegations)

