THE STATUS OF WOMEN AND MEN REPORT

INNOVATING FINANCING, CLIMATE CHANGE AND DISASTER RISK REDUCTION IN THE CARIBBEAN

EnGenDER
Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean

In partnership with Canada

UKaid
from the British people

UN WOMEN

United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)

UN Women is the United Nations organization dedicated to gender equality and the empowerment of women. A global champion for women and girls, UN Women was established to accelerate progress on meeting their needs worldwide. UN Women supports UN Member States as they set global standards for achieving gender equality, and works with governments and civil society to design laws, policies, programmes and services needed to implement these standards. It stands behind women's equal participation in all aspects of life, focusing on five priority areas: increasing women's leadership and participation; ending violence against women; engaging women in all aspects of peace and security processes; enhancing women's economic empowerment; and making gender equality central to national development planning and budgeting. UN Women also coordinates and promotes the UN system's work in advancing gender equality.

About the EnGenDER Project

The Enabling a Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean Project (EnGenDER) Project is funded by Global Affairs Canada (GAC) and the United Kingdom's Foreign, Commonwealth and Development Office (FCDO). Led by the United Nations Development Programme (UNDP), the EnGenDER Project is jointly implemented by the United Nations Entity for Gender Equality and Empowerment of Women (UN Women), World Food Programme (WFP) and the -Caribbean Disaster Emergency Management Agency (CDEMA). Nine Caribbean countries are beneficiaries of the EnGenDER Project – Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Suriname.

Disclaimer

The views expressed in this publication are those of the authors and do not necessarily represent the views of UN Women.

This UN Women flagship report was produced with funding support from UN Women and the EnGenDER project.

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May 2022

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ACRONYMS AND ABBREVIATIONS

2SLGBTQI	Two Spirit, Lesbian, Gay, Bisexual, Transexual, Queer and Intersex
CARICOM	Caribbean Community
CBO	Community-based organization
CCCCC	Caribbean Community Climate Change Centre
CDEMA	Caribbean Disaster Emergency Management Agency
COP26	United Nations Climate Change Conference 2021
DRR	Disaster risk reduction
EnGenDER	Enabling a Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean Project
GCF	Green Climate Fund
GDP	Gross domestic product
IFRC	International Federation of Red Cross and Red Crescent Societies
ILO	International Labour Organization
IRDR	Integrated Research on Disaster Risk
MCO	Multi-Country Office – Caribbean (UN Women)
MSME	Micro, small and medium-sized enterprises
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
OECS	Organisation of Eastern Caribbean States
PPP	Purchasing power parity (GNI)
SDG	Sustainable Development Goal
SIDS	Small Island Developing States
UNDRR	United Nations Office for Disaster Risk Reduction
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women

EXECUTIVE SUMMARY

The Status of Women and Men Report: Innovating Financing, Climate Change and Disaster Risk Reduction in the Caribbean addresses the theme of the sixty-sixth session of the Commission of Status of Women (CSW66) – "Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies and programmes". Commissioned by the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) Multi-Country Office – Caribbean (MCO – Caribbean), the report draws from trends in nine Caribbean countries that are a part of the Enabling a Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER) Project. EnGenDER was funded by the Governments of Canada and the United Kingdom, and implemented by the United Nations Development Programme (UNDP-lead agency), UN Women, World Food Programme (WFP) and the Caribbean Disaster Emergency Management Agency (CDEMA) in Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Suriname. It also draws reference to other Caribbean Community (CARICOM) countries, and Caribbean countries within the direct mandate of the UN Women MCO – Caribbean . The review focuses on coping mechanisms adopted by men and women in response to large- and small-scale, sudden and slow-onset, frequent and infrequent, and natural or man-made hazards. The report profiles the Caribbean to provide insights into areas of vulnerability, climate change and disaster risk reduction methods adopted in the region, especially within the context of the global impact of the war in Ukraine, given Small Island Developing States (SIDS) unique exposure to food, energy and financial shocks. It outlines past research undertaken by the UN Women MCO – Caribbean that explores coping strategies used by men and women in the face of rapid and slow onset disasters, and identifies positive and negative coping mechanisms. It also examines barriers to entry for financing towards addressing climate change and disaster risk reduction.

Key findings

- Men are more directly affected financially by disasters than women.
- Women are affected both directly and indirectly.
- Negative coping mechanisms can destabilize communities and increase vulnerabilities in the face of climate change.
- Data gaps and non-standardized indicators have resulted in an incomplete and inconsistent profile of climate change and disaster risk reduction in the Caribbean.
- Sustainable climate finance must be driven from local and national priorities, supported under a regional framework.
- The Caribbean has lines of private financing that can support climate change adaptation (CCA), which can be developed and utilized through public-private partnerships.
- Gender lens investing can offer solutions to reduce financial barriers for women-led and women-owned businesses.

Recommendations

- Standardize terms used to define hazards and indicators collected post-disaster.
- Improve regional coherence in CCA and mitigation to support food security.
- Promote the empowerment of local voices and actors, including the most marginalized, in the development of climate change initiatives and disaster risk reduction approaches.

- Mainstream through an intersectional gender lens in climate finance and disaster risk reduction programmes.
- Prioritize the protection of women and girls, through comprehensive shock responsive social protection programmes and ending violence against women and girls' initiatives.

A. INTRODUCTION

"The Status of Women and Men Report: Innovating Financing, Climate Change and Disaster Risk Reduction in the Caribbean" highlights trends in nine Caribbean countries that are part of the Enabling a Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER) Project, which was funded by the Governments of Canada and the United Kingdom, and implemented by the United Nations Development Programme (UNDP-lead agency), UN Women, World Food Programme (WFP) and Caribbean Disaster Emergency Management Agency (CDEMA) in Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Suriname. It also draws reference to other CARICOM countries, and Caribbean countries within the direct mandate of the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) Multi-Country Office – Caribbean (MCO – Caribbean). The review will focus on coping mechanisms adopted by men and women in response to large- and small-scale, sudden and slow-onset, frequent and infrequent, and natural or man-made hazards.

The countries under focus are all Small Island Developing States (SIDS), in physical and/or economic size. Land masses that range in area from 5.7 km^2 to 27,750 km^2 have a total population of more than 19 million persons (49 percent male, 51 percent female), and a linguistic range that incorporates official languages of English, French, Dutch and Haitian Kreyòl, together with a range of local creole, pidgin and indigenous languages. As a result of migration trends to the Caribbean, Chinese, Hindi and Spanish are spoken as a second language in some households, although English is accepted as the official working language for commerce and government. Indigenous peoples within the Caribbean add a further dimension of complexity in the creation of policies on and approaches to climate change adaptation (CCA) and disaster risk reduction (DRR).

The economic scope of the Caribbean further compounds its complexity, made up of at least ten high-income countries, several upper middle-income countries, and one least developed country (LDC), according to the World Bank.[1] Wealth distribution and economic growth is uneven, with gross national income (GNI)[2] reporting at purchasing power parity (PPP) 1,709 in Haiti compared to PPP 33,747 in The Bahamas[3] (2017 figures). In contrast, 2020 figures show growth in Haiti with a PPP of 3,100; The Bahamas reported a drop of PPP at 30,790; and Bermuda recorded the highest PPP at 83,180.

With an estimated external debt of USD 54.27 billion (Moody's Analytics 2017), Caribbean countries are now struggling to recover from two years dominated by the biological hazard – COVID-19. More than 80 percent of the Caribbean relies on tourism, with services contributing an average of 66 percent of the gross domestic product (GDP) and employing around 58 percent of the labour force. Pre-pandemic unemployment was at an average of 13 percent, with lows in Trinidad and Tobago (5 percent) and highs in Dominica (34 percent). The formal employment figures do

1 World Bank Country and Lending Groups (2022).
2 World Bank Open Data (2022).
3 These figures represent the highest and lowest GNI levels reported for the Caribbean under World Bank reporting. GNI figures are not provided for Bermuda, which had the highest reported Caribbean GDP for 2017.

not reflect the realities of many micro and small businesses, which are "largely informal, unbanked and owned by women" (Sammy, 2021). The International Labour Organization (ILO) (2020) describes the informal sector in Latin America and the Caribbean as a "labour market buffer", creating lines of income for more remote or disenfranchised members of the population. This often includes groups viewed as more vulnerable to climate change and disasters, such as women and girls, indigenous peoples (Figure 1), persons with disabilities, and youth.

The projected global impact of the war in Ukraine, resulting in increased food and energy prices, and restricted access to financing, could prove disastrous for heavily indebted SIDS: 40 economies of a total of 58 SIDS have been deemed to have maximum exposure scores in at least one of the Food, Energy and Finance dimensions of the impact of the Ukraine crisis (UNCTAD, 2022). This underscores the need for climate-resilient and gender-responsive food systems, as well as shock- and gender-responsive social protection systems in the Caribbean. In addition to climate-resilient agricultural systems, this would mean that small-, medium- and large-scale farmers investing in climate-resilient crops would require the requisite skills to effectively access local and regional markets.

Services, including social protection, across the region continue to be dependent on paper-based and in-person processing systems, and government services are often centralized within major cities and towns. Coastal and rural communities may be less able to access planning support or services unless decentralization takes place and are less able to access direct support post-disaster. Formal social and banking requirements for registration using paper-based identification documents, in-person registration, or processing/maintenance fees are viewed as a deterrent by members of the informal economy, or by those who are less financially literate.

FIGURE 1
Indigenous peoples – Caribbean profile

Indigenous peoples

The Caribbean has few territories that legally recognize indigenous peoples. Of the countries under focus, five have created distinct spaces for indigenous traditions and culture. Indigenous peoples can be found in Belize (three *Maya groups – Yucatec, Mopan, and Qo'eqchi Maya,* as well as *Garifuna*), Dominica (*Kalinago*), Guyana (*Arawaks, Wai Wai, Caribs, Akawaio, Arecuna, Patamona, Wapixana, Macushi* and *Warao*), Saint Lucia (*Kalinago*), Saint Vincent and the Grenadines (*Kalin-ago*), Suriname (*Akurio, Alamayana, Apalai, Kali'.a, Katuena/Tunayana, Lokono, Maraso, Mawayana, Okomoyana, Pireuyana, Sak.ta, Sirewu, Sikiiyana, Trio, Wai-Wai* and *Wayana*), and Trinidad and Tobago (*Carib*). Indigenous communities often remain isolated in remote villages, relying mostly on subsistence farming, fishing and cottage industries, such as handicrafts. Guyana has more than 100 indigenous villages engaged under its Ministry of Amerindian Affairs.

Fintech options are being explored in the region to reach the unbanked. In 2020, the Bahamas launched a digital currency, and in 2021, the Eastern Caribbean announced the launch of "DCash", a blockchain-based currency active in Antigua and Barbuda, Grenada, Saint Lucia, and Saint Kitts and Nevis. The cashless currency in a downloaded app aims to allow for cheaper payment options and **remove the need for traditional bank accounts to purchase and sell goods and services.** Lockdowns and restricted movement during the pandemic resulted in governments adapting service structures, introducing teleworking, and exploring innovative ways to quickly digitize or offer services remotely. This new way of business can then strengthen the resilience of persons working in the informal sector by creating an avenue for entry into digital financial services.

The Sixth Assessment Report from the Intergovernmental Panel on Climate Change (IPCC) (2022) stated that water and food in small islands were at risk due to increased insecurities because terrestrial and marine ecosystems continue to be degraded. Sea-level rise, invasive species and coral bleaching are all challenges being faced in Caribbean countries, together with more extreme conditions linked to environmental hazards. Vulnerabilities to climate change can differ based on age, gender, economic status, ability, sexual orientation/identification, migration status, ethnicity and health (mental and physical) (ILO, 2020), and in turn affect how communities cope with disasters. This report will review coping mechanisms in the Caribbean and the gender transformative steps needed to improve both approaches to mitigate climate change and disaster risk reduction in the region.

B. METHODOLOGY

The Disaster Risk Management and Climate Change Adaptation in the CARICOM and Wider Caribbean Region: Strategy and Action Plan,[4] Sendai Framework for Disaster Risk Reduction, Beijing Declaration and Platform for Action, the 2030 Agenda for Sustainable Development, the Paris Agreement on Climate Change, national reports from the sixty-fourth session of the Commission of Status of Women (CSW64)/ Beijing +25 (2020), and several publications related to climate change, disaster risk reduction, and planning were drawn upon to establish context for this report.

Virtual interviews were conducted with representatives from five organizations (**Appendix I**) that offered services regionally in the areas of gender, disaster preparedness, disaster response and recovery, and climate change research, adaptation, and mitigation. This included the Caribbean Community Climate Change Centre (CCCCC), Caribbean Disaster Emergency Management Agency (CDEMA), International Federation of Red Cross and Red Crescent Societies (IFRC), International Organization for Migration (IOM), and the Climate Change and Disaster Resilience Unit (CCDR) of the Organisation of Eastern Caribbean States (OECS).

Limitations

The analysis defines the Caribbean within the scope of UN Women MCO – Caribbean countries of focus, which include CARICOM member and associate states. This approach is aligned with existing climate finance and multi-lateral agreements and partnerships. It is noteworthy that this definition excludes more than 26 million Caribbean residents from Cuba, Dominican Republic, Puerto Rico, and French Departments along the Caribbean archipelago.

Consistent and accurate data are not available for all Caribbean countries. Figures vary based on the reporting source, and data gaps vary from country to country. Average figures are based on data available at the time of this study and may not represent a full picture of the realities on the ground. Gender-disaggregated data in the Caribbean also remain binary, and there is little evidence to identify and account for individuals who identify with options outside of male or female. The coping mechanisms employed by persons who identify as Two Spirit, Lesbian, Gay, Bisexual, Transexual, Queer and Intersex (2SLGBTQI) were difficult to access and were not captured in all country level reports.

This report acknowledges that the Caribbean is at risk of man-made disasters in the form of social unrest/war, terrorism, mining or industrial accidents, and food insecurity, but will not include an analysis of the coping mechanisms in place for mitigating or responding to these disasters. The report does include an analysis of anthropogenic hazards that contribute to climate change.

4 This plan was supported by the Food and Agriculture Organization of the United Nations (FAO) and focuses primarily on climate change adaptation and DRR related to food production in the Caribbean.

C. OVERVIEW OF DISASTER RISK REDUCTION FRAMEWORKS IN THE CARIBBEAN

Climate change policies and programmes

The Caribbean is categorized as a multi-hazard region but is most often affected by meteorological and climatological hazards. Hurricanes, tropical storms and flooding lead to annual disasters that affect individuals and communities. Frequently faced with sudden-onset cascading hazardous events that often occur simultaneously, the region is now confronted by slow onset hazards, in the form of ocean acidification, sea level rise, biodiversity loss, extreme heat, and degradation of coastal areas, hillsides and forests. Vector-borne diseases endemic to the region include dengue fever, yellow fever and malaria (Haiti). The periods post-disasters are often marked by a rise in water-borne illnesses, such as cholera, that further affect recovery efforts and the health of communities.

Home to more than 50 percent of SIDS and Associate Member States of SIDS globally, the Caribbean is considered part of "the second most disaster-prone region in the world" (United Nations Office for the Coordination of Humanitarian Affairs, 2020). A review of disasters from 2000 to 2019 recorded in the Latin America and Caribbean region, identified floods as most likely to affect persons due to meteorological events. The region also recorded extreme temperatures, volcanic events, droughts, earthquakes, landslides and wildfires. The Caribbean does experience these events cyclically, with hurricanes and floods most prevalent between June and November. With climate change as an underlying risk driver, the region was affected by 23 Category 5 hurricanes between 2000 and 2019, severe earthquakes in Haiti (2010) and Trinidad and Tobago (2018), and a major volcanic eruption in Saint Vincent and the Grenadines (2021).

Caribbean governments have taken steps to create frameworks for climate change mitigation and disaster risk reduction. All are signatories to the Paris Agreement, and all have launched Nationally Determined Contributions (NDCs) (Figure 2). There are National Adaptation Plans (NAPs) in four countries,[5] and efforts are in place to introduce plans in other states. Programmes to protect agriculture and fisheries, promote climate-resilient infrastructure and post-disaster social support for the most vulnerable are in place. However, during the pandemic, gaps have been observed in disaster management responses.

Unemployment insurance only exists in five Caribbean countries – Antigua and Barbuda, Belize, Guyana, Saint Vincent and the Grenadines, and Trinidad and Tobago, and eligibility is limited to persons employed in the formal sector. Social protection systems that restrict financing to formally employed workers limits access to those performing unpaid care work or those operating under the informal economy. The lack of unemployment insurance has placed a greater burden on states as they seek to recover from the financial stagnation of over the last two years.

Local actors play a limited role in most national programmes and policies. Local government capacity to lead disaster preparation, response

5 The NAP for Grenada was set to expire in 2021, but this tri-island nation was the first CARICOM country to launch a government-approved NAP.

and mitigation is either absent or limited in scope from most governmental frameworks, although this is changing with the push to localize the Sustainable Development Goals (SDGs). The CCCCC is pursuing a municipal development project focusing on rural and indigenous communities, and in 2021, Jamaica became the first country in the world to have all its local government corporations join the Making Cities Resilient 2030 (MCR2030) initiative.[6]

Non-profit organizations and civil society groups are often points of contact post-disaster, providing much needed services in the aftermath of a climate or man-made shock, but their efforts are not coordinated at the national level. There are some exceptions, as seen in country partnerships with member societies under the IFRC, prominent churches, and more vocal women's rights organizations and human rights groups.

FIGURE 2
Disaster risk reduction frameworks

Nationally Determined Contributions First NDC	Nationally Determined Contributions First NDC Updated	Nationally Determined Contributions Second NDC	National Adaptation Plans
• Antigua and Barbuda • The Bahamas • Barbados • Belize • Dominica • Grenada • Guyana • Haiti • Jamaica • Saint Kitts and Nevis • Saint Lucia • Saint Vincent and the Grenadines • Suriname • Trinidad and Tobago	• Antigua and Barbuda • Barbados • Belize • Jamaica • Saint Kitts and Nevis	• Grenada • Suriname	• Grenada • Saint Lucia • Saint Vincent and the Grenadines • Suriname

Source: NDC Registry (interim) (UNFCCC secretariat) www4.unfccc.int, adapted by the author.

6 UNDRR (2021).

While there are examples of private sector partners providing support post-disaster, there is little evidence of public-private partnerships that promote climate change adaptation and mitigation. Some programmes are being introduced to encourage more resilient buildings and businesses, but these programmes are targeted at individuals and businesses operating in the formal economy.

Regionally, inter-governmental collaboration towards disaster risk reduction is primarily mobilized under the Caribbean Disaster Emergency Management Agency (CDEMA, formerly Caribbean Disaster Emergency Response Agency). This CARICOM-level agency has a memorandum of understanding with 20 member countries, is governed by an executive council, and is guided by technical advisory committees with representatives from each member country. There are several multinational agencies that support governments in hazard identification and tracking, post-disaster recovery, and climate change capacity- building training and support.

Financial systems

The Caribbean has a mix of strong financial systems with a prevalent informal economy. Commercial banks recorded USD 41 billion in assets in 2019, spread over 80 institutions in 19 countries. Credit unions are present in 16 countries and reported USD 7.3 billion in assets within 196 member institutions. Added to this are the financial flows from multilateral lending agencies, with over USD 8 billion committed to the region. In contrast, public funds are declining, with debt-to-GDP ratios averaging 76 percent, and external debt topping at USD 54.27 billion.[7] In 2020, foreign direct investment (FDI) in Trinidad and Tobago decreased by -239 percent, tied to its dependence on the energy sector. In Jamaica, there was a 45 percent drop of FDI due to a contraction in tourism, which was exacerbated in 2021 due to health and travel restrictions.

Climate finance and investments in the Caribbean often targets specific projects. The Climate Change Adaptation Programme implemented under the U.S. Agency for International Development (USAID) together with the CCCCC mobilized USD 310 million between July 2016 and September 2020. This investment was used to deploy Coral Reef Early Warning System stations, Light Detection and Ranging (LiDAR) instruments and automatic weather stations, as well as support for scaling up of projects.[8] Financing through the Green Climate Fund (GCF) supports work at the CCCCC and is being pursued by several development financial institutions to foster more resilient micro, small and medium-sized enterprises (MSMEs) in the region. The lack of national adaptation plans in many Caribbean countries may be viewed as a deterrent for lenders or financiers seeking to invest in climate adaptation or mitigation.

Remittances are both a coping mechanism post-disaster and a contributor to Caribbean economies. The Organization of Eastern Caribbean States (OECS) saw remittances contribute between 1.7 percent and 10.4 percent of the national GDPs. Smaller remittances made

7 Public debt figures sourced from Moody's Analytics (2022) and representing 14 Caribbean countries – Anguilla, Antigua and Barbuda, The Bahamas, Belize, Barbados, Dominica, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

8 Chumbler (2022).

TABLE 1
Debt-to-GDP ratio (%)

Country	Debt-to-GDP ratio (%)	Year
Anguilla	20.1	2015
Antigua and Barbuda	92.7	2016
The Bahamas	66.9	2016
Barbados	108.3	2017
Belize (Central America)	88.5	2017
Dominica	81.0	2016
Grenada	84.4	2016
Guyana (South America)	52.3	2017
Jamaica	117.8	2017
Saint Kitts and Nevis	65.8	2016
Saint Lucia	82.9	2016
Saint Vincent and the Grenadines	79.2	2016
Suriname (South America)	64.6	2016
Trinidad and Tobago	65.3	2017

Source: Moody's Analytics (2022).

up 2.5 percent of GDP in Barbados, 6.6 percent of GDP in Guyana and 1 percent of GDP in Trinidad and Tobago. Haiti and Jamaica saw remittance contributions make up 23.2 percent and 21.4 percent of national GDPs, respectively.[9]

The 'quiet financial revolution' that mobilized policy reform in economies such as in China and Kenya are slowly becoming more present in the Caribbean. While development finance institutions are used by governments to promote MSME development, disruptive financing models are slower to move. According to recent announcements in The Bahamas and in countries of the OECS, movement towards the adoption of digital financial inclusion systems has been observed. Green credit guidelines led through central banks, insurance and lending approaches that prioritize support for resilient infrastructure and sustainable business practices are slowly being implemented in the Region.

> **"Financing the SDGs and the Paris Agreement commitments on climate requires investments."**
>
> *United Nations Environment Programme, 2018*

9 Figures sourced from World Bank Open Data.

Within national economies, an invisible economy exists, made up of both micro-enterprises and funds accessed through criminal activity and illicit gains. The informal economy was estimated at 16.1 percent in Barbados (2008), 18.4 percent in Guyana (2013) and 40.3 percent in Jamaica (2014) of national GDPs.[10] Women make up a major part of the invisible economy and can also face high levels of underemployment. ILO (2019) found that women are more likely to have precarious employment, which is often temporary, seasonal, or part-time. Women are the lynch pin of food security in families and communities, and nationally. Rural women are also more likely to be engaged in informal employment, and women in general are increasingly engaged in informal work related to caring for children, the elderly and differently abled family members. Unpaid care work and informal work remain outside of the formal economy, and consequently are not captured in the financial systems tracked by Caribbean countries.

10 Peters (2017).

D. GENDERED IMPACTS OF CLIMATE CHANGE AND DISASTERS

In 2021, UN Women MCO – Caribbean published a series of policy briefs titled, "Gendered Impacts of Climate Change and Disaster Risk". The briefs focused on gendered impacts of climate change in EnGenDER countries and outlined sector specific coping mechanisms. The Gender Inequality of Climate and Disaster Risk and Cost of Inaction (GICDR) studies[11] focused on national approaches to protected areas,[12] finance and infrastructure. Limited data availability affected reporting for some countries, particularly among rural and indigenous communities, and recommendations were made to improve data gathering post-disaster. In general, it emerged that women were more aware of climate change realities and its implications on lives and livelihoods than men.

There are positive and negative coping strategies employed by men and women in the face of climate change. Some positive mechanisms consist of applying for loans or grants, accessing government or non-governmental services, and diversifying farming and fishing techniques. Negative coping mechanisms include drug and alcohol abuse, the avoidance of medical or other services, and transactional sex. An overview of coping mechanisms adopted in the Caribbean (Figures 3 and 5) outlines the probability and impact of hazards on the lives of men and women in the Caribbean.

Livelihoods

Livelihoods in the Caribbean are dominated by services,[13] except within most indigenous communities. Services related to tourism are prevalent, but there are also financial services (banking and investments) in Anguilla, Antigua and Barbuda, and Saint Kitts and Nevis, with growing sectors in Barbados. Micro and small enterprises that offer services are associated with food services and cottage industries (i.e. nature-based enterprises) and are mostly owned and operated by women. Fishing boats are most often owned and operated by men, and land tenure linked to agriculture are traditionally passed to men in some countries.[14]

Women were more likely to collaborate through networks and cooperatives, use savings, and diversify income streams to support livelihoods. At the micro level, women engaged in fishing and agriculture were also more likely to be involved throughout the value chain, producing, selling and using revenue to maintain households. Women were also more likely to depend on remittances, gifts and state grants, or on accessing loans through family and friends. People with disabilities and 2SLGBTQI persons also pursued alternative sources of income or sought assistance from government or community organizations. Indirect consequences of a disaster on women's livelihoods are partly due to a compounding of responsibilities with unpaid care work, particularly in more traditional communities.

11 The policy briefs were led by UN Women under the EnGenDER project which is also being jointly implemented by the United Nations Development Programme (UNDP – lead agency), World Food Programme (WFP), and the Caribbean Disaster Emergency Management Agency (CDEMA), and is being funded by Global Affairs Canada and the UK Foreign Commonwealth and Development Office (UKFCDO).

12 Protected areas referred to priority sectors in each country. This included tourism, heath, communication, fisheries, agriculture, water, energy and forestry.

13 This excludes Dominica, Guyana, and Trinidad and Tobago, where agriculture and energy contribute the most to the GDP.

14 Legal tenure of land in indigenous communities is often tied to communal ownership. This definition of land ownership conflicts with eligibility for recovery grants created by national governments.

FIGURE 3

Hazards and Coping Mechanisms in the Caribbean

probability: **L**ow / **M**edim / **H**igh
impact: **L**ow / **M**edim / **H**igh

Source: Adapted from findings in the UN Women policy briefs titled, Gendered Impacts of Climate Change and Disaster Risk and from EnGenDER country-level reports (2019–2021).

Men are the majority of those formally engaged in the agricultural sector. Men were more likely to adopt new farming or fishing techniques and seek loans. This is critical to climate responsive agriculture. Men were also more likely to migrate in pursuit of more stable income streams. Men were less likely to purchase insurance to protect business assets, had higher rates of loan defaults, and were less involved in processing fishing or farming products for sale. They were more likely than women to have direct financial implications after a disaster, while livelihoods among women were more likely to be both directly and indirectly affected, losing direct income and having increased responsibility for caring for the family in the wake of men's direct losses.

Psychosocial stress tied to the loss of livelihoods also results in negative coping mechanisms being adopted by individuals. Women and 2SLGBTQI persons were more likely to engage in transactional sex. Men were more likely to engage in substance abuse or illegal activities (theft). Persons with disabilities and 2SLGBTQI people were more likely to engage in substance abuse if faced with discrimination and victimization due to their sexuality and/or ability.

Financial inclusion

Traditional access to finance is driven by the priorities and financial goals of asset owners and asset managers. Central banks and governments direct policies and programmes to promote economic growth and stability, while asset managers, such as banks, insurance companies and wealth funds, control how and who accesses finance. In most cases, actors in the financial system, individuals and enterprises, are least consulted or engaged in the operations of financial systems. This financial system effectively delinks the financial productivity and worth of individuals, and dismisses inherent factors that affect financial decisions, for example, gender, income streams, age and lifestyles.

> **"The two hazards that most affected the Caribbean in 2021 were not weather-related. But no matter the hazard, one disaster can set a small island developing state back 10 to 15 years."**
>
> *Feedback from interview participant*

Adaptation to the effects of climate change requires financing individuals, communities and countries. Financial inclusion and access are needed to ensure that adaptation approaches involve all persons and support inclusive growth. Barriers to entry for the unbanked are most often financial – limited income, opening costs or recurrent fees – but can also be tied to distrust of formal banking, strict documentation rules or constraints facing physical access to banking or financial institutions.[15] Access to insurance is frequently tied to commercial banking, creating a further barrier to protections for the most vulnerable who operate outside of the formal economy. Many of the unbanked are those within the agricultural sector. Women in this sector have reported significant barriers

15 Findings from World Bank (2014).

accessing financing, loans and/or insurance before disasters.

Damages and losses following a disaster have financial implications. In Suriname, under-nourishment, child trafficking, prostitution and child marriages were negative coping mechanisms adopted to respond to financial losses. In Saint Vincent and the Grenadines, women were more likely to face delays in accessing social security payments and income support, and both men and women faced the risk of defaulting on loan payments. In Saint Lucia, limited access to resources affected women's ability to purchase insurance coverage against loss and damage due to hazards, while in Dominica, insurance coverage limitations most often affected fishers (both women and men) who were unable to access coverage for boats.

Remittances to persons from members of the Caribbean diaspora offers financial supports to Caribbean economies. Tracking of remittances is limited, and relies on monitoring of formal transmittal lines, such as cash or wire transfers through banks or *cambios*. There is little information on remittances given by visiting relatives through gifts, shipments, or other means, which supplement incomes within Caribbean families. More structured frameworks to encourage and promote remittances could address barriers to entry faced by individuals seeking to enter the formal economy.

Personal security

Risks to personal security are most often experienced by women and children following a disaster. Increased gender-based violence (GBV) frequently follows the loss of livelihoods and restricted mobility, as seen in increased police reports of domestic violence during the COVID-19 pandemic. Linked to behavioural patterns, GBV is exacerbated by perceived stress and abuse of drugs or alcohol.[16] After a disaster, temporary relocation or homelessness can increase the risk of violence within communal shelters, or as women and children walk to more remote or isolated areas to access water and food. The IFRC (2021) reported that following Hurricane Maria (2017) in Dominica, there was increased aggression against children, a *"high prevalence of sexual violence and domestic abuse"* and higher instances of unplanned pregnancies.

Urbanization and migration

Men are more likely to pursue migration to access livelihood options, but women and girls are more likely to be trafficked while seeking to migrate legitimately. Migration is viewed as a positive coping mechanism since it may lead to increased remittances, improved opportunities for jobs and livelihoods, and access to skills training. If migrants return to their home country, this can be viewed as a positive coping mechanism that benefits both the individual and the community. However, there can be negative aspects to migration, leading to 'brain drain' of key skills and knowledge, risky migration attempts through human smuggling, or undocumented migrants being abused or disenfranchised in receiving countries. One example of negative effects was observed in 2019, when Haitian migrant communities in Abaco experienced a physical loss of assets, higher levels of xenophobia, and the threat of deportation following hurricane Dorian in The Bahamas.

16 UN Women Policy Briefs (2021).

Human trafficking and exploitation are another migration risk faced in the Caribbean. While there are instances of men being labour trafficked, women experience labour and sexual trafficking more regularly. In all instances, the option of migration held inherent risks as men became victims of labour trafficking, and women and 2SLGBTQI persons became victims of sexual exploitation and trafficking. The risks surrounding human trafficking and its prevalence in the Caribbean are still a taboo topic in many communities, but there has been positive progress in preventing, prosecuting and partnering more effectively within countries to reduce these risks.

There is no evidence that men and women are permanently migrating in response to sudden onset disasters. Temporary migration resulting from devastation of property and livelihoods has been observed in Barbuda, the Bahamas and Dominica. The eruption of La Soufrière volcano in Saint Vincent and the Grenadines in 2021 saw more than 20,000 residents refusing to leave the island, which led to the creation of the largest post-disaster shelter in the English-speaking Caribbean. Support from state agencies, local community-based organizations (CBOs) as well as regional and international partners enhances disaster response and creates opportunities for recovery post-disasters. One respondent indicated that temporary migration most significantly affects members of indigenous communities, whose lives and livelihoods rely on the lands and water that surround their communities.

E. MANAGING IMPACTS OF CLIMATE CHANGE AND DISASTERS ON WOMEN AND MEN

Policy and legislative frameworks

Caribbean societies can best respond to the effects of climate change and disasters by acknowledging the nexus between finance, gender and the environment. One respondent stated that "disasters will happen depending on vulnerability and exposure". Coping mechanisms are dependent on the policy and legislative frameworks that govern how individuals operate and function in societies. Data gaps in tracking the effects of sudden and slow onset disasters is the primary obstacle affecting policy and legislative frameworks in the Caribbean. Data gaps and non-standardized indicators have resulted in an incomplete and inconsistent profile of climate change and disaster risk reduction in the Caribbean.

Evidence-based policies, plans and programmes must first be based in scientific definitions of hazards and climate risks. The United Nations Office for Disaster Risk Reduction (UNDRR) published its Hazard Definition and Classification Review Technical Report (Figure 6) in 2020, updating the 2014 Integrated Research on Disaster Risk (IRDR) Peril Classification and Hazard Glossary. The 2020 revisions adopted a gender lens and aligned the classification with the objectives under the Sendai Framework. The UNDRR revisions should guide local and national discussions towards the creation and launch of national adaptation strategies.

A review of legislative gaps that create barriers to financial inclusion should be carried out in Caribbean countries, which should focus on legal requirements that deter or limit access to the formal economy. Ideally led by a regionally based organization, it should focus on reviewing: (i) legal limitations to women's access to finance, land or other assets; (ii) legal frameworks that hinder or promote digital financial support towards cashless economies and technology based financial systems; and (iii) legal barriers that affect the rollout of the digitization of state programs and services, including those related to registries (birth, death, commerce and land), health, utilities, communications, and infrastructure (construction and development).

There is a recognition among regional partners that gender and the environment are not integrated into most policy frameworks, financial systems, and DRR programming in the Caribbean. UN Women (2021)[17] noted that while 89 percent of its EnGenDER countries had national climate change policies or strategies, only 67 percent had national gender policies or strategies. This disconnect could be a factor in the inability of Caribbean countries to develop and launch Second NDCs, NAPs or national DRR strategies. However, with the debt average being 76 percent of Caribbean GDPs, financing the NAP and DRR planning processes is more appropriately viewed as the main concern. Of an estimated USD 18.8 billion disbursed for climate finance since 2003, USD 2.4 billion was disbursed to Latin America and the Caribbean (LAC), and less than 7 percent of LAC funds were disbursed to Caribbean countries (less than 1 percent of global total).[18] These funds were disbursed to Ministries of Finance, and there is little evidence of involvement or leadership from ministries that are responsible for the environment or gender lens approaches in climate finance spending.

17 UN Women and International Institute for Sustainable Development (2021).
18 Gibbs (n.d.).

Capacity development and institutional strengthening

Strong institutions that balance scientific and gender views can strengthen access to and use of sustainable finance regardless of climate-based or man-made food, energy or financial shock. Addressing planning gaps that affect settlements, access to water and communications can reduce vulnerabilities faced by communities during a disaster. Training and awareness building can result in greater coordination of programmes, and regionally specific training can improve cohesion in disaster response and recovery. Weak policies and inadequate regulatory frameworks further undermine the ability of Caribbean institutions to meet climate adaptation and mitigation needs. Access to climate financing under the GCF, Reducing emissions from deforestation and forest degradation (REDD+) and other climate finance streams often require that countries have transparent, skilled, and efficient public sector mechanisms. Some, like GCF, require that institutions have a gender strategy and action plan in order to access funding.

A major point of weakness for Caribbean economies is the heavy reliance on paper-based processing for public and private sector transactions. Applications for land tenure, grants, and jobs all require the physical posting or positioning of individuals in a governmental ministry, department, or unit. Consequently, processing can be affected by the speed of manual reviews, lost paperwork, and in some instances, corrupt or fraudulent practices. Destruction of buildings, flooding and landslides can also add to the risk of paperwork being lost or destroyed following a sudden onset disaster.

Overall, attempts to digitize government services in some countries have been met with public approval, but resistance to change within government departments still abounds. Fears about job losses and the need to continue with old methods can create strains on change management, and even result in technology gaps when building new systems. Climate finance that supports adaptation planning and programming should build in costs to effect change management and promote 'buy-in' in the adoption of innovative solutions. The region should also examine potential risks to data loss or exposure by including business continuity plans[19] and cybersecurity analyses within digitization programmes.

The Caribbean has several strong regional and international partners that provide training for national coordinators, and can support the development of NAPs, DRRs and other plans. The region faces weaknesses in accessing technologies, data tools and financing to monitor and evaluate climate change and disaster trends in real time. Harmonization of data, particularly gender investment trends, and post-disaster data fields are additional areas for strengthening needed in the region.

Sustainable financial systems

Sustainable financial systems focus on a comprehensive view of how finance affects communities and the environment while achieving capital gains. It recognizes that gains

19 Trinidad and Tobago, together with several other Caribbean countries, faced days of slow and intermittent internet access due to damaged submarine fibre optic cables, caused by a cut cable near Miami in 2018, and damage to cables near the Kick' Em Jenny volcano in 2020.

should be projected against potential losses due to unequal market access, hidden economies, and climate risks. The inability of financial systems to balance these three areas can lead to pockets of underdevelopment in communities, potential increases in criminality, and increased risks for women and girls. Sustainable approaches that create a business case for investing in risk management are needed in the Caribbean's approach to climate change and disaster risk reduction. As countries adapt legislation and improve institutional capacity, the approach to managing financial systems should also be reviewed.

Gender lens investing promotes the support of not only women-owned, and women-led organizations, but also organisations that contribute to gender equality. Local lending institutions can prioritize products and services developed under women-led organizations that promote climate change adaptation and mitigation. Locally targeted lending institutions, such as credit unions and development finance institutions, are best poised to access climate finance investments and provide targeted support for women-led businesses in communities. Investing approaches also recognize the role of women as primary consumers, and support services and products that promote women's empowerment. This could include the use of supply chain structures that promote the training and employment of women in non-traditional sectors, such as construction, or traditional roles in the care economy or manufacturing.

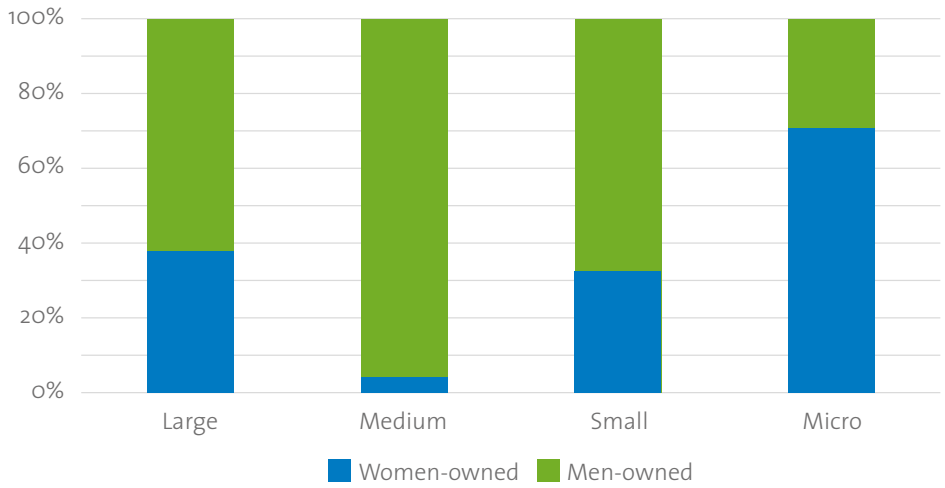
Financial inclusion goes beyond social services and grants. Interviews held with regional organizations showed that support for climate adaptation of businesses is based on national priorities. One example is Belize, where the Government partnered with the CCCCC to introduce adaptive techniques for farmers and reduce fossil fuel use through the creation of biomass fuel sources. Re-skilling and financial incentives are needed to address slow onset hazards and to improve resilience. There are some re-skilling and financial incentives programmes that target women and indigenous communities, but little data are shared and insufficient replication of training and financing programmes in other Caribbean countries. Creating access to finance that formalize MSMEs can support protections and coping options for men and women following disasters and in the face of climate change.

Women continue to be less likely to access loans to grow or adapt their business in the face of climate change. A sample of loan portfolios offered through the Development Bank of Jamaica (Figure 4) showed that women dominated micro loans but were less likely to seek out loans for small, medium-sized or large businesses. In Belize, women borrowers were less likely to have delinquent or non-performing loans, but their loans made up 30 percent of the total value of loans issued.[20] Overall, women are more likely to seek support to meet loan obligations and operate under collectives or corporations. Loan structures and repayment options should be adapted to promote this system of cooperation among women entrepreneurs in the region.

As the Caribbean faces recovery after a 15 percent economic contraction in 2020 (IMF, 2020), this

20 Development Finance Corporation of Belize, 2019.

FIGURE 4
Jamaica loan disaggregation, 2016–2018



Source: Development Bank of Jamaica, 2019, cited in E.T. Jackson and Associates and Consultation M.D. Beaulieu, 2021. Adapted by author.

is an ideal opportunity to examine gaps in inclusivity, relevance and adequacy of existing financial systems within the Caribbean. Distrust and lack of awareness of insurance options are prevalent among communities and insurance options are often designed for individuals or families. To promote livelihood protections and sustainable growth in the Caribbean, insurance

TABLE 2
Caribbean development financial institutions

Country	National Development Banks
Antigua and Barbuda	Antigua Barbuda Development Bank
The Bahamas	Bahamas Development Bank
Belize	Development Finance Corporation
Curacao	Fundashon Korporashon pa Desaroyo di Korsou Sustainable Development Bank of Curacao
Grenada	Grenada Development Bank
Jamaica	Development Bank of Jamaica
Saint Kitts and Nevis	Development Bank of St. Kitts and Nevis
Saint Lucia	Saint Lucia Development Bank
Suriname	National Development Bank of Suriname
Trinidad and Tobago	Development Finance Limited Agricultural Development Bank of Trinidad & Tobago

Note: The European Investment Bank, Inter-American Development Bank, International Finance Corporation and the Caribbean Development Bank also operate in the Caribbean as multilateral development finance institutions.

options should be adapted to be sector- specific, designed for cooperatives, and flexible in terms of assurances. The introduction of cashless options by The Bahamas and the OECS creates an opportunity for revised banking requirements tied to insurance coverage.

Inclusive financial systems should create dedicated lines of financing for women-led businesses. It is estimated that, globally, women-led small and medium-sized enterprises can add USD 93 billion to the global economy, and micro-led enterprises can add an additional USD 5 billion (IDB Invest, 2019). The informal status of most women-led MSMEs has limited their voice and visibility among policymakers and financial leaders, as well as their options for recovery in the face of disasters.[21] Access to loans for households headed by women or for women from low-income households[22] continues to be a recommended action at the national level.

In the Caribbean, women make up between 40 and 60 percent[23] of corporate board memberships, with higher numbers among development finance institutions boards. Caribbean countries also have high levels of gender diverse activities, albeit more training and awareness are needed on gender definitions, and distinctions between gender, sex, and sexuality. The region also boasts high levels of women leaders in senior leadership positions in both public and private sectors, with growing numbers of women in elected roles. Since women's engagement in society can be linked to levels of education, support for promoting financial literacy and business education among disenfranchised communities can increase the involvement of women from more marginalized communities in financial systems.

Empowering communities and individuals

The involvement of CBOs can promote the empowerment of communities and individuals. The top-down approach employed by heavily centralized governance structures in Caribbean public and policy organizations can limit the engagement and involvement of individuals and communities. This is particularly true among persons who face discrimination based on ability, sexual orientation, gender, or age. CBOs create bridges between formal hierarchical structures and promote societal engagement by coordinating local activities that create spaces for dialogues.

Local governments can legitimize the work being carried out by civil society groups and individuals towards climate change adaptation and disaster risk reduction. The presence of local governments' elected officials and technocrats at the community level fosters a 'first-port'[24] framework, to address fears and distrust of public sector's role and goals. By partnering with CBOs, local governments can build a level of collaboration for the betterment of the community. Similarly, local governments can

21 Recovery programmes led by state and international actors frequently require that businesses are formally registered to access climate change financing or post-disaster recovery grants.

22 UN Women Policy Briefs (2021).

23 ILO (2018).

24 'First port' refers to the nautical expression, 'first port of call', which is a safe starting point for a journey. Here it is used as a metaphor to describe the functioning of the local government as a safe harbour that supports citizens along their various journeys.

act as a liaison between local communities and national or international partners, by framing areas for cooperation and supporting spaces for dialogue.

Approaches for vulnerable populations

While the Caribbean can be described as a region with significant exposure to multiple shocks, countries should pay specific attention to groups that have become further disenfranchised due to climate change. Positive coping mechanism options targeting for these groups should be prioritized in national strategies, such as NAPs and DRRs.

Specifically, this should target:

- indigenous peoples, particularly those in indigenous communities based in rural areas, such as in Belize, Dominica, Guyana, and Saint Vincent and the Grenadines;
- individuals operating outside of the formal economy, who are mostly women and youth;
- persons with disabilities;
- 2SLGBTQI individuals.

Public-private partnerships

Remittances and the role of the diaspora should be the first area for exploration in promoting public-private partnerships within the Caribbean. With pre-existing ties to the region, diaspora members can be classified as persons with significant ties to the Caribbean, through birth, parental lineage, or major investments in the local economy. Diaspora inputs offer a one-line revenue stream, in that remittances are often sent from currencies that have a higher value than the currency of the receiving economy. The practice of remitting has been structured and streamlined in other parts of the world, such as Ireland that received annual remittances around EUR 17 million[25] in 2019, and India, where remittances topped at USD 87 billion in 2020. Countries have created Ministries of the Diaspora, while others, such as the Philippines, adopted the lowest remittance fees globally to grow remittances to USD 36.2 billion in 2021, a move that was able to reverse the Philippines' projected economic declines for that year.[26]

Unstructured remittance flows to Jamaica showed an increase in remittances between 2020 and 2021, topping USD 1 billion in the first quarter of 2021.[27] Haitian remittances topped at USD 3.8 billion for 2020,[28] and Dominica remittances capped at USD 68 million for 2020.[29] If Caribbean governments tap into both financial remittances of its diaspora, and in-kind remittances through gifts, skills development and training or other support, public-private partnership lines should improve the technical capacity and financial resources available in the region.

Government-led programmes can guide and encourage the use of remittances to adopt climate-smart approaches to agriculture and fisheries. It can also direct or create education or skills development programmes that train in

25 Flaherty (2019).
26 Vera (2021).
27 CARICOM (2021).
28 Bojarski (2021).
29 World Bank. Migration and Remittances Data

the production of renewable energy sources, for example, biomass production using sugarcane, or maintenance of hybrid vehicles. Finally, remittances could be used to develop financial or technological skills that complement the service-driven economies but are not tourism-dependent.

As global financial institutions exit the region, Caribbean countries should look towards bolstering national development finance institutions, credit unions and cooperative banks to fill financing gaps. Between 2018 and 2022, the region has experienced the closure and scaling back of global banking institutions, such as the Royal Bank of Canada and the Bank of Nova Scotia.[30] It is projected that as hazards increase in number and intensity, and disasters become more frequent and severe, other investment partners may leave the region. This exodus is not sustainable and reduces the revolving capital streams that support growth of Caribbean businesses.

Caribbean governments should adopt more structured, transparent and accountable processes to engage and partner with private sector bodies. With over USD 47 billion in assets within banks and credit unions (2019), and large enterprises in the private sector continuing to show growth[31] during the pandemic, there is clearly an untapped line of financing that could support climate change adaptation and disaster risk reduction. Steps should be taken to mitigate corrupt behaviour and increase confidence in public sector spending and accountability to improve public-private sector engagement.

Areas of focus for public-private partnerships should not be limited to infrastructure, early warning systems and recovery efforts post-disaster; rather, local, and national governments should target livelihoods, training and the institution of more climate-adaptable and -resilient products and techniques. Additionally, in sub-regions like the OECS, public debt is still being managed nationally, despite there being a single Eastern Caribbean currency. By adopting a more collective adaptation approach that encompasses local, national and regional priorities, borrowing and fund disbursement with private partners could be explored at sub-regional and regional levels.

The Caribbean is expected to benefit from recent developments at the United Nations Climate Change Conference, 2021 (COP26), with the global commitment to mobilize USD 500 billion. Jamaica is a member of the five-state Taskforce on Access to Climate Finance,[32] led by the UK Government and Fiji, that will focus on ease of access by developing countries to climate finance. COP26 also agreed to funding under a three-year work programme focused on indigenous peoples and local communities. The work programme's pavilions include CARICOM, the Indigenous Peoples Forum on Climate Change, and the Alliance of Small Island States (AOSIS).

Communities of practice

The Caribbean has a history of policy and programming collaboration, but the process is limited to regional organizations that have

30 Ainger (2022).

31 Massy Holdings (TTSE: MASSY) in Trinidad and Tobago, reported after-tax profits of 36 percent in 2021, while the Bank of Nova Scotia in Trinidad and Tobago reported a 16 percent increase in the same year.

32 The Taskforce includes Bangladesh, Fiji, Jamaica, Rwanda and Uganda. United Nations Climate Change Conference, 2021.

bureaucratic frameworks and heavily structured memorandum for engagement. The localization of climate change issues and the correspondent effects on populations during and after disasters requires more locally led solutions supported by lessons learned in similar jurisdictions. While it may be difficult for communities in Caribbean countries to interact regularly and in-person due to high travel costs, advances in technology can offer solutions to developing communities of practice within the region. Coordination of these communities require a regional partner, who can collate and distribute lessons learned while creating spaces for mutual exchange, sharing and learning among communities. Financing of communities of practice should be built into adaptation plans, particularly when such collaborations may be realized by temporary relocations between communities following a disaster.

F. RECOMMENDATIONS FOR ACHIEVING RESILIENCE IN THE CARIBBEAN

- **Standardize terms used to define hazards and indicators collected post-disaster.** In keeping with the UNDRR's recommendation to adopt standard terms, there should be a regional push to standardize what data are collected and by whom within Caribbean countries. The adoption of standardized indicators to measure the number of deaths, injured and displaced due to rapid or slow onset disasters can be used to promote regional data and understand trends to inform policy, the public and partners. Indicators should ideally be disaggregated based on age, sex, gender identity, disability status, location and other indicators adopted as needed.

- **Improve regional coherence in climate change adaptation.** Already identified as regional leaders in the areas of science and disaster management, the CCCCC and CDEMA are poised to support the development and finalization of Caribbean NAPs. In the OECS, the OECS Secretariat should act as a sub-regional point of contact to align approaches within OECS countries. Other non-governmental agencies, such as CBOs or international partners, for example, the International Organization for Migration (IOM), ILO and IFRC can offer inputs into real-time, on-the-ground strengths and weaknesses within communities. Regional positioning of organizations can support broader discussions with other multi-national governmental and non-governmental organizations to inform a collective regional climate change adaptation plan. Adaptation plans that build in regional approaches to mitigation and recovery can also include frameworks for positive coping mechanisms, such as shared insurance schemes, permanent or temporary migration options, planned migration, and climate-resilient techniques and approaches to farming, fishing, building and manufacturing.[33]

- **Improve national coherence in climate change adaptation, nationally determined contributions and innovative finance.** Adaptation plans should be developed in an integrated approach with NDCs, where NAPs and NDCs already exist. Governments should ensure sensitization across government agencies and civil society, as well as alignment with broader country development policies. Agriculture and Energy should be prioritized for gender-responsive action, since studies have confirmed that women-owned small and micro businesses rely heavily on these sectors not only for their livelihoods, but also for food security.

- **Promote the empowerment of local voices and actors in the development of climate change initiatives and disaster risk reduction approaches.** Local leaders (indigenous leaders, local government or similar) should create spaces for the inclusion of the disenfranchised or invisible groups, such as women in the informal economy, at-risk youth, persons with disabilities, 2SLGBTQI individuals and migrant workers. National adaptation plans and related frameworks should be built with local, national and regional inputs.

- **Adopt an intersectional gender lens in climate finance and disaster risk reduction programmes.** Women and men experience

33 This recommendation is based on the premise that Caribbean States will design and enact standardized policy and legislative amendments to support new cooperation models.

climate change and disasters differently, and financing of initiatives should be adapted to reduce pre-existing vulnerabilities. Gender lens investing through development finance institutions offers public sector-led financing options that can promote private sector growth. Countries should prioritize the engagement and involvement of its diaspora, and create lines of support for persons who are seeking to be repatriated, particularly those who are facing disenfranchisement in other countries.

- **Prioritize the protection of women and girls. Women and girls continue to be the most affected by climate change and disasters, both directly and indirectly.** Financing women rights organizations and integrating gender considerations in policy dialogues and programmes can improve awareness of the risks women face and encourage gender champions and advocates for change. More specifically, creating lines of financing for women that allow them to grow their enterprises from micro to small, or small to medium-sized can increase financial flows within communities, and encourage more positive coping mechanisms in response to disasters.

- **Validate the recommendations and nominate a climate finance working group.** The recommendations should be validated by government leaders and adopted for movement forward. A working group should be nominated to design approaches for technical cooperation towards the development of NAPs, ensuring that the structure draws on the experiences of countries with already published NAPs, and gives voice and visibility to the most vulnerable groups affected by climate change.

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ANNEXES

Annex I. Interview List and Guide

Kyana Bowen, Programme Officer – Humanitarian, Climate Change and Disaster Risk Resilience, UN Women Multi Country Office – Caribbean

Marisa Clarke-Marshall, Assistant Manager, Country Cluster Delegation for the Dutch and English-speaking Caribbean, International Federation of Red Cross and Red Crescent Societies

Crispin D'Auvergne, Programme Director – Climate Change & Disaster Risk Management, Organization for Eastern Caribbean States Commission

Captain Robert Harewood, Senior Programme Officer, Preparedness and Response Department at Caribbean Disaster Emergency Management Agency

Ian Morrison, Environmental and Social Specialist at Caribbean Community Climate Change Centre

Robert Natiello, Regional Coordination Officer for the Caribbean and Chief of Mission, Guyana, International Organization for Migration

Jan-Willem Wegdam, Programme Coordinator, International Organization for Migration

Annex II. Definitions

Adaptation – "To avoid or limit the effects of climate change by adjusting approaches or maximizing beneficial opportunities" (Adapted from the Intergovernmental Panel on Climate Change).

Anthropogenic – Pollutants or hazards to nature generated from the actions of human beings.

Biological – A hazard caused by the exposure to living organisms and/or their toxic substances or vector-borne diseases that they may carry, such as parasites, bacteria, or viruses (e.g. malaria) (IRDR, 2014).

Caribbean Community – Inter-governmental organization with 15 members – Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago, and 5 associate members – Anguilla, Bermuda, British Virgin Islands, Cayman Islands, and Turks and Caicos Islands.

Climatological – A hazard caused by long-lived, meso- to macro-scale atmospheric processes ranging from intra-seasonal to multi-decadal climate variability (IRDR, 2014).

Disasters – Major disruptions to communities that exceed its capacity to cope using its own resources.

EnGenDER countries – Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines and Suriname.

Gender – Roles, responsibilities, rights, relationships and identities of men, women and non-binary persons that are defined or ascribed to them within a given society and context, and that are changeable over place and time.

Geophysical – a hazard originating from solid earth, also called a 'geological hazard'. (IRDR, 2014)

Gender-lens investing – A business strategy that balances financial investment cycles with the advancement and promotion of gender equality, specifically improved access to "decent and skilled employment, finance, entrepreneurship, leadership opportunities, and products and services that enhance economic participation of women and girls" (adapted from Trujano, 2021).

Hydrological – A hazard caused by the occurrence, movement, and distribution of surface and subsurface freshwater and saltwater (IRDR, 2014).

Meteorological – A hazard caused by short-lived, micro- to meso-scale extreme weather and atmospheric conditions that last from minutes to days (IRDR, 2014).

Organization of Eastern Caribbean States – Eleven grouping inter-governmental organization made up of seven protocol members Antigua and Barbuda, Commonwealth of Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and four associate members Anguilla, The British Virgin Islands, Martinique, and Guadeloupe.

Sudden onset hazards – Hazards that occur quickly and trigger disasters, but are difficult to forecast accurately or in advance, often meteorological or hydrological, for example, cyclones, landslides, wildfires, floods and earthquakes.

Slow onset hazards – Hazards that occur slowly over time, and are triggered by anthropogenic factors, for example, ocean acidification, sea level rise and biodiversity loss.

Annex III. Hazard Icon Guide

FIGURE 5
Hazard Icon Guide

Annex IV. Guidelines for Hazard Descriptions

FIGURE 6
Guidelines for Hazard Descriptions

FAMILY	MAIN EVENT	PERIL
Geophysical	Earthquake Mass Movement Volcanic Activity	Ash Fall Fire Following EQ Ground Movement Landslide Following EQ Lahar Lava Flow Liquefaction Piroclastic Flow Tsunami
Hydrological	Flood Landslide Wave Action	Avalanche: Snow, Debris Coastal Flood Coastal Erosion Debris/Mud Flow/Rockfall Expansive Soil Ice Jam Flood Riverine Flood Rogue Wave Seiche Sinkhole
Metereological	Convective Storm Extratropical Storm Extreme Temperature Fog Tropycal Cyclone	Cold Wave Derecho Frost / Freeze Hail Heat Wave Lightning Rain Sandstorm / Dust Storm Snow / Ice Storm Surge Tornado Wind Winter Storm/Blizzard
Climatological	Drought Glacial Lake Outburst Wildfire	Forest Fire Land Fire: Brush, Bush, Pasture Subsidence
Biological	Animal Incident Disease Insect Infestation	Bacterial Disease Fungal Disease Parasitic Disease Prion Disease Viral Disease
Extraterrestrial	Impact Space Weather	Airbrush Collision Energetic Particles Geomagnetic Storm Radio Disturbance Shockwave

Source: UNDRR 2020.

EnGenDER
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