



**INVESTIGATING THE IMPACTS OF
SOVEREIGN DEBT
AND CLIMATE-RELATED EVENTS
ON VULNERABLE GROUPS
IN THE CARIBBEAN**

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ACRONYMS

ADRA	Adventist Development and Relief Agency
AIDS	Acquired Immunodeficiency Syndrome
B\$	Bahamian Dollars
CARICOM	Caribbean Community
CATI	Computer Assisted Telephone Interviewing
CDB	Caribbean Development Bank
CDEMA	Caribbean Disaster Emergency Management Agency
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CIP	Citizen by Investment Programme
CPDC	Caribbean Policy Development Centre
CPI	Consumer Price Index
COP	Climate Change Conference
CREAD	Climate Resilience Execution Agency for Dominica
CSB	Civil Society Bahamas
ECCB	Eastern Caribbean Central Bank
ECCU	Eastern Caribbean Currency Union
ECD	Eastern Caribbean Dollar
FAO	Food and Agricultural Organization
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GNI	Gross Net Income
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
IDMC	Internal Displacement Monitoring Centre
ILO	International Labour Organization
IMF	International Monetary Fund
IOM	International Organization of Migration
IPCC	Intergovernmental Panel on Climate Change
JMD	Jamaican Dollar
LGBTI	Lesbian, Gay, Bisexual, Transgender and Intersex
MLGRD	Ministry of Local Government and Rural Development
MLSS	Ministry of Labour and Social Security

ACRONYMS (cont'd)

MoF	Ministry of Finance
MSME	Micro Small and Medium Sized Enterprise
NDC	Nationally Determined Contribution
NEMA	National Emergency Management Agency
NEP	National Employment Programme
NIC	National Insurance Corporation
NIS	National Insurance Scheme
NODS	National Office of Disaster Services
NRDS	National Resilience Development Strategy
OAS	Organization of American States
OCHA	Office for the Coordination of Humanitarian Affairs
ODA	Official Development Aid
ODM	Office of Disaster Management
ODPEM	Office of Disaster Preparedness and Emergency Management
OECS	Organisation of Eastern Caribbean States
PATH	Programme of Advancement through Health and Education
PAP	Public Assistance Programme
PPS	Probability Proportionate to Size
PTSD	Post Traumatic Stress Disorder
RRC	Revenue Recovery Charge
SGBV	Sexual and Gender Based Violence
SIDS	Small Island Developing States
SDG	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
TDI	Tourism Dependency Index
WASH	Water, Sanitation and Hygiene
WB	World Bank
WFP	World Food Programme
UNEP	United Nations Environment Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USD	United States Dollar

EXECUTIVE SUMMARY

Oxfam International (2023) defines climate-related events as climate hazards that are natural disaster events in the weather cycle. The most common natural disaster events include hurricanes, droughts, wildfires, flooding and high winds. However, in recent times, changes in the global climate have exacerbated climate hazards and amplified the risk of extreme weather disasters.

Moreover, Caribbean islands are confronted with elevated levels of public debt, much of which were either directly or indirectly induced by the onset of natural hazard events during the last decade. And, due to the increased frequency and intensity of climate-related hazards and the additional cost of adaptation, the region's existing debt overhang continues to grow and requires innovative measures to address current debt levels. Elevated debt levels and the resulting rise in debt servicing expenses have the direct consequence of crowding out investments in critical social programmes and infrastructure needed to support vulnerable and marginalised groups.

In the Caribbean, the effects of natural disasters demonstrate a key link between environmental and public debt vulnerabilities. In 2017, extreme weather events resulted in losses of US\$320 billion worldwide (Munevar 2018). Dominica experienced damage and losses valued at US\$1.1 billion, equivalent to 250% of GDP, after being hit by Hurricane Maria in September 2017. Additionally, according to the UN Office for the Coordination of Humanitarian Affairs (OCHA), 92% of the population of Dominica was left in need as the hurricane destroyed 15% of citizen's homes and heavily damaged an

additional 65% of the housing stock of the country. Similarly, in 2017, Hurricane Irma also had a devastating impact on the island of Barbuda. It is estimated that 95% of all properties (public and private) on the island were destroyed, resulting in damages and losses totalling US\$155 million (11% of GDP). According to the Inter-American Development Bank (2019), damages and other impacts on The Bahamas by Hurricane Dorian were estimated at US\$3.4 billion; losses for the social sector were estimated at B\$93.2 million: B\$65 million were in housing, B\$21.4 million in health and B\$6.7 million in education.

Climate-related events also compound the existing challenges experienced in the health sector. Non-Communicable Diseases (NCDs) are linked to more than 70% of deaths in the region, which mirrors the current global average. Consequently, those who live in poverty, are disproportionately affected by NCDs as they usually possess limited capacity to avoid the impacts of climate-related hazards such as hurricanes, storms, and floods, which further compounds their vulnerability and weakens household and personal coping strategies.

Additionally, the shocks and crises caused by climate extremes such as drought, floods and hurricanes destroy crops, livestock and fish resources, as well as agriculture, livestock and fishing/aquaculture infrastructure and productive assets such as irrigation systems, livestock shelters, docks, and landing and post-harvest facilities. This reduces overall food production capacity, increases food prices, shrinks economic opportunities and livelihoods, particularly in rural areas, and decreases investments in the sector.

...Caribbean islands are confronted with elevated levels of public debt, much of which were either directly or indirectly induced by the onset of natural hazard events...



Scope of the Consultancy

The Caribbean Policy Development Centre (CPDC), through its programmes and advocacy campaigns, is aiming to build a case for Caribbean Debt relief and restructuring based on the region's inherent climate and economic vulnerabilities. An investigation into the impacts of sovereign debt and climate-related events on vulnerable groups in the Caribbean was conducted in four countries, namely Antigua and Barbuda, The Bahamas, Dominica and Jamaica.

Research Objectives

The objectives that guided the study were to:

1. Contextualise the current development concerns and challenges experienced by vulnerable populations in the Caribbean region using, but not limited to, the following indicators: **i) poverty and social inclusion; ii) unemployment rates; iii) cost of living; and iv) access to health, long-term care and social protection.**
2. Identify the vulnerabilities of marginalised social groups in Antigua and Barbuda, The Bahamas, Dominica and Jamaica, and examine the impacts of national debt and climate-related events on their livelihoods and standard of living for the period 2010- 2020. These include the following:
 - Analyse the effects of sovereign debt on the provision of social programmes and social safety nets for vulnerable groups, highlighting the implications on their lives.
 - Identify the main social and economic impacts that natural disasters have had on the livelihoods of vulnerable populations.
 - Identify the primary social service and other developmental needs of vulnerable groups as it relates to mitigating and responding to the effects of natural disasters.
3. Analyse the key development challenges raised by vulnerable groups and develop policy responses for sovereign governments and civil society organisations to mitigate and remedy the aforementioned issues.

Research Methodology

The researchers employed a mixed methodology of concurrent transformative design. This design incorporated secondary data analysis as well as primary qualitative and quantitative data collection methodologies. A multiplicity of

data collection methods allows for triangulation of data and deeper exploration into sensitive issues. Data collection was conducted during the period February 24 – March 15, 2023. The consultancy was 100% virtually implemented.

Data Collection

- Secondary data (social, economic and fiscal) were obtained from country reports and official online statistical databases from country statistical offices, Ministries of Finance, Central Banks and multilateral agencies like the International Monetary Fund (IMF) and the World Bank.
- Country surveys were administered to 245 beneficiaries of public assistance programmes offered by the government and NGO services. There was a response rate of 100%.
- Six focus group discussions were conducted; one with NGO service providers and five in-country group discussions.
- Eight key informant interviews were conducted with senior administrative and technical personnel in national disaster management offices and departments of social services.

Instrumentation

There were four instruments used to collect data that were aligned to the objectives of the study. The survey instrument was primarily closed ended in its structure and the focus group discussion and interview guides were semi-structured to facilitate probing.

Data Analysis

Trend analysis and econometric computations were used to assess macro-economic, fiscal and social indicators. Univariate and bivariate statistical computations were used to analyse survey data. Participatory techniques and thematic coding were used to analyse and present qualitative data.

Ethical Considerations

An informed consent sheet was made available to all beneficiaries for their awareness and involvement in the survey and focus group discussions. Participants were required to give verbal consent before the commencement of any aspect of data collection-survey, focus group discussion and key informant interview.



Main Findings

During the period 2010-2020, poverty and unemployment rates fluctuated. Country Poverty Assessments and Household Living Conditions Survey¹ and Labour Force Surveys reveal:

1. POVERTY

- Women account for a marginally higher percentage of the poor: 51.8% in The Bahamas, 52.8% in Antigua and Barbuda, 28.9% in Dominica, and 10.4% in Jamaica. The Kalinago population is one of the most vulnerable groups, with a poverty rate of 49.8%.
- Poverty rates are likely to have increased. This increase would have resulted from external shocks, namely the global financial recession in 2008 and the passage of catastrophic hurricanes, flooding and drought as well as the COVID-19 pandemic.

2. TOTAL UNEMPLOYMENT RATES

- Antigua and Barbuda (8.7%); The Bahamas (9.5%); Dominica (11.1%); and Jamaica (6.6%)

Youth unemployment rates are on average three times higher than national unemployment rates:

- Antigua and Barbuda (25.7%); The Bahamas (20.0%); Dominica (27.0%); and Jamaica (16.7%)

Social Protection Allocation

- Between 2014-2020, the average budget allocations to social protection across Antigua and Barbuda, The Bahamas, Dominica and Jamaica was 1% of Gross Domestic Product.
- The average social assistance budget allocation for all four countries declined from 51% in 2015 to 39% in 2020. The average social care budget allocation was reduced from 24% to 21% and labour market allocations increased from 25% to 40%. Reduced allocations towards social protection programmes have adverse implications for the changing population dynamics in the region, such as increase in life expectancy as well as the increase in female participation in the labour force.

Socio-Demographic and Quality of Life Features of Beneficiaries of Public Assistance and NGO Beneficiary Services

- 6% of the population is 30 years of age or less
- 38% of the population is regarded as elderly (60 years and over)
- 47% reported secondary school education as the highest level of education completed
- 25% are persons with disabilities
- 45% were employed (paid and self-employed combined)
- 48% were unemployed
- 28% lost jobs during the pandemic
- 18% reported monthly earnings from all sources as US\$100 or less; 20% earned US\$101-\$500 monthly; and 10% earned US\$901 or more

Experience, Preparedness, Response and Recovery from Climate-Related Disasters

- Overall, 46% of beneficiaries were most affected by hurricanes. However, in Jamaica, nearly half (47%) of all beneficiaries indicated that they were most impacted by drought.
- The overall mean score for disaster preparation was 2.7 out of a possible 4.0. The mean score for both females and males accounted for 2.7 each. This suggests that, generally, beneficiaries were not well-positioned or appropriately prepared in the period leading up to the disaster and this has implications for how quickly vulnerable groups are able to recover from disasters.

The Socio-Economic Impacts of Natural Disasters on Vulnerable Populations' Livelihoods

- The main economic impacts that natural disasters have on vulnerable populations were in their reduced ability to buy goods or inputs for their business and farm (49%), loss or damage to housing (42%), and reduction or loss of income (42%). Respondents also informed that price increases on basic food items were realised after a hurricane and during periods of drought.
- The main economic challenges experienced by females were a reduction in their ability to: (a)

¹ Jamaica is the only country among the four with a Household Survey Living Conditions Survey conducted at regular intervals. All others rely on Country Poverty Assessments for poverty data, which date back as far as 2005.



purchase goods or inputs for their business (52%); (b) farm/raise animals (50%); (c) loss or damage to their housing (45%); and (d) loss of income (44%).

- Male respondents reported that their main economic challenges were a reduced ability to: (a) farm/raise animals (49%); (b) repay loans/credit (47%); and (c) maintain a healthy diet (38%).
- The most cited social impacts of natural disasters were obtaining access to clean water (20%), disruption to their physical mobility (14%), increase in home duties/responsibilities (13%) and limited access to information on response and recovery efforts and support services (13%). Psycho-social impacts such as depression and anxiety were commonly experienced by the elderly and children. The emergence of new health issues and the exacerbation of existing health issues were reported, particularly among persons with disabilities. Interruption of schooling and re(entry) into new schools were social challenges experienced by children and youth.

Post-Disaster Coping Strategies

- Vulnerable groups expressed multiple ways to cope within the context of national debt and disasters such as hurricanes, floods, and the COVID-19 pandemic. Some of the most cited strategies were: divine intervention (praying and fasting) (63%); using their personal savings (38%); reliance on social networks such as relatives and friends (29%); humanitarian support from NGOs, CBOs, or religious groups (12%); remittances (4%); and reducing the number or portion size of their daily meals (23%). Other coping strategies reported were pursuing self-development opportunities, consuming alcohol to reduce anxiety and selecting the child perceived with most academic prospects to attend school.

Participation in Social Protection Programmes

- Most respondents (74%) indicated that they were benefiting from a government public assistance programme.
- Less than one-third (30%) were contributing to the National Insurance Scheme (NIS) and 12% were participating in a private health scheme.
- 84% of males compared to 71% of females were beneficiaries of government public assistance programmes.

Social Services Required to Assist Vulnerable Groups with the Effects of Climate-Related Disasters

- Half (50%) of all those who experienced a climate-related disaster during 2010-2020 tried to access government social services to help deal with the aftereffects. There were more females (53%) compared to males (42%) who accessed these services.
- Nearly eight in every ten (78%) beneficiaries tried to access public assistance programmes, including food or food assistance, which was cited by respondents as an important social service need. Other types of social services that respondents tried to access the most were shelter/housing services (22%), medical care/health services (12%) and employment services (9%).
- Females were 5.4 times more likely than males to seek shelter/housing services (27% versus 5% for males) and twice as likely as males to seek employment services (10% versus 5%).
- 65% of respondents reported satisfaction with the services they received; however, 79% reported that accessing these services was somewhat difficult/very difficult.

Developmental Needs

- In the aftermath of a climate-related disaster, vulnerable populations revealed that their most urgent developmental challenges were nutrition imbalance/malnutrition (35%), difficulty obtaining a job/employment (21%), inability to obtain suitable/affordable housing (15%) and difficulty accessing home/day care services for dependents (10%). The most critical development challenges for females were experiencing nutrition imbalance/malnutrition (38%) and having difficulty accessing home/day care services for dependents (12%). Males reported having difficulty obtaining a job (23%) as a critical development challenge.

Conclusion

Poverty and vulnerability in the four countries are best characterised as structural in nature. The geographical location of the region and size of the islands increase the risk of experiencing negative effects of climate change on the physical infrastructure and vulnerable groups.

Recommendations

The study has identified several broad recommendations to support debt restructuring and improving the resilience of the physical infrastructure and human resources in a context of sovereign debt and the adverse effects from climate change. The recommendations are to:

- a. Advocate for updating poverty and vulnerability diagnostics and monitoring data.
- b. Prioritise improving governance and creating fiscal space for resilient social protection systems.
- c. Improve targeting and allocation of social protection resources.
- d. Strengthen institutional mechanisms in the national disaster authorities and social sectors as well as NGO services in supporting inclusive disaster risk reduction.
- e. Integrate Information, Communication and Technology (ICT) in the accessibility and delivery of human and social services.
- f. Improve opportunities for livelihood and psychosocial recovery in the aftermath of natural disasters and pandemics.
- g. Promote greater knowledge about free movement treaties and efficiency in climate-related migration within CARICOM amongst skilled professionals supporting response and recovery efforts.
- h. Support inclusive communication and advocacy requirements.
- i. Strengthen the infrastructure to withstand the damage that comes with more frequent and intense hurricanes, floods and other disasters.
- j. Maintain food security.

Promote greater knowledge about free movement treaties and efficiency in **climate-related migration within CARICOM amongst skilled professionals supporting response and recovery efforts.**



INTRODUCTION

Chapter 1



CPDCNGO.ORG

FORT JAMES
St. John's, Antigua

1.0 Background

Caribbean states are particularly susceptible to climate hazards due to their geographic location. The region's environmental vulnerabilities, which are exacerbated by climate change and global warming, have significantly stretched and pressured the region's fiscal and social systems. Furthermore, the increased frequency with which natural disasters are likely to occur and the extent of damage caused will create additional pressure on governments to identify the fiscal space to respond. The United Nations Environment Programme (UNEP) estimates that adapting to climate change and coping with damages will cost developing countries US\$140-300 billion per year by 2030 (Oxfam 2023).

Weather events can have significant impacts on

macroeconomic conditions in a country and the quality of life experienced by the most vulnerable groups. Oxfam International (2023) defines climate-related events as climate hazards that are natural disaster events in the weather cycle. The most common natural disaster events include hurricanes, droughts, wildfires, flooding and high winds and changes in the global climate have been known to exacerbate these climate hazards and amplify the risk of extreme weather disasters. During the period 2000-2021, the Caribbean recorded 326 disasters associated with natural hazards (see Table 1.0), with the highest incidence in 2004 and 2017 (30 and 29 disasters, respectively). Hurricanes Irma and Maria (2017) and Hurricane Dorian (2019) devastated national infrastructure across 10 Caribbean islands and prompted a humanitarian crisis in the subregion (ECLAC 2021).

Table 1.0: The Caribbean population affected and number of disasters, 2000-2021

Country	Population affected	Number of disasters
Anguilla	15,000	1
Antigua and Barbuda	32,600	3
The Bahamas	53,150	15
Barbados	7,181	7
Belize	240,925	12
Bermuda	0	1
British Virgin Islands	0	2
Cayman Islands	300	7
Cuba	20,405,628	35
Dominica	107,857	5
Dominican Republic	3,412,767	54
French Guiana	144	2
Grenada	60,000	2
Guadeloupe	113,155	4
Guyana	762,048	7
Haiti	12,883,002	85
Jamaica	869,591	21
Martinique	29,308	5
Montserrat	200	1
Puerto Rico	773,384	18
Martinique	29,308	5
Saint Kitts and Nevis	500	1

Country	Population affected	Number of disasters
Saint Lucia	228,785	10
Saint Vincent and the Grenadines	74,886	11
Sint Maarten	11,400	1
Suriname	41,648	3
Trinidad and Tobago	151,760	5
Turks and Caicos Islands	1,700	5
United States Virgin Islands	0	3
Total	40,276,919	326

Source: Economic Commission for Latin America and the Caribbean (2021)

Importantly, many Caribbean islands are also confronted with elevated levels of public debt, much of which were either directly or indirectly induced by the onset of natural hazard events during the last decade. And, due to the increased frequency and intensity of climate-related hazards and the additional cost of adaptation, the region's existing debt overhang continues to grow and requires innovative measures to address current debt levels. Elevated debt levels and the resulting rise in debt servicing expenses have the direct consequence of crowding out investments in critical social programmes and infrastructure needed to support vulnerable and marginalised groups. Additionally, given the newly graduated middle-income status of many Caribbean states, access to concessional and grant financing has decreased.

It is noteworthy to mention that the impact of natural disasters represents a key link between environmental and public debt vulnerabilities in the Caribbean. In 2017, extreme weather events resulted in losses of US\$320 billion worldwide (Munevar 2018). Dominica experienced damage and losses valued at US\$1.1 billion, equivalent to 250% of GDP, after being hit by Hurricane Maria in September 2017. According to the UN Office for the Coordination of Humanitarian Affairs (OCHA), 92% of the population of Dominica was left in need as the hurricane destroyed 15% of the houses and heavily damaged an additional 65% of the housing stock of the country. Similarly, in 2017, Hurricane Irma had a devastating impact on the island of Barbuda. It is estimated that 95% of all properties (public and private) on the island were destroyed, resulting in damages and losses totalling US\$155 million (11% of GDP). According to the Inter-American Development Bank (2019), damages and other impacts in The Bahamas by Hurricane Dorian in 2019 were estimated at US\$3.4 billion. Losses for the social sector were estimated at B\$93.2 million: B\$65 million in housing, B\$21.4 million in health, and B\$6.7 million in education.

Variability in climatic conditions affects human health and well-being both directly, through hazard related injuries, death and other physical effects, and indirectly through the effect on water, air and food quality, natural ecosystems (agricultural, marine, freshwater), disease causing vectors and pathogens, industry, critical infrastructure, settlements and the economy (World Health Organization, 2003). Among the most vulnerable populations are infants and children and the elderly, who are physically limited in their ability to escape the impacts of climate-related hazards such as hurricanes, storms, and floods. Furthermore, these groups are more sensitive to the effects of heat strokes, air pollution or disease outbreaks. People who are impoverished or unemployed are also more likely to be impacted as they lack the necessary resources to mitigate the adverse effects of climate-related hazards or health outcomes. The living conditions of the poor also place them at greater risk to be affected during climate-related disease outbreaks, as they often have less access to basic amenities such as water, sanitation, and health care. As such, it is important to consider the needs of these vulnerable groups in the development of policies to lessen the effects of climate-related events and other external shocks.

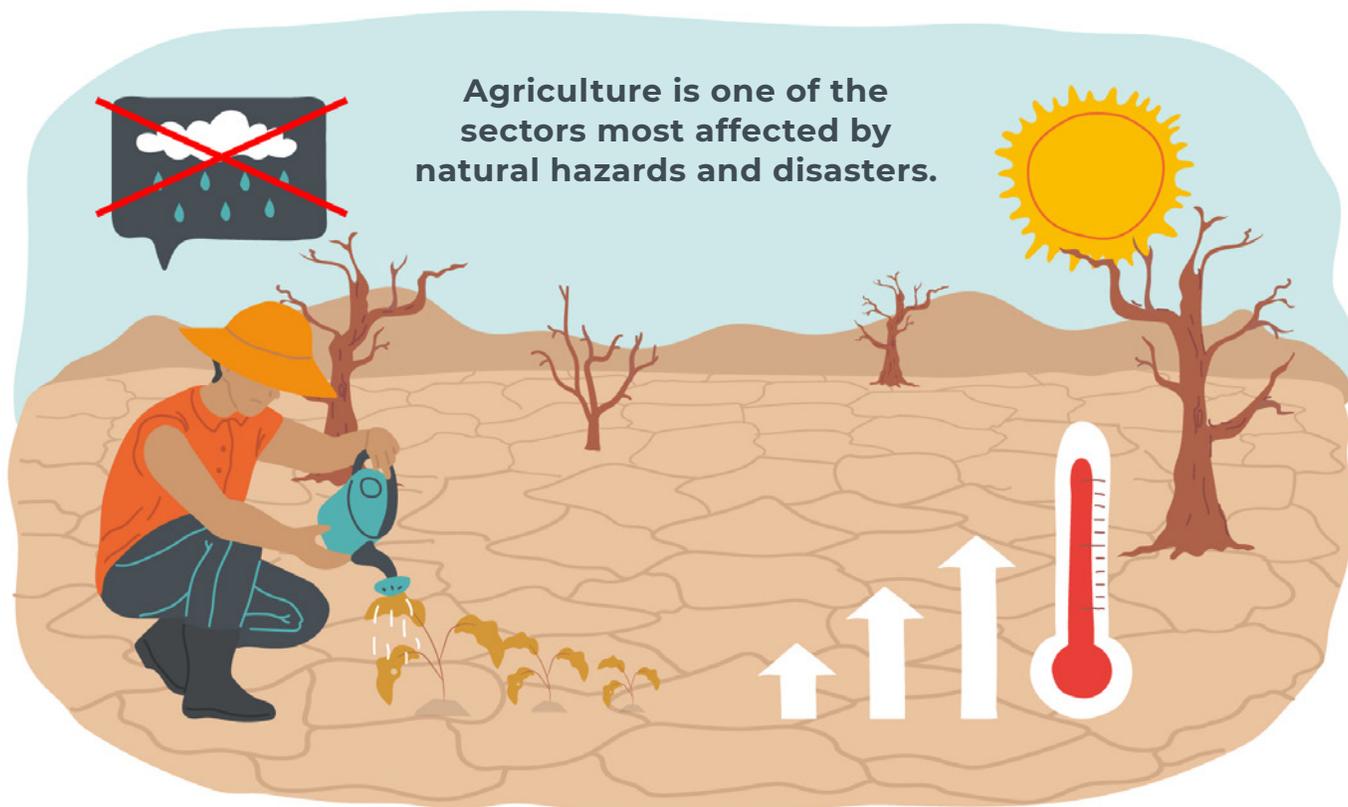
Non-communicable diseases (NCDs) are the leading cause of death in the region, and the Caribbean region faces the highest burden from NCDs for developing nations in the Americas. NCDs are linked to more than 70% of deaths in the region, which mirrors the current global average. According to Camillo Gonsalves (2021), Minister of Finance, Economic Planning and Information Technology of Saint Vincent and the Grenadines, "NCDs have a disproportionate impact on people living in poverty, which means that addressing them constitutes a development challenge for the Caribbean..."

Agriculture is one of the sectors most affected by natural hazards and disasters. The United Nations Food and Agricultural Organization conducted an analysis of 78 post-disaster needs assessments in 48 developing countries

spanning the 2003-2013 period, which showed that 25% of all economic losses and damages inflicted by medium- and large-scale climate induced hazards such as droughts, floods and storms in developing countries are affecting the agriculture sector.² This has economic implications that result in changes in agricultural incomes, food markets, prices and trade patterns, and investment patterns. At the national level, climate risks can trigger an increase in agricultural commodities' prices (food and feed), which impact the economic and social status of the entire population. For example, during January and February 2022, the agriculture sector in the northern part of Jamaica was adversely affected by floods resulting in loss of crops and livestock and loss of farmlands due to erosion and landslides. It was estimated that 551 farmers lost an estimated JM\$76,815,000, with the damage to crops accounting for JM\$74,884,600 and over JM\$ 1.9 million in losses were estimated for the livestock sector. Livestock productivity and yields decrease due to floods resulting in price increases and making food access difficult and resulting in unhealthy food choices, especially among the most economically vulnerable groups.³ Undoubtedly, climatic risks can discourage investments in the agricultural sector. This has negative implications for Caribbean countries for which agriculture is an important contributor to GDP as well as provides employment opportunities.

The people most vulnerable to natural hazards are the world's 2.5 billion small-scale farmers, herders, fishers and forest-dependent communities, who derive their livelihood from renewable natural resources. Shocks and crises caused by climate extremes such as drought, floods and hurricanes destroy crops, livestock and fish resources, as well as agriculture, livestock and fishing/aquaculture infrastructure and productive assets such as irrigation systems, livestock shelters, docks, and landing and post-harvest facilities. This reduces overall food production capacity, shrinking economic opportunities and livelihoods, particularly in rural areas.

This study requires gender sensitivity and a gender inclusive approach in demonstrating the ways in which the lives of men and women are affected by the impacts of sovereign debt and climate-related events. Sustainable Development Goal 5 (Gender Equality) is a pivotal enabler in contributing to the global 2030 vision of leaving no one behind. The focus on gender in a study of this nature is critical because gender norms and gender roles, sexual division of labour and gender relations and power dynamics are important components in understanding the impact of sovereign debt and climate-related events on livelihood.



2 United Nations Food and Agricultural Organization. (2015). Climate Change and Food Security: Risks and Responses. <https://www.fao.org/3/i5188e/i5188E.pdf>

3 White-Barrow, Vanessa (2022). Climate Change impacts on Food Security and Nutrition. <https://jamaica-gleaner.com/article/focus/20220612/vanessa-white-barrow-climate-change-impacts-food-security-and-nutrition#slideshow-0>, accessed May 16, 2023.

1.1 Scope of the Assignment

The Caribbean Policy Development Centre (CPDC), through its programmes and advocacy campaigns, is aiming to build a case for Caribbean debt relief and restructuring based on its inherent climate and economic vulnerabilities. It is in this context that a study has been commissioned to examine the vulnerabilities of marginalised social sectors in the region and proffer advocacy strategies and policy solutions to address the social and developmental needs of these groups. This paper will focus on four countries, namely, Antigua and Barbuda, The Bahamas, Dominica and Jamaica.

1.2 General Objective

To undertake an assessment report on vulnerable groups in the Caribbean to highlight the impacts of unsustainable sovereign debt and climate-related events on their lives, and to inform gender-sensitive policies and programmes focused on addressing the development needs of marginalised groups.

1.2.1 Specific Objectives

- a. To contextualise the current development concerns and challenges experienced by vulnerable populations in the Caribbean Region using, but not limited to, the following indicators: i) poverty and social inclusion; ii) unemployment rates; iii) cost of living; and iv) access to health, long-term care and social protection.
- b. To identify the vulnerabilities of marginalised social groups in **Antigua and Barbuda, The Bahamas, Dominica and Jamaica**, and examine the impacts of national debt and climate-related events on their livelihoods and standard of living for the period 2010-2020. The assessment should utilise gender analysis to:
 - Analyse the effects of sovereign debt on the provision of social programmes and social safety nets for vulnerable groups, highlighting the implications on their lives;.
 - Identify the main social and economic impacts that natural disasters have had on the livelihoods of vulnerable populations;
 - Identify the primary social service and other developmental needs of vulnerable groups as it relates to mitigating and responding to the effects of natural disasters.
- c. To analyse the key development challenges raised by vulnerable groups and develop policy responses for sovereign governments and civil society organisations to mitigate and remedy the aforementioned issues.
- d. To develop a summary report and a 10-12 page slideshow presentation based on the findings of the assessment report.

1.3 Structure of the Report

In the following section, **Chapter 2** provides a summary of the Caribbean region's socio-economic characteristics, including population of countries, poverty and unemployment. There is a discussion on the international frameworks on climate change and national development plans that addresses disaster risk reduction as an important component of the development strategy and climate induced migration. The literature review concludes with a discussion on gender and diversity considerations in climate-related events.

Chapter 3 describes the methodology. This section details the research design consistent with the objectives of the assessment presented in **Chapter 1**. The procedures used to collect, manage, analyse and present data are described.

Chapter 4 provides a detailed assessment of the key social and economic indicators for each of the sample countries to conceptualise the current development challenges faced by vulnerable groups and populations. This chapter also provides an overview of the social protection landscape in the sample countries and an assessment of government social protection programmes and their impact on vulnerable groups. The findings presented in this section are based on secondary data.

Chapter 5 provides trend analysis and econometric techniques to examine the impact of climate-related hazards and public debt levels on vulnerable households through the transmission channel of social protection expenditure.

Chapter 6 presents the findings from the country surveys, focus group discussions and key informant interviews conducted with executive officers in Ministries/Departments of social services and national disaster management offices. The results highlight the impact of climate-related events on vulnerable populations.

Chapter 7 provides the conclusions and recommendations that are informed by the findings presented in **Chapters 4, 5 and 6**.

LITERATURE REVIEW

Chapter 2



CPDCNGO.ORG

NASSAU HARBOUR LIGHTHOUSE
Nassau, Bahamas

2.0 Socio-Economic Overview of the Caribbean Region

The challenges experienced by countries in the Caribbean region are evidenced by its demographic and economic characteristics. Jamaica and Trinidad and Tobago are the only two countries among the 13 countries identified with a

population over one million (see Table 2.0a). Population size is an important factor in addressing financial challenges. Overall, the region lacks the economies of scale to attract large investment projects.

Table 2.0a: English-speaking Caribbean countries and population size⁴

Country		Population Size (2020)
Antigua & Barbuda		97,895
The Bahamas		389,410
Barbados		287,375
Belize		419,199
Dominica		74,289
Grenada		113,135
Guyana		797,202 ⁵
Jamaica		2,734,092
St. Kitts and Nevis		49,347
Saint Lucia		181,192
St. Vincent & the Grenadines		110,696
Suriname		607,065 ⁶
Trinidad & Tobago		1,366,725 ⁷

Source: Various online census bureau databases

4 Population figures for the OECS Member States were obtained from the ECCB website. <https://www.eccb-centralbank.org/statistics/macroeconomic-financial-indicators/comparative-report>

5 Population figures for other countries were extracted from interim reports for various census bureau. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=SR>

6 <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=SR>

7 https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf



Another important economic characteristic relates to the income levels of countries in the Caribbean region (see Table 2.0b). Most countries in the Caribbean region are part of the upper middle-income group as defined by the United Nations, with GNI per capita levels above US\$4,036. This is an

important element from a policy perspective, as the income level of most Caribbean countries precludes the possibility of accessing funding in concessional terms or receiving additional Official Development Aid (ODA).

Table 2.0b: English-speaking Caribbean countries, GNI, HDI Rank and HDI Value

Country	GNI per capita (2017 PPP\$) 2021	HDI rank (2020)	HDI value
Antigua and Barbuda	16,792	71	0.788
The Bahamas	30,486	58	0.812
Barbados	12,306	71	0.790
Belize	6,309	120	0.683
Dominica	11,488	106	0.720
Grenada	13,484	70	0.795
Guyana	22,465	107	0.714
Jamaica	8,834	110	0.709
St. Kitts and Nevis	23,358	76	0.777
Saint Lucia	12,048	104	0.715
St. Vincent and the Grenadines	11,961	82	0.751
Suriname	12,672	92	0.730
Trinidad and Tobago	23,392	56	0.810

Source: UNDP 2022

2.1 Structural Challenges, Poverty and Development in the Caribbean

Persistent poverty is a key feature and symptom of Caribbean society. The Caribbean region has been plagued with the challenges associated with poverty for decades. The historical antecedents of race, colour, class and gender hierarchy, reinforced by the impact of globalisation on Small Island Developing States (SIDS), in particular on the agricultural sector, have resulted in the exclusion of the poor from meaningfully engaging in economic opportunities and succinctly accessing social services (Bowen 2007).

2.1.1 Poverty

Absolute poverty is defined as the lack of sufficient resources to attain the basic necessities such as safe drinking water, food and sanitation. The World Bank defines absolute poverty as living on less than US\$1.25 per day (Council of Europe, 2023). According to the Oxford Poverty and

Human Development Initiative (2023), it is important to use a multidimensional approach to understand poverty. This multidimensional approach incorporates various deprivations experienced daily by the poor, such as poor health, lack of education, inadequate living standards, disempowerment, poor quality of work, the threat of violence, exposures to the harmful effects of natural disasters, and living in areas that are environmentally hazardous, among others. **Chapter 4** provides details on poverty rates for Antigua and Barbuda, The Bahamas, Dominica and Jamaica.⁸

2.1.2 Poverty and COVID-19

COVID-19 further complicated the development challenges of Caribbean economies. The experiences of hurricanes, flooding and drought over the past decade and the COVID-19 pandemic in 2020 brought a double-digit shock to real GDP in the Caribbean region. Given the high dependence on tourism among most Caribbean economies, the impact of the COVID-19 pandemic on the balance of payments and

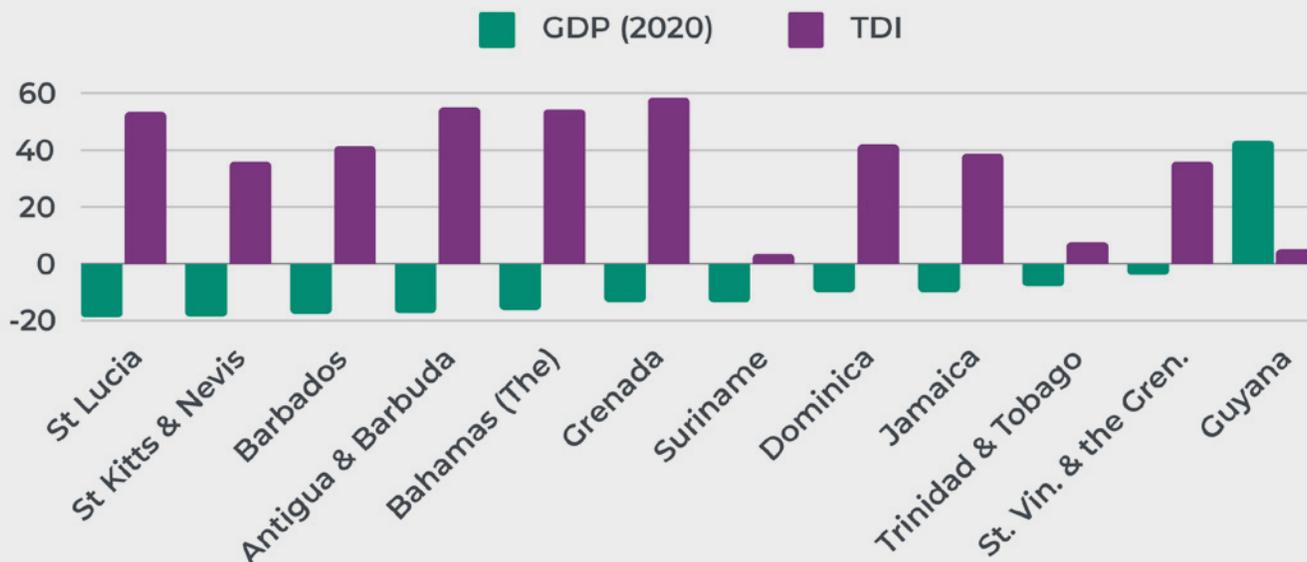
⁸ It should be noted that much of the poverty data in the Caribbean is dated. Financial challenges have constrained the ongoing collection of data to monitor poverty and other aspects of the SDGs. **As such, there remains a reliance on country poverty assessments and surveys of living conditions, which were conducted in some countries as far back as 2007-2008.**



employment was severe, especially for women who tend to dominate employment within the services sector (see Figure 2.1.2). Shocks such as the COVID-19 pandemic exacerbate situations among people who already lack the minimum

income required to maintain the average standard of living. Low wage workers in the tourism sector as well as the wholesale and retail sectors throughout the Caribbean were severely affected.

Figure 2.1.2: Change in Real GDP (year-over-year) in 2020 and Tourism Dependence Index (%)



Source: IDB 2021, 8

2.1.3 Unemployment

Overall, the average unemployment rates in the Caribbean have been on the decline, as some countries before the pandemic were experiencing some economic growth. Average unemployment, which was 12.2% in 2010, rose to 13% in 2012 and then began a slow decline to 10.7% in 2019.

As expected, average unemployment rose to 12.9% in 2020 (Alleyne et al. 2021). **Figure 2.1.3a** details the rates of unemployment for several Caribbean countries during the period 2010-2020.

Figure 2.1.3a: Unemployment rates among selected Caribbean states, 2010-2020



Source: Alleyne 2021, 10



Trinidad and Tobago experienced the lowest rate of unemployment during the period 2010-2020. Saint Lucia and Saint Vincent and the Grenadines have historically maintained high rates of unemployment, especially among the youth. In 2019, the rates were 15.6% and 18.6%, respectively, and in 2020 these jumped to 17.1% and 20.3%, respectively. Youth

unemployment is a major development challenge in the Caribbean. It is often nearly three times higher than adult unemployment. Comparatively, unemployment among female youth is the highest among the categories of the unemployed (see Figure 2.1.3b).

Figure 2.1.3b: Youth unemployment rates by age-sex, 2010-2020



Source: Alleyne 2021, 10

2.2 International Agreements on Climate Change which Support Vulnerable Populations

There are several key international and regional frameworks that address the disastrous effects from climate-related events on vulnerable groups such as women, children, persons with disabilities and farmers, as well as workers in the agro-processing sector. This section outlines some key international and regional frameworks and how inclusivity of key populations is addressed.

2.2.1 Paris Agreement⁹

The United Nations Framework Convention on Climate Change (COP 21), convened in Paris in 2015, has relevant aspects of its agreement for Caribbean countries. They are:

- a. **Articles 7.5 and 7.12 - Transparency and Participation in Adaptation/Gender/Indigenous Peoples.** These state that adaptation action

should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems.

- b. **Article 11.1 - Capacity Building and Public Awareness/Environmental Education.** This addresses enhancing the capacity of developing countries through facilitating technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information.

⁹ Ibid



2.2.2 The 2022 United Nations Climate Change Conference (COP 27)¹⁰

The United Nations Climate Change Conference, otherwise called COP27, was hosted in Sharm El-Sheikh, Egypt during November 6-18, 2022. Support for loss and damage for developing countries resulting from natural disasters is an area of significant importance as a critical outcome of the conference. Loss and damages from disasters have increased debt burden, thus reducing the possibility of realising the 2030 sustainable development agenda.

2.2.3 The Addis Ababa Action Agenda

This framework is supportive of gender mainstreaming based on gender analysis as an integral part of climate policy and action. By mainstreaming gender considerations in climate policy and action, climate approaches will be more efficient, effective, and equitable by being responsive to and providing broader benefits to address the needs of women and men, including through compensation and shared benefits (UNDESA et al. 2016, 12).

2.2.4 Sendai Framework for Disaster Risk Reduction 2015-2030

A greater people-centred approach is required for disaster risk reduction. This framework calls for increased inclusivity of vulnerable groups such as women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons in the design and implementation of policies, plans and standards.

2.3 International Development Treaties Supportive of Gender Responsiveness and Inclusivity of Vulnerable Groups in Economic Development and Disaster Risk Reduction

International and regional frameworks, namely the Sustainable Development Goals Agenda 2030, **Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)**, **Convention on the Rights of Persons with Disabilities (CRPD)**, and the **Caribbean Regional Comprehensive Disaster Management (CDM) Strategy and Results Framework 2014-2024** have incorporated the importance of prioritising the needs of vulnerable groups in preparation before and after natural disasters because their livelihoods and wellbeing are severely adversely affected. Appendix 7 details key development frameworks and how vulnerable groups have been prioritised in the context of climate change.

2.4 National Frameworks Supportive of Inclusivity in Disasters

The inclusion of vulnerable groups in national development plans as well as national disaster management plans should be prioritised to ensure the inclusion of marginalized and vulnerable groups into a country's development strategy. This section identifies key plans and policy documents in Antigua and Barbuda, The Bahamas, Dominica and Jamaica that address the inclusivity of vulnerable groups in disasters.

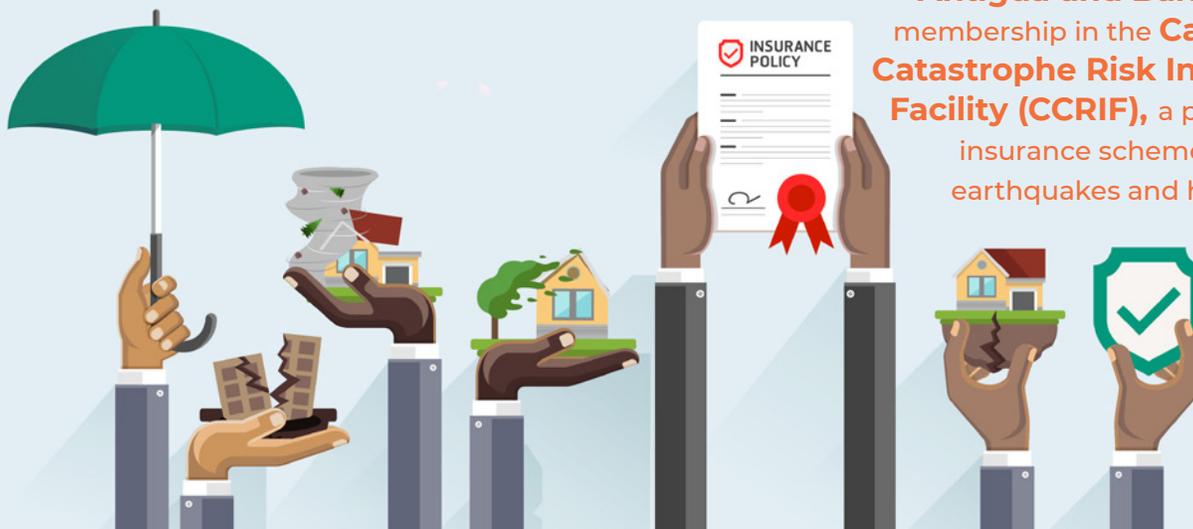


¹⁰ Sharm el-Sheikh Implementation Plan, <https://unfccc.int/documents/624444>, accessed February 23, 2023.

Table 2.4: National development plans supportive of resilience and inclusivity of vulnerable groups in natural disasters

Country	Policies/Plans Supportive Resilience and Inclusivity
<p>Antigua and Barbuda</p> 	<p>Medium-Term Development Strategy 2016 to 2020 of Antigua and Barbuda</p> <ol style="list-style-type: none"> 1. This prioritised the natural environment and sustained historical and cultural assets as one of the four core programme actions. 2. The island has membership in the Caribbean Catastrophe Risk Insurance Facility (CCRIF), a parametric insurance scheme covering earthquakes and hurricanes, developed by the World Bank (WB). 3. Four key policy actions earmarked by the Government of Antigua and Barbuda towards strengthening strategies for managing disasters and climate change were: <ol style="list-style-type: none"> a. Preparing a disaster mitigation plan that is led by the National Office of Disaster Services (NODS). The plan is geared towards addressing various types of interventions, such as economically feasible capital interventions directly needed to reduce the impact of weather-related events and disaster risk reduction considerations. b. Reviewing coordination arrangements and practices geared towards improving the dialogue in relation to disaster risk coordination and encouraging more effective participation of agencies across government. c. Preparing a climate change policy that aims to address, among other considerations, the institutional responsibilities for climate change management, and adequate mechanisms for reflecting climate change considerations in the activities and initiatives across ministries. d. Preparing a disaster risk financing strategy whereby the Ministry of Finance (MOF) in collaboration with the NODS will prepare a disaster risk financing plan to improve the predictability of the budget.
<p>The Bahamas</p> 	<p>Disaster Risk Management Act, 2022</p> <p>The Act explicitly prioritises the inclusion of vulnerable populations in disaster management. It focuses on reducing risk, including the risk of loss of life, health, physical integrity, economic disruption and damage to the environment and property, especially to those members of the population who are most vulnerable by reason of age, disability, poverty, lack of resources, physical displacement or gender. It also promotes the involvement and participation of all relevant sectors and stakeholders, at all levels of the society.</p>

Antigua and Barbuda has membership in the **Caribbean Catastrophe Risk Insurance Facility (CCRIF)**, a parametric insurance scheme covering earthquakes and hurricanes



Country	Policies/Plans Supportive Resilience and Inclusivity
<p data-bbox="154 199 284 231">Dominica</p> 	<p data-bbox="609 199 1226 231" style="text-align: center;">National Resilience Development Strategy 2030</p> <p data-bbox="341 273 1453 367">This strategy outlines a clear vision of Dominica becoming the first climate resilient country in the world. Among its several development objectives, which are directed towards sustainability and inclusivity of vulnerable groups, are the:</p> <ul style="list-style-type: none"> <li data-bbox="414 388 1096 420">a. Promotion of sustainable human settlements/communities. <li data-bbox="414 430 1494 493">b. Provision of adequate and sustainable social protection systems with the ability to respond rapidly to the impact of shocks at the individual and household levels. <li data-bbox="414 504 1494 598">c. Implementation of a comprehensive risk management framework (including national vulnerability risk resilience fund) and the pursuit of the low carbon development pathway (the greening of the economy). <p data-bbox="560 630 1274 661" style="text-align: center;">Climate Resilience and Recovery Plan (CRRP) 2020-2030</p> <p data-bbox="341 703 1071 735">It is composed of three pillars that address resilience and inclusivity.</p> <ul style="list-style-type: none"> <li data-bbox="414 745 1494 903">a. Pillar #1 focuses on having climate-resilient systems, including a robust and responsive financial system that will be able to support other core elements of climate resilience. Additionally, it incorporates building the resilience of economic assets such as roads, bridges, housing, schools, ports, health facilities and other economic infrastructure so that it can withstand the effects of climate events. <li data-bbox="414 913 1494 1039">b. Pillar #2 looks at minimising and managing the risks associated with climate-related disasters. For example, establishing or strengthening established procedures to evacuate people from disaster-prone areas when lives will be at risk from a pending weather event so as to minimise the loss of life and disruption of livelihoods. <li data-bbox="414 1050 1494 1207">c. Pillar #3 addresses post-disaster needs, minimising disaster impacts, reducing the pain and the period of recovery and building back better. This includes developing robust business continuity measures for both the public and the private sectors, so that essential operations are resumed in a short space of time, as well as establishing systems that facilitate the speedy restoration of livelihoods, particularly in the agriculture, fisheries and tourism sectors. <p data-bbox="341 1218 1461 1386">Embedded in the CRRP 2020-2030 is the inclusion of a rights-based approach to disaster management. A human rights-based approach to social protection requires that special attention be given to those persons who belong to the most disadvantaged and marginalised groups in society. This entails guaranteeing non-discriminatory treatment as well as adopting proactive measures to enable those suffering from structural discrimination to enjoy their rights (CRRP 2020, 16).</p>
<p data-bbox="154 1428 284 1459">Jamaica</p> 	<p data-bbox="844 1428 990 1459" style="text-align: center;">Vision 2030</p> <p data-bbox="341 1501 1453 1564">Goal 4, titled "Jamaica has a healthy natural environment", is one of four goals that pivots the country towards developed country status. The goal is accompanied by the following three strategies:</p> <ul style="list-style-type: none"> <li data-bbox="414 1596 1494 1690">a. Sustainable management and use of environmental and natural resources that addresses integrating environmental issues into social and economic policies and decision-making processes. <li data-bbox="414 1701 1494 1795">b. Hazard risk reduction and adaptation to climate change that focuses on improving resilience to all forms of hazards, improving emergency response capabilities and developing measures to adapt to climate change. <li data-bbox="414 1806 1494 1900">c. Sustainable urban and rural development that is geared towards creating sustainable urban centres, including urban renewal and upgrading as well as ensuring safe, sanitary and affordable shelter for all as well as diversified rural areas.

2.5 Climate Induced and Humanitarian Migration

Climate change intensifies the frequency and severity of disasters and thereby increases the number of people displaced by extreme weather events. According to the *Global Report on Internal Displacement 2022*, 38 million internal displacements took place in 2021, of which 23.7 million were because of disasters and 22.3 million of which were weather-related.

Climate-induced migration has become a global challenge and according to Francis (2019), the Caribbean region is particularly vulnerable. The ten countries and territories worldwide with the highest average annual internal displacement per capita are all small island developing states (SIDS), the top six of which are in the Caribbean (Francis 2019). This is evidenced by the fact that three major hurricanes of the 2017 Atlantic hurricane season – Harvey, Irma, and Maria – displaced approximately 3 million people in a single month. The passage of the Category 5 Hurricane Dorian across The Bahamas also resulted in 9,840 individuals being displaced and 70 deaths.

Despite the Caribbean region's susceptibility to disaster risk, there are two main regional Free Movement Agreements (FMA) for addressing climate-induced migration: the Caribbean Community (CARICOM) and the Organisation of Eastern Caribbean States (OECS), that grant displaced Caribbean nationals important protection benefits after catastrophic hurricanes. Caribbean governments also offer several accommodations to humanitarian or forced migrants as they are signatories to several international treaties prohibiting human rights violations.

However, the Caribbean region confronts the negative effects of forced migration, triggered by economic hardship and civil unrest experienced in countries such as Haiti, Dominican Republic and Venezuela, whose citizens travel as undocumented migrants to other countries in CARICOM and the OECS sub-regions. Immigrants are often avoided or at times exploited by the host populations and subjected to discrimination when contact is made. They are often blamed for requiring too much educational, health and social service spending (when those services are available), particularly in times of natural disasters.

Climate-induced migration has become a global challenge, and the Caribbean region is particularly vulnerable.

The ten countries and territories worldwide with the highest average annual internal displacement per capita are all small island developing states (SIDS), **the top six of which are in the Caribbean**

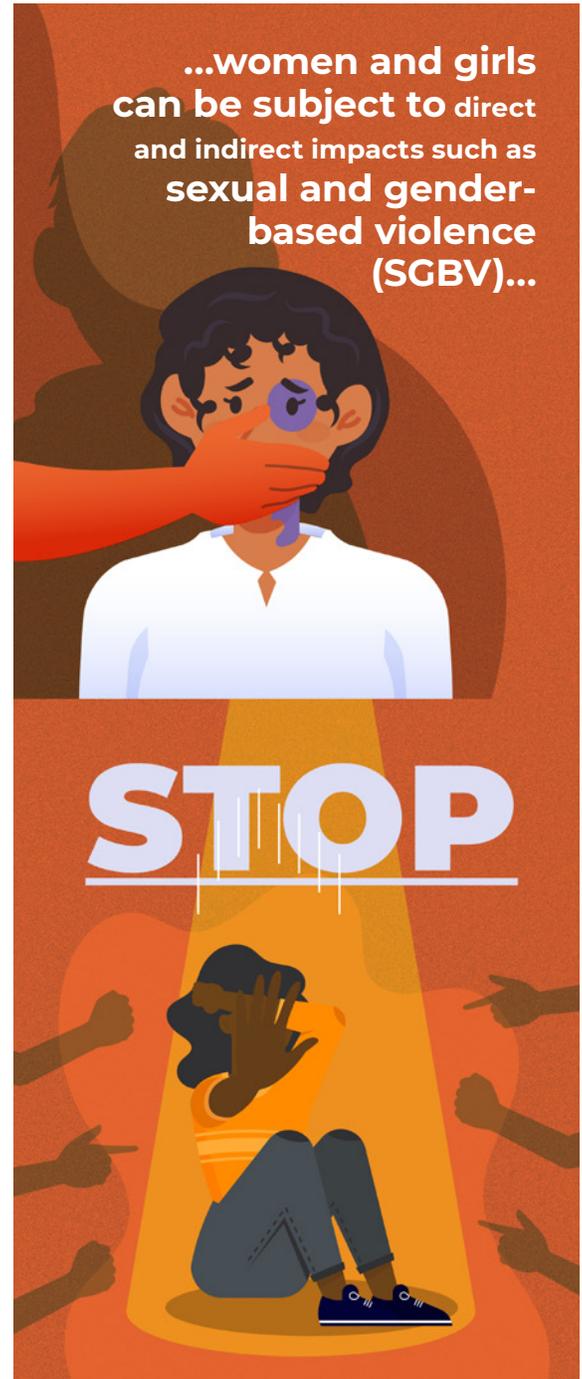


2.6 Gender and Diversity Considerations in Climate-related Events

Men, women, boys and girls face differences in vulnerability and exposure to natural disasters driven by gender relations and societal norms. A World Bank study (2021) revealed that women are severely disadvantaged by the impact of natural disasters when compared to men. Women are disproportionately affected by disasters in several outcomes, including life expectancy, unemployment, labour force re-entry, and relative asset losses. Furthermore, following a disaster, women and girls can be subject to direct and indirect impacts such as sexual and gender-based violence (SGBV), early and forced marriages, loss of livelihood and access to education, deterioration in sexual and reproductive health, and increases in their workload.

The Gender-Responsive Disaster Preparedness and Recovery in the Caribbean: Desk Review revealed that many disaster-related policies in Caribbean countries are gender neutral, without considerations of the specific needs of men, women, girls, and boys as well as the elderly, people living with disabilities, people with AIDS or HIV or both, and various minorities. Notwithstanding, the success of disaster preparedness and recovery efforts depends on all-inclusive approaches and equal participation of men, women, and other affected individuals and groups.

People with disabilities are marginalised in society during times of crises due to disability-based discrimination. In the event of climate disasters, persons with disabilities encounter physical barriers such as public transportation systems and road systems that are inaccessible to wheelchair users or people with other mobility disabilities. Furthermore, accessing information also becomes a barrier. For example, early warning systems that rely solely on audible methods, such as sirens, radios, loudspeakers, and some mobile phone alerts are inaccessible to many members of the disabled community. These barriers therefore impede their ability to respond. Additionally, societal barriers that stigmatise persons with disabilities are often witnessed, when beliefs that persons with disabilities will bring misfortune results in their exclusion from shelters or relief centres by aid workers or other survivors (GFDRR and World Bank Group 2017).



In the event of climate disasters, persons with disabilities encounter physical barriers such as public transportation systems and road systems that are inaccessible to wheelchair users or people with other mobility disabilities.



METHODOLOGY

Chapter 3



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St. David, Dominica

As such, the expenditure used focuses on social assistance, social care and active labour market programmes, both the administrative and transfer to beneficiaries.

3.2.2 Primary Data Collection

Beneficiary Survey

A beneficiary online survey, directed towards vulnerable groups, was conducted to determine the following: (a) the main social and economic impacts that natural disasters have had on the beneficiaries' livelihoods; (b) the primary social service and other developmental needs to mitigate and respond to the effects of natural disasters; and (c) key development challenges.

The survey was conducted using the Computer Assisted Telephone Interviewing (CATI) methodology. This involved the use of an electronic device to read the script/survey questions to respondents over the telephone and record the responses. Enumerators were mobilised for the effort through the nine participating stakeholder groups/entities.

Key Informant Interviews

Eight key informant interviews were conducted with senior personnel in Ministries, departments of social services and national disaster management offices. The key informant interviews explored the effects of sovereign debt on the provision of social programmes and social safety nets for vulnerable groups, disaster management and partnerships as well as opportunities supporting inclusive and gender responsive programme delivery.

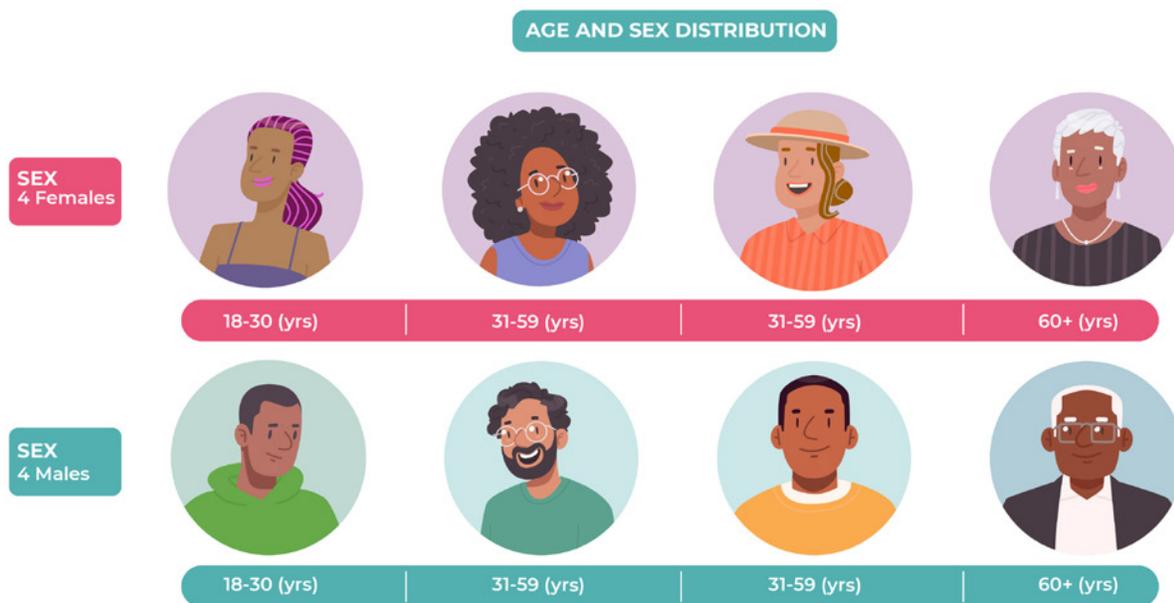
Focus Group Discussions (FGD)

Six focus group discussions were conducted with stakeholders

in the participating countries. One discussion was convened with NGO service providers and the remaining five discussions were with beneficiaries of the government public assistance programmes and NGO programme beneficiaries.

The FGD, convened with NGO service providers, was geared towards identifying their key challenges within the context of national debt and emergencies such as climate-related events and the COVID-19 pandemic, development challenges of their beneficiaries and recommendations towards delivering inclusive services. The group comprised representatives from organisations representing the Kalinago community (an ethnic and cultural minority group in Dominica), women and girls, LGBTI, children and youth and farmers as well as persons with disabilities. There were seven participants representing NGOs from each country for this discussion.

There was one FGD hosted in each country except Dominica, which convened two discussions: one comprising only representatives from the Kalinago community and the other comprising participants from the government's public assistance programme and beneficiaries from NGO services. Focus group discussions with beneficiaries were primarily geared towards ascertaining the effects of climate-related events and the COVID-19 pandemic on their livelihood. More specifically, the discussions provided an opportunity to explore: (a) vulnerabilities at a localised level; (b) the social and economic effects of climate-related events and COVID-19; (c) coping mechanisms at the household and individual levels; and (d) recommendations for preparing the country for climate-related events and recovery. Mobilisation was guided by the following criteria:





3.2.3 Sampling Procedure for Survey

Purposive sampling was first used to select organisations for participation in the surveys. Aside from government agencies in charge of public assistance initiatives in each of the study countries, stakeholder organisations were chosen from the CPDC NGO and Civil Society Bahamas databases based on their alignment with the interests of CPDC. These included those which represented farmers, persons with disabilities, women and youth at risk. Beneficiary listings from selected organisations were anonymised and shared with the research team for review and selection of the sample. The final sample frame comprised a total of 1885 beneficiaries from nine public assistance programmes, NGOs and CSOs.

A random sample of 237 participants from nine participating

organisations was then selected. The distribution of beneficiaries was determined using Probability Proportionate to Size (PPS), thus ensuring that the probability of a beneficiary being selected is proportional to the size of the organisations' beneficiary lists. Participating organisations were provided with two randomised listings and beneficiaries were contacted from the first list which comprised of the selected sample. Once this list was exhausted and beneficiaries could not be contacted, the second randomised listing was utilised until the required number of respondents from each organisation was attained. The final count of beneficiaries surveyed using this approach was 245. **Table 3.2.3** provides a geographical presentation on the number of beneficiaries for each country.

Table 3.2.3: Number of beneficiaries sampled by country¹²

Country	Number of Beneficiaries	Percentage Distribution
Antigua & Barbuda	36	15%
The Bahamas	130	53%
Dominica	20	8%
Jamaica	59	24%
TOTAL	245	100%

¹² Figures include beneficiaries from the public assistance programmes of the central government as well as NGO services.

3.2.4 Sampling Procedure for Key Informant Interviews and Focus Group Discussions

Expert sampling, a type of purposive sampling, was used to select key informants from departments and ministries of social services and national disaster management offices. These key informants were deemed to have expertise in the broad thematic areas of the study, namely sovereign debt, social protection and disaster risk management. The CDEMA office in Barbados provided a list comprising the name, designation and contact details for the national disaster offices for the four participating countries. Professional connections within the fields of economics and social development facilitated connections with permanent secretaries and their directors in Ministries of Finance and Planning as well as Ministries of Social Services.

A purposive sampling approach was used to select both organisations and participants for the focus group discussions for this study. The CPDC NGO database and the Civil Society Bahamas (CSB) database were used to identify and select various types of organisations of interest to the CPDC to participate in the study, namely organisations representing farmers, persons with disabilities, women and children and youth at risk.

Participants in the focus groups included those who were not chosen to take part in the country surveys but were on the government's central beneficiary list and the NGO services list (see Section 3.2.3).

3.3 Instrumentation and Dissemination for the Survey

The survey instrument was designed using Kobo Toolbox. The software was selected for its convenience and suitability for collecting, aggregating and managing data for online surveys, as captured from multiple devices. The form's URL was distributed to focal points from each of the nine participating organizations and used to record responses gathered from survey respondents. Once entries were completed and uploaded, they were reviewed for processing and analysis. The survey comprised of closed-ended questions, organised into seven sections based on the objectives of the survey. The sections included: (i) introduction/consent; (ii) socio-demographic and household characteristics; (iii) climate-related disasters experience and knowledge of migration treaties; (iv) disaster preparedness; (v) socio-economic impacts of climate-related disasters; (vi) post-disaster coping strategies, response and recovery; and (vii) advocacy.

3.4 Instrumentation for Key Informant Interviews and Focus Group Discussions

Key informant interview guides were used to facilitate discussions with knowledge experts across ministries and departments of social services and national disaster management offices. In a similar manner, focus group discussions were supported by focus group discussion guides. These instruments were semi-structured in nature to provide opportunities for deeper probing of the issues.

3.5 Data entry, Coding and Analysis

Secondary Component

3.5.1 Social Protection Public Expenditure Analysis

Although several other measures are available to assess the effectiveness and efficiency of social protection expenditure, this study employs two methods to scrutinise the allocation of public expenditure on social protection programmes in the four select countries:

Fiscal Burden Approach: this methodology aggregates all social protection expenditure disbursed in a given year and divides it by the nominal Gross Domestic Product of the same year.

$$\text{Fiscal Burden} = \frac{\sum_i^n \text{Social Programme}_t}{\text{Nominal GDP}_t}$$

Cost Transfer Ratio Approach: is the ratio of the administrative cost to deliver a particular programme to the transfer cost and is the standard methodology used to measure programme efficiency.

$$\text{Cost Transfer Ratio}_i = \frac{\text{Administrative Cost}}{\text{Transfer Amount}}$$



The analysis is also extended to incorporate the comparison of public expenditure across the various types of social programme as well as the vulnerable group cohort types, i.e., poor and vulnerable, persons with disabilities, children, young persons, elderly and indigenous persons where the data is available. Such an analysis provides a snapshot of where governments are concentrating social protection expenditure and gives a sense of whether social protection policies and programmes are aligned with the social risk and vulnerability profile of the country.

Survey Component

3.5.2 Analysis for Country Surveys

Once the completed survey forms were uploaded into Kobo Toolbox, the entries were accessed in real-time by the research team. The data were downloaded into Microsoft Excel and then transferred to the Statistical Package for the Social Sciences (SPSS) software version 28 for further cleaning, processing and analysis. Data were analysed using univariate and bivariate analysis techniques.

Where suitable, variables were transformed for better management of missing values and ease of computations. In addition, the reverse coding technique was applied, particularly to compute the mean level of preparation score, which sought to assess the experience and level of preparedness of beneficiaries in the period leading up to climate-related disasters during the period 2010-2020. Respondents were asked to indicate their level of agreement, on a scale of 1 to 4, with statements indicating whether or not they were well-positioned or prepared prior to the disaster, where 1 was 'strongly disagree', 2 was 'disagree', 3 was 'agree' and 4 was 'strongly agree'. A 'not applicable' option was included in the response categories; however, when this was selected, it was excluded from the mean score calculation. Before calculating the mean level of preparation score, reverse coding was applied to selected statements, to ensure that across all statements,

higher values reflected a greater level of preparation in the period leading up to the disaster.

Qualitative Component

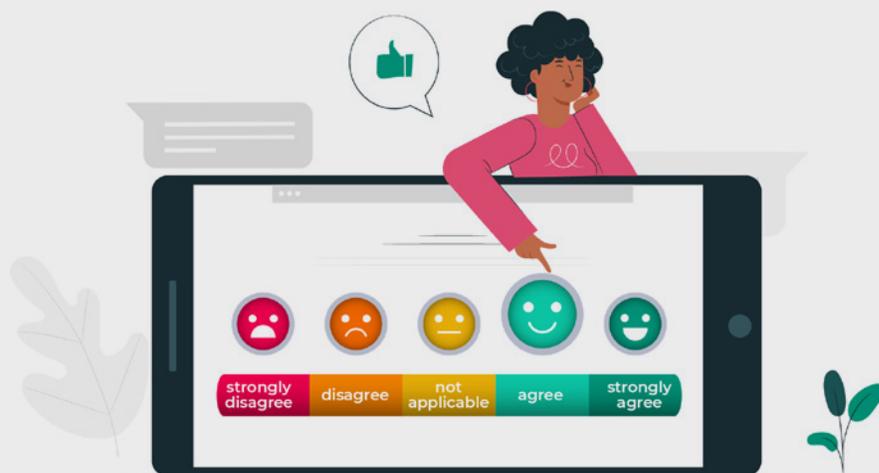
3.5.3 Analysis for FGDs and Key Informant Interviews

Recordings and notes generated from key informant interviews and focus group discussions were organised into categories and sub-themes aligned with the objectives of the study. Opportunities to incorporate some participatory approaches such as strengths, weakness, opportunities and threats (SWOT) analysis and generate maps to discuss localised vulnerability in the context of climate-related events enhanced the quality of beneficiary participation and allowed for local expertise in informing recommendations. There was an incorporation of gender analysis in exploring the impacts of climate-related events and COVID-19 on men and women. Where appropriate, the findings from the qualitative aspects of the study were presented as support to secondary data analysis and surveys. There are instances when qualitative findings are presented independently, though connected to other aspects of the study.

3.6 Ethical Considerations

All research requires adherence to ethical considerations to minimise harmful effects to participants. No harm was experienced by participants in this research, and participation was voluntary. An informed consent sheet was made available to all beneficiaries for their awareness and involvement in the survey and focus group discussions. During all six focus group discussions, participants were informed of their rights and assured of anonymity of personal identity, confidential use of information, and avoidance of falsification of data. Each person was required to give verbal consent before the commencement of any aspect of data collection-survey, focus group discussion and key informant interview.

Respondents were asked to indicate their level of agreement, on a scale of 1 to 4, with statements indicating whether or not they were well-positioned or prepared prior to the disaster, where 1 was 'strongly disagree', 2 was 'disagree', 3 was 'agree' and 4 was 'strongly agree'. A 'not applicable' option was included in the response categories.



3.7 Limitations

The study had anticipated accessing the central beneficiary lists from all four participating countries. However, the Ministry of Labour and Social Security (MLSS) in Jamaica was unavailable to participate in the study. The MLSS is the custodian of the Programme of Advancement through Health and Education (PATH) programme. To ensure the inclusion of social protection coverage for Jamaica, the Ministry of Local Government and Rural Development, which offers the poor relief services, was approached to participate in the study. The poor relief services engage the most vulnerable and destitute population in Jamaica. Policy and budget documentation for review as well as the sample frame for survey were developed from the poor relief programme managed by the Board of Supervision, an agency of the Ministry of Local Government and Rural Development. Limitations specific to each data collection method were:

Secondary Data Component

- It should be noted that in this study, the assessment of public expenditure on social protection programmes, as a result of lack of data, excludes universal subsidies on food and fuel, which is significant and can in some instances outweigh the overall cost of direct social protection programmes. Importantly, though, such universal subsidies are usually regressive in nature.
- There is no new poverty data in the region that reflects the effects of major events such as hurricanes, storms and the COVID-19 pandemic. Household surveys and Country Poverty Assessment data for the Caribbean region are outdated. These data were referenced in several current reports describing the landscape of the region.
- Regional websites and libraries of national statistics departments were consulted for recent national population data. However, disaggregated population data for current periods of 2020 and above were for the most part non-existent due to budget cuts and reduction, financial issues and the surge in COVID-19 cases which resulted in the postponement of census taking in the CARICOM region. Additional details on constraints and plans to undertake future national censuses can be obtained from the report *Overview of Population*

and Housing Censuses in the Caribbean Countries.¹³

Survey Component

- The survey instrument was somewhat lengthy and there was a risk of survey fatigue. Notwithstanding, enumerators were able to manage the interviews and the data from the survey is not indicative of an extensive occurrence of item non-response.
- There was concern at the outset that familiarity of the beneficiaries with enumerators, some of whom were employed by participating organisations, would negatively impact on the authenticity of survey responses. However, feedback from the focal points suggests the contrary, where because of the trust that was already established, responses were more forthcoming than if the enumerator was a stranger.
- In implementing a virtually conducted multi-country study, it was not possible for the research team to provide very close monitoring of the fieldwork processes and ensure strict adherence to the survey and sampling protocols as would normally pertain in an 'in-person/in-country' study. The study team developed a WhatsApp group comprised of focal points from participating entities in order to accommodate queries and concerns that may arise in the field, as well as to ensure a shared understanding and standardised approach to the treatment of issues which were encountered during the course of the fieldwork.
- Given the vulnerabilities of the target population, including persons living with disabilities, some beneficiaries may have been unable or limited in their ability to participate fully in the study, once selected. In such instances, caregivers who were intimate with the selected beneficiary's experience were permitted to respond to the questions on behalf of the beneficiary. However, this meant that in some instances, information on selected questions was not forthcoming if it was not known by the persons responding on the beneficiaries' behalf. Notwithstanding, reports of these instances were minimal and it is not expected that they adversely affected the findings of the study.

13 CARICOM Secretariat (2021), https://www.cepal.org/sites/default/files/presentations/overview_-_population-_housing-censuses-caribbean-caricom-23-nov2021.pdf



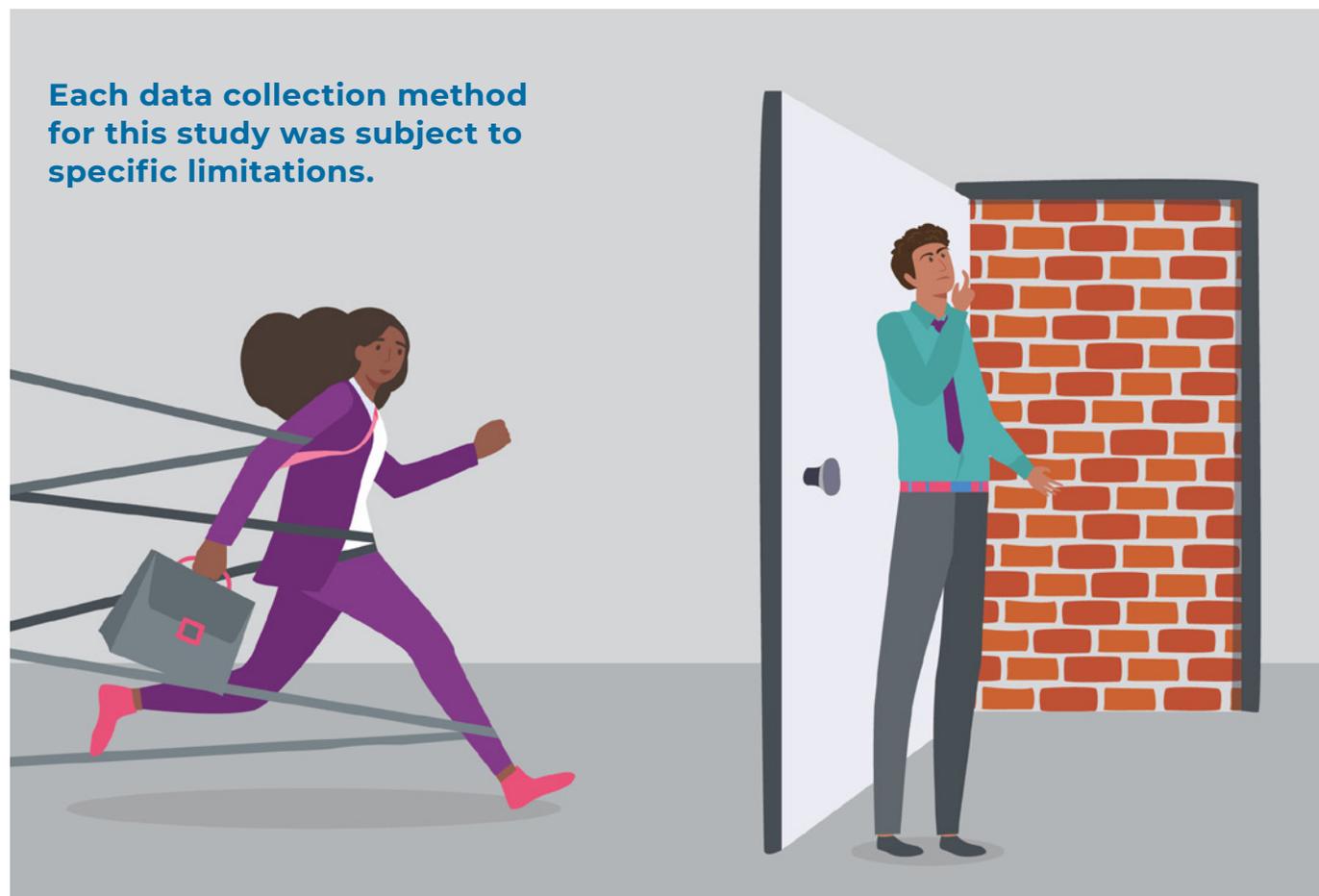
- There is an emergent view where carers attending to persons with disabilities are also regarded as persons with disabilities. This is an interesting perspective and may influence the definition of persons with disabilities in future studies.
- In some instances, enumerators were staff of the participating entities and were also managing competing responsibilities. As such, the administrative forms which were designed to support the reconciliation process were not always completed or in some instances, were not properly filled out. This presented a challenge during the reconciliation phase post-fieldwork and impacted on the timeliness for data processing and analysis.

Qualitative Component

- The several focus group discussions did not include the gender balance required. Notwithstanding, this does not compromise the trustworthiness of the findings and the desired outcome to mainstream gender throughout the study as other

data collection methods would have helped to narrow gaps.

- Poor internet services/low internet bandwidth affected the quality of participation for some focus group discussions. Participants who opted to participate remotely, instead of travelling to government ministries to access the internet, were unsuccessful in their attempts to complete the full discussion. The moderator was required to prioritise main topics and limit the time of probing in some instances to ensure optimal involvement.
- The requirement of participants to share experiences of climate-related events (hurricanes, floods and droughts) and COVID-19 brought back memories of loss and suffering, which some had thought they had forgotten. The recall of these events brought back unpleasant sentiments that required the moderator to be sensitive about the participants' needs for pause and reflection. Future discussions of this nature may require counselling services to whom participants may be referred.



Each data collection method for this study was subject to specific limitations.

SOCIO-ECONOMIC AND SOCIAL PROTECTION ASSESSMENT

Chapter 4



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4.0 Overview

This section seeks to provide an overview of the socio-economic environment to provide insights into current economic and social trends and development challenges faced by vulnerable groups in Antigua and Barbuda, The Bahamas, Dominica and Jamaica. This macroeconomic perspective is critical as it further exposes the compounded effects of climate-related events and pandemics on vulnerable groups, which is addressed in greater depth in Chapter 5.

This chapter is divided into two sections. The first section provides an assessment of key social and economic indicators, namely: (a) population demographics, (b) poverty and inequality, (c) unemployment rates, (d) economic development, and (e) inflation. The country economic indicator profiles are sequenced in the order of Antigua and Barbuda, Dominica, The Bahamas and Jamaica. The second section gives insight into the social protection framework in each country and provides an assessment of trends in social protection expenditure.

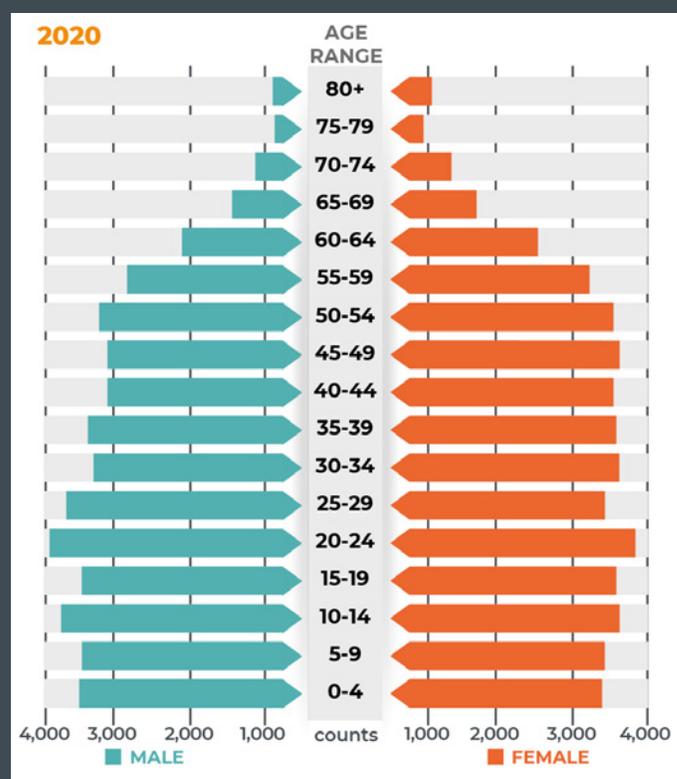
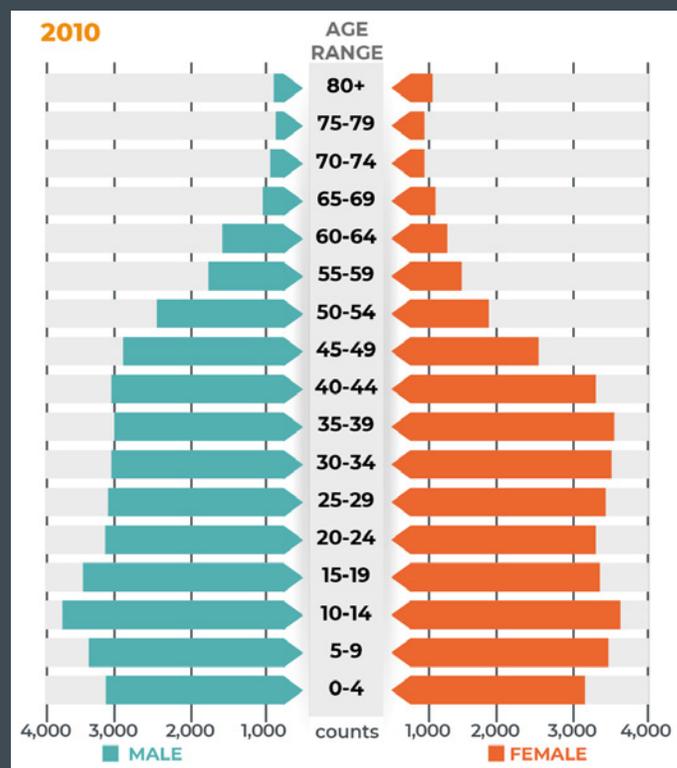
4.1 Country Level Socio-Economic Assessment - Antigua and Barbuda

4.1.1 Population Demographics for Antigua and Barbuda

According to population estimates,¹⁴ the total population of Antigua and Barbuda grew by 15.7%, from 83,622 people in 2010 to 97,895 in 2020. The gender distribution was relatively constant over the period, with females accounting for a marginally higher percentage of the population at 52% and males at 48%. The population pyramid for Antigua and Barbuda (see Figure 4.1.1a) suggests an ageing population. As of 2020, children (0-14 years) comprised an estimated 21.4% of the population, while youth (15-24 years) constituted 15.2%. This represents a decline in the proportion of these two groupings compared to 2010, coinciding with a fall in the birth rate from 14.7 births (per 1000 people) in 2010 to 11.9 births in 2020.



Figure 4.1.1a: Age-sex population distribution, Antigua and Barbuda (2010 and 2020)



Data Source: Antigua and Barbuda Statistics Division - Annual Population Projections

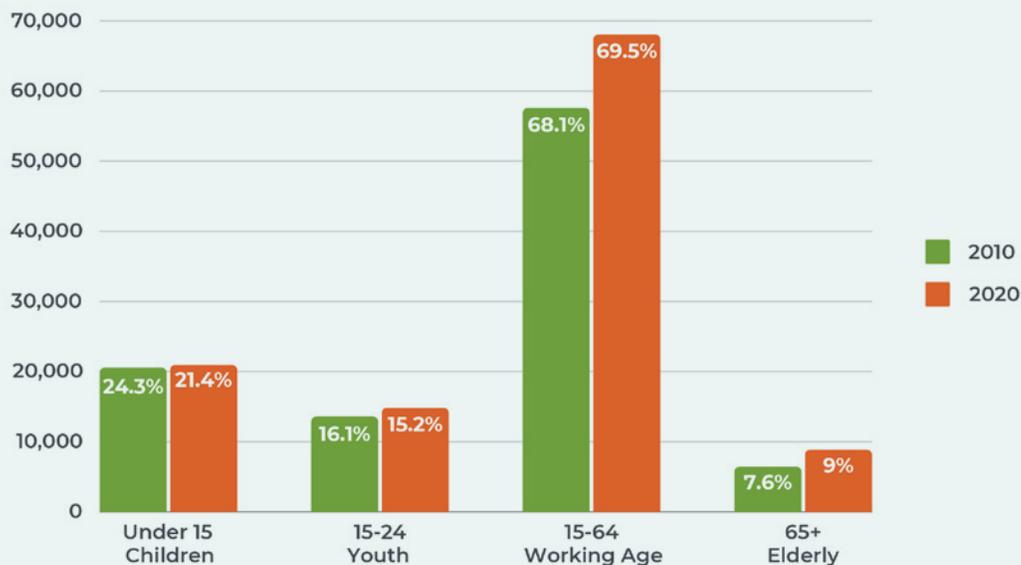
14 Data Source: <https://statistics.gov.ag/subjects/population-and-demography/population-projections-by-age-group-annual-1991-2026/>



The working age population accounted for the largest percentage of the population at 70% (68,084) (see Figure 4.1.1b). On the lower end of the distribution were the elderly (65+ years), representing 9% (8,858) of the population. Notwithstanding, the population of the elderly has been

increasing as life expectancy rose from 76.5 years in 2010 to 78.5 years in 2020. Moreover, the death rate remained relatively constant and averaged 5.9 deaths during the review period.

Figure 4.1.1b: Population distribution by major age categories, Antigua and Barbuda (2010 and 2020)

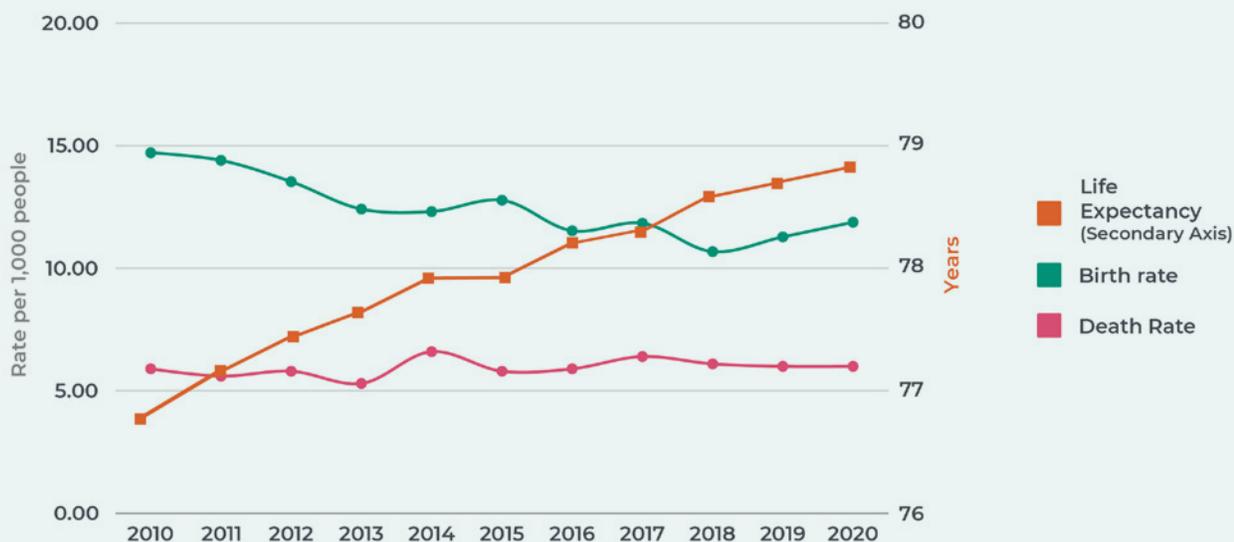


Data Source: Antigua and Barbuda Statistics Division - Annual Population Projections

The dependency ratio, which measures the ratio of dependents (children and elderly) to the total working-age population, was 43.8% as of 2020 compared to 46.8% in 2010. The decline in the dependency ratio was driven by the

decrease in the percentage of children coupled with an increase in the working age population. However, this ratio is projected to increase in the long-term if the current demographic trend continues.

Figure 4.1.1c: Birth rates, death rates and life expectancy



Data Source: Antigua and Barbuda Statistics Division



4.1.2 Poverty and Inequality

The Country Poverty Assessment (2005/2006) estimated the poverty headcount index for Antigua at 18.3%, meaning that the household per capita expenditure of 15,485 individuals fell below the poverty line¹⁵; 52.8% female and 47.2% male. Of the poor, 3.7% of individuals were classified as severely poor or indigent as their household per capita consumption expenditure fell below the indigence line¹⁶ (see Table 4.1.2). Furthermore, an estimated 5.5% of individuals reported no access to safe water while 20.8% dwelled in poor-quality housing. The assessment also revealed that 36.2% of the poor and 32.5% of the indigent population were children below the age of 15 years. St. John's city and St. John's rural had the highest poverty levels at 38.6% and 27.3%, respectively.

Of the non-poor population, an estimated 7.2% of households and 10% of individuals were deemed vulnerable¹⁷, meaning that they were at risk of falling into poverty in the event of a natural disaster or economic shock. Since the last poverty assessment, the country has undergone several shocks, including but not limited to the global financial crisis and the ensuing recession during the period 2008-2011, Hurricane Earl (2010), Hurricane Irma (2017), and the COVID-19 pandemic in 2020, and as such poverty is expected to have risen well above those estimates. USAID/UNICEF (2020) projected the severe poverty rate in Antigua and Barbuda at 24% in the total population and 29% for children.

Table 4.1.2: Poverty Estimates 2005/2006, Antigua and Barbuda

Households		
Poor	4,187	13.4
Indigent	970	3.1
Poor but not indigent	3,217	10.3
Non-Poor	26,939	86.5
Vulnerable	2,252	7.2
Non-Vulnerable	24,687	79.3
Total	31,126	100
Individuals		
Poor	15,485	18.3
Indigent	3,144	3.7
Poor but not indigent	12,341	14.6
Non-Poor	68,849	81.7
Vulnerable	8,414	10
Non-Vulnerable	60,435	71.7
Total	84,334	100

Data Source: 2005/2006 Country Poverty Assessment

The assessment also revealed that **36.2%** of the poor and **32.5%** of the indigent population were **children below the age of 15 years.**



¹⁵ The poverty line is a measure of the minimum consumption (in dollar terms) of the goods and services required for a household to meet its basic needs based on the standard of the society in which they live. This line was set at EC\$6,318 (US\$2,366) per annum in Antigua as at 2005/2006.

¹⁶ The indigence line based on (2005/2006 prices) was set at EC\$2,449 (US\$917) per annum or EC\$6.71 (US\$2.51) per day.

¹⁷ The vulnerability line is set 25 percent above the poverty line.



The Gini coefficient, which is a measure of inequality, was estimated at 0.48 in 2005/2006, which is considered relatively high¹⁸. The data revealed that while the richest 10% of the population were responsible for 39.8% of the consumption, the poorest 10% of the population accounted for only 1.5% of the consumption.

4.1.3 Unemployment

In 2018, the labour force in Antigua and Barbuda stood at 51,931¹⁹ persons (see Table 4.1.3), which reflects an increase of 7% since 2015. The gender distribution remained relatively the same in 2018 as 2015, with males representing about 47% of the labour force and females representing 53%.

However, the participation rate was higher for males at 76.1%, compared to 68.9% for females, for an overall participation rate of 72.1% for the population. In 2018, the unemployment rate declined to 8.7% from the previous estimate of 13.8% in 2015. The rate of unemployment was higher among women at 9.9% compared to men at 7.3%. In 2018, the tourism sector was the largest employer, contributing to 17.4% of all employment. Therefore, growth in this sector generates higher employment and thus lower unemployment levels. The public sector is the next largest employer, contributing 15.9% of employment in the economy. The fishing and agriculture sectors generated the lowest rates of employment, accounting for 0.4% and 1.8%, respectively.

Table 4.1.3: Labour force indicators (2018), Antigua and Barbuda

Indicators	Gender		Total
	Male	Female	
Labour Force	24,525	27,406	71,993
Unemployed	1797	2705	4502
Youth Unemployment (15-24)	-	-	1765
Participation Rate (%)	76.1	68.9	72.1
Unemployment Rate (%)	7.3	9.9	8.7
Youth Unemployment (15-24) (%)	-	-	25.7

Data Source: 2015 Labour Force Survey



The public sector is the next largest employer, contributing **15.9%** of employment in the economy. The fishing and agriculture sectors generated the lowest rates of employment, accounting for **0.4%** and **1.8%**, respectively.

18 The closer the Gini coefficient is to unity or 1, the higher is the inequality, and the closer it is to zero, the lower the inequality. According to available data from the World Bank (World Development Indicators) as of 2020, Colombia had the highest Gini coefficient at 0.54 and Slovenia the lowest at 0.24.

19 Data Source: <https://statistics.gov.ag/subjects/labour/labour-force-characteristics/>

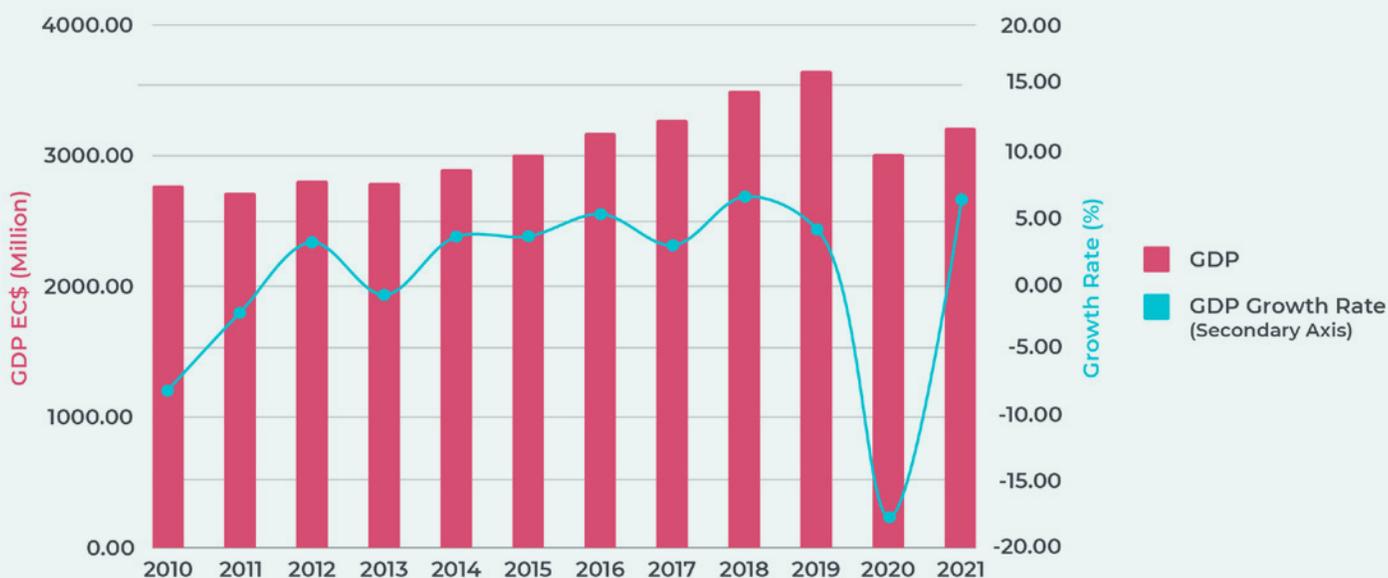
4.1.4 Economic Development

The economy experienced four (4) consecutive years of recession (2008-2011), precipitated by the 2008 financial crisis and global recession. There was a recovery of 3.4% in 2012, followed by another contraction of 0.6% in 2013 (see **Figure 4.1.4a**). Nonetheless, the economy grew steadily at an average rate of 4.6% during the period 2014-2019 before experiencing a sharp contraction of output by 17.4% in 2020 due to the COVID-19 pandemic. Overall, the economy

grew by an average of 0.2% during the period 2010-2020.

Accordingly, GDP per capita²⁰ which measures the standard of living of the population stood at \$18,939 in 2010 and rose steadily to \$22,000 in 2019. However, GDP per capita plunged to \$17,299.22 in 2020, below 2010 levels. While the economy has been in recovery, the level of output remains below 2019 levels.

Figure 4.1.4a: Economic activity measured by GDP (in constant prices), Antigua and Barbuda



Data Source: Eastern Caribbean Central Bank (ECCB)

The economy is driven by tourism and service-related activity. Tourism accounted for 15% of economic activity in 2019 before dropping to 8.5% in 2020. Real estate, construction, wholesale and retail sectors were the next largest contributors to economic activity, accounting for 14.5%, 13.3% and

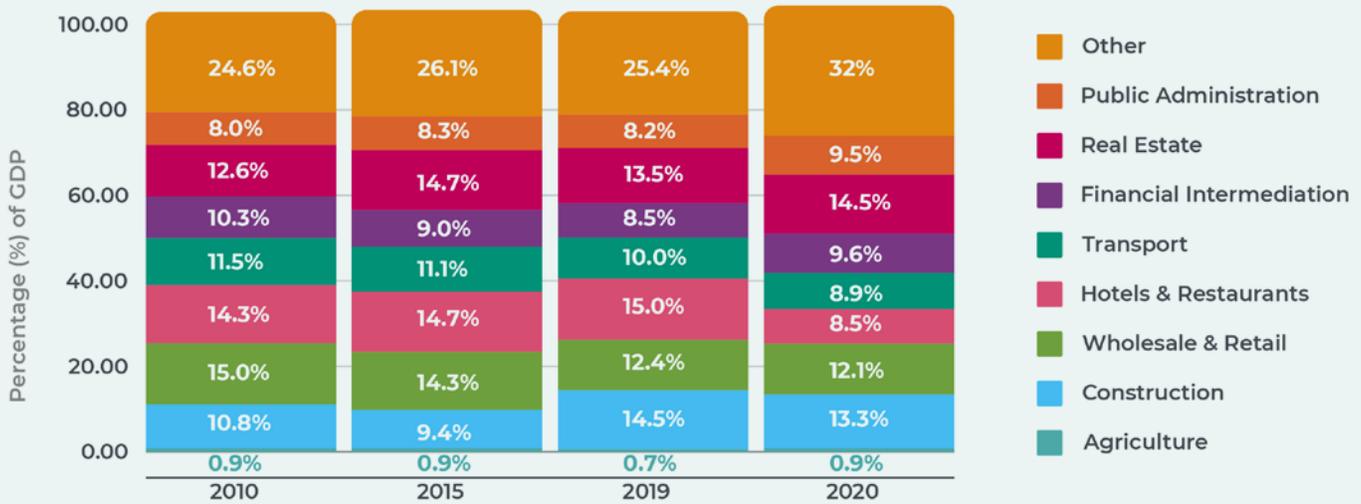
12.4%, respectively. As such, movements in these sectors highly influenced the outturn of GDP in any particular year. Agriculture makes up less than 1% of economic activity in Antigua and Barbuda (see Figure 4.1.4b).

The economy is driven by **tourism and service-related activity**. **Tourism accounted for 15% of economic activity in 2019** before dropping to **8.5% in 2020**.



²⁰ Purchasing power parity (2017 international dollar) to allow comparison across the countries despite exchange rate differences.

Figure 4.1.4b: Economic sector contribution to GDP (%), Antigua and Barbuda



Data Source: Eastern Caribbean Central Bank (ECCB)

4.1.5 Inflation

Inflation, as measured by changes in the consumer price index²¹ (CPI), averaged a rate of 1.78% over the review period (2010-2020). As a member of the Eastern Caribbean Currency Union (ECCU), inflation in Antigua and Barbuda is relatively low. There were marked increases in prices, resulting in average inflation rates of about 3.4% during the period 2010-2012 owing to increases in international oil and food prices (see Figure 4.1.5). Notwithstanding a jump

in prices in 2017, prices had been on a decreasing trend, averaging about 1% until 2020. However, prices spiked in the ensuing years, reflecting supply shortages and increases in transportation costs caused by the pandemic. The inflation rate was 7.5% in 2022, driven by increases in the prices of transportation (23.5%), clothing and footwear (13%), food and beverages (11.6%), and household furnishings and supplies (11.5%).

Figure 4.1.5: Inflation rate (%), Antigua and Barbuda



Data Source: Eastern Caribbean Central Bank (ECCB)

21 The Consumer Price Index in Antigua was rebased in 2019, causing a break in the series. Data from 2010 to 2017 is based on 2001 prices, while data from 2019 to 2020 is based on 2019 prices.



4.2 Country Level Socio-Economic Assessment - The Bahamas

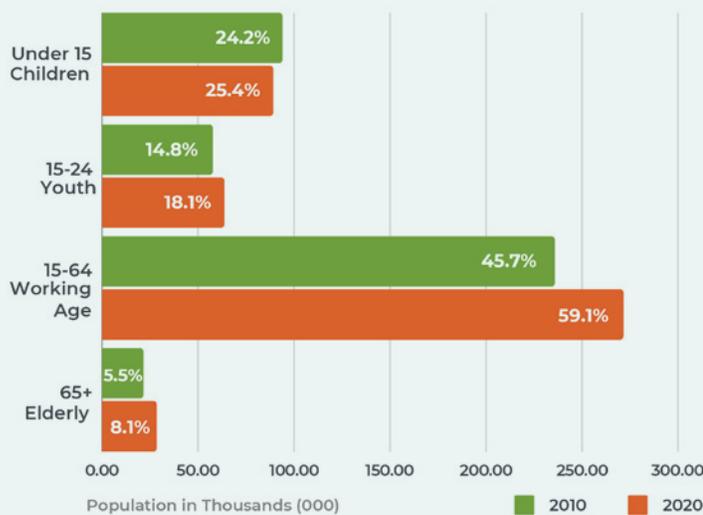
4.2.1 Population Demographics for The Bahamas

According to the population projections²², the mid-year population for The Bahamas grew by 10.8%, from 351,500 people in 2010 to 389,410 in 2020. The gender distribution was relatively constant, with females accounting for a marginally higher percentage of the population at 51.6% and males at 48.4%. The population pyramid (see Figure 4.2.1a) displays the age and gender distribution of the population for 2020. The Bahamas' birth rate has been declining over time, from 14.4 births (per 1000 people) in 2010 to 9.6 births in 2017. However, the death rate has risen, from 5.8 deaths (per 1000 people) in 2010 to 6.3 deaths in 2017.

The proportion of all major age groupings increased in 2020 compared to 2010 (see Figure 4.2.1b). In 2020, children (under 15 years) represented 25.4% of the population, youth (15-24 years) 18.1%, and the elderly (65+) 8.1%. With the working age population accounting for 59.1% of the population, the dependency ratio for The Bahamas was 56.7%. This represented an improvement from 65% in 2010. However, this ratio is projected to increase in the near term with a declining birth rate coupled with increasing life expectancy.

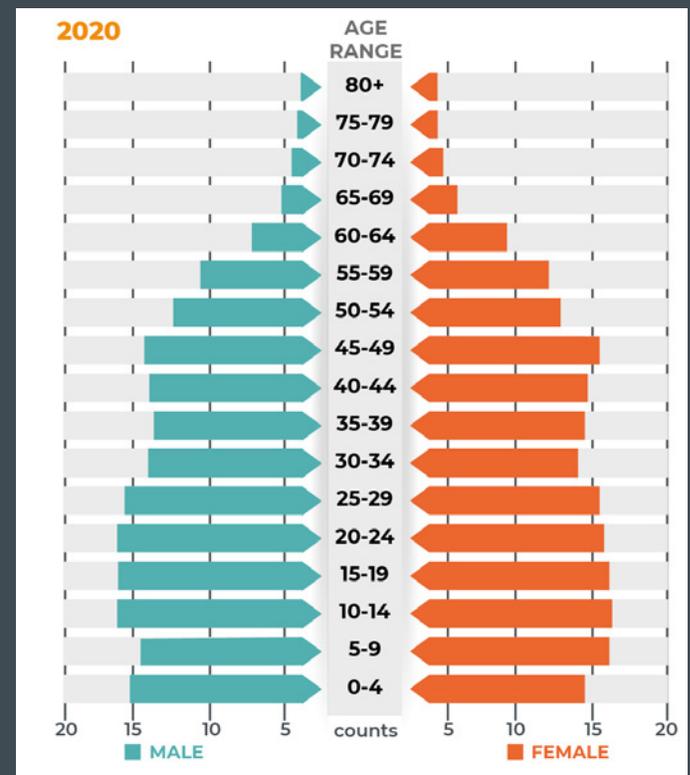
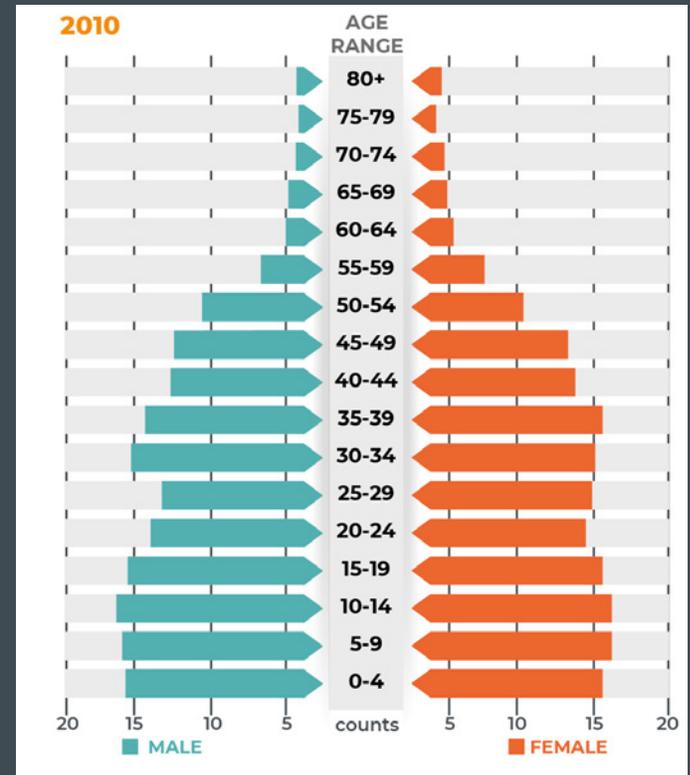
According to the 2010 census, the island with the largest population was New Providence, with 70.1% of the population, followed by Grand Bahama with 14.6%.

Figure 4.2.1b: Population distribution by major age categories, The Bahamas



Data Source: Department of Statistics - Population Projections 2010-2040

Figure 4.2.1a: Age-sex population distribution, The Bahamas (2010 and 2020)



Data Source: Department of Statistics - Population Projections 2010-2040

22 Reported population projections are for the medium scenario, which has been deemed more probable by the Department of Statistics.

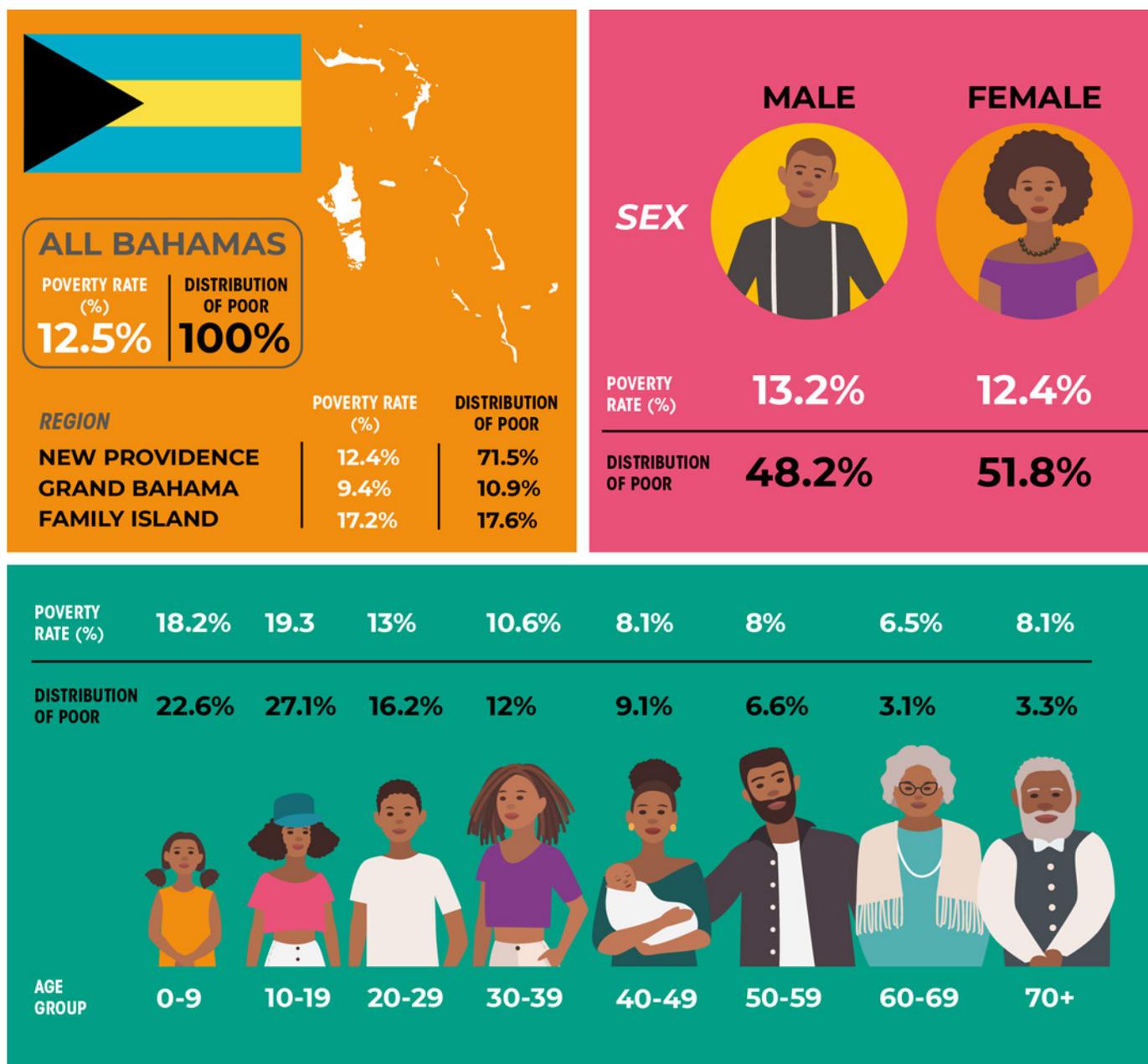


4.2.2 Poverty and Inequality

The Household Expenditure Survey Report (2013) estimated the national poverty rate at 12.5% in 2013, up from 9.3% in 2001. Differences in the incidence of poverty were observed across regions, sex and age groups. At the regional level, Family Island registered the highest rate of poverty at 17.2%, while Grand Bahama had the lowest at 9.4%. In New Providence, the poverty rate was about the same as the national average at 12.4%, however, this region had the largest population of the poor, with a distribution of 71.5%.

With regard to gender, while the incidence of poverty was lower among women (12.4%) than men (13.2%), women accounted for a greater proportion of the poor (51.8%). Furthermore, the poverty rate was the highest among children ages 10 to 19 (19.3%) and 0 to 9 years (18.2%). These groups also accounted for the largest share of the poor. However, the poverty rate fell below that of the national rate for the age groups 30 and above, with the lowest incidence of poverty among adults ages 60 to 64 (6.5%).

Table 4.2.2: Poverty indicators by region, age and sex – The Bahamas



Data Source: Household Expenditure Survey Report (2013)



4.2.3 Unemployment

The Labour Force and Household Income Survey (2019)²³ revealed that The Bahamas labour force has been rising steadily and was estimated at 237,525 people as of May 2019. The participation rate has also been on an increasing trend, from 76.9% in 2016 to 82.9% in 2019 (see Table 4.2.3b). The

percentage of males in the labour force was higher at 52%. There is a gender difference in the labour force participation rates, with participation rates of 85.9% for males and 76.8% for females (see Table 4.2.3a).

Table 4.2.3a: Labour force indicators (May 2019), The Bahamas

Labour force indicators	Male	Female	Total
N/A	123,565	113,960	237,525
Participation Rate (%)	85.9	76.8	82.9
Unemployment Rate (%)	9.2	9.9	9.5
Youth Unemployment (15-24) (%)	19.5	20.7	20

The unemployment rate has been trending downwards and was estimated at 9.5% as of May 2019. The youth unemployment rate also improved compared to the previous period. Nonetheless, it was more than double that of the national rate at 20% (see Table 4.2.3b). The unemployment

rate including the youth unemployment was marginally higher for women than men. The community, social and personal services industry had the highest employment rate at 35%, followed by the tourism industry at 18%.

Table 4.2.3b: Labour force indicators (2016-2019), The Bahamas

Labour force indicators	May 2016	May 2017	May 2018	May 2019
N/A	215,880	222,035	231,445	237,525
Participation Rate (%)	76.9	80	82.5	82.9
Unemployment Rate (%)	12.7	9.9	10	9.5
Youth Unemployment (15-24) (%)	25.8	20	24.1	20

4.2.4 Economic Development

The economy of The Bahamas experienced several years of GDP growth, averaging 1.1% during the period 2010-2019. The highest growth rate during this period was 3.1% in 2012 and the lowest was a contraction of 2.9% in 2016 (see Figure

4.2.4a). However, economic activity declined sharply by an estimated 23.8% in 2020 due to the pandemic. While there has been recovery in 2021, with GDP growth of 13.7%, economic output remains below the 2019 level.

²³ The latest available data was for May 2019; therefore, this month was used as the reference point for comparison.



Figure 4.2.4a: Gross Domestic Product (in constant prices), The Bahamas

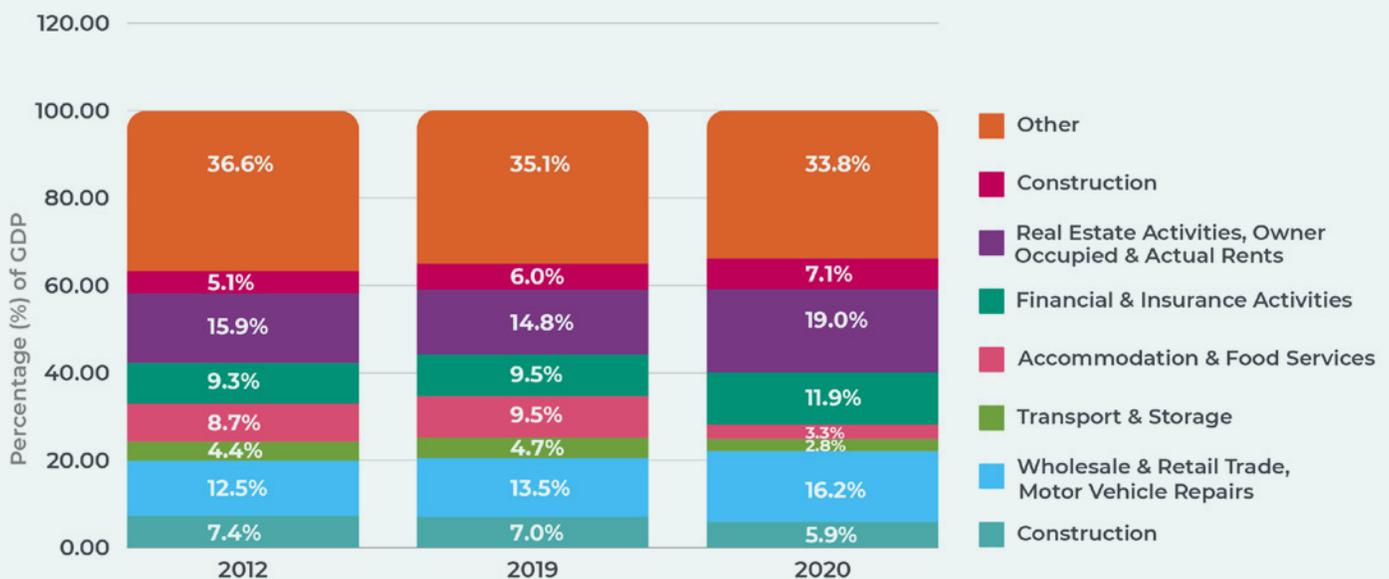


Data Source: Department of Statistics

The economy is driven by service-related activity. Real estate, wholesale and retail, financial services and tourism are the largest contributors to GDP. Therefore, movements in these sectors highly influenced the outturn of GDP in any particular year. The contribution of these sectors to economic activity

has increased over time (see Figure 4.2.4b). However, tourism activity was greatly impacted by the travel restrictions during the pandemic, causing its contribution to GDP to decrease from 9.5% in 2019 to 4.8% in 2020.

Figure 4.2.4b: Economic sector contribution to GDP (%), The Bahamas



Data Source: Department of Statistics



Moreover, the country is highly exposed to natural hazards and was impacted by seven (7) hurricanes and storms during the review period. The hazards with the greatest impacts were Hurricanes Dorian (2019), Maria (2016) and Joaquin (2015), which caused damages estimated²⁴ at US\$3.9 billion, at US\$0.73 billion and at US\$0.11 billion, respectively. Notwithstanding, The Bahamas has one of the highest standards of living in the Caribbean. GDP per capita²⁵ stood at \$37,583 in 2010 and averaged \$37,083 during the period 2010-2019; however, in 2020, GDP per capita dropped below 2010 levels to \$28,146.

4.2.5 Inflation

Inflation²⁶ in The Bahamas has been relatively low and averaged a rate of 1.4% over the review period (2010-2020) (see Figure 4.2.5). This ranged from a high of 3.2% in 2011 to deflation of 0.3% in 2016. While inflation remained at about 0% in 2020, prices spiked thereafter, raising inflation to 6.7% in 2022. The increase in prices was driven by global supply chain disruptions and increases in transportation costs caused by the pandemic, coupled with rising commodity and fuel prices due to geopolitical tensions caused by Russia's war in Ukraine.

Figure 4.2.5: Inflation rate, The Bahamas



Data Source: Department of Statistics

While inflation remained at about 0% in 2020, prices spiked thereafter, raising inflation to 6.7% in 2022. The increase in prices was driven by global supply chain disruptions and increases in transportation costs caused by the pandemic, coupled with rising commodity and fuel prices due to geopolitical tensions caused by Russia's war in Ukraine.



24 Data Source: EM-DAT - The International Disasters Database.

25 Purchasing power parity (2017 international dollar) to allow comparison across the countries despite exchange rate differences.

26 Inflation is measured by the annual average change in the CPI.

4.3 Country Level Socio-Economic Assessment - Dominica

4.3.1 Population Demographics for Dominica

The total population of Dominica grew by 3.8%, from 70,712 people in 2010 to 74,289 in 2020²⁷. Males represented 51.1% of the population and females, 48.9%. The population pyramid (see Figure 4.3.1a) displays the age and gender distribution of the population using the latest available data from the 2011 census. The shape of the pyramid²⁸ indicates an ageing population with low birth rates. According to the 2011 census, the largest share of the population (30%) resided in St. George, with 21% of this total living in Roseau, the capital city.

In 2011, children (under 15 years) represented 23.1% of the population, youth (15-24 years) represented 17% and the elderly (65+) 11.5%. The working age population accounts for 65.3% of the population. The dependency ratio for Dominica was 53% (see Figure 4.3.1b). This ratio is projected to increase over time due to a declining birth rate coupled with a high life expectancy of 77 years²⁹.

Figure 4.3.1a: Age-sex distribution, Dominica (2001 and 2011)

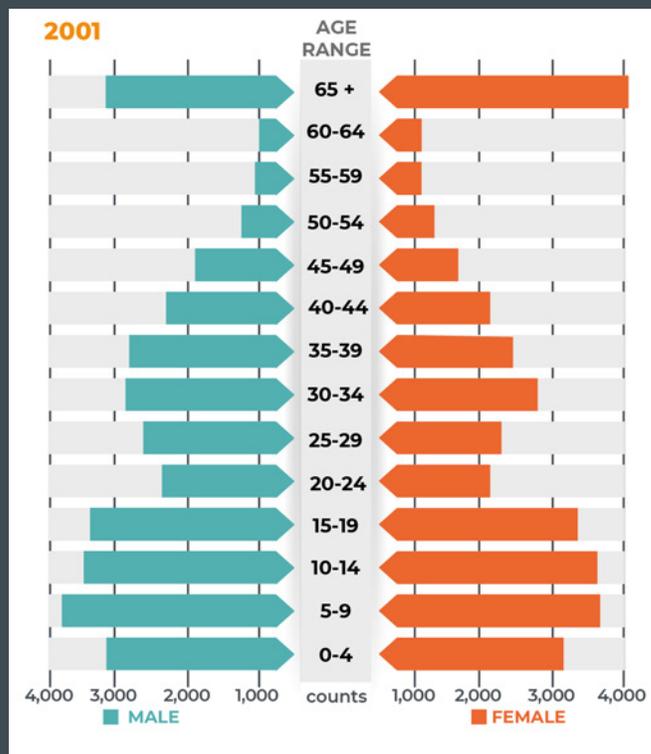
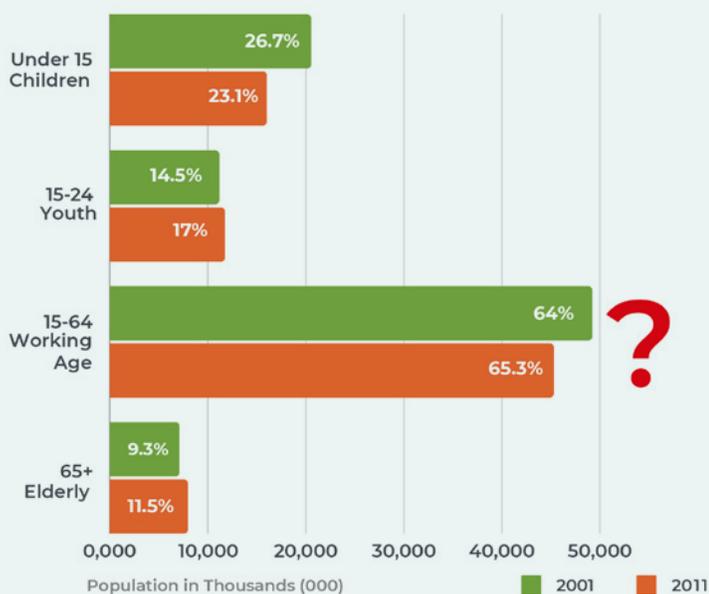
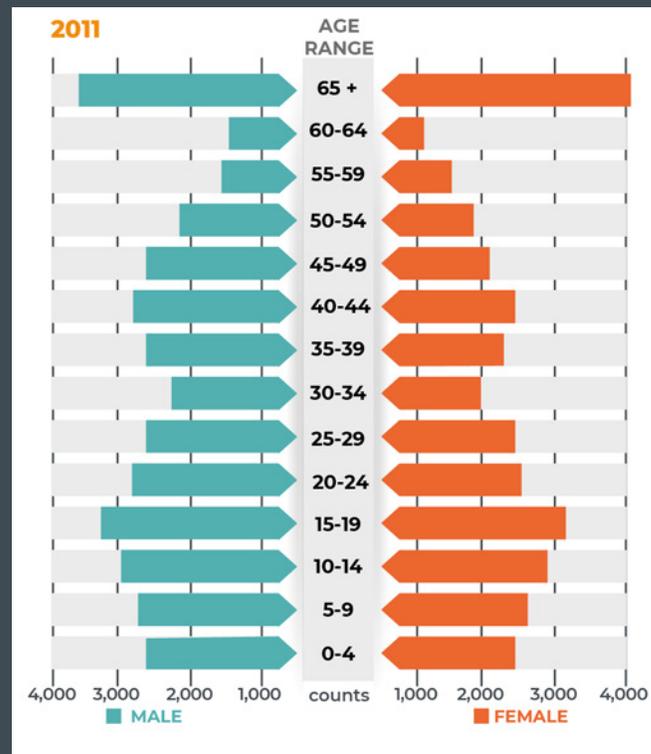


Figure 4.3.1b: Population distribution by major age categories (2001 & 2011)



Data Source: 2001 and 2011 Population and Housing Census



Data Source: 2011 Population and Housing Census

27 Data Source: ECCB Population Estimates <https://www.eccb-centralbank.org/statistics/>

28 The population pyramid displayed only up to the 60-64 age band because data on the disaggregated 5-year age bands were not available past age 65.

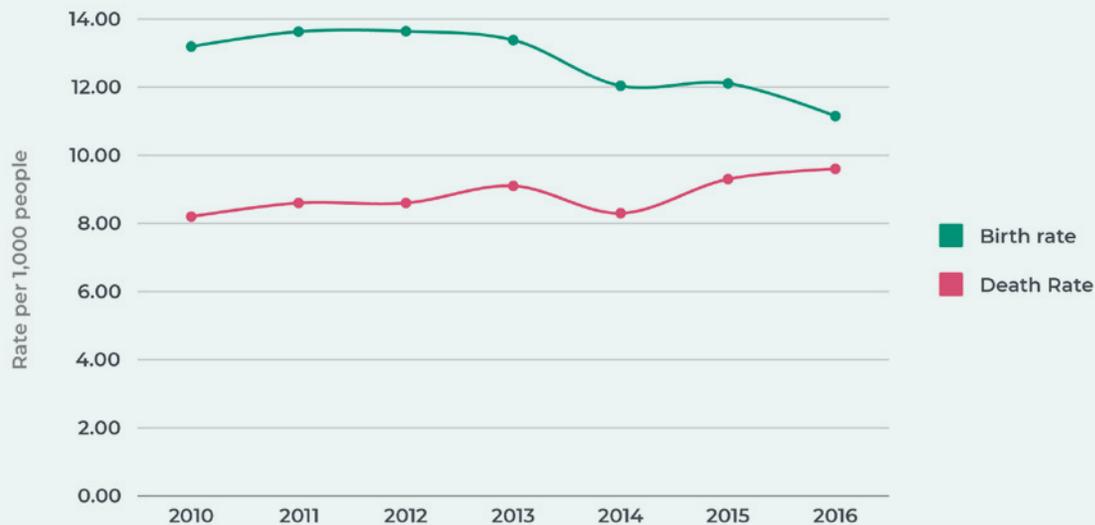
29 Data Source: World Bank. Life expectancy was 77 years in 2002 and is expected to have increased over the last 20 years.



The birth rate for Dominica has been declining over time from 13.2 births per 1000 people in 2010 to 11.2 births in 2016. **However, the death rate rose** from 8.2 deaths (per 1000 people) in 2010 to 9.6 deaths in 2016.



Figure 4.3.1c: Birth and death rates, Dominica



Data Source: Central Statistics Office

4.3.2 Poverty and Inequality

The Country Poverty Assessment (2008/2009) for Dominica estimated the poverty rate at 28.8% in 2009, down from 39% in 2003. This indicated that 20,759 individuals fell below the minimum annual per capita consumption expenditure as defined by the poverty line. The poverty rate across genders was about the same at 28.8% for males and 28.9% for females. The Kalinago population was highlighted as one of the most vulnerable groups, with a poverty rate of 49.8%. Children (0-14 years) were also disproportionately represented among the poor at a poverty rate of 34.7%. The poverty rate among the youth (15-24 years) was 16.4%, bringing the cumulative proportion of children and young people to 52.1% of the total impoverished population. The poverty rate among

the elderly was comparatively low, at 9.8%. The burden of poverty also varied across parishes. The two poorest parishes were St. Joseph and St. Patrick where 47.2% and 42.7% of the poor resided, respectively. The parish with the lowest poverty rate was St. John at 10.2%.

Of the poor, 3.1% were classified as indigent, meaning that the per capita consumption expenditure fell below the indigent line. This was an improvement over 2003 where the indigence rate was 10%. However, 11.5% of the population are vulnerable or at risk of falling into poverty if the country experiences any adverse shocks.



Table: 4.3.2: Poverty indicators, Dominica (2009)

Indicator of Vulnerability	ECD (2009)	Percentage (%) of Population falling below lines	Total
Indigence Line (Annual)	2,435	3.1	237,525
Poverty Line (Annual)	6,230	28.8	82.9
Vulnerability Line (Annual)	7,788	11.5	9.5

Data Source: Country Poverty Assessment (2008/2009)

The Gini coefficient, which measures inequality, was estimated at 0.44% in 2009, which is considered high. According to the assessment, the richest 10% of the population accounted for 37.2% of the consumption while the poorest 10% account for only 2% of the consumption.

4.3.3 Unemployment

The 2011 census estimated the labour force at 31,222 people (see Table 4.3.3). The representation of males in the labour force was notably higher at 58.7% compared to females who accounted for 41%. Accordingly, this

gender divide was also reflected in the participation rates. The unemployment rate was estimated at 11.1% in 2011. However, the unemployment rate was higher among men (12%) than women (9.9%). The data also revealed a high youth unemployment rate of 27%.

In 2011, the wholesale and retail trade sector had the highest employment rate at 20.5%, followed by the education sector at 12.4%. The sectors with the lowest employment rates were the real estate sector (0.12%) and the mining and quarrying sector (0.22%).

Table 4.3.3: Labour market indicators, Dominica (2011)

Labour market indicators	Male	Female	Total
Labour Force	12,882	18,340	31,222
Participation Rate (%)	67.2	49.6	58.6
Unemployment Rate (%)	12.0	9.9	11.1
Youth Unemployment (15-24) (%)	27.1	26.8	27.0

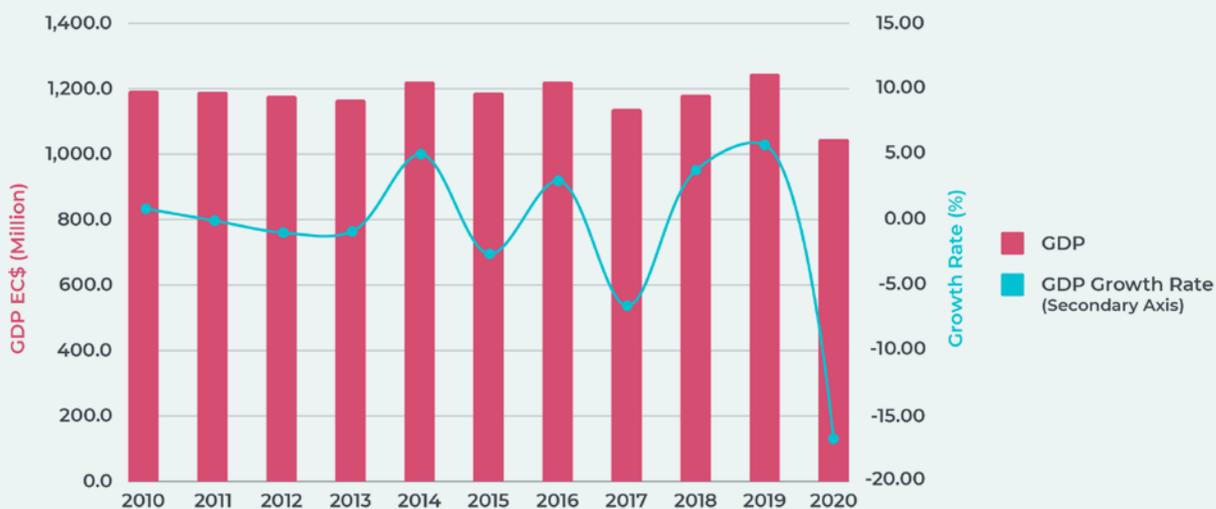
4.3.4 Economic Development

During the period 2010-2020, there was an average contraction of 1% in GDP. Economic activity in Dominica has been constrained by a series of adverse economic shocks and natural disasters during the period. Following the 2008 financial crisis and global recession, there were consecutive declines in GDP from 2011-2013. Thereafter, the economy

went through cycles of growth and contractions. Economic activity was on an upward trend from 2017, reaching a growth rate of 5.9% in 2019. However, this was met with a significant decline in GDP of 16.6% in 2020 due to the pandemic (see Figure 4.3.4a).



Figure 4.3.4a: Economic activity measured by GDP (in constant prices), Dominica

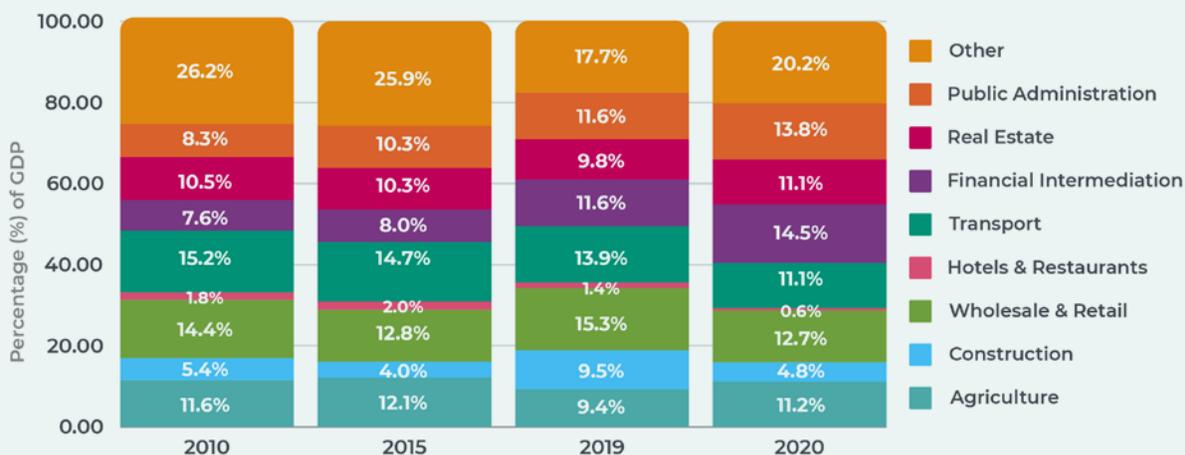


Data Source: Eastern Caribbean Central Bank

Reflecting these trends, GDP per capita³⁰ in Dominica grew from \$11,989 in 2010 to \$12,258 in 2019, before declining \$10,064 in 2020. On average, the wholesale and retail and transport sub-sectors accounted for the largest share of economic activity. However, during the pandemic there

was a change in the distribution as the financial sector and the public sector became the largest contributors to GDP. Agriculture accounts for an average of 11% of GDP while tourism represents only about 1.5% of GDP (see Figure 4.3.4b).

Figure 4.3.4b: Economic sector contribution to GDP (%), Dominica



Data Source: Eastern Caribbean Central Bank

4.3.5 Inflation

The inflation rate, as measured by the changes in the CPI, has been relatively low, averaging 0.69% over the review period (2010-2020). Following inflation of 3.1% in 2010, prices trended downwards until 2015 (see Figure 4.3.5). Prices then rose steadily to 1.5% in 2019 before decreasing in 2020 due to a slowdown in economic activity caused by the pandemic.

However, prices have since spiked to 7.9% at the end of 2022 with supply shortages and increases in transportation costs in the wake of the pandemic. The largest increases in prices have been in housing, utilities and fuel (14.2%), transport (11.2%) and food and beverages (11%).

30 Purchasing power parity (2017 international dollar) to allow comparison across the countries despite exchange rate differences.



Figure 4.3.5: Inflation rate (%), Dominica



Data Source: Eastern Caribbean Central Bank

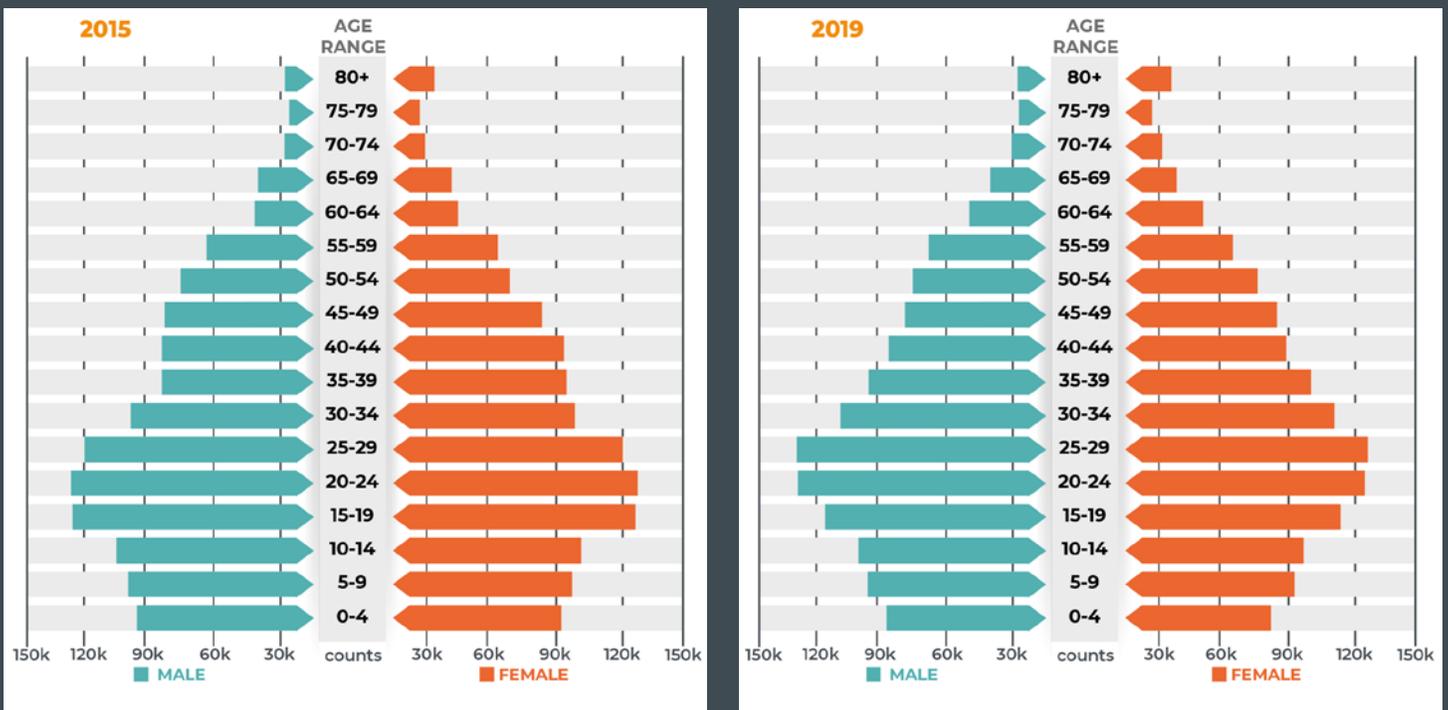
4.4 Country Level Socio-Economic Assessment - Jamaica

4.4.1 Population Demographics for Jamaica

The total population in Jamaica was estimated at 2,734,092

people in 2019, representing a 1.4% increase compared to 2015. The gender distribution across the population was relatively constant across the review period, with females accounting for a marginally higher percentage of the population, at 50.5%, than males at 49.5%. The population pyramid for Jamaica depicts an ageing population (see Figure 4.4.1a).

Figure 4.4.1a: Age-sex distribution, Jamaica (2015 and 2019)



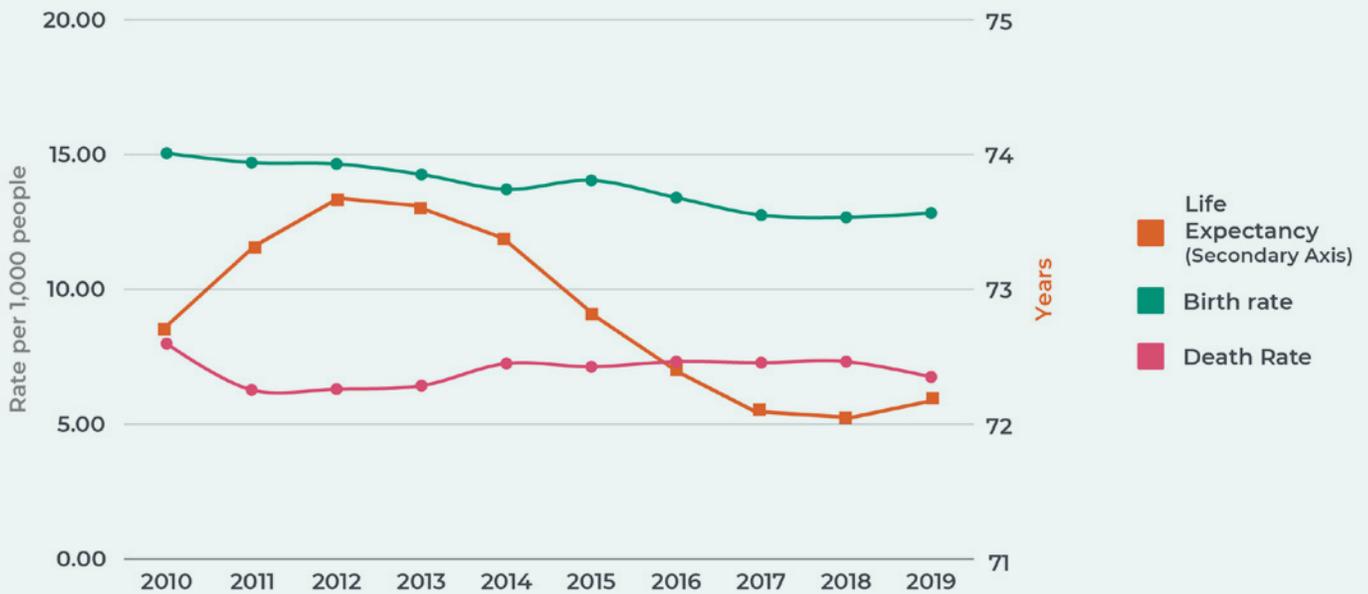
Data Source: Statistical Institute of Jamaica



The birth rate has been declining from a rate of 15.1 births (per 1000 people) in 2010 to 12.8 births in 2019. The average death rate for the review period was 7%, with **life expectancy dropping** from 72.6 years in 2010 to 71.8 years in 2019.



Figure 4.4.1b: Birth rates, death rates and life expectancy, Jamaica



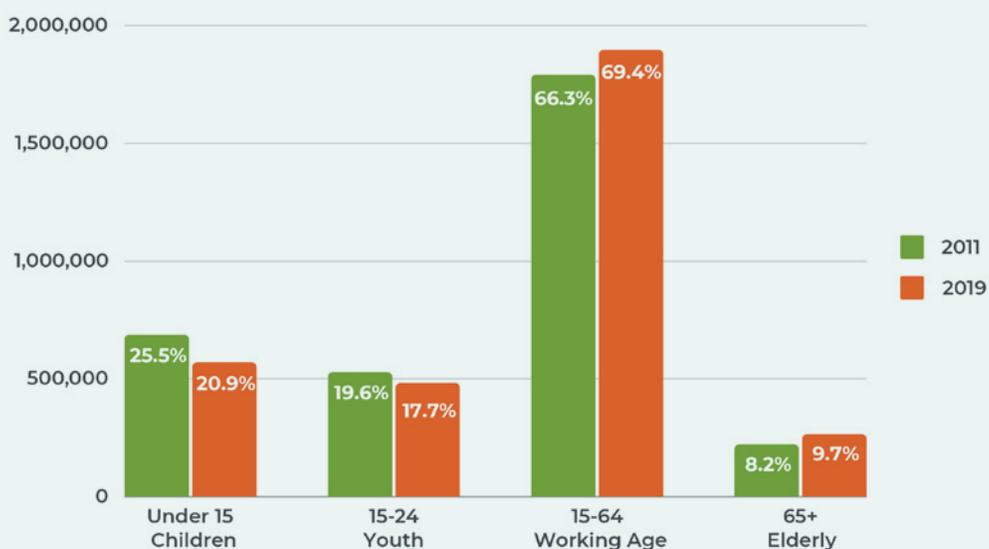
Data Source: Statistical Institute of Jamaica

In 2019, children (under 15) made up 20.9% of the population, compared to 25.5% in 2011. The youth population also declined from 19.6% in 2011 to 17.7% in 2019. Conversely, the working age population (15-64) and the elderly (65+) recorded increases during the period (see Figure 4.4.1c). The dependency ratio, which measures the ratio of the

number of dependents (children and elderly) to the total working-age population, fell from 50.8% in 2011 to 44.1% in 2019. The decline in the dependency ratio was attributable to decreases in the number of children coupled with a larger working age population.



Figure 4.4.1c: Population distribution by major age categories, Jamaica



Data Source: Statistical Institute of Jamaica

4.4.2 Poverty and Inequality

There has been a reduction in the incidence of poverty in Jamaica. The poverty rate declined from 19.3% in 2017 to 11% in 2019. Similarly, the incidence of food poverty has also declined from 5.4% in 2017 to 4% in 2019 (see Table 4.4.2a). This outturn was attributable to several years of consecutive

growth in economic activity. The incidence of poverty has been higher in the rural areas than in the urban areas. There was also a marginal improvement in the Gini coefficient, from 0.39 in 2010 compared to 0.38 in 2017, suggesting a reduction in inequality.

Table 4.4.2a: Poverty prevalence by region (%), Jamaica

Region	Poverty			Food Poverty		
	2017	2018	2019	2017	2018	2019
Greater Kingston Metropolitan Area (GKMA)	17.7	9.2	4.7	5.5	2.9	0.4
Other Urban Centres (OUC)	19.8	12.0	13.4	4.8	3.9	3.5
Rural Areas	20.2	15.0	14.2	5.6	3.7	6.7
Jamaica	19.3	12.6	11.0	5.4	3.5	4.0

Data Source: Voluntary National Review Report: Implementation of the 2030 Agenda and the Sustainable Development Goals 2022/Planning Institute of Jamaica

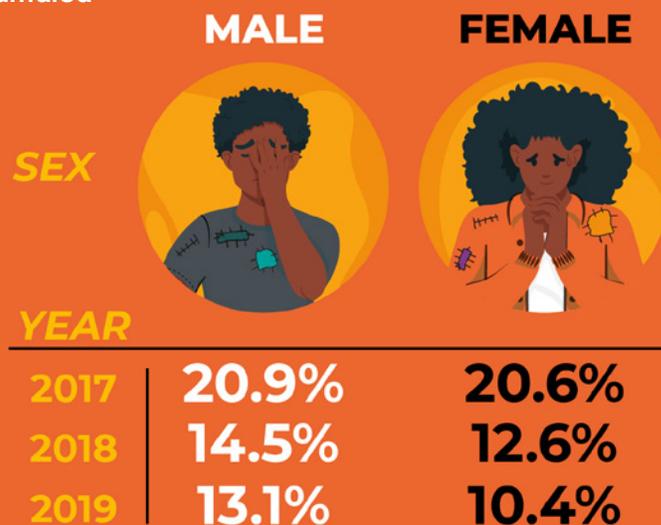


The poverty rates were the lowest in the Greater Kingston Metropolitan Area and were significantly lower than the national average (see Table 4.4.2a).

The incidence of poverty has been higher among males than females, with the disparity widening in 2018 and 2019. In 2019, the poverty rate for females was 10.4% compared to 13.1% for males (see Table 4.4.2b).

The poverty rate among all age groups also declined (see Table 4.4.2c). The poverty rate for children (0-17 years) fell from 24.4% in 2017 to 13.3% percent in 2019. Similar declines were also recorded for the youth (15-24 years). Notwithstanding, the incidence of poverty was higher among children and the youth, with rates higher than the national average. The incidence of poverty among the elderly (60+) was the lowest among the age groups in 2017 at 14.2%; however, in 2019 young adults (25-34) recorded the lowest poverty rate, at 8.9% (see Table 4.4.2c).

Table 4.4.2b: Poverty prevalence by sex and year, Jamaica



Data Source: Voluntary National Review Report: Implementation of the 2030 Agenda and the Sustainable Development Goals 2022/ Planning Institute of Jamaica

Table 4.4.2c: Poverty Prevalence by demographic cohort and year, Jamaica

Age cohort 	2017	2018	2019
Early Childhood (0-8)	23.4	15.2	13.9
Children (0-17)	24.4	15.7	13.3
Adolescent (10-19)	25.9	16.4	13.9
Youth (15-24)	23.7	14.6	13.7
Young Adults (25-34)	18	11.4	8.9
Prime Working Age (35-39)	15.7	10.4	9.3
Elderly (60+)	14.2	11.2	9.4
All Jamaica	19.3	12.6	11

Data Source: Voluntary National Review Report: Implementation of the 2030 Agenda and the Sustainable Development Goals 2022/ Planning Institute of Jamaica



4.4.3 Unemployment

According to the *Labour Force Survey (2022)*³¹, Jamaica's labour force stood at 1,357,700 people. The percentage of males in the labour force was higher, 53.5%, compared to females, who represented 46.5% of the labour force. There were differences in male and female participation in the labour force; the participation rate for males was 70.5% and 59.2% for females (see Table 4.4.3a). The labour force and the participation rates have been increasing over time, though they remain below pre-pandemic levels.

During the pandemic, total unemployment and youth unemployment rose to 12.6% and 30.3%, respectively; however, there has been improvement in those indicators with recovery in economic activity in the post-pandemic period. As of July 2022, the unemployment rate was estimated at 6.6%, with the unemployment rate higher among women (8.2%) than men (5.2%). Notably, the men's rate was lower than that of the total population (see Table 4.4.3a).

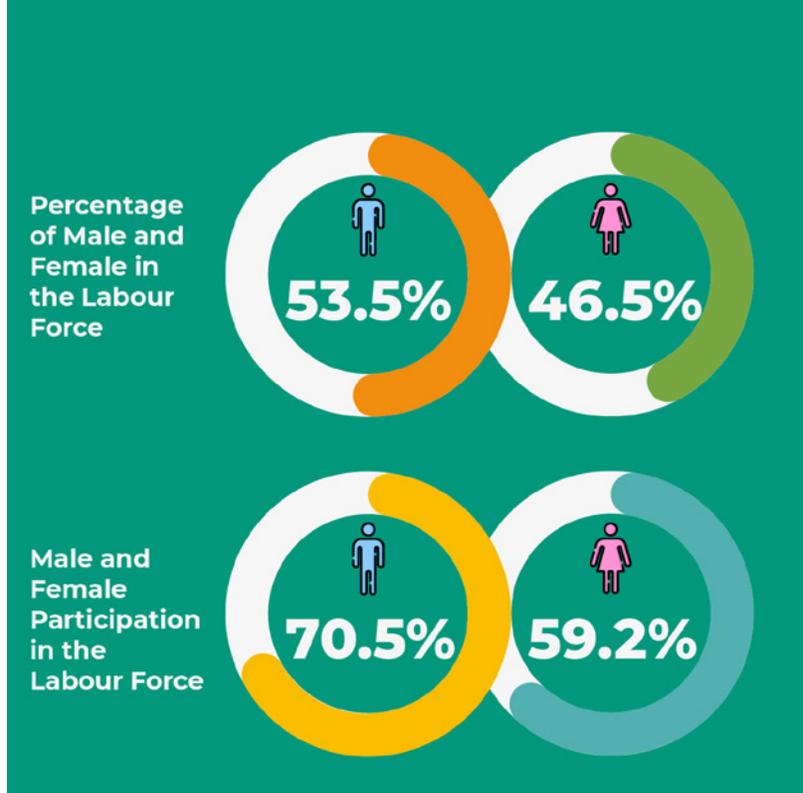


Table 4.4.3a: Labour force indicators by sex, Jamaica (July 2022)

Labour market indicators	Male	Female	Total
Labour Force	726,000	631,700	1,357,700
Participation Rate (%)	70.5	59.2	64.7
Unemployment Rate (%)	5.2	8.2	6.6
Youth Unemployment (15-24) (%)	17.3	16	16.7

Data Source: Labour Force Survey (2022)

The data also revealed the youth unemployment rate has been trending downwards and was 16.7% as of July 2022

(see Table 4.4.3b). Youth unemployment among women was marginally lower than among men.



...the youth unemployment rate has been trending downwards and was 16.7% as of July 2022...

31 The latest available data was for July 2022; therefore, this month was used as the reference point for comparison.

Table 4.4.3b: Labour force indicators by sex, Jamaica (July 2019-July 2022), Jamaica

Labour market indicators	July 2019	July 2020	July 2021	July 2022
Labour Force	1,363,400	1,283,300	1,327,500	1,357,700
Participation Rate (%)	65.2	61.3	63.4	64.7
Unemployment Rate (%)	7.8	12.6	8.5	6.6
Youth Unemployment (15-24) (%)	20.2	30.3	23.9	16.7

Data Source: Labour Force Survey (2022)

The wholesale and retail trade sector had the highest employment rate at 17.8%, followed by the agriculture sector at 13.7%. The sectors with the lowest employment rates were the mining and quarrying sector (0.4%) and the electricity, gas and water supply sector (0.5%).

4.4.4 Economic Development

GDP growth has been relatively low in Jamaica, averaging 0.7% during the period 2010-2019³². Following growth of 1.7% in 2010, GDP declined in 2011 by 0.6%. Thereafter, the economy grew steadily to 1.9% in 2018, followed by a deceleration in the growth rate in 2019 to 0.9%. GDP per capita in Jamaica was estimated at \$9,921 in 2010 and grew steadily to \$10,545 in 2019. However, the IMF estimated that GDP per capita in 2020 fell to \$9,474.

The wholesale and retail trade sector had the highest employment rate at 17.8%



Figure 4.4.4a: GDP (in constant prices), Jamaica



Data Source: Statistical Institute of Jamaica

32 GDP data was only available up to 2019.



The Jamaican economy is relatively diverse compared to the smaller Caribbean islands. While some sectors recorded changes in their contributions to GDP over the review period, the wholesale and retail trade remains the largest contributor

to economic activity at 17.2%, followed by government services at 12.4%. The share of financial services and tourism has increased over the period; however, the share of manufacturing has declined (see Figure 4.4.4b).

Figure 4.4.4b: Economic sector contribution to GDP (%), Jamaica



Data Source: Statistical Institute of Jamaica

4.4.5 Inflation

The inflation rate, as measured by the changes in the CPI³³, has been relatively high, averaging 6.3% over the review period (2010-2019). Inflation was higher during the period 2010-2014, averaging 8.9% compared to an average of 3.6% for the period 2015-2019. Inflation was at its highest in 2010,

at 12.6%. Since then, inflation has been trending downwards, reaching the lowest rate of 2.3% in 2016. Notwithstanding, the inflation rate as of 2019 was 3.9%. The inflation rate is projected to rise in the near-term due to the global spike in prices after the pandemic.

Figure 4.4.5: Inflation rate (%), Jamaica



Data Source: Statistical Institute of Jamaica

33 Jamaica's Consumer Price Index series was rebased in 2019.



4.5 Social Protection Landscape

Social Protection Taxonomy

In order to assess the social protection landscape in the four selected countries, the study adopts the internationally accepted taxonomy of social protection. It assumes the definition of social protection as **“the set of policies and programs designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruptions and loss of income”** (see Chapter 3).

The study adopts the following four major components of social protection (see Figure 4.5):

SOCIAL ASSISTANCE: non-contributory transfers of cash, vouchers, or in-kind (including school feeding programmes) to individuals or households in need; public works programmes; fee waivers (for basic health and education services); and subsidies (food and fuel). It is designed primarily with the intention to help individuals and households cope with poverty, destitution and vulnerability.

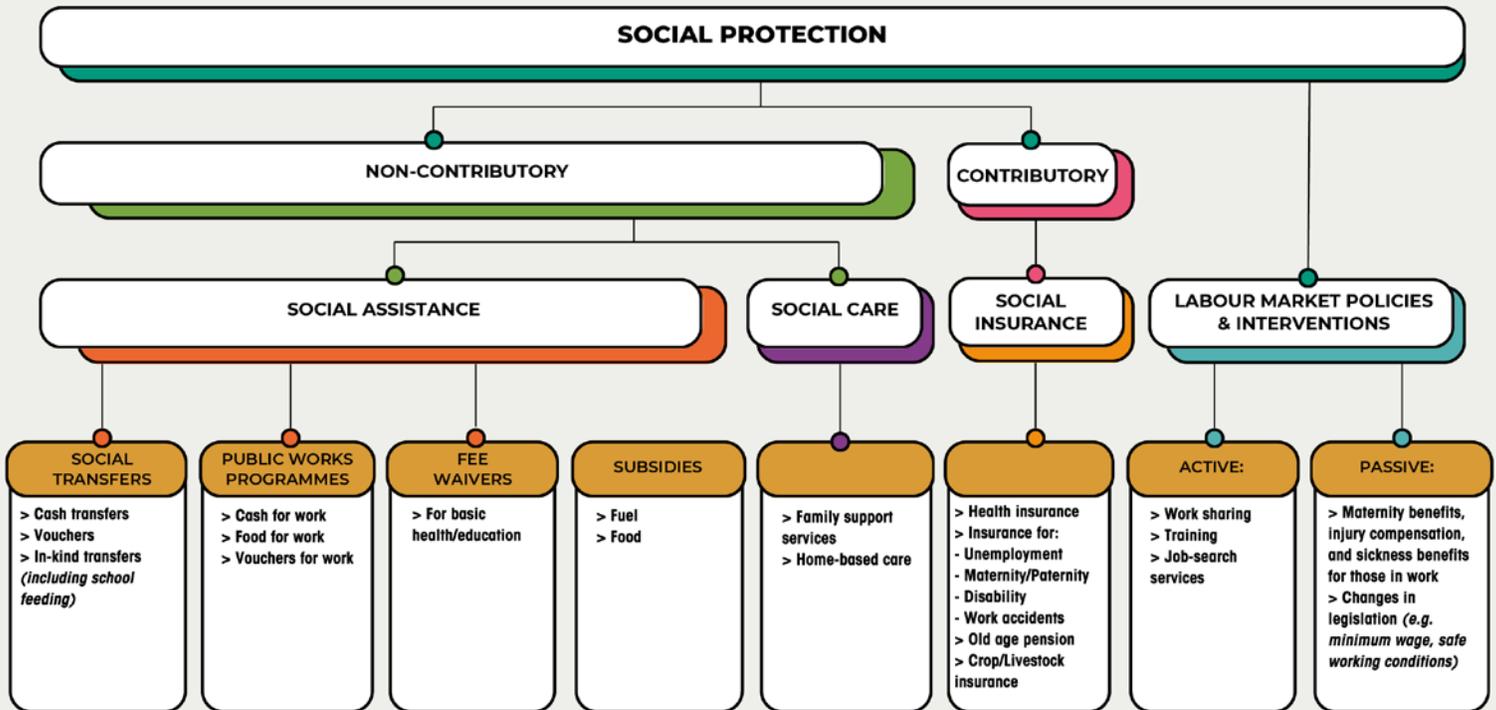
SOCIAL INSURANCE: contributory programmes/schemes where participants make regular payments to a programme or scheme that will cover costs related to life-course events. These generally include old age pension, survivor benefits, disability pensions, as well as unemployment insurance, sickness, injury, health insurance and maternity and paternity benefits.

SOCIAL CARE: support interventions provided to individuals facing social risks such as violence, abuse, exploitation, discrimination and social exclusion which are usually provided to protect children, youth, women and girls, elderly and persons with disabilities.

LABOUR MARKET PROGRAMMES: active programmes that assist the most vulnerable and unemployed to enter the labour market. It includes programmes that assist job seekers with acquiring jobs, upskills job seekers, providing employment subsidies, creating jobs through public sector employment programmes or the provision of subsidies to the private sector. Passive labour market programmes, on the other hand, are generally legislative in nature and focus on maternity and paternity benefits, minimum wage legislation, injury compensation and early retirement.



Figure 4.5: Taxonomy of social protection instruments



The social protection systems in the four selected countries can be best described as being in their emergent stages of development, although varying vastly in their pace and progress of implementation. Notwithstanding, they have articulated in their various national development planning frameworks the essential role strong social protection plays in protecting the poor and vulnerable from idiosyncratic and macro-economic shocks. However, the evidence has shown that not enough has been done to accelerate action on this front. The recent onset of the COVID-19 pandemic has laid bare many of the structural vulnerabilities that existed in these countries and the glaring inadequacy of the prevailing social protection frameworks to respond to shocks of this magnitude.

4.5.1 Legislative Framework

International Conventions

The Governments of Jamaica, Antigua and Barbuda, Dominica, and The Bahamas, similar to many other Caribbean countries since independence and becoming full members of the United Nations, have signed and ratified several international conventions and treaties pertaining to human rights, racial discrimination, the rights of women, the rights of the children and the right to education (see Appendix 8). This signals on the part of these governments the intention to bestow and protect various rights of their

citizens. However, with regard to social protection, none of the four governments have ratified any of the International Labour Organisation (ILO) international conventions on Social Security, Equality of Treatment (Social Security), Invalidity, Old Age and Survivor Benefits and the Social Protection Floor Recommendations.

Domestic Legislation

Progress on implementing the relevant social protection related laws in-country has been slow in the selected countries (see Table 4.5.1). Importantly, while these countries have designed and implemented a wide array of social programmes, very few have any legislative legitimacy. By the same token, some programmes are inherently perceived as political in nature, design and execution and as a consequence run the risk of sudden stop or the complete termination of the programme in the event of a change in administration. Notwithstanding, several pieces of legislation relating to social protection have been enacted in the four countries being studied. Mirroring international agreements on the rights of the child and consensus on the need to protect the children, all four countries have legislation that deals with the role of the State in caring for and protecting children as well as for adoption. Equally, all have social security legislation in place given that social insurance schemes were among the first-generation social protection programmes implemented post-independence.



Of note, except for Antigua and Barbuda, none of the other countries have enacted legislation that speaks directly to the development of a comprehensive social protection

system. In Jamaica, there is a Poor Relief Act of 1882, but this speaks narrowly to a cash and in-kind transfers of the poor and destitute.

Table 4.5.1: Domestic Social Protection Legislation

Domestic Legislation	Antigua and Barbuda	The Bahamas	Dominica	Jamaica
Social Protection	●	X	X	X
Social Security	●	●	●	●
Child Care and Protection	●	●	●	●
Child Justice	●	●	●	●
Labour Code /Employment Act	●	●	●	●
Domestic Violence	●	●	●	●
Minimum Wage	●	●	●	●
Cash Transfer to Poor	●	X	X	●
Trafficking in Persons	X	●	X	●
Persons with Disabilities	●	●	X	X
Mental Health	X	X	X	●
Adoption of Children	●	●	●	●

Key: ● *Enacted Legislation* X *Social Protection Programme not existent in country*

4.5.2 Number of Social Protection Programmes

Jointly, the four countries of Antigua and Barbuda, Bahamas, Dominica and Jamaica have a total of 135 social protection programmes (see Table 4.5.2a). Forty-eight percent (48.1%) or 65 programmes are social assistance in nature, reflecting governments' thrust to alleviating the socio-economic plight of the poor and vulnerable. Social care services for children

in need of care and protection, the elderly and women and girls account for 25.9% of total social protection programmes, followed by labour market programmes, which stood at 21.5% or 29 programmes. Social insurance programmes, while being the most advanced of the social protection programmes, number only six across the four countries.

Table 4.5.2a: Number and category of social protection programmes by country

Type of Social Protection Programme	Antigua and Barbuda	The Bahamas	Dominica	Jamaica	Total
Social Assistance	5	25	21	14	65
Social Care	6	16	4	9	35
Social Insurance	2	2	1	1	6
Labour Market Programme	1	11	13	4	29
Total	14	54	39	28	135



Table 4.5.2b details social protection programmes that exist in each category by country. The Bahamas has the most programmes at 54, followed by Dominica 39, Jamaica 28 and Antigua and Barbuda 14. The number of programmes reflect the pressing and diverse social risk facing these countries' vulnerable populations. However, and importantly, having so many social programmes inevitably create an environment that perpetuates increased fragmentation, therefore reducing the effectiveness and efficiency of social protection expenditure. Each programme carries

its own administrative cost. As such, it is recommended that governments take deliberate steps to rationalise and merge programmes where possible, as it not only increases efficiency and reduces wastage, but it will increase the gross expenditure allocated to each social protection beneficiary, consequently increasing the likelihood of lifting these persons out of poverty. A key point worth noting is that the evidence shows that poverty and vulnerability are structural in nature and therefore require a structural response.

Table 4.5.2b: Category and types of social protection programmes in each country

Programme		Antigua and Barbuda	The Bahamas	Dominica	Jamaica
SOCIAL INSURANCE	Survivor Pensions	●	●	●	●
	Unemployment Insurance	X	●	X	X
	Retirement Pensions	●	●	●	●
	Sickness & Disability	X	X	●	●
	Non-contributory Old Age Pension	●	●	X	X
	Health Insurance	X	X	X	●
SOCIAL ASSISTANCE	Conditional Cash Transfers	●	●	●	●
	Unconditional Cash Transfers	●	●	●	●
	Food subsidies, Food coupons/stamps, Food programme	●	●	●	●
	School Feeding Programmes	●	●	●	●
	Student Support Services (Uniform/Bus Subsidies)	●	●	●	●
	Education Subsidy Programmes	●	●	●	●
	Adult Education Programmes	●	●	●	●
SOCIAL CARE	Gender Affairs Agency	●	●	●	●
	Domestic Crisis Shelter	●	●	●	●
	Child Residential Facilities	●	●	●	●
	Parenting Programmes	●	●	●	●
	Child Development Agencies	●	●	●	●
	Disability Agencies	●	●	●	●
	Elderly Agencies	●	●	●	●
	Long-term Residential Elder Care Facilities	●	●	●	●
LABOUR MARKET	Youth Skills Programmes	●	●	●	●
	Migrant Labour Programmes	●	●	●	●
	Public Works Programmes	●	●	●	●
	Enterprise Development Support	●	●	●	●
	Minimum Wage	●	●	●	●
	Labour Laws	●	●	●	●

Key: ● Enacted Legislation X Social Protection Programme not existent in country



Social Assistance

In the countries of Antigua and Barbuda, The Bahamas, Dominica and Jamaica, governments and NGOs are providing a wide array of social protection programmes across the four major segments of the social protection spectrum. Each provides cash transfers to the poor and

vulnerable whose income and consumption falls below the poverty line. However, only in Jamaica is there a conditional cash transfer, namely the Programme for Advancement Through Education and Health (PATH) (see Case Study 1).

Case Study 1

Jamaica's PATH Programme - A Successful Conditional Cash Transfer Programme

A success story among the four countries is Jamaica, which has taken bold steps to reduce poverty by creating jobs and rationalising its flagship social protection programmes and using the programme to incentivise participants to build human capital from conditionalities on education and health which will break the intergenerational cycle of poverty.

The Programme of Advancement Through Health and Education (PATH) was launched in 2002 and is an amalgamation of three programmes aimed at reducing poverty in Jamaica, namely, the Food Stamp Programme, Public Assistance Programme, and the Poor Relief Programme. A key feature of PATH is that it is a single and comprehensive social protection programme for the poor and vulnerable that focuses on increasing targeting and transparency of the programme and crucially enhancing the human capital of the poor and vulnerable, hence increasing their ability to manage risk and participate in the wider economy. The programme targets poor and vulnerable households that include at least one of the following: **(i) children and youth up to 17 years old; (ii) pregnant and lactating women (up to 6 months after delivery); (iii) elderly 60 years and over; (iv) persons with disabilities; and (v) poor adults between 18 and 60 years.**

Eligibility is determined through an objective instrument known as a Proxy Means Test (PMT) Score, which is derived from statistical estimates used to objectively determine whether a household is poor based on various household socio-economic characteristics. Recognizing that poverty is intergenerational, PATH aims to reduce poverty by introducing conditionalities to ensure households build human capital through education and health outcomes. For households with children between 6 and 18 years old enrolled in public school, a minimum of 85% attendance rate per month is required. Children, pregnant women, lactating women, and elderly are required to attend health visits ranging from every two to six months to be eligible.



It appears that policymakers are cognizant of the importance of nutrition to learning outcomes, given that school feeding programmes are a constant feature in the social protection system of all the countries in this study and are provided across all education levels. Importantly, countries have implemented school food nutrition policies to standardise the quality of meals and snacks served as part of these programmes, with an aim of mitigating child obesity and other non-communicable diseases. The COVID-19 pandemic hampered the delivery of these school feeding programmes during the closure of schools and spotlighted the fact that for many children school feeding programmes were the main source of food during the week.

It should be noted that clear graduation strategies were not defined in many of the social assistance programmes, which meant that beneficiaries would remain on these programmes indefinitely.

Social Care

Social care services are well established in the four study countries. All have agencies that are dedicated to the wellbeing of children, women and families. However, all do not have specific agencies that deal with the elderly and disabled but rather provide subventions and transfers to various councils such as the councils for persons with disabilities and councils for the elderly. Consistent with enacted legislation, residential care facilities for children in

need of care and protection and those that are at-risk or in conflict with the law are provided across all four countries either by the State or by private non-profit organisations who receive support from the government. Crisis shelters and places of safety for women experiencing domestic violence or intimate partner violence, however, are not well established in these four countries. The COVID-19 pandemic exposed the pervasive nature of domestic and intimate partner violence in the Caribbean, with gender affairs agencies observing an increased number of reported cases.

Another area of observation is that of life expectancy. The region, including the four study countries, is witnessing a critical demographic transition evident by increased life expectancy and a growing population of the elderly needing care and gerontology services. Anecdotal evidence, however, suggests that the supply of residential care facilities is insufficient to meet the demand. In addition, although there are private sector players in the long-term elderly care space, there is a need to establish clear policies and procedures for the management of such facilities. Despite some of the study countries putting frameworks in place to deal with management of residential care facilities, there is significant work needed to regulate the sector. In addition, the government will be required to identify mechanisms to incentivise the investment by the private sector and create avenues for training and skills development for this emerging caring economy.

Anecdotal evidence, suggests that the supply of residential care facilities is insufficient to meet the demand.

In addition, although there are private sector players in the long-term elderly care space, there is a need to establish clear policies and procedures for the management of such facilities.



Labour Market Programmes

The high rate of unemployment and informality and the anaemic rates of growth observed by the countries in this study have resulted in governments resorting to the implementation of numerous labour market programmes in their bid to absorb the over-supply of labour in their economies and societies. Public work programmes, such as national beautification and de-bushing programmes, have featured prominently but are temporary in nature and do not deal with the structural nature of unemployment that many beneficiaries face. Importantly, these programmes, while providing income to the participants, still leave them in a state of under-employment and do not enhance their skill sets.

Some public work programmes have been more progressive by partnering with the private sector to transfer skills to youth on the job through wage subsidies and other tax concessions to participating companies. At the same time, given the youthful population of those countries and the high rates of youth unemployment observed, governments have increasingly brought youth employment and skills development to the centre of their social policy framework, in order to capitalise on this youth dividend. Also,

recognising the vital role played by enterprise development and micro, small and medium sized enterprises (MSMEs), the countries being studied have tried to intersect the need to create employment and expand the private sector by implementing youth enterprise development programmes through the provision of training and affordable credit for youth business startups.

In two of the countries, Jamaica and Dominica, overseas migrant labour programmes are supported by the government, targeting young men to work in the agricultural or hospitality sector in North America (Canada and the United States). In Jamaica for instance, the government introduced a migrant labour-saving programme to incentivize participants to remit income earned during their tenure working abroad.

Regarding passive labour market programmes, all four countries have instituted legislation by way of either labour codes or national minimum wage to ensure minimum employment standards in their respective labour market. Increasingly though, calls are being made to pivot away from minimum wage towards a liveable wage.

Public work programmes, such as national beautification and de-bushing programmes, have featured prominently but are temporary in nature and do not deal with the structural nature of unemployment that many beneficiaries face. Importantly, these programmes, while providing income to the participants, still leave them in a state of under-employment and do not enhance their skill sets.



Social Security

Social security is the most advanced component of the study countries' social protection system. All countries of study have national insurance schemes that are enshrined in legislation that provide a range of benefits (old age, survivor, maternity, paternity, injury, disability etc) and assistance such as burial assistance to members. Of recent, actuarial studies³⁴ have highlighted concerns with regard to the sustainability of the respective social insurance fund and have recommended the gradual increase of the rate of contribution and the increase of the pensionable age from 60 to 65, in keeping with the life expectancy. The high level of informality is a key issue plaguing social security funds as people who do not contribute usually become reliant on state social programmes such as cash transfer during their later lives. Importantly, public sensitisation on the importance of social security must be a central plan in remedying the lower level of contributions, in addition to efforts to reduce the level of informality in these economies.

The massive job losses and furloughing observed during COVID-19, particularly among women who were overrepresented in the hotel and restaurant sector and other close contact services, brought into sharp focus the glaring absence of unemployment insurance as a critical part of these countries' social protection architecture. The Bahamas was the only country at the time of the pandemic to have a formal unemployment insurance framework in place, which meant that as part of the COVID-19 response governments had to either draw down on savings, as was the case in Jamaica, or borrow from multilateral development agencies to provide income support. The Government of

Jamaica, with the assistance of the International Labour Organisation (ILO), has commissioned a feasibility study to determine the practicality of introducing an unemployment scheme in the country.

As the countries go through population transitions, governments are now introducing old-age non-contributory pension schemes to support the elderly who did not contribute to social insurance during their working age. The governments of Jamaica and Dominica have recently introduced such programmes to assist the elderly segment who do not have any form of income.

Another critical component of social security is health insurance. Although provided primarily by the private sector, data have shown that health insurance coverage is below the acceptable levels in the region and even when persons have health insurance the out-of-pocket expenditure to meet certain medical treatments and procedures is astronomical. In The Bahamas and Antigua and Barbuda, the governments have implemented partial national health insurance schemes which provide a basket of health services to citizens with the aim of introducing universal health insurance. Governments will have to give serious consideration to the introduction of some variants of health insurance, particularly as the region faces the challenges of increasing incidence of non-communicable diseases, which some have labelled an existential risk to the future sustainability of the Caribbean's human capital stock, especially among women.

Another critical component of social security is HEALTH INSURANCE. Although provided primarily by the private sector, data have shown that health insurance coverage is below the acceptable levels in the region and even when persons have health insurance the out-of-pocket expenditure to meet certain medical treatments and procedures is astronomical.



34 Actuarial Studies commissioned periodically by the various National Insurance Schemes in the selected countries.

4.6 Social Protection Expenditure Review

Social Protection Expenditure Review is one of the many toolkits available to policy makers to track expenditures allocated to social programmes, monitor progress and to compare across programmes and vulnerable groups.

4.6.1 The Fiscal Burden of Social Protection

Between 2014 and 2020, the average budget allocation to social protection across the four countries was 1.03% of Gross Domestic Product (see Figure 4.6.1a). Except for 2016, which recorded a decline in the budget allocation, the governments' allocation increased from 0.76% in 2014

to 1.41% in 2020. It must be noted that 2020 registered the largest increase in social protection expenditure, rising by 0.22 percentage points, on account of increased social protection outlay to respond to the COVID-19 pandemic as governments expedited their quest to save lives and livelihoods from the public health and economic fallout of the COVID-19 pandemic. However, the growth in social protection expenditure is reflective of horizontal expansions, that is, the introduction of new programmes or increasing beneficiary coverage and vertical expansion, which is increases in allocation to various programmes.

Figure 4.6.1a: Social protection expenditure as % of GDP



Comparing the four study countries over the same period, Dominica has the highest share, averaging 2.4% of GDP and reaching 3.6% of GDP in 2020 (see Figure 4.6.1b). Interestingly, during the period Dominica encountered several climate-related hazards, such as Tropical Storm Erika (2015) and Hurricane Maria (2017). These consecutive climate hazards inflicted damages in the order of 96% and 224% of GDP, eroding substantial amounts of capital stock, narrowing the economic base of the country, destroying livelihoods and triggering significant income insecurity in Dominica. Accordingly, during the period, the Government

of Dominica introduced the National Employment Programme (NEP), which is its flagship labour market programme aimed at providing temporary employment to an estimated 4,000 Dominicans annually. Similar trends are observed for the other three countries of Antigua and Barbuda, The Bahamas and Jamaica, with all registering increases in social protection expenditure over the period. In Jamaica, a noticeable decline was recorded in 2020, falling from 1.07% to 0.88%, primarily because of reduced outlay on the school feeding programme by 47.0% due to the closure of schools during the period.



Figure 4.6.1b: Social protection budget expenditure (% of GDP)



Change in The Budget Allocation

Figure 4.6.1c reflects the change in the share of budget allocation across the three main social protection categories, that is, social assistance, social care, and active labour

market programmes over two discrete time periods, 2015 and 2020.

Figure 4.6.1c: Percentage of budget allocation disaggregated by social protection categories

Programme		2015	2020	% Change
ANTIGUA AND BARBUDA	Social Assistance	0.26	0.19	-27.87
	Social Care	0.60	0.64	5.50
	Labour Market Programmes	0.14	0.18	28.78
BAHAMAS	Social Assistance	0.70	0.41	-40.81
	Social Care	0.10	0.05	-54.57
	Labour Market Programmes	0.20	0.54	172.68
DOMINICA	Social Assistance	0.37	0.27	-26.15
	Social Care	0.09	0.05	-48.07
	Labour Market Programmes	0.54	0.68	26.02
JAMAICA	Social Assistance	0.71	0.66	-8.12
	Social Care	0.15	0.12	-16.78
	Labour Market Programmes	0.14	0.22	60.44



In each of the four countries it is observed that the share of social assistance programmes declined between 2015 and 2020 by 40.8%, 27.9%, 26.2% and 8.1% for The Bahamas, Antigua and Barbuda, the Commonwealth of Dominica and Jamaica, respectively. Conversely, the data revealed that labour market programmes' share of total social protection expenditure rose across all the countries, evident by the 172.7%, 60.4%, 29.9% and 26.0% increase in The Bahamas, Jamaica, Antigua and Barbuda and Dominica, respectively. It is important to note that despite the increases in the share of active labour market programmes, except for Dominica, they do not constitute the largest share of the social protection budget in the other three countries. Notwithstanding, it does reveal government policy preference towards labour market programmes to reduce unemployment, particularly among the youth population.

4.7 Implications of Declining Social Protection Allocation on Vulnerable Groups

The increased allocation for active labour market programmes may be a reflection of two structural issues: an economy that is not dynamic enough to produce decent and sustainable jobs at the rate that is needed to achieve full employment, or an education system that is outmoded and does not provide school leavers with the requisite skill sets needed for the labour market, leading to a labour-market skills mismatch in these economies. If either of these structural impediments exist in these economies, to create fiscal space for social assistance programmes governments will have to tackle these pressing development challenges at the source; that is, a revamping of the education system and creating the enabling environment through pro-growth economic

reforms to increase productivity and competitiveness. Equally important, and which was not able to be ascertained by this study, is whether the poor and vulnerable are participating in these active labour market programmes.

The average social assistance budget allocation for all four countries was 51% in 2015 and declined to 39% in 2020. Similarly, the average social care budget allocation fell from 24% to 21%, while the labour market programmes rose from 25% to 40%. These changes in the allocation of social protection programmes in these countries may have been amplified by the pandemic, but the trend existed prior to the pandemic. Crucially, how the government decides to allocate social protection resources can reinforce socio-economic vulnerabilities and inequities if done incorrectly and without evidence to support such a policy shift.

4.8 Allocation of Social Protection by Country and Vulnerable Group

When the allocation of social protection expenditure by various sub-groups in the society, in particular vulnerable groups, is investigated an interesting picture emerges (see **Figure 4.8**). It was noted that in Dominica, Jamaica and The Bahamas, the allocation of social protection expenditure to the working age population increased substantially. This jump was most pronounced in The Bahamas, which moved from 13.7% to 65.2% between 2015 and 2020, reflecting increased budget expenditures on programmes to create employment and to train the jobless. The econometric analysis (see **Chapter 5**) addresses the impact of debt through the transmission channel of interest rates on social protection spending by various categories.

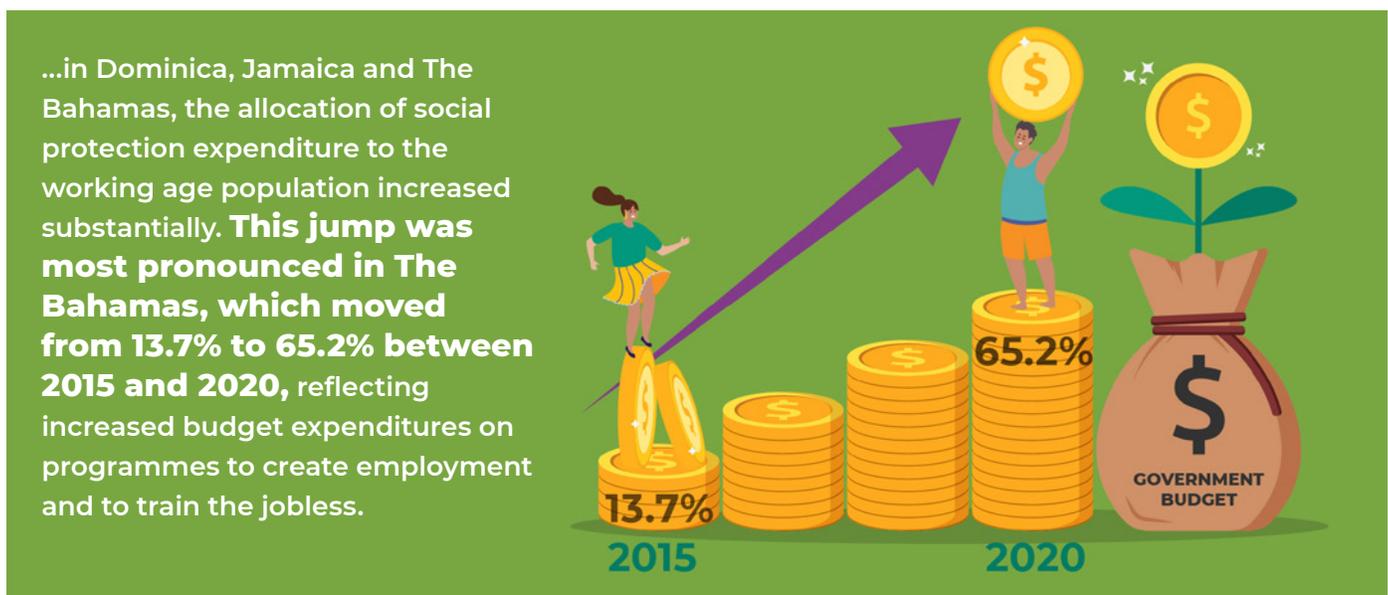
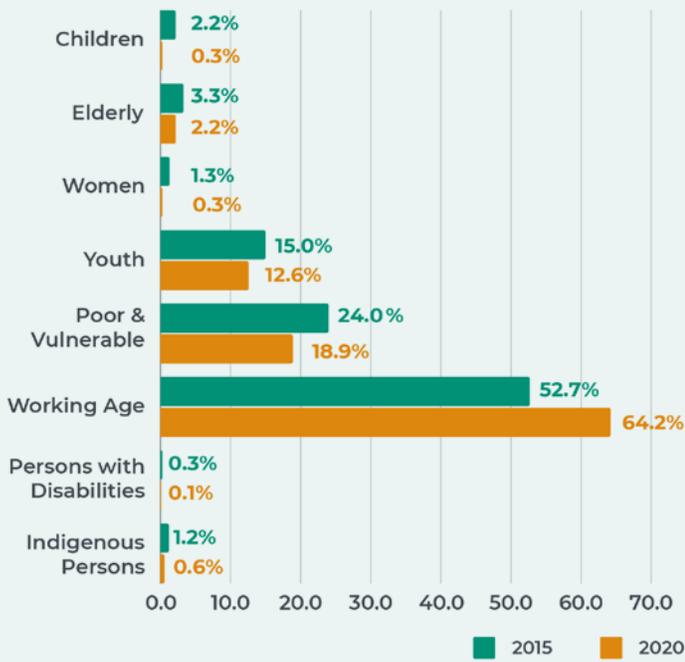
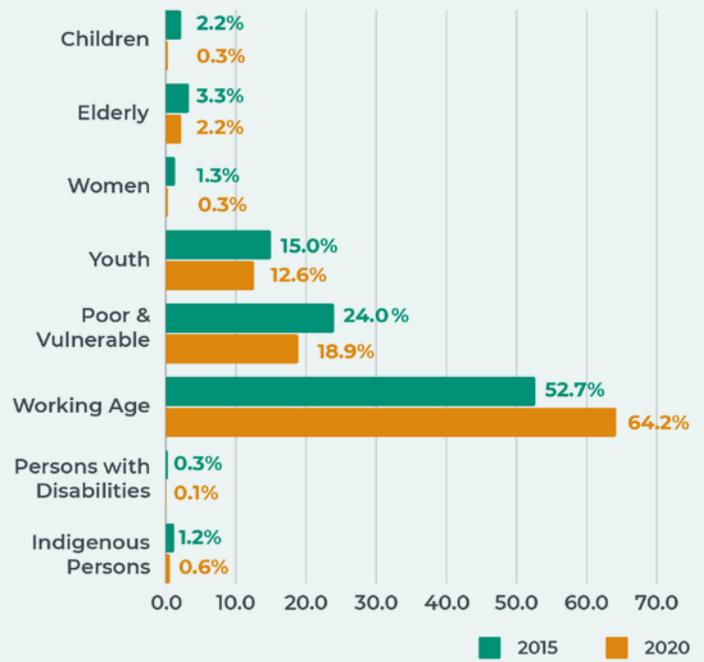


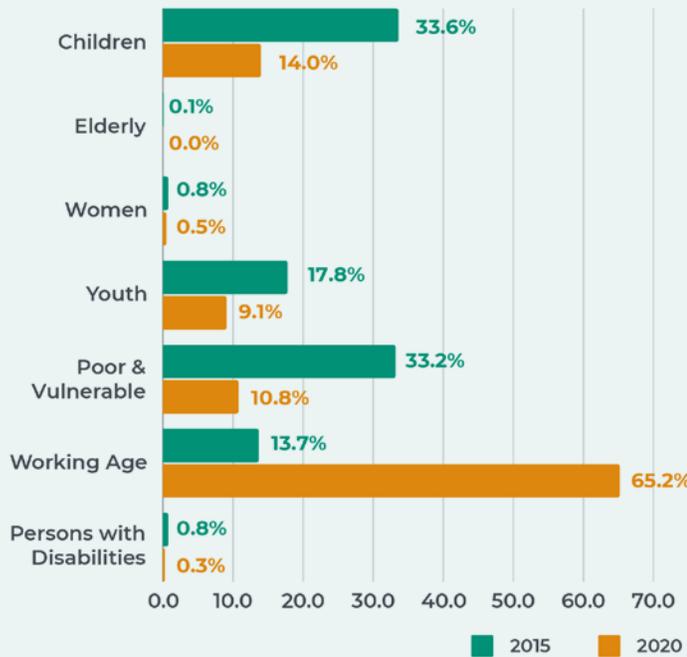
Figure 4.8: Allocation of social protection expenditure by vulnerable groups within countries



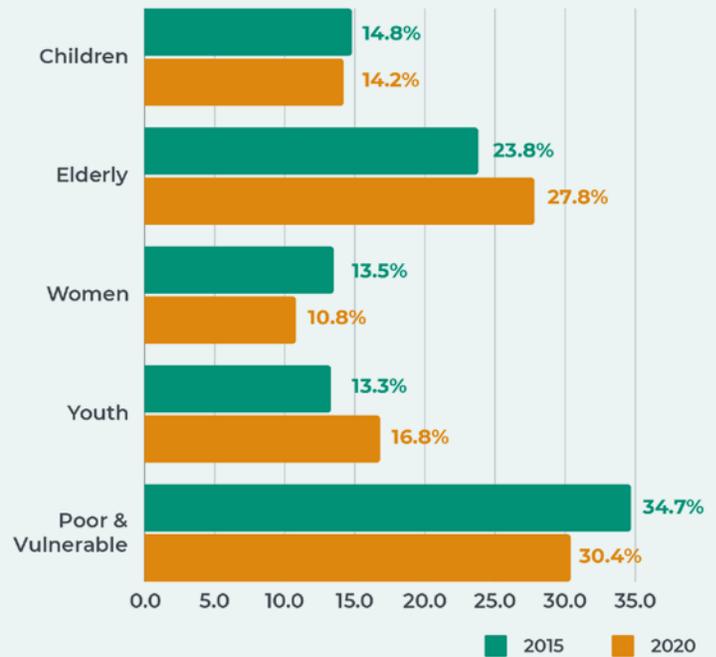
DOMINICA



JAMAICA



THE BAHAMAS



ANTIGUA & BARBUDA



It is also noteworthy that the share of allocation for the poor and vulnerable declined for both The Bahamas and Dominica and might be suggestive of a crowding effect due to increased allocation to the working age population. On the contrary, the allocations to children either increased or remained unchanged, with similar trends observed for the elderly. With regard to the youth, changes in the allocation were mixed, increasing in some countries while decreasing in others.

The share of the allocations of social protection expenditure to the poor and vulnerable was the highest for Jamaica and Antigua and Barbuda, while in Dominica and The Bahamas the allocation to the working age population was the highest.

In Jamaica, Antigua and Barbuda and The Bahamas, between 2015 and 2020, the governments allocated an average of 14% of social protection on children, primarily through school feeding programmes and child protection services such as residential care facilities and adoption services. Regarding the elderly, Antigua and Barbuda

allocated the most to this segment of the population, estimated at around 25.8%. Conversely, Dominica, Jamaica and The Bahamas allocated very little to elderly support services.

Implications

As these countries experience ageing populations, governments will need to rebalance their social protection expenditure to ensure that all segments of the vulnerable populations are allocated resources commensurate with their corresponding prevalence and depth of vulnerability and risks. Importantly, given the mounting evidence pointing to the increased role of women's economic participation and empowerment in social and economic development, greater emphasis must be given to increasing the share of social protection expenditure and public service to women. Equally, with a relatively youthful population, the study countries must simultaneously ensure that their education systems are preparing school leavers for the world of work and jobs for the future and that their economies are buoyant enough to generate decent paying employment.

As these countries experience ageing populations, governments will need to rebalance their social protection expenditure...



...the increased role of women's economic participation and empowerment in social and economic development, greater emphasis must be given to increasing the share of social protection expenditure and public service to women.



...with a relatively youthful population, the study countries must simultaneously ensure that their education systems are preparing school leavers for the world of work and jobs...



4.9 Conclusion

This chapter sought to situate the macro-socio-economic context of each of the four study countries. It also evaluated the social protection landscape that exists in these nations by investigating the institutional, legislative and budgetary allocation profiles of their social protection systems. The analysis showed that the structural factors that characterise the economies are relatively homogenous. Importantly, all the countries are facing demographic transitions, evident by declining fertility rates and an increase in their elderly population, coupled with longer life expectancy. Notably, if these demographic trends continue, public expenditure on pensions, social security and healthcare are projected to increase, creating additional fiscal pressures. Dependency ratios are also projected to increase with a rise in the elderly population and a shrinking working age population. This has negative implications for the labour supply and could potentially further narrow the existing tax base.

Moreover, the economies are characterised by narrow economic bases dominated by services (tourism exports) and agriculture, making them particularly susceptible to exogenous climate and economic shocks. As such, the countries have been experiencing volatile and anaemic growth rates, reflecting the impact of multiple and cascading economic, climate, commodity (food, fuel) and public health related shocks. These shocks present significant downside risks to the development of these economies and threaten to erode many of the hard-earned gains made by these countries post-independence. As such, unemployment is protractedly high, particularly among youth and women. Females are worse off in the labour market, both in terms of labour market participation and employment. Poverty is in double-digits for all, ranging from 28.3% in Dominica to 12.5%

in The Bahamas. While inflation has been relatively low in the last few years, there has been a significant rise in prices post-pandemic due to global supply chain disruptions together with rising commodity and fuel prices due to geopolitical tensions caused by Russia's war in Ukraine.

The analysis revealed that all four countries have taken steps to develop social protection systems aimed at supporting the poor and vulnerable, albeit at varying degrees. Each has enacted legislations that are related to social protection; however, significant gaps remain and there is a need to modernise legislation and policies to move in line with global social protection advancements. All have several programmes targeting the poor and vulnerable, which creates room for inefficiency in the delivery of programmes, double dipping by the sophisticated poor and compromising the effectiveness of the programmes' goal of lifting persons out of poverty.

Social protection increased between 2014 and 2020, from 0.76% to 1.41% of GDP. This, however, is below the globally accepted share of GDP, which ranges between 3% and 5%. The share of budget allocation for children, women and the elderly decreased in some countries, while allocations to the working age population increased, suggesting a crowding out effect of programmes geared towards poor, children, women and the elderly by programmes targeting the working age population. To mitigate this shift in the share across vulnerable populations, governments should commit to an objective methodology of allocation that equitably considers the level of vulnerability of each group in order to not disadvantage any group over the other.



The analysis revealed that all four countries have taken steps to develop social protection systems aimed at supporting the poor and vulnerable, albeit at varying degrees.

MACRO-ECONOMIC IMPACT OF CLIMATE-RELATED EVENTS AND SOVEREIGN DEBT ON VULNERABLE GROUPS

Chapter 5



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FORT BERKELEY
English Harbour, Antigua

5.0 Overview

Using secondary data, this chapter examines the impact of climate-related hazards and public debt levels on vulnerable households through the transmission channel of social protection expenditure. The chapter is organised under the following:

- (i) impact of climate-related hazards on vulnerable groups;
- (ii) time series trend analysis of the evolution of public debt in the sample countries; and
- (iii) empirical analysis of the impact of public debt on social protection expenditure.

The Caribbean region is acutely vulnerable to the impacts of a rapidly changing climate and extreme weather-related events (Rasmussen 2004). According to the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), a total of 385 climate-related disasters impacted the Caribbean since 1990, with annual losses quantified in terms of physical infrastructure, livelihoods, and productivity from catastrophic events estimated at US\$3.0 billion (UNECLAC 2019). Moreover, due to their high degree of openness, Caribbean economies are greatly exposed to external macroeconomic shocks. This includes demand side shocks such as recessions in partner countries or supply side shocks emanating from high oil and food prices. These conditions, coupled with other structural impediments, have constrained economic growth and development in those countries.

Furthermore, low growth rates, narrow tax bases and lack of buoyancy in the tax system, coupled with high recovery costs due to the increased frequency of natural hazards, have led to elevated levels of public debt in many Caribbean countries. Studies confirm that elevated levels of public debt have a negative impact on economic and social welfare (Presbitero 2012; Law, Ng, Kutan, & Law 2021; Lora & Olivera 2007; Shabbir & Yasin 2015). These impacts are transmitted through various channels, and the costs are borne disproportionately by vulnerable groups in society. These transmission channels include the following:

- a. **Social Expenditure:** Low-income households and other vulnerable groups are usually more dependent on basic public goods and government social protection programmes such as cash transfers and subsidies for their well-being. However, high debt levels and ensuing debt service payments may have a crowding out effect on investments in critical social programmes and infrastructure needed to support vulnerable and marginalised groups.

- b. **Disposable Income:** Governments may resort to introducing new taxes or increasing existing tax rates to finance debt service obligations. This reduces disposable income and consumption of vulnerable households, thereby further lowering their living standards.
- c. **Cost of Living:** Increases in public sector borrowing may raise the cost of borrowing to the private sector. This may translate into higher costs of production and higher prices for goods and services, thus resulting in higher living costs and reductions in household consumption.
- d. **GDP and Employment:** Higher public-sector borrowing also crowds out access to private-sector credit, leading to reductions in private investment and consumption. A fall in private investment and consumption impedes economic growth and employment creation. This leads to rising unemployment, further reducing economic opportunities for vulnerable households, thus compounding the vicious cycle of poverty.

5.1 Impact of Climate Hazards on Vulnerable Groups

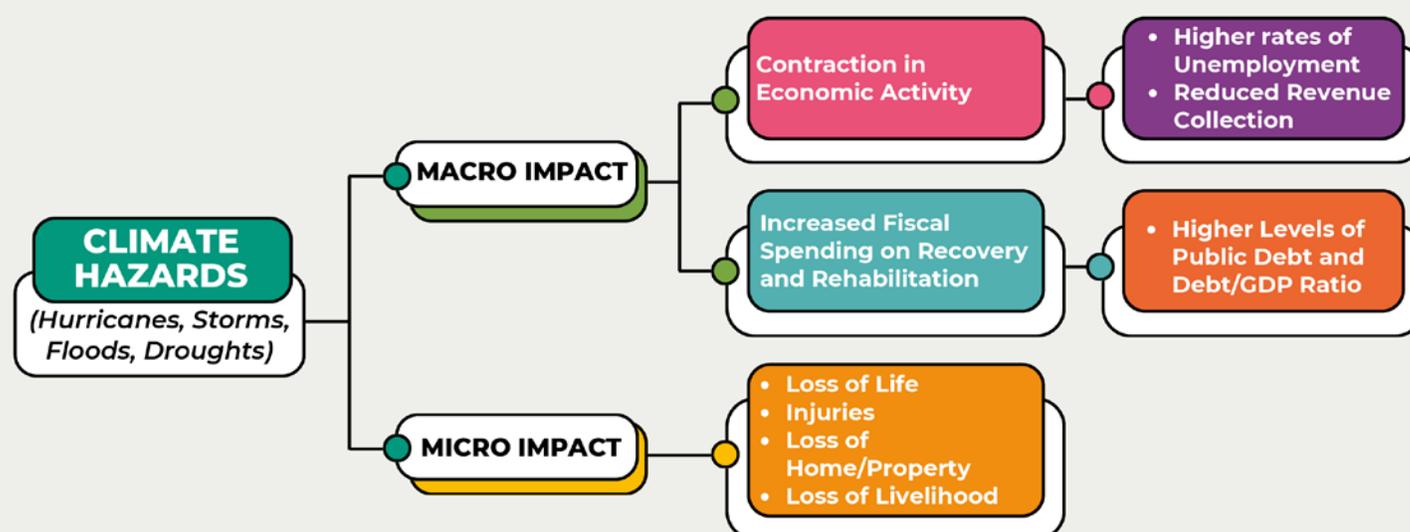
Table 5.1 lists the climate-related hazards and the total damages impacting the four countries over the review period. Climate-related hazards such as hurricanes, tropical storms, floods, and droughts adversely impact the lives of vulnerable groups through several pathways (see Figure 5.1). The passage of hurricanes and storms impacts the lives of vulnerable groups directly through injuries, physical trauma, physical displacement, loss of lives, and property, loss of culture, or livelihoods. At the macro-economic level, climate-related hazards cause disruptions in economic activity thereby increasing the rate of unemployment. Furthermore, climate hazards also affect vulnerable groups through the impact on public debt and social spending. Firstly, lower economic activity leads to declines in government revenue collection. Reductions in revenue, coupled with increased spending on recovery and rehabilitation, widens the fiscal deficit and increases borrowing requirements and nominal debt levels in the absence of fiscal buffers. Secondly, contractions in GDP also raise the debt to GDP ratio. Details on the impact of debt on social spending and the challenges experienced by vulnerable groups using empirical analysis are presented in Section 5.3.



Table 5.1: Climate-Related Hazards (2010-2020)

Country	Month	Year	Name of Hazard	Number of Deaths	Number Affected	Total Damages (US\$ 000)
Antigua & Barbuda	August	2010	Hurricane Earl	0	5,000	\$16,911
	September	2017	Hurricane Irma	0	1,800	\$298,482
The Bahamas	August	2011	Hurricane Irene	0	10,000	\$52,042
	October	2012	Hurricane Sandy	1	0	0
	May	2013	Riverine Flood	0	1,000	\$56,532
	October	2015	Hurricane Joaquin	33	6,700	\$111,127
	September	2016	Hurricane Matthew	0	0	\$731,615
	September	2017	Hurricane Irma	0	0	\$2,388
	September	2019	Hurricane Dorian	356	14,940	\$3,892,030
Dominica	September	2011	Tropical Storm Orphelia	0	240	0
	August	2015	Hurricane Erika	30	28,594	\$596,146
	September	2017	Hurricane Maria	64	71,393	\$1,738,357
Jamaica	September	2010	Tropical Storm Nicole	15	2,506	\$201,317
	October	2012	Hurricane Sandy	1	215,850	\$21,085
	January - November	2014	Drought	0	91,545	0
	September	2016	Hurricane Matthew	0	125,000	0
	April	2017	Tropical Storm Arlene	0	5,000	0

Figure 5.1: Impact of Climate Hazards on Vulnerable Groups



5.2 Time Series Trend Analysis

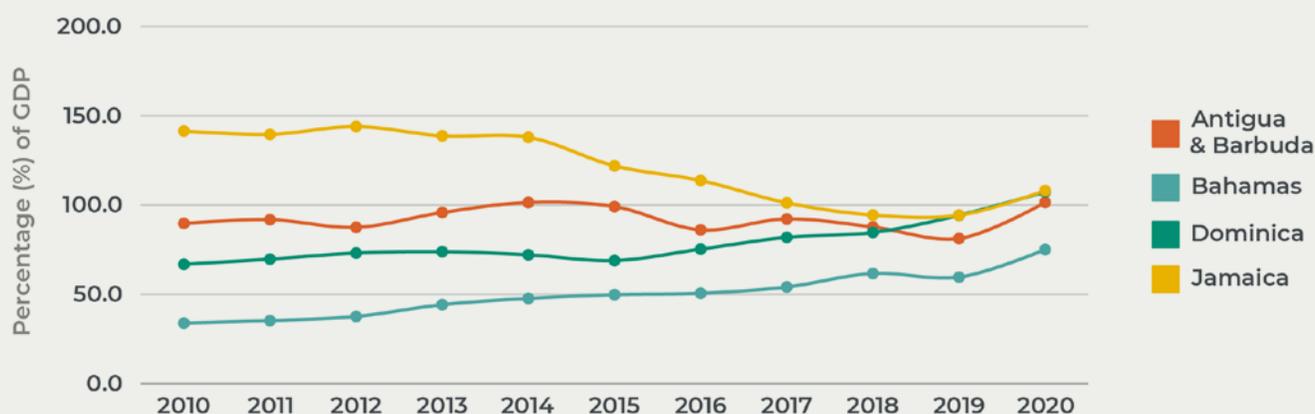
5.2.1 Data and Methodology

Secondary data on fiscal variables such as government revenue, expenditure, fiscal balances, public debt and debt service payments (interest and amortisation) were compiled from various online statistical databases, country reports and budget estimates³⁵, and data on climate-related hazards were extracted from the EM-DAT International Disaster Database to facilitate the analysis. The fiscal variables were analysed to capture trends in the time series for the review period (2010-2020). Moreover, the effects of various shocks, such as climate-related hazards (hurricanes and storms) and the COVID-19 pandemic, were examined to understand how multiple and cascading shocks intersect to worsen pre-existing fiscal constraints and increase public debt.

5.2.2 Evolution of Public Debt in Sample Countries

During the review period, all countries saw increases in the levels of public debt except for Jamaica, whose public debt was on a downward path prior to 2020. In 2020, there was a sharp increase in public debt as countries faced additional fiscal pressures due to the COVID-19 pandemic. As of 2020, The Bahamas had the lowest level of public debt at 75.1% of GDP, while Dominica surpassed Jamaica, recording the highest level of public debt of 109.1% of GDP.

Figure 5.2.2a: Public Debt (% of GDP)



Antigua and Barbuda

Public debt in Antigua and Barbuda rose from EC\$2,613 million, the equivalent of 84.3% of GDP in 2010 to EC\$3,657 million or 98.9% of GDP in 2020. The high level of public debt in Antigua and Barbuda reflects cumulative borrowing and accumulation of arrears over time to meet the financing requirement of sustained overall fiscal deficits. The fiscal data revealed that total expenditure has exceeded total revenue going back the last 20 years.

The fiscal performance at the beginning of the review period was heavily impacted by the fallout from the 2008 financial crisis and global recession. To cushion the impact of these shocks on vulnerable populations, the government increased spending on transfers and subsidies to expand social protection and other support programmes. Furthermore, in response to rising prices, tax concessions were applied to a wide range of food and essential items, further eroding the

35 Online statistical databases and sources include Government Finance Statistics (GFS) Database (IMF), World Development Indicators (The World Bank), Public Finance Statistics (ECCB) and Ministry of Finance websites from sample countries.



tax base. These countercyclical measures led to an increase in total expenditure to 36.2% of GDP and a sharp reduction in revenue to 18.3%, thereby widening the fiscal deficit to 18.3%, raising public debt to 89.2% of GDP in 2009.

Faced with weak economic recovery, the closure of the Stanford Group of Companies and a large financing gap, the Government of Antigua and Barbuda entered a three-year Stand-By arrangement (SBA) with the International Monetary Fund (IMF) from 2010 to 2013. As part of this agreement, the government implemented measures to close the financing gap. Measures to increase revenue included the introduction of the revenue recovery charge (RRC) (a 10% tax applied on all goods imported or produced in Antigua and Barbuda), expansion of the VAT base, an increase in import duties and excise tax on alcohol and tobacco and one-off non-tax revenue payments. On the expenditure side, the government reduced capital expenditure and implemented a hiring and wage freeze in the public service. As a result, revenue rose to 22.3% of GDP while expenditure fell to 22.6% of GDP, bringing the fiscal deficit down to 0.3% and debt to GDP to 84.3% in 2010.

In the years that followed, revenue performance was

impacted by changes in economic activity, non-tax revenue or fiscal policy. Revenue receipts were adversely affected by the removal and transfer of the embarkation tax and passenger facility charge to the Airport Authority in 2013, the removal of personal income tax in 2016 and the decline in business activity due to the impact of Hurricane Irma in 2017. Conversely, revenue performance improved with the introduction of the Citizen by Investment (CIP) programme in 2016 and growth in tax revenue on account of successive years of economic expansion.

On the other hand, expenditure trended upward at the end of the IMF programme in 2013, attributable to higher outlays on personal emoluments, goods and services, interest payments and capital spending in 2013. There were additional increases in expenditure due to recovery efforts following the passage of Hurricane Irma in 2017 and 5% salary increase, back-pay and retroactive payments and new hirings in 2018. Moreover, total expenditure rose to 26.8% of GDP in 2020 on account of higher health and social spending to mitigate the impact of the COVID-19 pandemic. Accordingly, the fiscal deficit widened to 6.4% of GDP in 2020 and public debt jumped from 75.6% of GDP in 2019 to 98.9% in 2020.

Figure 5.2.2b: Public Debt (% of GDP)

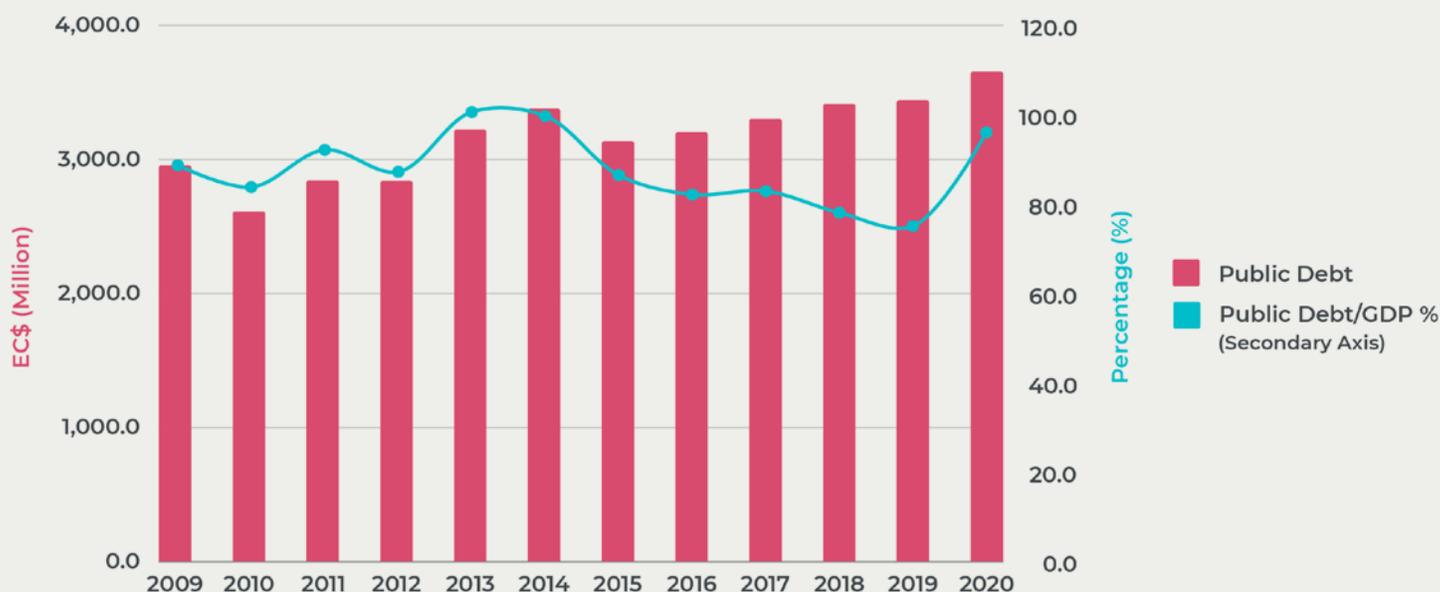
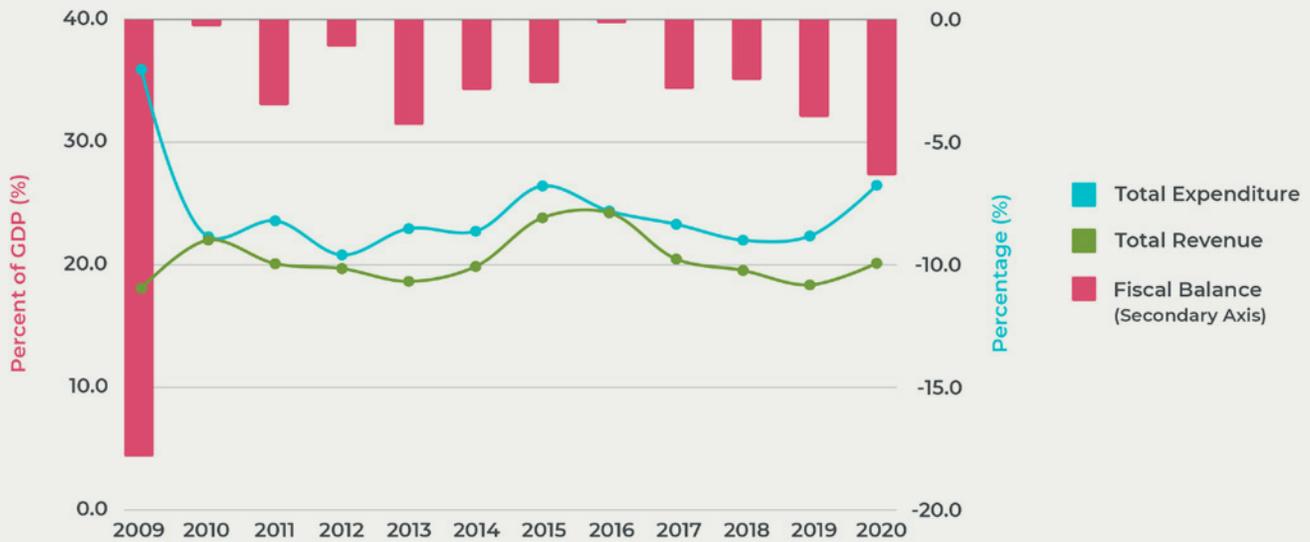


Figure 5.2.2c: Total Revenue, Total Expenditure and Fiscal Balance (% of GDP), Antigua and Barbuda



The Bahamas

Public debt in The Bahamas has been trending upward from B\$3,401 million, the equivalent of 33.9% of GDP in 2010, to B\$8,484 million or 75.1% of GDP in 2020. Similar to the case of Antigua and Barbuda, total expenditure has been consistently higher than total revenue, leading to persistent fiscal deficits and resultant increases in public debt. Over the review period, total revenue and total expenditure averaged 15.2% and 18.8% of GDP respectively, the lowest among the sample countries.

Total revenue in The Bahamas was primarily driven by changes in economic activity, one off payments and changes in tax policy. Due to the frequency of hurricanes and storms, economic activity has been relatively low and averaged 0.1% during the period, thereby subduing revenue collections. In 2011, total revenue to GDP increased to 14.2% from 12.9% in 2010 on account of one-

time capital receipts from the sale of government property, together with one-off outstanding payment of excise tax by a public corporation. Thereafter, it returned to trend levels until VAT was introduced in January 2015 at the initial rate of 7.5%, followed by a hike of 4.5 percentage points to 12% in 2018. As a result, revenue grew from 14.7% of GDP in 2015 to 18.4% by 2019. However, this was met with higher levels of expenditure, from 17.3% in 2015 to 20% of GDP in 2019, largely due to unplanned recovery spending due to the passage of Hurricane Joaquin in October 2015, Hurricane Matthew in October 2016, Hurricane Irma in 2017 and Hurricane Dorian in 2019. The accumulative fiscal deficits led to an increase in public debt to 59.6% in 2019. This was compounded by the COVID-19 pandemic as higher spending on health, social transfers and ongoing hurricane recovery raised the fiscal deficit to 7.2% of GDP and public debt to 75.1% of GDP in 2020.

Hurricane Joaquin in October 2015, Hurricane Matthew in October 2016, Hurricane Irma in 2017 and Hurricane Dorian in 2019. The accumulative fiscal deficits led to an increase in public debt to 59.6% in 2019.

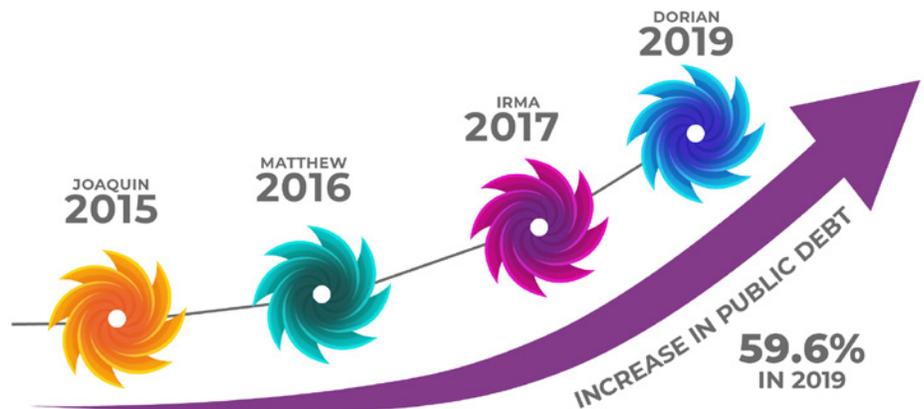


Figure 5.2.2d: Public Debt, The Bahamas

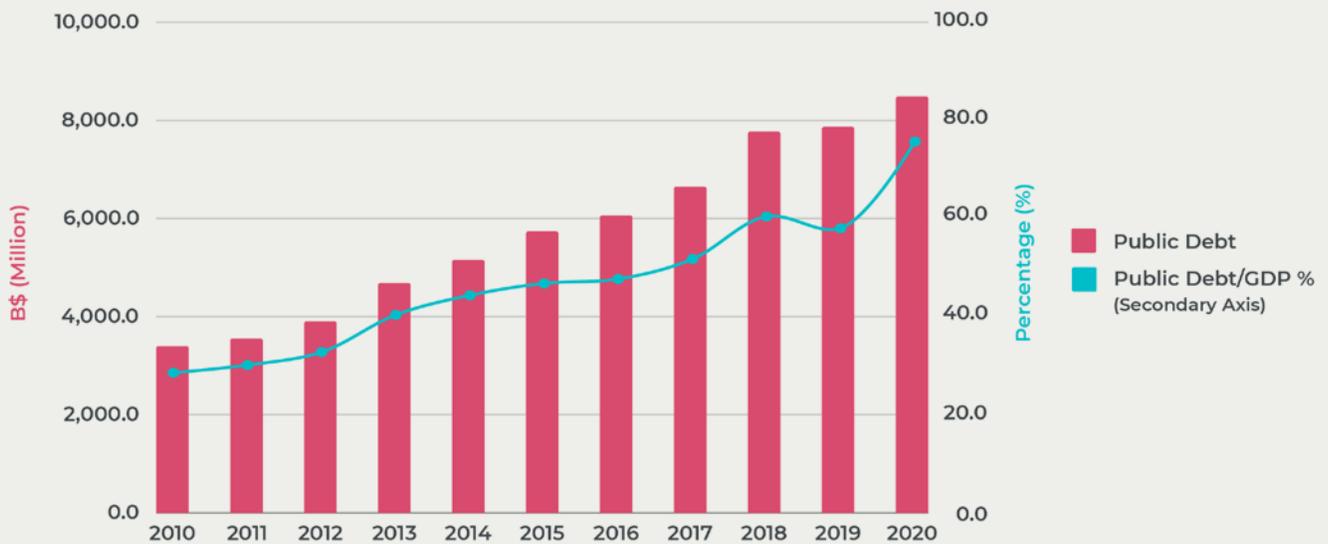
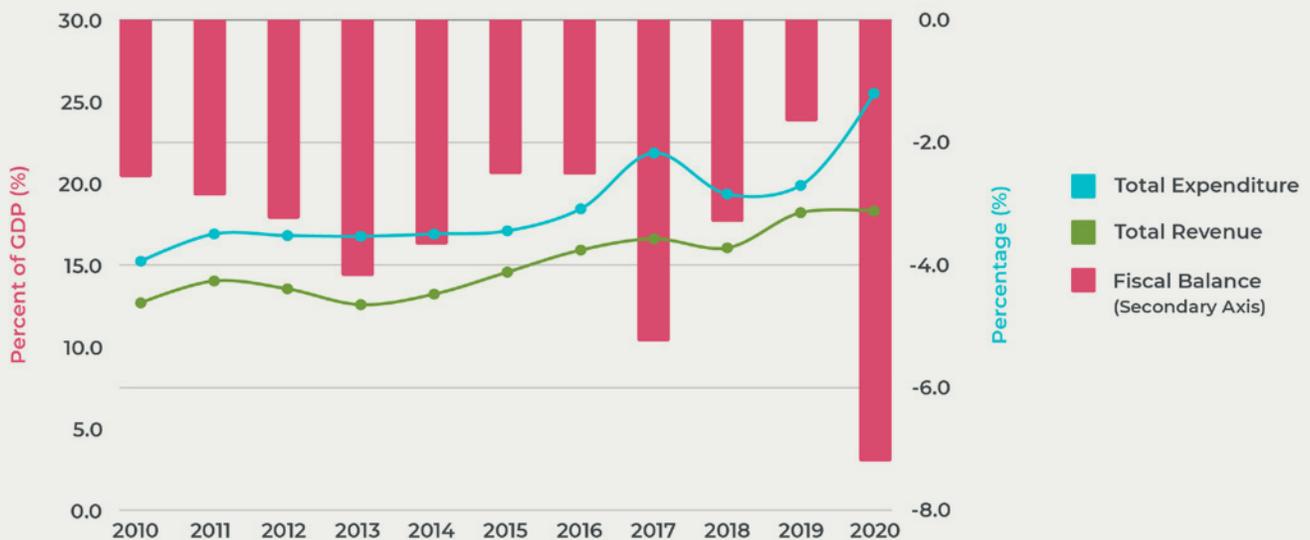


Figure 5.2.2e: Total Revenue, Total Expenditure and Fiscal Balance, The Bahamas



Dominica

Public debt in Dominica rose from EC\$921 million or 69% of GDP in 2010 to EC\$1,485 million or 109.10% of GDP in 2020. During the period 2010-2014, the country ran average fiscal deficits of about 4.3%; however, revenue rose from 27.2% of GDP in 2014 to 43.8% in 2015, reflecting large inflow of funds from the revamped Citizenship by Investment Programme. With expenditure relatively unchanged at 32.4%, the country recorded an overall fiscal surplus of 11.4% of GDP

in 2015. Revenue performance improved further in 2016 to 58.7%; however, total expenditure also rose to 47.3%, reflecting recovery and reconstruction activities following the passage of Hurricane Erika in 2015. Notwithstanding, there was a surplus of 11.4% on the fiscal account for another consecutive year, leading to a decline in public debt from 78.1% in 2014 to 68.3% in 2016.



The passage of Hurricane Maria in September 2017 brought a halt to this positive outturn as the sharp contraction in economic activity led to reductions in revenue and increases in reconstruction and rehabilitation expenditure in 2017 and 2018. Following a record high fiscal deficit of 18.5% of GDP in 2018, there was an uptick in economic activity and a decline in expenditure, thereby reducing the deficit to 8.3% in 2019. This performance was short-lived as

the pandemic caused a 16.6% contraction in GDP in 2020 and prompted a rise in expenditure to 63.7% of GDP, due to increased spending on health, social transfers, and public infrastructure. Despite high revenue receipts from the Citizenship by Investment Programme the country recorded a fiscal deficit of 7.3% and a jump in public debt to 109% of GDP at the end of 2020.

Figure 5.2.2f: Public Debt, Dominica

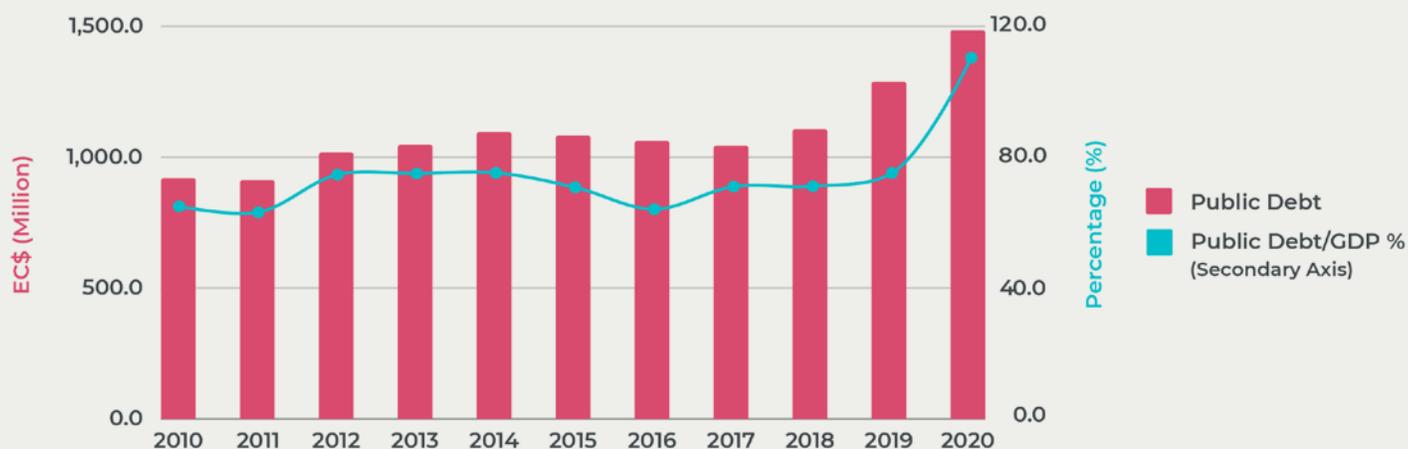
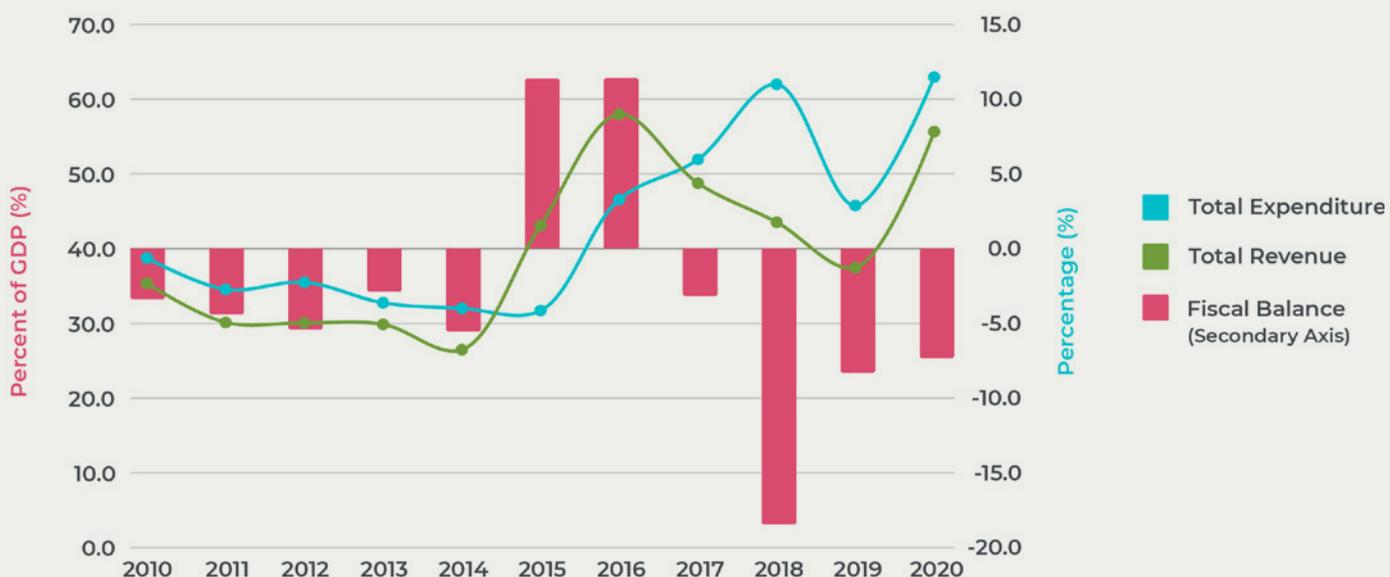


Figure 5.2.2g: Total Revenue, Total Expenditure and Fiscal Balance, Dominica



Over the review period, nominal public debt in Jamaica rose from **J\$1,657 billion in 2010 to J\$2,137.6 billion in 2020**. However, the public debt to **GDP ratio improved from 141.4% in 2010 to 108.1% of GDP in 2020**, attributable to sustained growth in GDP during the period 2013-2019.



Jamaica

Over the review period, nominal public debt in Jamaica rose from J\$1,657 billion in 2010 to J\$2,137.6 billion in 2020. However, the public debt to GDP ratio improved from 141.4% in 2010 to 108.1% of GDP in 2020, attributable to sustained growth in GDP during the period 2013-2019. The fiscal performance at the beginning of the review period was impacted by a confluence of adverse exogenous shocks during the period 2007-2008. While still recovering from the passage of Hurricane Dean in 2007, the performance of the Jamaican economy was further impeded because of the 2008-2009 global recession coupled with high inflation from sharp increases in global food and oil prices. The government responded with countercyclical policies which raised the fiscal deficit to 11.3% of GDP and public debt to 141.9% of GDP at the end of 2009. This prompted the launch of a debt exchange programme in January 2010 followed by a 27-month Stand-By Arrangement with the IMF in February 2010 in the amount of US\$1.27 billion to provide liquidity support, achieve fiscal sustainability and reduce risks to the financial system.

Under the programme, measures were adopted to enhance revenue collection through improved compliance while reducing expenditures. In addition, US\$7.8 billion in bonds

were exchanged, leading to a reduction in debt service obligations. Nonetheless, fiscal consolidation efforts were hampered due to spending pressures, delays in reforms and increases in capital expenditure on recovery and rehabilitation following the passage of Hurricane Nicole in September 2010 and Hurricane Sandy in October 2012. The fiscal deficit, while showing some improvement, remained elevated, moving from 6.3% of GDP in 2010 to 4.1% in 2012. Consequently, the debt position deteriorated to a ratio of 143.9% of GDP in 2012.

In May 2013, the IMF approved a four-year Extended Fund Facility (EFF) arrangement for Jamaica to support Jamaica's economic reform agenda, geared at fiscal consolidation, improvement in competitiveness, debt reduction, and improved social protection programmes. Measures were undertaken to narrow the fiscal and financing gap and achieve growth in GDP during the period 2013-2019, despite the effects of the 2014 drought, Hurricane Matthew in 2016 and Tropical Storm Arlene in 2017. As at 2019, there was a surplus of 0.9% on the fiscal accounts and the debt/GDP ratio fell to 94.3% of GDP. However, these gains were eroded due to the COVID-19 pandemic as the fiscal deficit grew to 3.1% of GDP and the debt/GDP climbed to 108.1% of GDP.



Figure 5.2.2h Public Debt, Jamaica

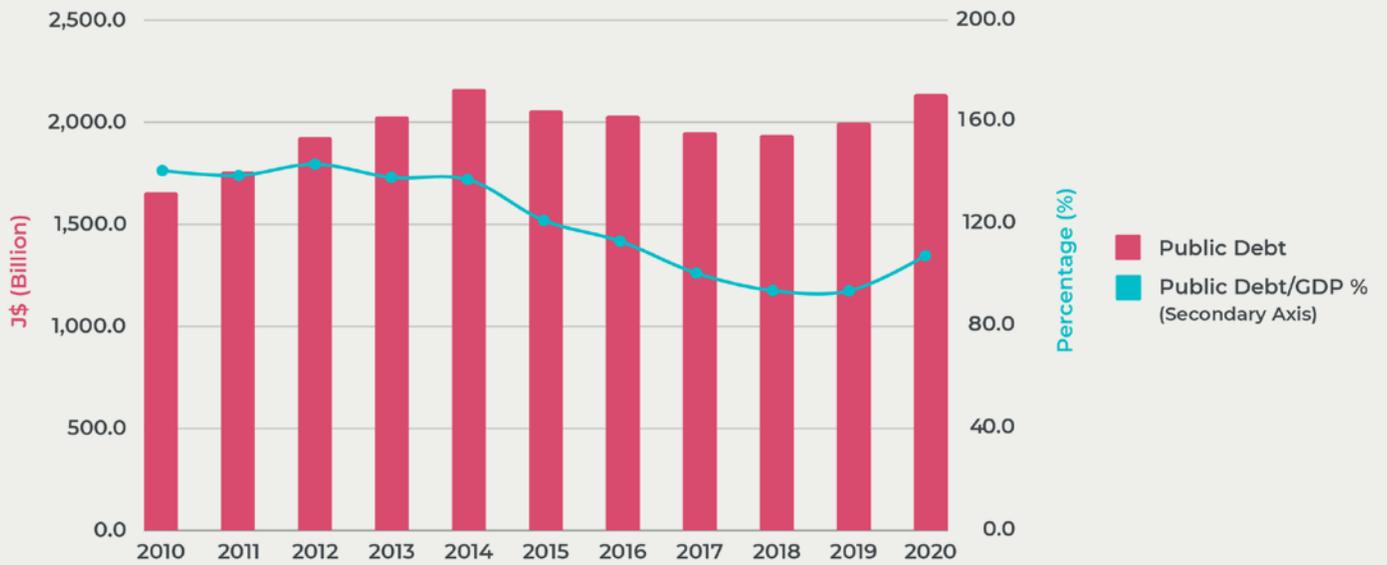
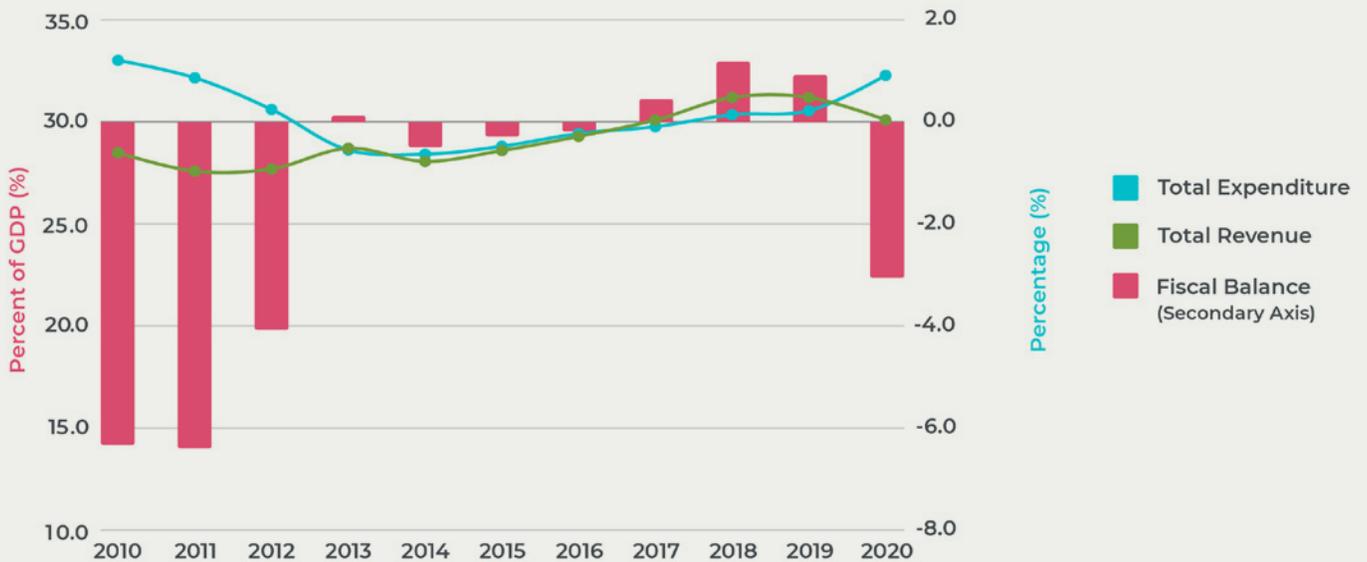


Figure 5.2.2i: Total Revenue, Total Expenditure and Fiscal Balance, Jamaica



5.2.3 Debt Service Payments

It is widely accepted in the public policy space that high levels of public debt and the associated debt servicing commitments have an adverse impact on the provision of essential social protection programmes and infrastructure to vulnerable groups. In other words, high debt overhangs and debt servicing costs crowd-out and constrain governments' ability to provide such services to the vulnerable. **Figure 5.2.3a** shows the trends in debt service as a percentage of total revenues. As public debt levels increase, so does the proportion of revenue earmarked for debt service, which comprises repayment of loan principal and interest payments.

In Antigua and Barbuda, debt service payments as a percentage of total revenue have been trending upward over time, rising from 34.8% in 2010 to 85% in 2020. There have been fluctuations in debt service ratio in The Bahamas, ranging from a low of 10.7% in 2015 to a high of 41.6% in 2020. Despite high debt levels, Dominica had the lowest debt service ratio among the sample countries, averaging 13.2% over the review period. The debt service ratio in Dominica rose from 9.5% in 2010 to 16.2% in 2020. Conversely, Jamaica had the highest debt service ratios, averaging 60.7% over the period. They ranged from a low of 41.7% in 2018 to a high of 102.5% in 2015.

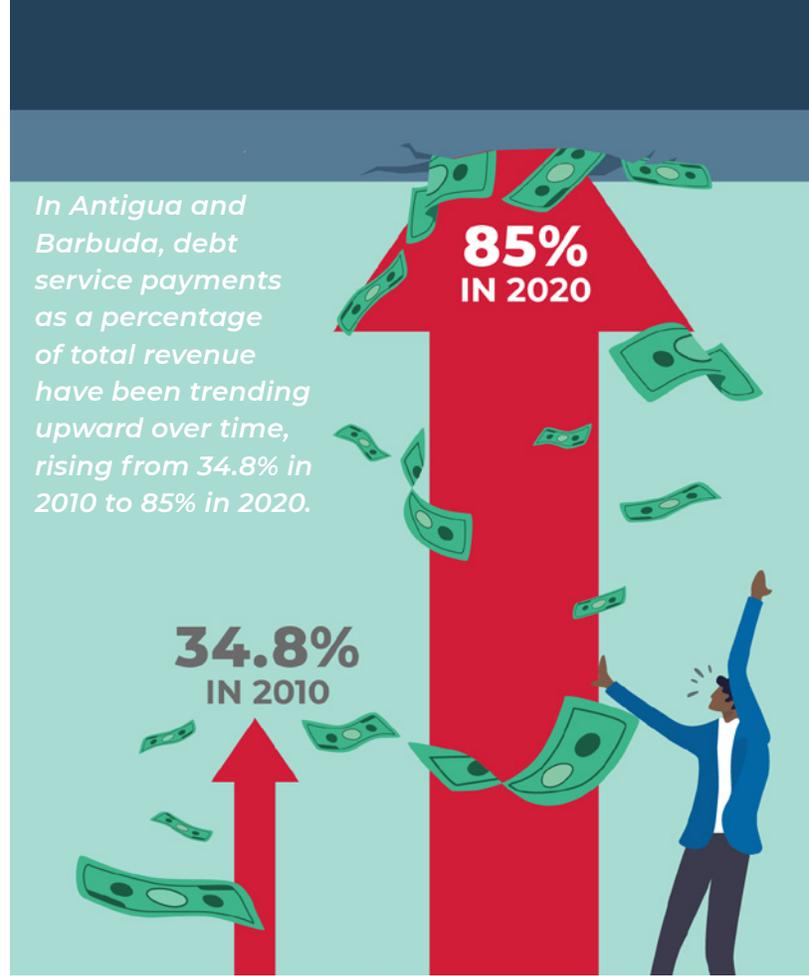
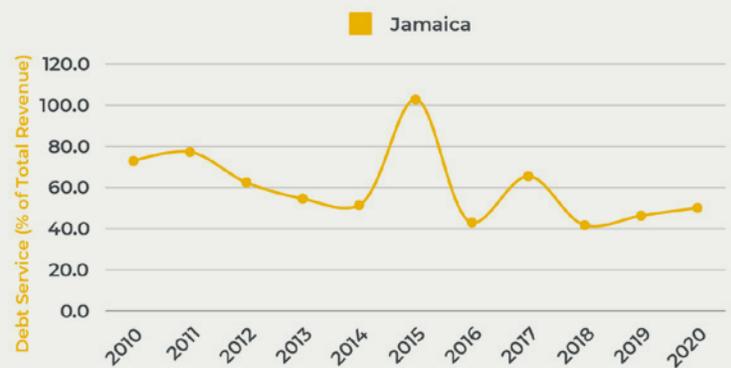
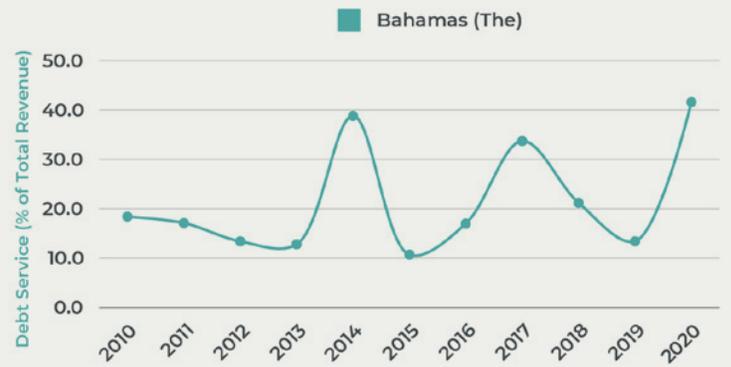
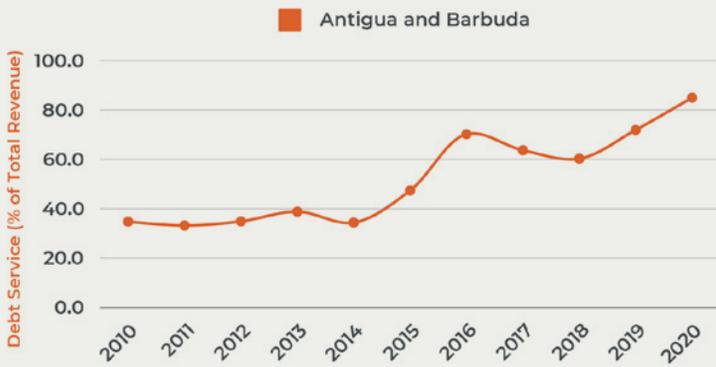


Figure 5.2.3a: Debt Service (% of Total Revenue)

Debt Service / Total Revenue



5.3 Empirical Investigation of Debt on Social Protection Expenditure and Implications on Vulnerable Groups

This section investigates the impact of public debt and interest payments, and other key covariates, on social protection expenditure in Antigua and Barbuda, The Bahamas, Dominica and Jamaica

5.3.1 Empirical Methodology

To explore whether a relationship exists between debt and social protection expenditure, an attempt is made to estimate social protection expenditure, total government expenditure, total revenue, debt, interest repayments and population. All variables are converted into logarithms to facilitate ease of interpretation of the results. **The base econometric specification is presented below.**

$$SPE_{it} = \beta_0 + \beta_1 GE_{it} + \beta_2 GR_{it} + \beta_3 PB_{it} + \beta_4 IP_{it} + \beta_5 POP_{it} + \beta_6 PBal_{it} + \varepsilon_{it}$$

Where:

Table 5.3.1a: Variable Description and Expected Sign

Variable	Description	Apriori Expectation
SPE_{it}	Total social protection expenditure for country <i>i</i> over time period <i>t</i>	n.a
GE_{it}	Total government expenditure for country <i>i</i> over time period <i>t</i>	Positive
GR_{it}	Total government revenue for country <i>i</i> over time period <i>t</i>	Positive
IP_{it}	Total government interest for country <i>i</i> over time period <i>t</i>	Negative
PB_{it}	Total government public debt for country <i>i</i> over time period <i>t</i>	Negative
$PBal_{it}$	Primary Balance	Negative
POP_{it}	Total population for country <i>i</i> over time period <i>t</i>	Positive
ε_{it}	The stochastic error term	n.a
β	The betas are the coefficients associated with each variable, which explains how much social protection expenditure will change given a 1 percent change in each associated variable.	n.a

Pooled Ordinary Least Squares was used to estimate the specified relationship because the number of time series observations is greater than the number of cross-sectional units. In such a case, where the T is larger than N, using the standard panel data estimation methods such as the fixed and random effects has shown to provide bias estimates. Using the Pooled OLS approach, however, requires that some strong assumptions are made, key of which is that there is

no difference between countries, essentially ignoring what is known as the heterogeneity bias. Given the major constraint of not having a large N, we proceed with the Pooled OLS estimation. **Appendix 9** presents the estimation results emanating from the Pooled OLS and **Appendix 10** details the Pooled Ordinary Least Squares estimation methodology when applied to the various vulnerable groups, i.e., poor, elderly, children, and women.



5.4 Conclusion

The high debt level in the four countries reflects fiscal constraints faced by governments in financing their budgets. These fiscal constraints were largely attributable to structural impediments, including an undiversified economy highly reliant on tourism and agriculture, and a narrow tax base. Furthermore, countries are highly vulnerable to external economic shocks and the increasing rate of climate-related hazards. **These climate-related hazards cause major infrastructural damage, disruptions in economic activity and increase the spending requirement for recovery and rehabilitation and countercyclical policies.** This leads to a buildup of public debt in these countries and the associated high rate of interest repayments crowd out priority investments in both social programmes and growth and job enhancing initiatives.

In the final section, an empirical analysis using panel data econometric methods was employed to investigate the impact of interest expenditure on social protection allocation and results found that indeed there was a crowding out effect, with interest rate expenditure having a negative and statistically significant relationship with social protection expenditure for the four countries investigated. **The study also finds that the social protection expenditure for the poor and children was positively impacted by increases in government expenditure. Equally, all vulnerable groups were negatively impacted by interest expenditure, with the social protection expenditures for the elderly being the most impacted.**

...a buildup of public debt in these countries and the associated high rate of interest repayments crowd out priority investments in both social programmes and growth and job enhancing initiatives.



EFFECTS OF CLIMATE-RELATED EVENTS ON VULNERABLE GROUPS

Chapter 6



CPDCNGO.ORG

THE QUEEN'S STAIRCASE
Nassau, Bahamas

6.0 Overview

Geographical location and size increase the risk of the Caribbean to the negative effects of climate change. This chapter describes and explores the views from institutions and vulnerable groups on the effects of climate-related events on the social and economic landscape. The chapter presents the findings of data collected from NGO service providers, programme beneficiaries from government public assistance programmes and NGO services as well as knowledge experts in social service and national disaster management organisations using the methodology described in Chapter 3.

6.1 Socio-Economic Profile of Study Participants

6.1.1 Socio-Demographic Profile of Focus Group Participants

A total of 41 participants took part in the five focus group discussions.³⁶ There was an even gender balance. In total, more than half of the focus group participants across the four countries, 23 or 56%, self-identified as males and 18 or 44% of the participants self-identified as females (see Figure 6.1.1a). There was fair distribution of all age categories, which is important in addressing the perspectives of the youth and older adults (see Figure 6.1.1b). Female participants in the age groups 18-24 years, 31-44 years and 60+ slightly outnumbered their male counterparts.

Figure 6.1.1a: Number of participants by country

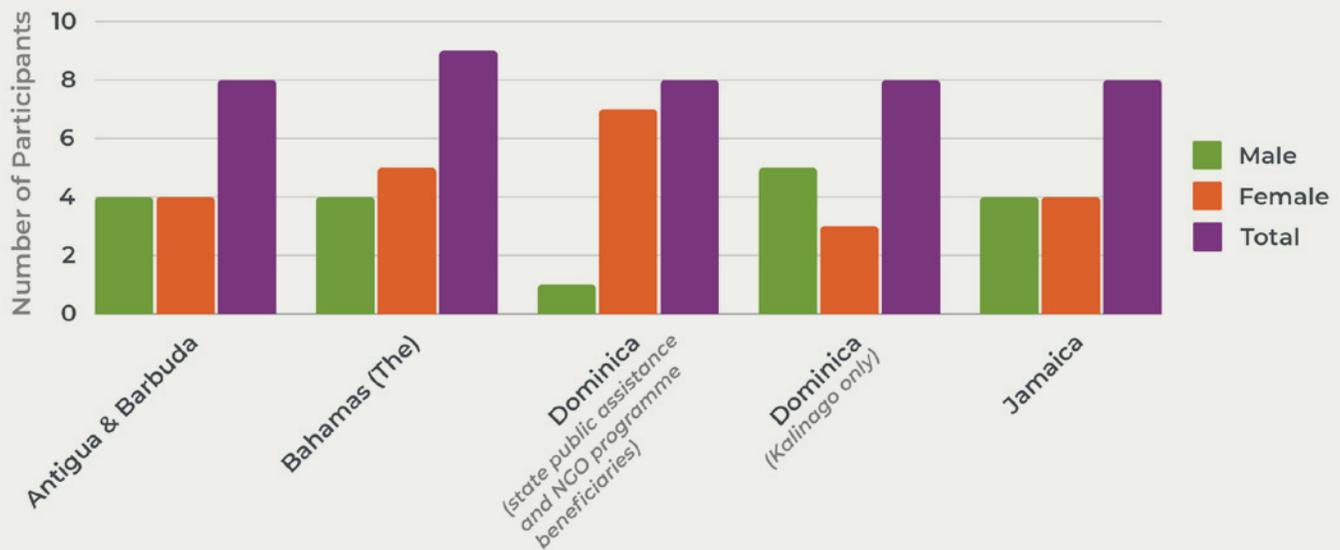
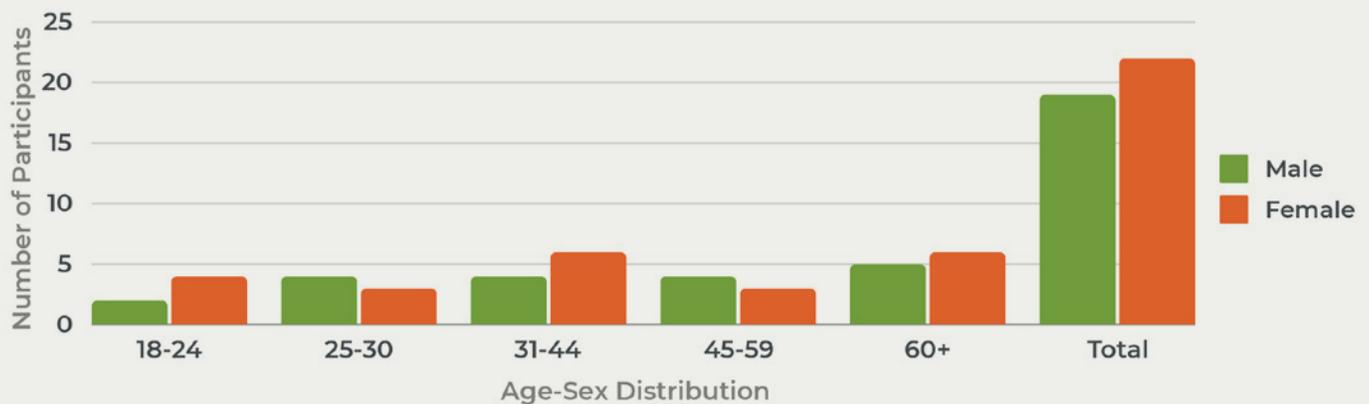


Figure 6.1.1b: Age-sex distribution



36 The NGO service provider focus group comprises 7 people, that is 6 women and 1 man.



6.1.2 Other Characteristics of Participants

Among all focus group participants, 27% or 11 individuals indicated that they have a disability. The types of disabilities represented were cerebral palsy, blindness, paraplegic, and a broken leg (temporary disability). Participants were mainly employed as semi-skilled professionals and labourers and reported earning their livelihood from several sources, such as through fishing, farming, domestic servants, clerical work, warden, coaching, information technology specialists and entrepreneurs. Students, pensioners and the unemployed were also among the focus group discussion participants.

6.1.3 Profile of Key Interview Informants

There were eight (8) key interview informants from the ministries and departments of social services and the national disaster management offices. The sex distribution of the subject matter experts is consistent with stereotypical perspectives in the division of labour. Females dominated leadership roles in the social services; across the four social service entities, there were three female senior managers who were engaged in the social services and one male

middle manager. The senior leadership in the national disaster management offices were all men.

6.1.4 Socio-demographic Profile of Survey Participants

Socio-demographic Characteristics

Table 6.1.4a presents the socio-demographic characteristics of survey respondents. Beneficiaries from The Bahamas accounted for more than half (53%) of respondents, followed by those from Jamaica (24%), Antigua and Barbuda (15%) and Dominica (8%). More than six in ten (64%) respondents resided in an urban area, while 36% resided outside of an urban area. The sample of respondents was ageing, a feature consistent with the demographic transition occurring in the Caribbean region (**see Chapter 4**). Nearly six in every ten respondents were over 50 years old, with 38% aged 60 years or older and 19% aged 51-59 years. Youth 30 years and under were in the minority, with that cohort accounting for 6% of all respondents.

Table 6.1.4a Socio-demographic characteristics of survey respondents

Socio-demographic characteristics	Total	Percent distribution, %
Country	245	100%
Antigua and Barbuda	36	15%
The Bahamas	130	53%
Dominica	20	8%
Jamaica	59	24%
Area of residence	245	100%
In an urban area	156	64%
Outside an urban area	89	36%
Gender	245	100%
Female	185	75%
Male	60	25%
Age-group	245	100%
18 - 24 years	6	2%
25 - 30 years	8	3%



Socio-demographic characteristics	Total	Percent distribution, %
31 - 40 years	38	16%
41 - 50 years	53	22%
51 - 59 years	47	19%
60 years or older	93	38%
Marital status	244	100%
Single	132	54%
Casually dating	2	1%
Married/Common law	53	22%
Divorced/Separated	27	11%
Widowed	30	12%
Highest level of formal education completed	245	100%
None	6	2%
Primary	62	25%
Secondary	116	47%
Post-secondary/Technical vocational training	32	13%
Tertiary	29	12%
Living with disability	245	100%
Yes	62	25%
No	183	75%
Type of disability	62	N/A*
Physical disability	38	61%
Vision impairment	21	34%
Deaf or hard of hearing	4	7%
Mental health conditions	2	3%
Intellectual disability	5	8%
Acquired brain injury	1	2%
Autism spectrum disorder	2	3%
Household size	245	100%
1	50	20%
2-3	95	39%
4-5	62	25%
6 or more	38	16%

* Multiple responses allowed for 'type of disability'



Three-fourths (76%) of respondents were female, whilst 24.5% were male. **Table 6.4.1b** further highlights the beneficiaries' country of residence by gender. The majority of respondents

in each country were female. They accounted for 90% of all respondents in Dominica, 77% in The Bahamas, 76% in Jamaica and 61% in Antigua and Barbuda.

Table 6.1.4b: Beneficiary country of residence by gender, n = 245

Country of residence	Total, n	Gender		Total
		Female	Male	
Total	245	75%	25%	100%
Antigua and Barbuda	36	61%	39%	100%
The Bahamas	130	77%	23%	100%
Dominica	20	90%	10%	100%
Jamaica	59	76%	24%	100%

Table 6.1.4c further highlights the beneficiaries' age-group by gender. The overwhelming majority of respondents across all age-groups were female.

Table 6.1.4c: Beneficiary age-group by gender, n = 245

Age group	Total, n	Gender		Total
		Female	Male	
Total	245	75%	25%	100%
18 - 24 years	6	83%	17%	100%
25 - 30 years	8	75%	25%	100%
31 - 40 years	38	82%	18%	100%
41 - 50 years	53	79%	21%	100%
51 - 59 years	47	66%	34%	100%
60 years or older	93	75%	25%	100%

The majority (47%) of respondents advised that they had completed a secondary level education. This was followed by those who completed a primary level education (25%), post-secondary level education (13%) and tertiary level education (12%). Respondents who had not completed any

formal level of education amounted to 2% of the sample. **Table 6.1.4d** further highlights the beneficiaries' level of education by gender. Consistent with the overall distribution, most respondents across all levels of education were females.

The majority of respondents in each country were female. They accounted for 90% of all respondents in Dominica, 77% in Bahamas, 76% in Jamaica and 61% in Antigua and Barbuda.



Table 6.1.4d: Beneficiary level of education by gender, n = 245

Level of education	Total, n	Gender		Total
		Female	Male	
Total	245	75%	25%	100%
None	6	67%	33%	100%
Primary level education	62	73%	27%	100%
Secondary level education	116	74%	26%	100%
Post-secondary/technical vocational training/skills training	32	84%	16%	100%
Tertiary level education (e.g. Associate/Bachelor/Higher Degree)	29	79%	21%	100%

One in every four respondents (62 or 25%) reported living with a disability. The majority of those living with a disability had a physical disability (61%), followed by those with a vision impairment (34%), an intellectual disability (8%), those who were deaf or hard of hearing (7%), those with a mental health condition or with autism spectrum disorder (3% each)

and finally, those with an acquired brain injury (2%). **Table 6.1.4e** further highlights whether respondents were living with a disability by gender. Consistent with the overall gender distribution of the sample, more than seven in ten (71%) respondents living with a disability were female.

Table 6.1.4e: Beneficiaries living with a disability by gender, n = 245

Living with a Disability	Total, n	Gender		Total
		Female	Male	
Total	245	75%	25%	100%
Yes	62	71%	29%	100%
No	183	77%	23%	100%

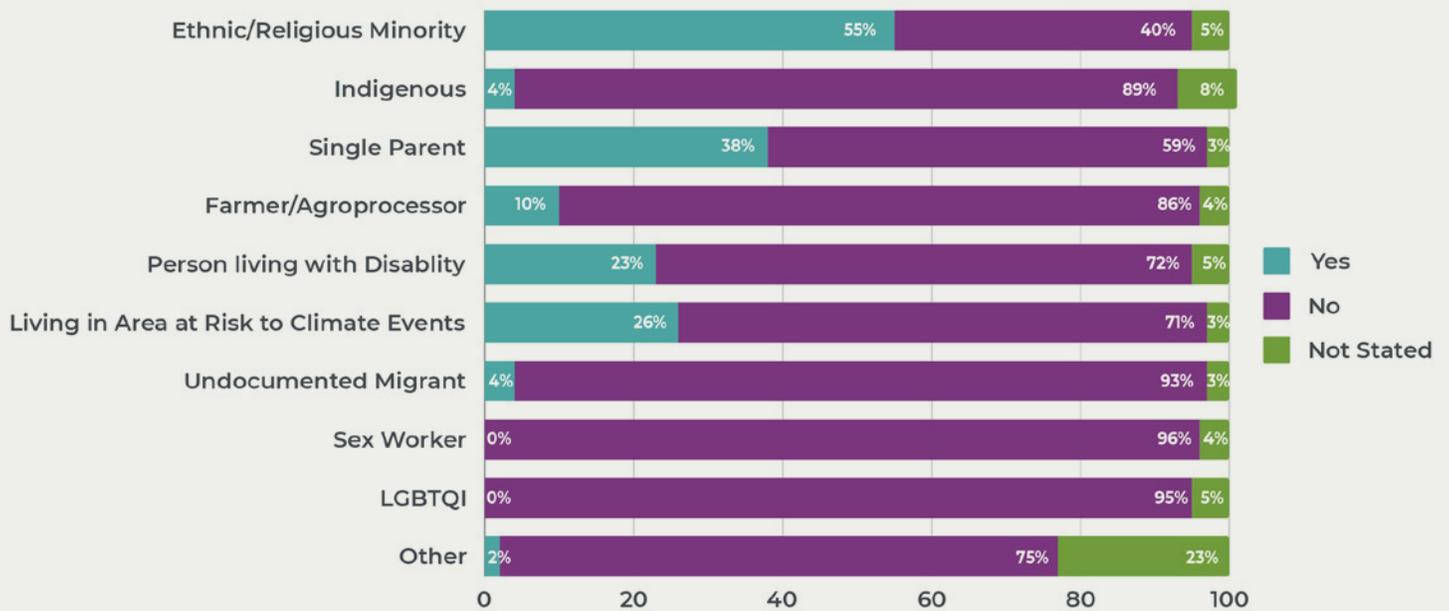
Twenty percent (20%) of survey respondents lived alone. However, 39% of survey respondents reported living with one or two other persons, while 25% lived with three or four other persons. Approximately 16% of all respondents lived in a household with five or more other persons. The average household size was 3.4.

Members of vulnerable populations are at greater risk of experiencing more severe impacts from climate-related disasters. **Figure 6.1.4a** illustrates the percentage (%) of beneficiaries who identified as members of vulnerable populations. More than half (55%) of the survey respondents

reported being a member of an ethnic/religious minority group, while 38% identified as single parents. One fourth (26%) of respondents were living in areas that are at risk to climate events such as along coastal areas, floodplains, along riverbanks/gullies or on steep slopes. Approximately one fourth (23%) of respondents identified as a person living with a disability, while 10% were farmers or agro-processors and 4% were indigenous (first people). Two percent of all respondents reported a sense of vulnerability because they were female, a survivor of domestic violence or a caregiver of elderly persons, including those with dementia.



Figure 6.1.4a Percent (%) of beneficiaries who identified as members of vulnerable populations



* Multiple responses allowed

Household Headship, Employment Status and Income

Table 6.1.4f presents the household headship and economic characteristics of respondents. A total of 195 survey respondents reported that they lived with at least one other person. A higher proportion of male respondents indicated they were household heads when compared to females (68% versus 61%), whereas 18% of female respondents indicated their partner/spouse was the household head, compared to 3% of their male counterparts. Further, nearly two-thirds of the 195 respondents (64%) who lived with at least one other person indicated that they were the breadwinner. A higher proportion of males were breadwinners, compared to females (68% versus 63%).

Nearly half (48%) of all survey respondents were unemployed, while 28% were employed (paid) and 17% were self-employed. Five percent (5%) indicated their status as 'other' and included those who were retired or volunteers, while two percent (2%) were students. Gender comparisons show that males were more likely than females to be unemployed (57% versus 45%) or self-employed (20% versus 16%). Females were more likely than males to be paid employees (31% versus 20%).



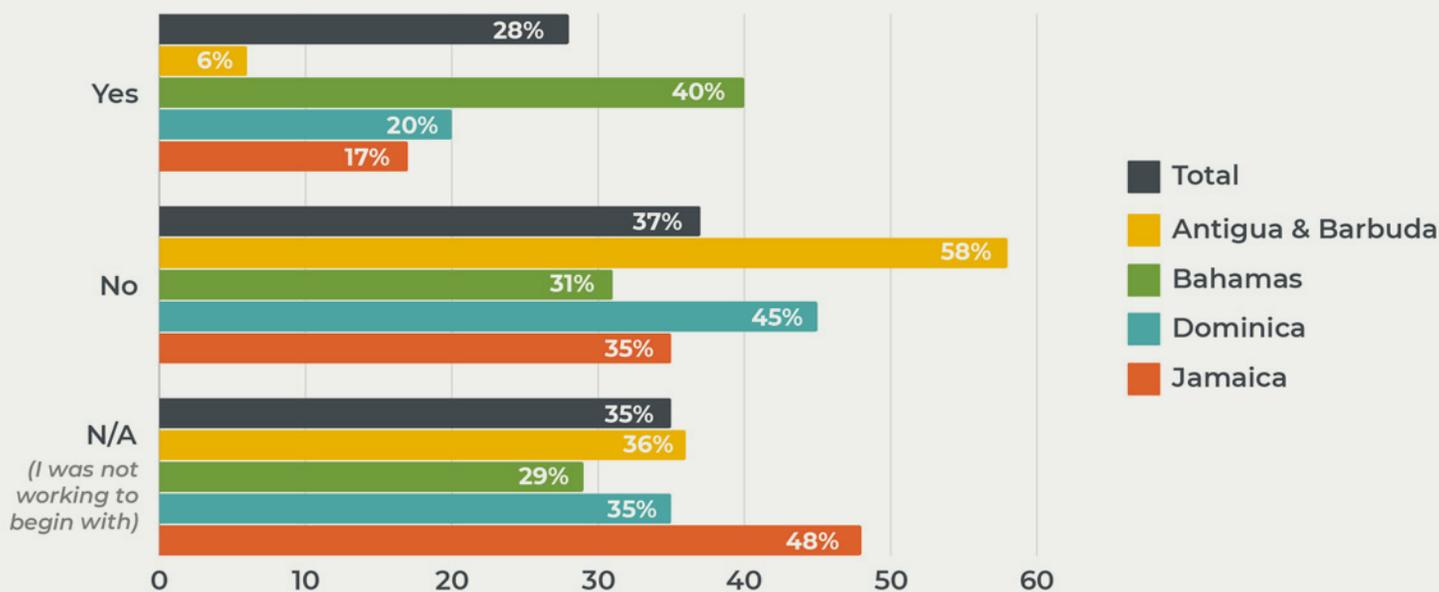
Table 6.1.4f: Household headship and economic characteristics of respondents

Characteristics	Total, n	Percent distribution, %	Gender	
			Female	Male
Head of Household (n=195)				
Yourself	121	62%	61%	68%
Your partner/spouse	30	15%	18%	3%
Female relative	24	12%	12%	14%
Joint	10	5%	4%	11%
Male relative	10	5%	5%	5%
Breadwinner (n = 195)				
Yes	124	64%	63%	68%
No	71	36%	37%	32%
Employment status (n=245)				
Employed (paid)	69	28%	31%	20%
Self employed	41	17%	16%	20%
Unemployed	118	48%	45%	57%
Student	4	2%	2%	2%
Other	13	5%	7%	2%
Average monthly income (n=245)				
None	23	9%	11%	5%
100 USD or less	43	18%	15%	27%
101 - 300 USD	34	14%	14%	15%
301 - 500 USD	15	6%	8%	0%
501 - 700 USD	15	6%	5%	8%
701 - 900 USD	13	5%	6%	3%
901 USD or more	25	10%	10%	12%
Prefer not to answer	77	31%	32%	30%
Job loss during the pandemic (n = 243)				
Yes	68	28%	28%	28%
No	90	37%	39%	30%
Not applicable, I was not working to begin with	85	35%	33%	42%

Overall, respondents represented individuals from the lower income brackets. More than one-fourth (27%) of survey respondents reported a monthly income of US\$100 or less and included those who did not have any income at all. Notably, 31% of survey respondents preferred not to reveal their monthly income. Gender comparisons show that females were more than twice as likely as males to report not having any income (11% versus 5%). However, males were almost two times more likely than females to report earnings of less than US\$100 from all sources (27% versus 15%). For the higher income brackets, there was little difference between males and females. Approximately 16% of females earned US\$701 or more, compared to 15% of males.

Three in ten (28%) respondents indicated that they lost their job during the COVID-19 pandemic, specifically during the period March – December 2020, while 72% were not affected, including 35% who were not working prior to the pandemic. There was no difference between the proportion of males and females who lost their job during the pandemic (28% each). **Figure 6.1.4b** further illustrates job loss experienced during the COVID-19 pandemic by country. Job loss amongst beneficiaries was most widespread in The Bahamas (40%), followed by Dominica (20%) and Jamaica (17%). On the contrary, job loss amongst beneficiaries in Antigua and Barbuda was minimal (6%).

Figure 6.1.4b: Job loss during the COVID-19 pandemic (March to December 2020) by country, n = 243



There was no difference between the proportion of males and females who lost their job during the pandemic **(28% each)**.



Quality of Life

Access to water, type of toilet facilities and access to the internet are indicators of quality of life. Most respondents accessed their water through pipes either into their dwelling or their yard. Table 6.4.1g presents the survey respondents' quality of life indicators. Nearly half (48%) of all respondents accessed their water from a public facility that was piped into their dwelling. This was followed by those whose water was from a private source and piped into the dwelling

(16%) and those whose access was from a public facility and piped into their yard (15%).

The majority (73%) of respondents reported their toilet facility as a water closet linked to a sewer, followed by those with a water closet not linked to a sewer (13%). Just over one in every ten (11%) respondents used a pit. Six in every ten (60%) respondents had access to the internet at home.

Table 6.1.4g: Survey respondents' quality of life indicators

Facility	Sample size, n	Percent distribution (%)
Access to water		
Total	245	100%
Private catchment, not piped	17	7%
Private piped into dwelling	40	16%
Public catchment	4	2%
Public piped into dwelling	117	48%
Public piped into yard	36	15%
Public standpipe	13	5%
Spring or river	2	1%
Trucked water/water truck	10	4%
Other (APUA, living in Salvation Army shelter, next door neighbour, rain water, well)	5	2%
Prefer not to answer	1	0%
Type of toilet facilities		
Total	244	100%
Pit	28	11%
Water closet linked to sewer	178	73%
Water closet not linked to sewer	32	13%
Other (bush, toilet bowl on pit)	2	1%
Prefer not to answer/Not stated	4	2%
Access to internet		
Total	245	100%
No	98	40%
Yes	146	60%
Not stated	1	0%



6.2.1 Vulnerability and its Intersectionality

Vulnerability is intersectional. Factors such as age, gender, cultural beliefs and disability compound the vulnerability and contribute to the social exclusion and marginalisation of individuals. This study has revealed that women, persons with one or more disability and cultural minorities are among the

highest risk of social and economic exclusion. Key informants and focus group participants revealed that national debt exacerbated by institutional arrangements has adversely affected persons with disabilities, particularly women with disabilities. **One NGO service provider revealed that:**



NGO SERVICE PROVIDER BAHAMAS

“Disabled women have added barriers and it speaks to our cultural values on what a woman's place is. And when you do have the added component of living with a disability it worsens their situation from an economic standpoint...You have people looking at you that you are a disabled farmer. You can't do this thing...Finance institutions do not want to invest the resources, you know, the training because it would be considered a waste of time or low value to give it to a person who will not be able to sustain it.”



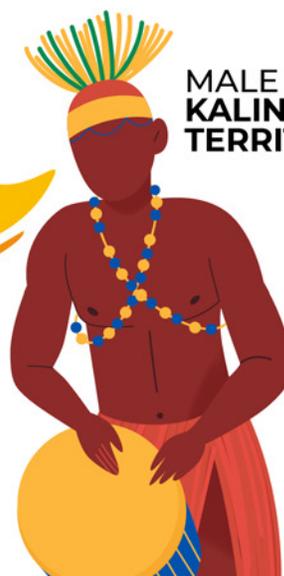
Given that among persons with a disability, 75% were women, there needs to be consideration to having gender mainstreamed in the delivery of services as well having systems of support to enable accessibility of those services.

This finding indicates the perpetuation of poverty and exclusion through ableist systems geared towards discrimination against persons with disabilities. Hence the perpetuation of poverty is a combination of structural poverty and systems that are inaccessible by design, that

is, from the onset they were never created for inclusivity in achieving economic development.

Cultural practices further impact on the poverty and marginalisation of minority groups such as the Kalinago community in Dominica. Traditions supporting land tenure affects the ability of this group to access loans from financial institutions to improve their livelihood and life chances of their households. **One focus group participant revealed that:**

“In Dominica to be Kalinago means you are looked down upon, marginalised and resources that other Dominicans have access to, you don't. We need access to funding from banks...We in the Kalinago territory don't have access to those opportunities because we have communal and not private land titles...Most of our guys who are into construction, they work under somebody else. They are not an actual contractor. Because you don't have the capital, you don't have the money, you don't own your own company and the equipment that it needs to actually run a project on your own. So most of our guys are like labourers and...you know, like subs, they're not contractors.”



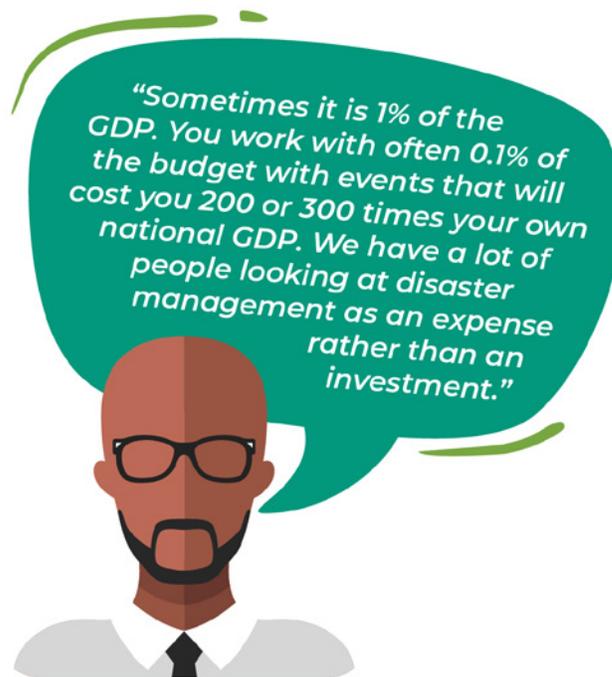
MALE YOUTH KALINAGO TERRITORY



This lived experience among a cultural minority group has implications on their participation in the labour market. Social stigma and limited access to employment and self-development opportunities will contribute to intergenerational poverty among this group and their inability to withstand various external shocks (economic, health, natural disasters, etc).

6.2.2 Inclusive Disaster Risk Reduction and Livelihood of Vulnerable Communities and Populations

Debt and climate-related events exacerbate the living conditions and erode opportunities for the survival of the most vulnerable and destitute. Key informant interviews revealed that national budgetary allocation to disaster risk management is inadequate because the national budget is required to service various sectors. **One key informant reported on the meagre allocation to disaster risk management:**



The basis of inclusive disaster risk reduction is the meaningful participation of the most vulnerable communities and groups, as well as relevant stakeholders, in shaping risk identification and reduction measures and response and recovery measures. Failure in practising inclusive or participatory disaster risk reduction has adverse implications on the livelihoods that further marginalise vulnerable groups.

Vulnerable groups are at greater risk of experiencing loss of livelihoods, food insecurity and slower restoration of infrastructure in periods of natural disaster when disaster risk management arrangements and planning processes ignore their needs, traditions and expertise. **A key informant stated it is necessary to account for the requirements of various vulnerable groups:**



Cultural norms are an important consideration and should be given equal priority as demographic factors, as noted in the below comment:

“Equally important in inclusive disaster risk reduction are cultural norms and ethnic values of traditional communities. The maroon population has their own cultural beliefs and norms that permeate their community. It's not as entrenched as what would happen in the rest of the Caribbean, like Saint Lucia, and those places like Belize...For these groupings you must ensure that you are including them in terms of decision making. So, you're bringing them to the table and ensuring that whatever aspects that you're implementing around service management or responding after the disaster includes their values.”



6.3 Experience, Preparedness, Response and Recovery from Climate-Related Disasters

This section addresses the experiences and knowledge of climate-related disaster experiences of vulnerable groups as well as their recommendations in preparing and recovering from the effects of disasters. The experiences provide unique perspectives on ways policy makers may improve inclusivity in disaster management at the regional and national levels.

6.3.1 Types of Climate-Related Disasters Experienced During the Period 2010 to 2020

The most cited climate-related disaster experienced by beneficiaries during the period 2010 to 2020 was hurricanes (48%). This was followed by tropical storms (35%), drought

(25%), flooding (22%), heatwaves (10%) and landslides (5%).

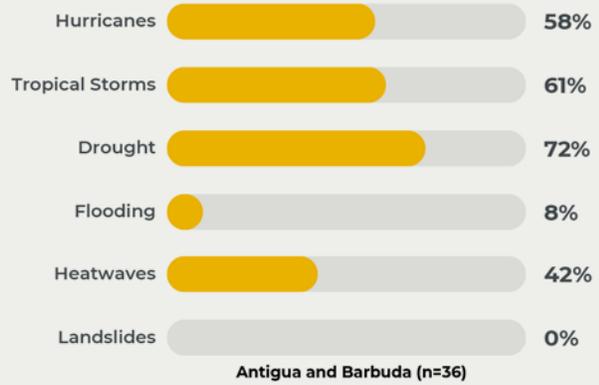
Figure 6.3.1 illustrates the types of disasters experienced by beneficiaries during the period by country. In Antigua and Barbuda, drought was cited as the climate disaster most experienced during the period (72%), followed by tropical storms (61%). This was also evident in Jamaica, where drought (42%) and tropical storms (41%) were cited by respondents as the two most experienced climate events, albeit to a lesser extent. In The Bahamas, hurricanes were cited as the event most experienced during the period (48%), followed by flooding (25%), whereas beneficiaries in Dominica cited hurricanes (95%) and tropical storms (75%) as the climate disasters most experienced during the period.



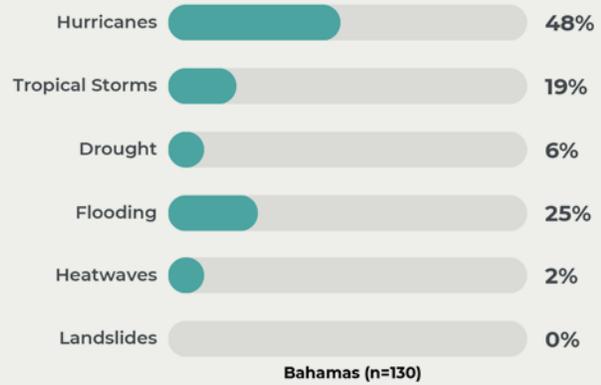
Figure 6.3.1: Types of disasters experienced by beneficiaries by country



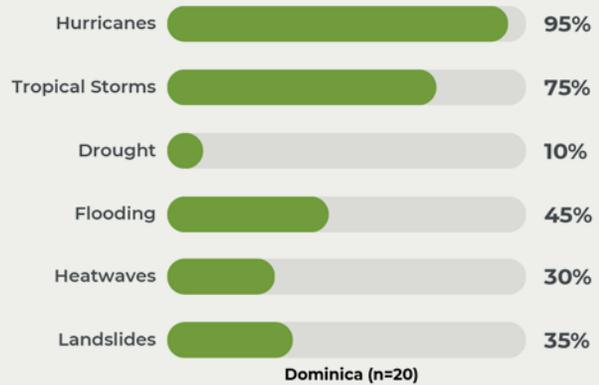
Antigua & Barbuda



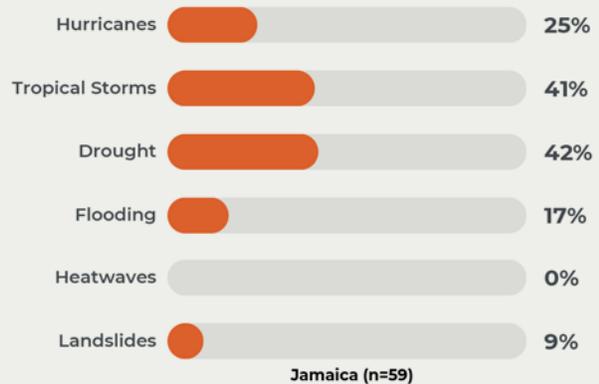
The Bahamas



Dominica



Jamaica



6.3.2 Types of Climate-Related Disasters that Significantly Impacted Respondents

Of all the climate disasters experienced, beneficiaries were asked to identify the event that affected them the most. More than four in every ten (46%) beneficiaries reported that they were most affected by hurricanes. The types of disasters by which beneficiaries were most affected by country, are presented in **Table 6.3.2**. Findings show that the climate event

by which beneficiaries in Dominica, The Bahamas and Antigua and Barbuda were most affected was hurricanes (90%, 65% and 31%, respectively). However, in Jamaica, nearly half (47%) of all beneficiaries indicated that they were most impacted by drought.

Table 6.3.2: Types of disasters that affected beneficiaries the most by country

Type of disaster	Antigua and Barbuda (n=36)	The Bahamas (n=66)	Dominica (n=20)	Jamaica (n=43)	Total (n=165)
Hurricanes	31%	65%	90%	9%	46%
Drought	28%	0%	0%	47%	18%
Flooding	8%	24%	5%	16%	16%
Tropical storms	11%	11%	0%	26%	13%
Heatwaves	22%	0%	5%	0%	6%
Landslides	0%	0%	0%	2%	1%
Total	100%	100%	100%	100%	100%

HIGHEST IMPACT

SECOND HIGHEST IMPACT

THIRD HIGHEST IMPACT



6.3.3 Disaster Preparedness

The survey assessed the experience and level of preparedness of beneficiaries in the period leading up to climate-related disasters during the period 2010 to 2020, with respondents being asked to indicate their level of agreement.³⁷ **Table 6.3.3** highlights the mean level of preparation scores by gender and country. The overall mean score was 2.7. This suggests that, generally, beneficiaries were not well-positioned or appropriately prepared in the period leading up to the disaster. This finding was also consistent when examined

by gender and country. The mean score for both females and males was 2.7 each. However, slight differences were observed when assessed by country. With a mean score of 2.8, beneficiaries in Antigua and Barbuda were most prepared, whereas beneficiaries in Jamaica were least prepared (2.5) in the period leading up to a disaster. These findings have implications for how quickly people, particularly members of vulnerable groups, can recover from disasters.

Table 6.3.3: Mean level of preparation scores by gender and country

Characteristics	Mean score	n	Standard Deviation*
Total	2.7	169	0.396
Gender			
Female	2.7	124	0.408
Male	2.7	45	0.365
Country			
Antigua and Barbuda	2.8	34	0.354
The Bahamas	2.7	72	0.370
Dominica	2.7	20	0.530
Jamaica	2.5	43	0.358

6.4 Socio-Economic Impacts of Natural Disasters on the Livelihoods of Vulnerable Populations

This section details the economic and social impact of climate-related events on vulnerable populations. The differences in economic impacts experienced by men and women are presented. A case study highlighting how floods and hurricanes further marginalise cultural minority groups such as the Kalinago is also presented.

Figure 6.4a presents the overall impact of climate-related events on beneficiaries by gender. More than three in every four (77%) beneficiaries indicated that they were affected in some way by climate-related events during the period 2010

to 2020. Among those affected, 42% were affected slightly, while more than one in every three (35%) beneficiaries were affected moderately (24%) or significantly (11%). A higher proportion of females than males (80% versus 71%) were impacted in some way by climate-related events. It is also notable that females were more likely than males to experience the most severe impacts from climate disasters, as 14% of female beneficiaries indicated that they were significantly affected by climate disasters, compared to 5% of male beneficiaries.

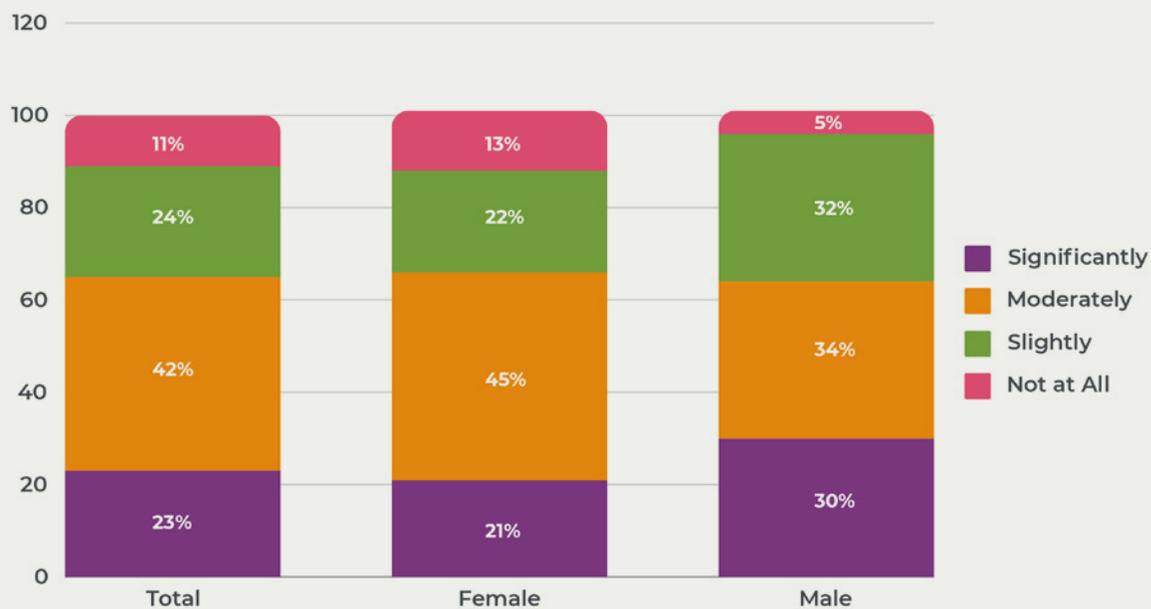
³⁷ On a scale of 1 to 4, with statements indicating whether or not they were well-positioned or prepared prior to the disaster, where 1 was 'strongly disagree', 2 was 'disagree', 3 was 'agree' and 4 was 'strongly agree'. Responses were then used to compute a mean score. Where relevant, reverse coding was applied to selected statements, so that higher values reflected a greater level of preparation in the period leading up to the disaster. *Standard deviation is a measure of the average amount of variability in the data and tells how spread out the data is in relation to the mean. Low standard deviation values mean that the data are clustered around the mean while high values mean that the data is more widely dispersed.



...the general livelihood, health and well-being of beneficiaries are severely affected in the aftermath of a disaster.



Figure 6.4a: Overall impact of climate-related events on beneficiaries by gender



6.4.1 Economic Impacts of Natural Disasters on Vulnerable Populations

Further analysis was conducted to ascertain the extent to which beneficiaries were economically impacted by climate-related disasters during the period 2010 to 2020, with particular focus on those who regarded the impact as 'moderate' or 'significant'. **Table 6.4.1a** highlights the five most severe economic impacts from climate disasters experienced by beneficiaries. Beneficiaries were most

severely impacted in their ability to buy goods or inputs for their business (49%) and their ability to farm (49%). In addition, loss or damage to housing (42%), reduction or loss of income (42%) and a reduced ability to purchase personal hygiene products were cited, revealing that the general livelihood, health and well-being of beneficiaries are severely affected in the aftermath of a disaster.



Table 6.4.1a: Most severe economic impacts from climate disasters experienced by beneficiaries

Economic Impact	% Total	Ranking
 Reduced ability to buy goods or inputs for my business	49%	1st
 Reduced ability to farm/raise animals	49%	1st
 Loss or damage to housing	42%	2nd
 Reduction or loss of income	42%	2nd
 Reduced ability to buy basic necessities/personal hygiene products (e.g. sanitary napkins, toilet tissue, soap)	41%	3rd

* Multiple responses allowed

Gender comparisons were also conducted. **Table 6.4.1b** highlights the five most severe economic impacts from climate disasters experienced by females while **Table 6.4.1c** highlights the five most severe economic impacts from climate disasters experienced by males. More than half

(52%) of females indicated they had a reduced ability to buy goods or inputs for their business, followed by a reduced ability to farm/raise animals (50%), loss or damage to their housing (45%), a reduction or loss of income (44%) as well as an impact on their ability to buy necessities (42%).

Table 6.4.1b: Most severe economic impacts from climate disasters experienced by females

Economic Impact	% Total	Ranking
 Reduced ability to buy goods or inputs for my business	52%	1st
 Reduced ability to farm/raise animals	50%	2nd
 Loss or damage to housing	45%	3rd
 Reduction or loss of income	44%	4th
 Reduced ability to buy basic necessities/personal hygiene products (e.g. sanitary napkins, toilet tissue, soap)	42%	5th

* Multiple responses allowed



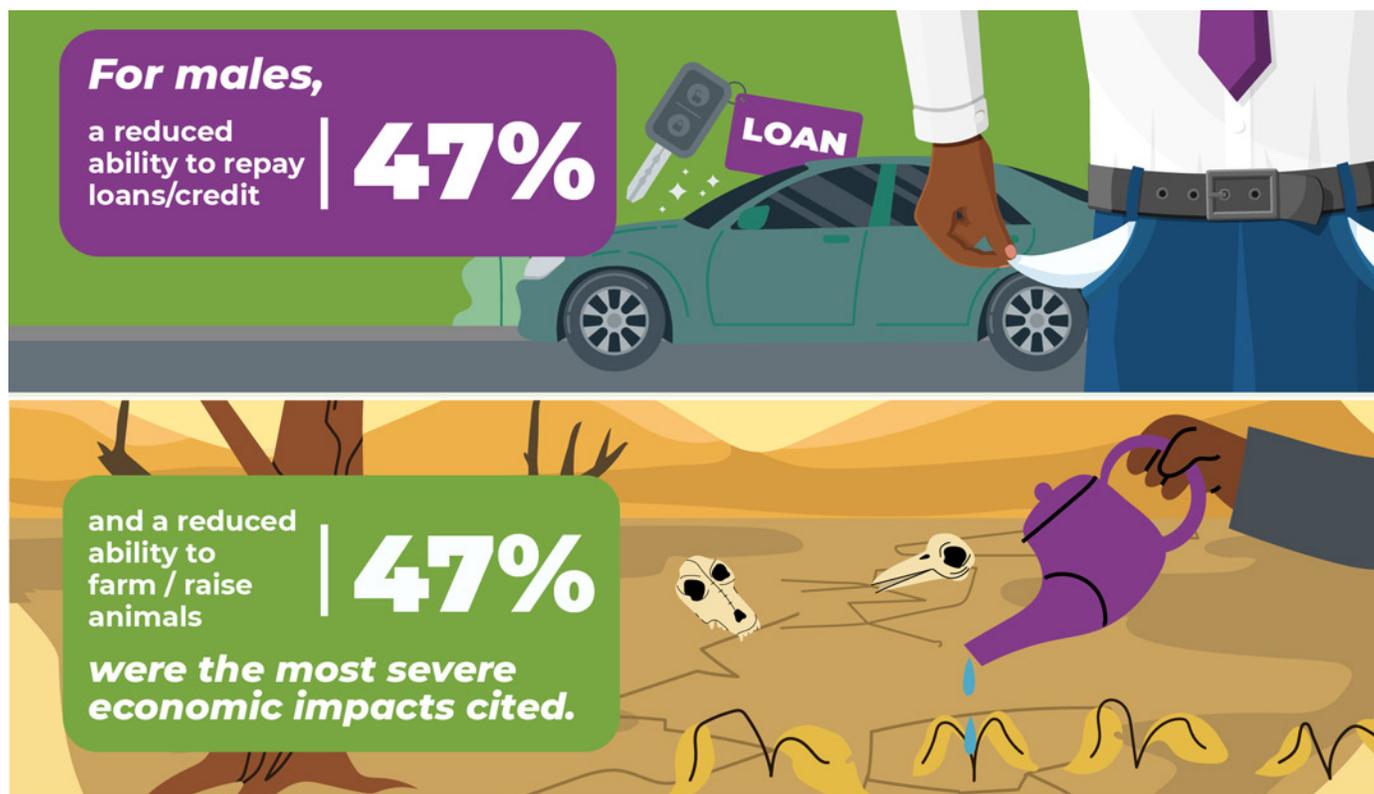
For males, a reduced ability to repay loans/credit (47%) and a reduced ability to farm/raise animals (47%) were the most severe economic impacts cited. Damage to housing and inability to buy basic hygiene products were not featured in the five most severe economic impacts for men as they

were for women; however, in addition to a reduced ability to repay loans/credit, they also cited a reduced ability to buy food and maintain a healthy diet (38%) as one of the most severe economic impacts experienced from the climate disasters.

Table 6.4.1c: Most severe economic impacts from climate disasters experienced by males

Economic Impact	% Total	Ranking
 Reduced ability to buy goods or inputs for my business	47%	1st
 Reduced ability to farm/raise animals	47%	1st
 Loss or damage to housing	43%	2nd
 Reduction or loss of income	38%	3rd
 Reduced ability to buy basic necessities/personal hygiene products (e.g. sanitary napkins, toilet tissue, soap)	38%	3rd

* Multiple responses allowed



The income received from vulnerable groups from all income sources is low. Forty-seven percent reported that they received US\$500.00 or less monthly. As a result, there are negative implications related to the low-income earnings of the vulnerable groups, which includes lack of adequate access to proper nutrition and housing amenities.

The main economic activities in the Caribbean are located

along coastal areas. Therefore, the effects from the passage of hurricanes or tropical storms often have acute impacts on specific communities. Using a participatory approach such as community mapping, focus group participants identified the effects of natural disasters on the livelihood and social life of residents living in vulnerable communities (see Figure 6.4.1b and Figure 6.4.1c). It is noted that drought is experienced island wide.

Figure 6.4.1b: Map of Antigua & Barbuda

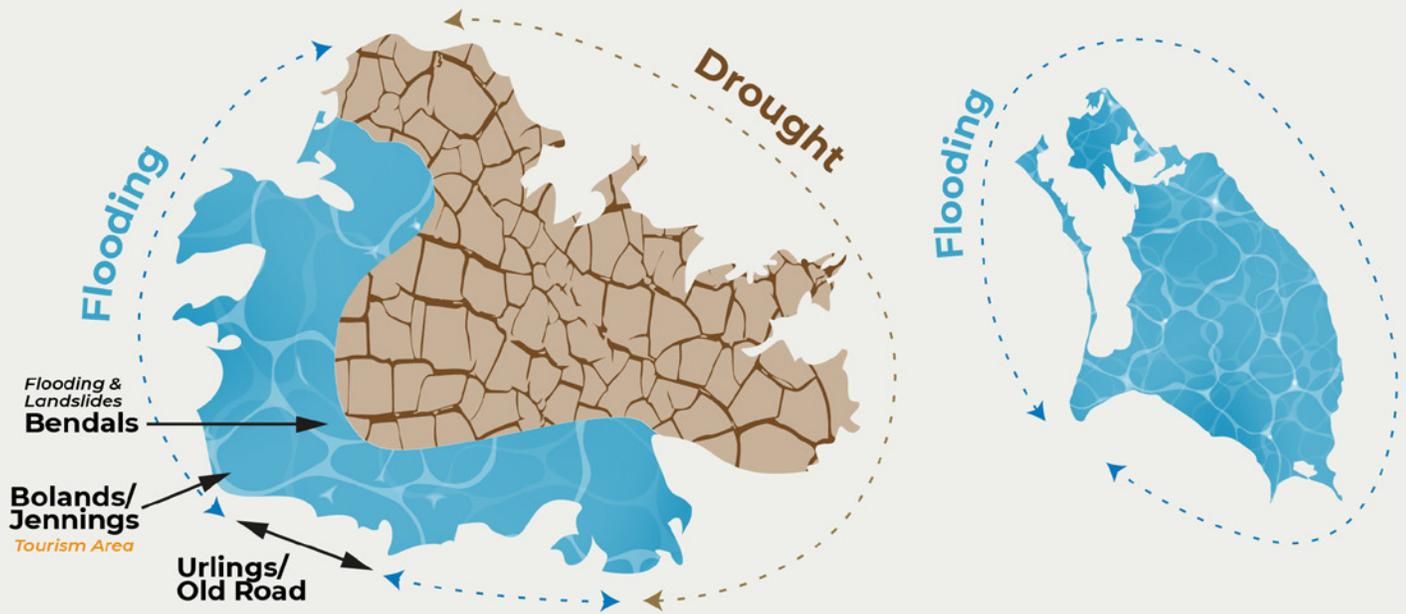


Figure 6.4.1c: Map of Dominica



Focus group participants reported that their livelihood was adversely impacted as a result of flooding and hurricanes. These findings corroborate with the survey results. **Firstly, respondents reported that flooding and hurricanes caused reduced income, as the following comments illustrate:**

"...Castle Bruce...farm roads are being destroyed and lots of land, especially for those persons who are depending on farming for their livelihood. Provisions like dasheen and plantain, bananas, vegetables are destroyed."



FEMALE
SMALL
FARMER
DOMINICA

"There will be an issue to access the farms because if you have flooding, most times you have landslides. There is also loss of crops: that's income. And there can be loss of land as well. All portions of land wash away..."



FEMALE
SMALL
FARMER
DOMINICA

The second impact of flooding and hurricanes, according to the focus group discussions, concerned the accessibility of food items and medical supplies in the country and the automatic increases on the prices of basic consumer items, as noted in the following comment:

"Due to the disaster it is often difficult to get goods into the country."



FEMALE
STUDENT
ANTIGUA

The third impact listed by focus group participants was price increases, as the following participant noted:



"...somebody benefiting, but it's not really the citizens, it's really people that own businesses, or electric companies...Prices go up because of whatever disaster is happening at the time. Because if you're stuck in your village, yeah, for you to buy whatever in the village and the shops and the business owners, they can be opportunists out of that circumstance."

MALE
ENTREPRENEUR
ANTIGUA

Effects of the Drought on the Livelihood on Farmers

Loss of Livelihood

Banana and coconut crops depend heavily on water. For that reason, farmers are usually stressed when these crops die and they are no longer able to earn income

"Affecting mi serious...mi have a cow and there is no grass...Everything dry up right now, mi tomato and mi skellion (eschehllion)³⁸. There is no water in my area. Mi get fed up with it right now but mi still praying for the rain."

MALE
RURAL FARMER
JAMAICA



Alternative livelihood opportunities were explored by some participants, as the following comments illustrate:

"Mi have few coconut tree and sell some eggs. Poor relief give mi something every two months, that's how mi live. Even mi plantain trees are going down right now. Everything falling down...mi hope fi get some rain."

MALE
RURAL FARMER
JAMAICA



"Mi thank poor relief fi give me a little food and money so my child can go to school. It rough. Mi have nutten fi guh a market - plantain dry out, banana dry out, everything dead out. Mi have few likkle goat, dem start dead inna di drought same way."

FEMALE
RURAL FARMER
JAMAICA



The focus group convened in Jamaica was the only discussion to have reported on the effects of praedial larceny³⁹ to farmers. It is estimated that Jamaican farmers suffer losses of more than J\$5 billion per annum due to praedial larceny. The theft of animals and produce as well as the effects from floods and droughts hampers the growth of the agricultural sector and threatens the livelihood of local farmers who incur losses every year. **One female farmer reported:**



Price Increases

Considering drought conditions, participants reported that there are price increases to food items. These increases are unaffordable for many low-income homes. This has implications on the quality of food and frequency of meals consumed. **Table 6.4.1d** reflects the name of basic staples or/and food items and the prices as informed by FGD participants from the parish of St. James, Jamaica.

Table 6.4.1d: Price on basic food items⁴⁰

Goods	Cost (JMD)[1]
 Carrot	250 per lb.
 Irish potato	300 per lb.
 Cabbage	250 per lb.
 Cucumber	150.00 per lb.
 Lettuce	500.00 per lb.
 Chicken	310-350 per lb
 Chicken back	250-280 per lb.
 Bread (small 2lb)	600
 25lb gas cylinder	3800.00 (Urban area) 4,000.00 (Rural area)

39 Jamaica Information Service (2022). Strategies Being Implemented to Tackle Praedial Larceny, <https://jis.gov.jm/strategies-being-implemented-to-tackle-praedial-larceny/> accessed March 24, 2023

40 The exchange rate was US\$1 is equivalent to JM\$152.18 as at Friday, March 10, 2023

The economic effects that result from climate-related events further compound the economic

marginalisation of ethnic minority groups such as the Kalinago (see Case Study 2).

Case Study 2

Natural disasters increase economic marginalisation of indigenous communities: Kalinago community, Dominica.

The Kalinago Territory is located in the north-east of Dominica, on the Atlantic (windward) coast. It comprises 3,700 acres (15 km²) in Saint David Parish. It has an estimated population size of 3,000. Farming is one of the major economic activities, with a high dependence on bananas, plantains and coconuts. These crops are not resilient.

Various natural disasters affect the economic activities of the Kalinago community. Droughts in the past have affected the agricultural sector and other events such as floods and mudslides impact the land on which they farm. When this happens quite a significant amount of income is lost and therefore they are unable to send their children to school as expected and they are unable to make purchases in the capital city of Roseau. The impacts of Hurricane Maria caused some persons to have lost almost everything crop-wise and livestock as well. This has set back most of the farmers in the Kalinago for a while because they have had to basically start all over, making it difficult to sustain themselves.

The craft industry was extensively impacted by the passage of Hurricane Maria in 2017. Most of the natural plants and materials to make the crafts died and it took a while for many of the plants to return. The craft items are mainly sold to outsiders and tourists; however, some sales are made within the territory as well.



The effects of Hurricane Maria on the tourism industry affected the Kalinago territory. The road structures throughout the country were destroyed and this impacted on visitors accessing the territory. One violent storm creates a ripple effect on all economic activities and impacts the lives of people.

There are policy implications for the most vulnerable when their standard of living is further reduced because of climate-related events. Sustainable agricultural practices, food security, health and wellness and investment in resilient infrastructure should be maintained as areas of priority on the development agenda of SIDS.

6.5 Social Impacts of Natural Disasters on Vulnerable Populations

This section discusses the social impacts of natural disasters experienced by males, females, children and youth, the elderly, persons with disabilities and undocumented persons. Psycho-social and health considerations, as well

as not accessing important social services in the aftermath of disasters, has implications on how countries experience social integration.

6.5.1 Social Impacts of Natural Disasters on Males and Females

Beneficiaries were also impacted socially by climate disasters. **Table 6.5.1a** highlights the five most severe social impacts from climate disasters experienced by beneficiaries. Nearly one-fourth (23%) of all beneficiaries indicated that they had to manage psychosocial/mental health conditions after the climate disaster. Other factors cited also compound their mental health and affect their ability to cope.

Table 6.5.1a: Most severe social impacts from climate disasters experienced by beneficiaries

Social Impacts	% Total	Ranking
 Psychosocial/mental health conditions (e.g. depression, anxiety, stress, trauma, grief from loss)	23%	1st
 Limited access to clean water	20%	2nd
 Disruption to physical mobility/movement (transportation)	14%	3rd
 Increase in home duties/responsibilities (including care of elderly, children, sick relatives)	13%	4th
 Limited access to information on response and recovery efforts, and support services	13%	4th

* Multiple responses allowed

Table 6.5.1b highlights the five most common social impacts from climate disasters experienced by females. As with the economic impacts, the five most common social impacts experienced by females reflect those experienced by beneficiaries overall, with psychosocial/mental health conditions being the most common.



Table 6.5.1b: Most severe social impacts from climate disasters experienced by female beneficiaries

Social Impacts	% Female	Ranking
 Psychosocial/mental health conditions (e.g. depression, anxiety, stress, trauma, grief from loss)	26%	1st
 Limited access to clean water	20%	2nd
 Disruption to physical mobility/movement (transportation)	14%	3rd
 Increase in home duties/responsibilities (including care of elderly, children, sick relatives)	14%	4th
 Limited access to information on response and recovery efforts, and support services	14%	4th

* Multiple responses allowed

Focus group discussions revealed the role women play in the recovery process from climate-related events. These are identified in new roles in the recovery of the economy and the burden of care.

a) Gendered division of labour





**KALINAGO
MALE
DOMINICA**

"After Maria, some men were a little reluctant to go back into agriculture, so women went into that field...the men felt well, look, I'm tired of this kind of thing, I want to do something else...so a lot of them get into the construction industry right now. The women feel like they have a responsibility to provide food for families and so therefore we see a lot of women right now leading in agriculture in the Kalinago territory."



**MALE
ENTREPRENEUR
DOMINICA**

"Women are taking more innovative action, I guess as a result of Hurricane Maria. So the men feel like they would need to make money quicker. They went straight into construction because that was a job that was available. The women would have time to think of a business plan... so therefore we saw a lot of women increasing in businesses after Maria."

The active participation of women in promoting food security and engaging in entrepreneurship at the community and national levels signals the importance of national institutions providing the necessary support systems to eliminate barriers that stymie the entry of more women into agriculture, innovation and entrepreneurship. This is an important step towards creating resilient and sustainable societies.



b) Unpaid care work

Unpaid care work is another social implication that emerges from climate-related events. It reinforces traditional stereotypes for the role of women in the home whilst accommodating the demands of the labour market. Oftentimes settling of the home is conducted simultaneously with work outside of the home. This has implications for personal, physical and family psychological wellness in recovery and rebuilding. **One female respondent reported:**

Table 6.5.1c highlights the five most common social impacts from climate disasters experienced by men. Gender comparisons show that all the social impacts experienced by women were also experienced by men, albeit to different degrees. Women were nearly two times more likely than men to experience psychosocial/mental health conditions (26% versus 14%), twice as likely as men to experience an increase in home duties/responsibilities (14% versus 7%) and twice as likely to have limited access to information on response and recovery efforts and support services (14% versus 7%). For men, social impacts such as difficulty accessing medical care (12%), death of a family member/relative/loved one (7%) and loss of their support network (7%), also featured prominently.



It reinforces traditional stereotypes for the role of women in the home whilst accommodating the demands of the labour market. Oftentimes settling of the home is conducted simultaneously with work outside of the home.



Table 6.5.1c: Most severe social impacts from climate disasters experienced by male beneficiaries

Social Impacts	% Male	Ranking
 Limited access to clean water	19%	1st
 Disruption to physical mobility/movement (transportation)	16%	2nd
 Psychosocial/mental health conditions (e.g. depression, anxiety, stress, trauma, grief from loss)	14%	3rd
 Difficulty accessing medical care/health services	12%	4th
 Increase in home duties/responsibilities (including care of elderly, children, sick relatives)	7%	5th
 Limited access to information on response and recovery efforts, and support services	7%	5th
 Death of a family member/relative/loved one	7%	5th
 Loss of support network	7%	5th

* Multiple responses allowed

Findings from the focus group discussions on the social implications of natural disasters concurred with results of the survey and revealed the depth of despair experienced. The discussions informed of differences in the experiences of countries directly affected by climate-related events (e.g.,

hurricanes and droughts) and those countries which received victims of natural disaster. There was also exploration into the effects of the COVID-19 pandemic in the context of countries just recovering from Category 5 hurricanes when they had to deal with the effects of the global pandemic.



6.5.2 Psycho-social Effects

The psycho-social effects resulting from COVID-19 and the passage of hurricanes was regarded as one of the major social impacts. There was consensus across all focus group discussions that the elderly and children were the most affected psychologically. The following narratives express the experiences of the elderly and migrants from neighbouring territories affected by the hurricanes.

a) Elderly



KALINAGO
MALE
DOMINICA

"I think it had a psychological effect on them. They had not seen a powerful hurricane, except for David in 1979. These seniors would have been internally devastated and mentally sick. Many of them actually got a kind of a psychological sickness and they would have, they would have to undergo some kind of counselling but then that wasn't available..."



A female reported the experience of her grandmother during Hurricane Maria and was of the opinion it contributed to long-term trauma complications. **She explains as follows:**



FEMALE
STUDENT
DOMINICA

"Personally, I noticed that my grandmother and my neighbour, since [Hurricane] Maria, the trauma has them kind of on edge. So, in the event that they hear a storm coming they are always on watch...like my grandma, she has a backpack already so anytime she sees a lot of rain, she comes to our house or she goes to the neighbour's house. So, she has that sort of PTSD from Maria."

Prolonged periods of isolation and limited access to important social services during the COVID-19 pandemic had adverse implications on the elderly. **One respondent reported the effect of the lockdown on his elderly mother:**



"...where my mom was concerned, she became very scared based on the information that flooded her and because of that she developed anxiety. So, there were weeks we couldn't sleep because we have to be with her. And we have to be breaking curfew because she wants to be out of the house. We had to actually seek permission from the authorities to take her out for a drive. It still bothers her but not as bad..." Male, Antigua

b) Migrants entering receiving countries

Nassau in The Bahamas and Antigua received hurricane victims from territories directly affected, such as Abaco, Grand Bahamas and Barbuda, respectively. The anxiety experienced among families and friends in the receiving territory was equally devastating. **One elderly female reported:**



"Well, we were watching this storm on the television and...Everyone in Nassau has family, on every family island...cousins, brother, sister. It's all worry...is my brother still alive, or am I going to see my sister again? So, when one island is affected, we are all affected."

ELDERLY FEMALE BAHAMAS

"...the fear is there, because you have no electricity, you have no communication...so that even heightened the fear."



A similar experience was shared by an Antiguan about the Barbudans who travelled over:



c) Feelings of sadness and depression are associated with the loss of livelihood and experiences of despair in hoping to recover. One respondent stated:



These narratives support the perspective that systemic psycho-social support programmes should be prioritised as an integral component of recovery programmes, with tailored interventions for seniors and children.

6.5.3 Health Implications

a) Complicated health issues for the elderly and persons with disabilities

Persons with disabilities reported on how their health conditions were aggravated during periods of extreme weather. This includes complications with breathing, increases in seizures and strokes and spoilage of medication from not having refrigeration.



Extreme weather conditions prohibit assisted and/or independent living among persons with disabilities or who live with chronic illnesses. There are instances where persons depend on a machine to facilitate their breathing. This disconnection of electricity in prolonged periods of flooding

results in further complications. Additionally, the support offered by home care workers for the persons with disabilities and the elderly is impacted. Persistent flooding prohibits them from attending work and mitigates against opportunities for independent living. **One participant reported:**

“I know persons who use caretakers to help facilitate them at home and so when they have a difficulty coming in because of flooding to help meet their daily needs, there will be challenges.”



b) Spread of other diseases and health issues

In situations where there is stagnant water due to poor drainage and a reliance upon stored water during prolonged drought, it often leads to public health concerns such as gastroenteritis and skin diseases. These oftentimes are left untreated due to the lack of financial resources to seek medical attention.

c) Complication of pre-existing health challenges

The high cost for food impacts on the nutritional requirements for persons living with lifestyle diseases. This may result in developing comorbidities or even death. **One respondent spoke to this issue, explaining that:**

"...I have diabetes, high blood pressure and high cholesterol. Sometimes I boil likkle bush and sometimes mi get di medication free. Mi have fi tek it easy because the stress will trigger everything. Mi caan buy di food dem cause dem dear (expensive). Suh mi haffi eat the starchy food dem..."

ELDERLY FEMALE
JAMAICA



6.5.4 Challenges for Undocumented Migrants

Climate-related migration causes strain on the social services for the receiving country long after the passage of the disaster. Citizens fleeing Haiti due to political unrest and poverty migrate to countries such as the Dominican Republic, The Bahamas, Turks and Caicos Islands (TCI) and to the French overseas departments of French Guiana

(Guyane), Guadeloupe and Martinique.⁴¹ Haitian immigrants experience perpetual social and economic marginalisation due to their undocumented status. This is evidenced by occupying low-income jobs, living in squatter settlements, ongoing police surveillance and limited benefits from the social services.



41 James Fergurson (2003). Migration in the Caribbean: Haiti, the Dominican Republic and Beyond. Accessed March 24, 2023. (refworld.org) https://minorityrights.org/wp-content/uploads/2015/07/MRG_Rep_Caribbean.pdf

Case Study 3

The Situation of Undocumented Haitians in The Bahamas

The population of The Bahamas was estimated at about 389,410 in 2020 (Source: Department of Statistics). Undocumented Haitian immigrants residing in The Bahamas comprise 20-25% of the population. They are concentrated in shanty towns or squat on prime land in New Providence, Abaco, Grand Bahamas, Andrews, and Eleuthera. Abaco has the largest community of undocumented Haitians. Undocumented Haitian immigrants are usually employed in low skill work and their employment tenure is unstable. Men are usually employed in the construction sector or yard care and women are employed in the informal economy as vendors or domestic care workers.

Representatives from the National Emergency Management Agency, social services, Parliamentary Minister, and appropriate creole speakers visited Abaco in preparation for the passage of Hurricane Dorian in 2019. These stakeholders provided the assurance that the appeal to evacuate was not an immigration issue and instead was being implemented to propel movement into available shelter facilities. Notwithstanding the appeals, some evacuated and others remained. As the eye of the storm passed, those who refused to evacuate into established shelters found refuge into the Government Administrative Building and other sturdy building structures. There were 70 lives lost: these were bodies recovered from the debris and assistance from sniffing dogs allowed for the retrieval of skeletal remains in the coming days. Haitian immigrants were accommodated in a shelter for a year after the passage of Dorian and the government covered all expenditures.



In the post Dorian period, undocumented Haitians still qualify for the feeding programme in school and medical assistance of US\$100.00 per day. However, unless their status is regulated, they will not qualify for other services. Since the passage of Dorian in 2019, the National Emergency Management Agency, with the support of local groups, has been implementing training with the migrant community on hurricane preparation.

6.6 Deep Dive: Impact of Climate-related Events on Children

The survey addressed the impact of climate disaster on *children in the household who were 17 years or younger at the time of the disaster (see Table 6.6)*. Children were most disrupted through low/irregular attendance at school (25%), followed by poor nutrition or malnutrition (12%) and

an increase in home duties (11%). These findings underscore the need for special focus and interventions for children during climate disasters to minimise or avoid disruptions to their education, their health and nutrition and work burden.

Table 6.6: Most common impacts from climate disasters experienced by children in the household

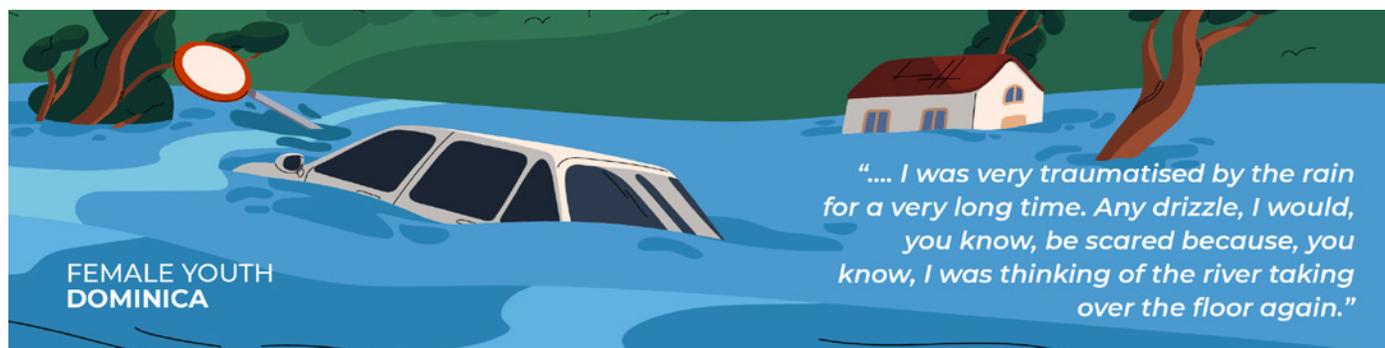
Impact on children	Total % (n = 129)	Ranking
 Low/irregular attendance at school	25%	1st
 Poor nutrition/Malnutrition	12%	2nd
 Increase in home duties/responsibilities	11%	3rd
 Need to adjust to new area of residence/community	7%	4th
 Need to adjust to new school environment	5%	5th
 Display of disruptive behaviours (e.g. aggression, fighting, etc...)	5%	5th

* Multiple responses allowed

The focus group discussions supported survey findings and unearthed other associated social challenges which children experience because of climate-related events.

Caregivers and parents of children and youth reported that the psychological effects caused by hurricanes were equally harmful.

(a) Psychological trauma



“Some of them before they hear rain they panic. Hurricane Maria caused them to bedwet. Sometimes the parents get into panic mode, and it affects the children every time.”

KALINAGO FEMALE
ENTREPRENEUR AND MOTHER
DOMINICA



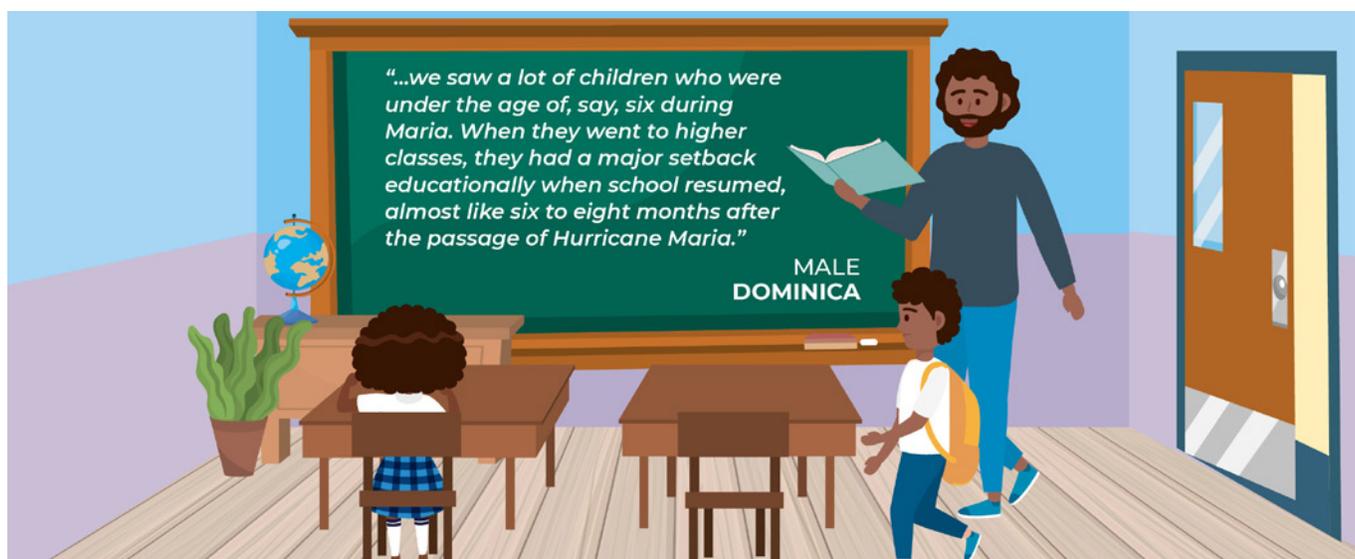
“Some of the children were more traumatised because during the storms, they had to leave their home to run to the shelter.”

FEMALE
DOMINICA

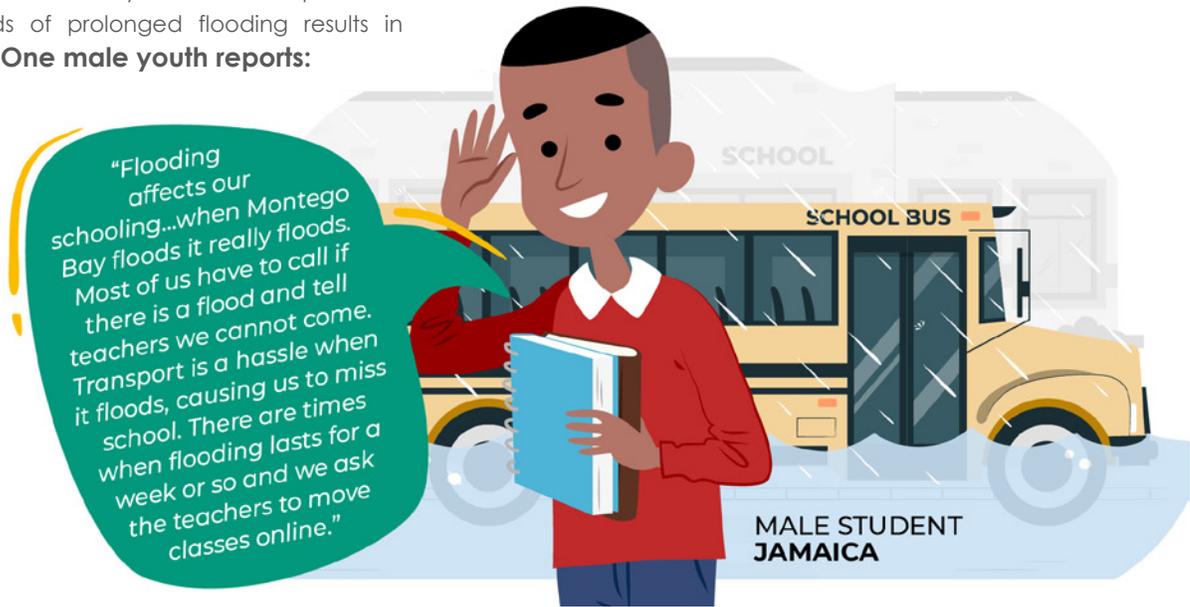
(b) Interruption of schooling

The passage of hurricanes disrupts schooling for many children. Schools are oftentimes used for shelters and occupied by evacuees for prolonged periods, making the compound inaccessible. Additionally, damage to the schools' infrastructure and the length of time for households

to recover from the disaster resulted in delayed return to face-to-face interactions with potential medium-term to long-term implications on their learning outcomes. **A former teacher shared his perspective on the loss of classroom engagement:**



Flooding also affects the availability of transportation. The inability to access transportation during periods of prolonged flooding results in absenteeism. **One male youth reports:**



The Treaty of Basseterre makes provision for the free movement of its citizens across the subregion. Families sought the opportunity to integrate children into schools and reduce the impact of loss learning.

One focus group respondent reported on the support his household offered to school aged Barbudan children in the aftermath of Hurricanes Irma and Maria:



The University of The Bahamas offered support to the educational services combined with psycho-social support activities for children of families displaced during the

passage of Hurricane Dorian in 2019. In addition to closing the education gap, it offered emotional support. **One respondent reported:**



“Children are emotionally quicker than the adults because a lot of them were intrigued with just being in a new environment and we worked with some of them through the University of The Bahamas because we were offering tutoring services to close the educational gap and we had an initiative to make a child smile.”

**FEMALE WITH
A DISABILITY
BAHAMAS**

Natural disasters often result in displacement for families with children. This has implications on how leaders of educational policy develop and plan for re-entry and reintegration of students across the OECS and CARICOM regions where climate-related migration usually occurs in the aftermath of a disaster. Additionally, it should be noted that while the COVID-19 pandemic mainstreamed online learning to continue with education there are implications for students without the necessary devices and internet connectivity. This may have long term implications on pedagogy, matriculation into higher levels of education and meaningful participation in the job market. Going forward, mainstreaming access to online learning should be prioritised in the education sector plans in the OECS and CARICOM regions.

6.7 Post-disaster Coping Strategies

Coping strategies are cognitive or social mechanisms developed to help withstand stress that usually emerges from external events. This section examines coping strategies used by individuals and households to assist with recovery from climate-related events.

Beneficiaries also made several adjustments to cope with the losses and effects from disaster. Table 6.10 presents the five most common coping strategies employed in the aftermath and recovery stages of disasters experienced by gender. As seen in the table, the majority (63%) of beneficiaries coped with the effects of the disaster through prayer. This was followed by nearly four in ten (38%) respondents who resorted to using their personal savings, 29% who obtained food or other help from friends or relatives and 23% who reduced the number or portion of their daily meals, a finding which sheds light on the increased risk to household food security and the threat to the nutrition and health of the family, including children, following disasters. Those who did nothing accounted for 15% of all respondents.

Gender differences in the coping strategies employed by beneficiaries in the disaster recovery stages further highlight the vulnerability of females in the aftermath of disasters. As presented in Table 6.10, except for 'doing nothing', females were more likely than males to employ any of the five most common strategies to help cope with disasters.

In general, these findings underscore the importance of faith and social networks and support groups, in offering stability to vulnerable groups in times of disaster.



Table 6.7: Five most common coping strategies employed in the aftermath and recovery stages of disasters experienced by gender

Coping strategies employed in aftermath and recovery stages	Gender		% Total (n=170)
	% Female (n=125)	% Male (n=45)	
 Pray	67%	51%	63%
 Spending savings	41%	31%	38%
 Getting food or other help from friends and relatives	32%	22%	29%
 Reduced the number of daily meals/size of portions	26%	16%	23%
 I did nothing	14%	16%	15%

* Multiple responses allowed

Case study 4 details the importance of family support as a coping mechanism.

Case Study 4

Story of Hope – A Father’s Role in Supporting his Family’s Recovery, Dominica

“My personal coping strategy was that I decided to stay home with my family because I saw my wife and five children worried because we had lost our home, then we went to live with another family member for three months and thereafter relocated to a shelter. Usually I work daily, five days a week, but this time I decided to remain home with my family to ensure that they were well and comfortable. During this time, I reassured them that we had not lost anything because we were together, and no one was injured. We received food rations and eventually found somewhere better to live. There was no school, so then the children were all my responsibility. Previously they would have been the teachers’ responsibility every day but now, I had to be taking care of them. We got food to eat. We did survive. We did not get sick.”



This section provides coping strategies that are testimonials of the resilience of Caribbean people. In the midst of adversity, we hurt but we rise to live again. **As one fisherman from Antigua stated,**



There were several coping mechanisms to help recover from the stress caused by droughts, hurricanes and flood:

a) Reliance on divine support

Adversity highlights our frailties and the temporary nature of material assets. During periods of disaster, dependence on God through prayer and meditation are critical. **One elderly male from The Bahamas noted that**



An elderly farmer in Jamaica reported on his coping strategy in the extensive drought season:



ELDERLY MALE BAHAMAS

b) Residents and colleagues came together to rebuild communities and livelihoods.

The importance of social capital at the community is an important factor in bringing people together to accomplish tasks:



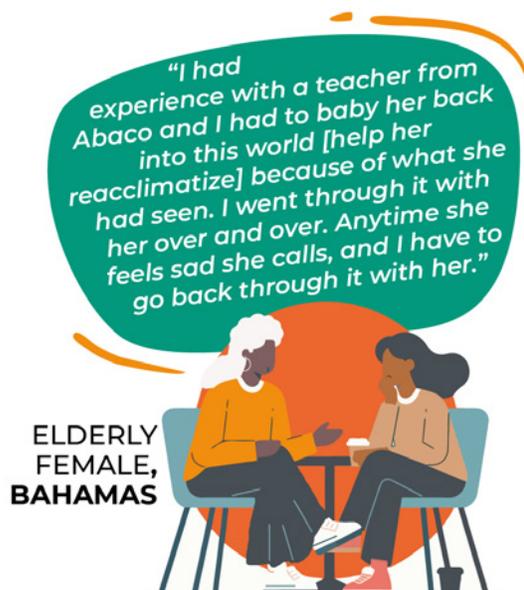
FEMALE PARTICIPANT DOMINICA

FISHERMAN ANTIGUA

c) Prioritising the needs of others despite personal challenges



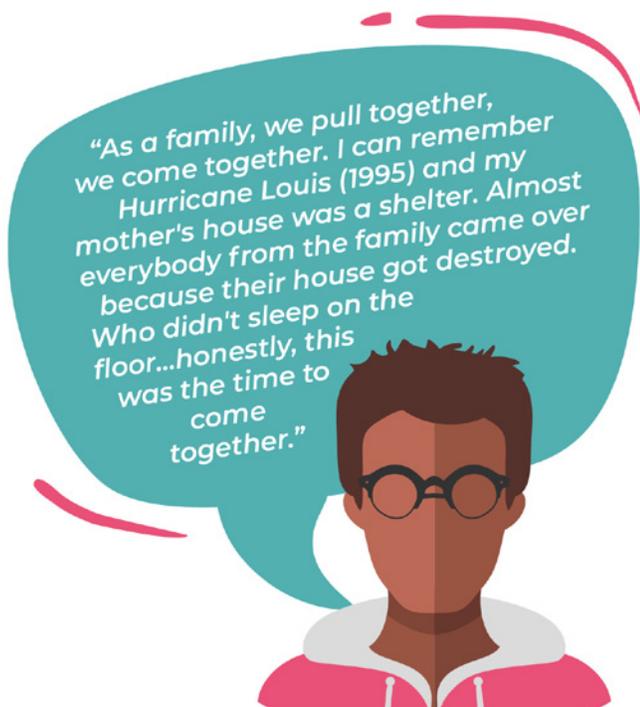
Listening to the painful experiences of others is another coping mechanism, both for the victim and individuals offering support:



d) Gathering support from family and social networks

Families and guardians offer emotional and financial support, especially in times of need.

This is an important component of psycho-social recovery, as noted by the following male from Antigua:

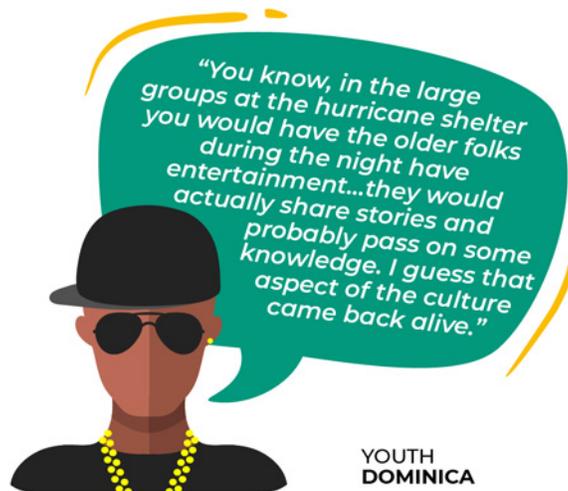


Persons with goodwill and institutions such as the Church are an important part of the social, emotional and financial network for victims of disasters, as seen in the following comment:



e) Building connections through oral traditions

Globalisation and increased reliance on social media have contributed to the loss of many of our Caribbean traditions, such as storytelling. **The absence of electricity and many amenities helped to revive many oral traditions, even if temporarily, as seen in the following comment:**



The return to a traditional system of bartering known as the Koudmein system was an important recovery mechanism. **A Kalinago male reported:**



f) Self-development and innovation

Experiences such as natural disasters and pandemics sometimes can be regarded as good opportunities for self-care and self-development as well as pursuing new opportunities. **One focus group respondent cited their accomplishments:**



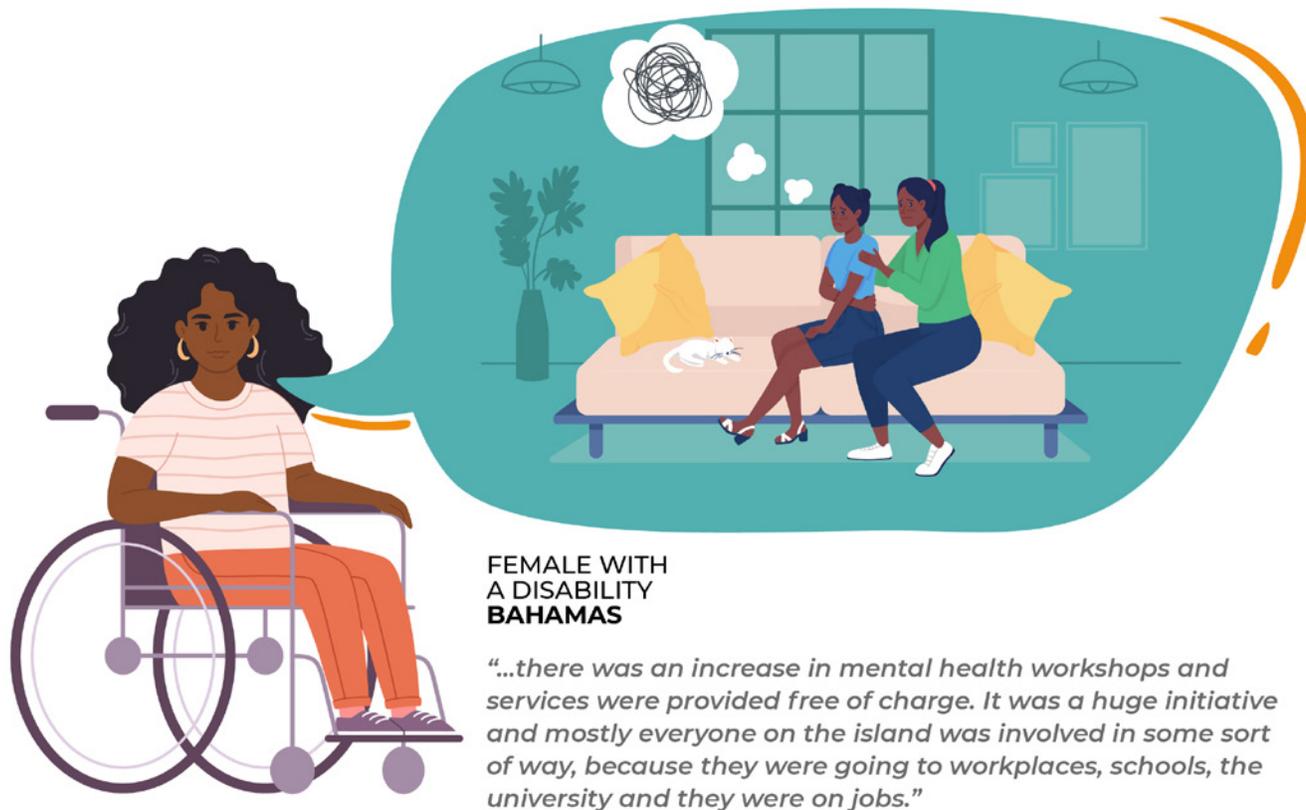
g) Make the necessary sacrifices to obtain water for domestic and personal use



h) Building alliances among service providers to create impactful delivery of vital services

The upsurge in depression, anxiety and stress in the aftermath of Hurricane Dorian in 2019 required collaboration among several organisations in The Bahamas such as the Ministry of Health, the Alzheimer’s Association, Psychiatric Association

and others. These organisations were instrumental in the delivery of psychosocial services. **As one participant noted:**



Respondents reported coping mechanisms that were deemed negative. Reduced food consumption and alcohol consumption were options cited.

a) Reduced food consumption.



"Some persons may choose which meal of the day they can eat. It can't be breakfast, lunch and dinner...it may just be breakfast or dinner. I've heard, you know, anecdotal stories of persons just envisioning the food that they would like to eat and that is what helps to keep them full."

KEY INTERVIEW INFORMANT

b) Alcohol consumption



"I think alcohol played a big role in coping mechanisms, as well because, I mean, it was a stressful time."

FEMALE DOMINICA

Case Study 5

A Testimony on Negative Coping Mechanisms in The Bahamas

"There was a string of negative coping patterns expressed by persons directly and indirectly affected by the passage of Hurricane Dorian 2019 across Grand Bahamas and Abaco. Persons resorted to alcohol to cope, which resulted in other negative behaviour patterns. I knew of young men who are part of the armed forces who volunteered in evacuation or in the search and rescue team which left from Nassau to travel to Abaco. They reported that as they were diving and helping to retrieve bodies, they saw dead children in the water and in the mud and it affected them mentally and they started to cry, experienced insomnia and began consuming alcohol, something some have never done before. As part of their self-help, they started to turn to Church groups and other areas for help."



6.8 Social Protection, Social Services and Developmental Needs of the Vulnerable

This section provides information on the: **(a) main social protection and social services needs of vulnerable groups within the context of national debt; (b) social services required to assist with dealing with the effects of climate-related disasters; and (c) development challenges of vulnerable populations.** The findings are important in informing the social services and developmental assistance required to improve the well-being of vulnerable groups in the medium and long-term.

This is an important contribution in developing the resilience of the region's human capital. The general social protection and social service needs of vulnerable groups are presented in **Table 6.8**. The needs of vulnerable groups vary by age, abilities and geographic location. Food assistance support for single mothers was regarded as an important social service needed across the four countries.

Food assistance programmes that support the needs of single mothers (Priority area for all countries)



Table 6.8: General social protection and social service needs of vulnerable groups

Children	Youth	Elderly	Persons with disabilities	Men, women and other groups	Geographical location
<ol style="list-style-type: none"> Improvement in case management services for children and families Increased contribution to child maintenance (In Antigua the government poverty assistance programme offers EC\$162 monthly per child) Improving government support in equipping children with computers and supporting educational devices Waiving the cost of electricity to vulnerable households Residential care facilities for children in need of care and protection Protection for children in conflict with the law Expanding the school feeding programme to support students not receiving lunch (The Bahamas) 	<ol style="list-style-type: none"> Technical and financial assistance to support start-up businesses Counselling services 	<ol style="list-style-type: none"> Provision of a more comprehensive regime of services to the elderly and centenarians including: <ol style="list-style-type: none"> Rehabilitation of their homes and home care services Protection from various abuses (physical, neglect, financial) Access to medication and assistive devices (wheelchairs, prosthetic limbs, etc.) Reduction of prices or removal of taxes on sanitary items such as diapers, incontinence pads Better family and social networks to promote emotional stability and well-being 	<ol style="list-style-type: none"> Improving the physical infrastructure of buildings to improve accessibility to services Enabling social and human services with the necessary communication skills (e.g., sign language) to support access to information Ensuring accessibility and reasonable accommodation to basic services Access to medication and assistive devices (wheelchairs, prosthetic limbs, etc.) as well as rehabilitation support services 	<ol style="list-style-type: none"> Food assistance programmes that support the needs of single mothers (Priority area for all countries) Non-contributory monthly cash allocation for identified individuals in the indigenous population (Dominica) Establishment of equipped emergency safe home for persons in domestic violence situations Financing housing (In The Bahamas thousands of people are still struggling to have homes repaired post Dorian) 	<p><u>RURAL AREAS</u></p> <ol style="list-style-type: none"> Improving access to farming services and inputs such as training in crop production, lease agreements, provision of farming tools and inputs such as seedlings and fertilisers Strengthened coordination of government services to avoid duplication of financial and human resources <p><u>URBAN AREAS</u></p> <ol style="list-style-type: none"> Better food security even for the employed: many are working but their wages cannot afford to make purchases Training, employment and employability in new growth areas in creative industry (e.g., content creation, make up artistry) and virtual environment (online sales and marketing). This is an area of interest for the youth demographic

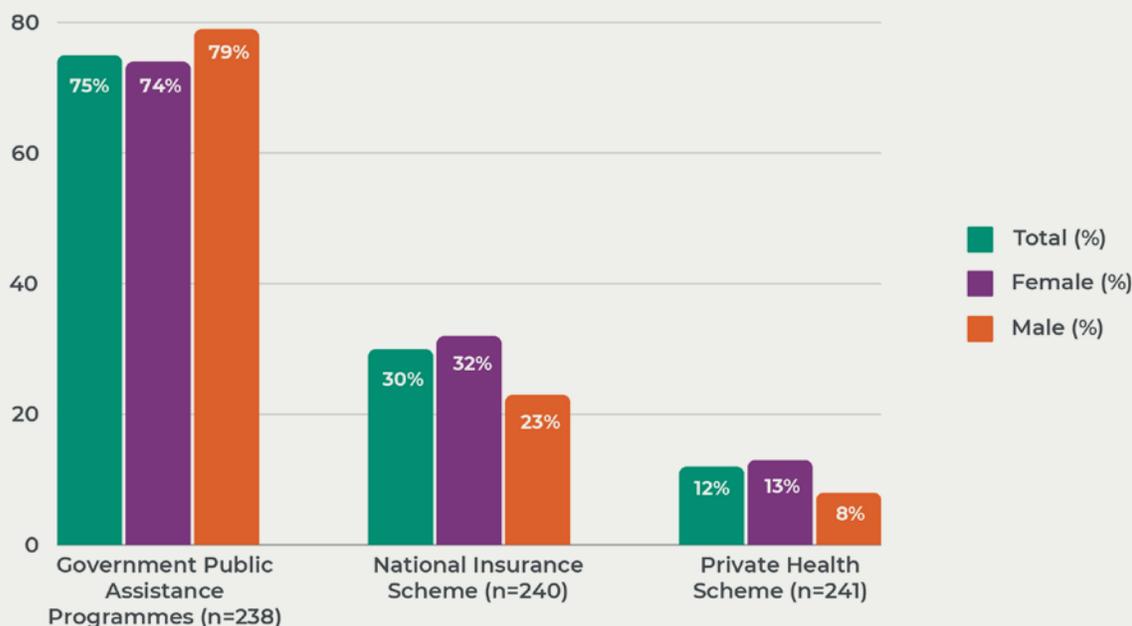


6.8.1 Participation in Social Protection Programmes

Figure 6.8.1 highlights the percent of respondents currently participating in social protection programmes by type of programme and gender. Most respondents (75%) indicated that they were currently benefiting from a government public assistance programme; however, less than one-third (30%) indicated that they were contributing to the National Insurance Scheme (NIS) and 12% were participating in a private health scheme. Males were more likely than females to be beneficiaries of government public assistance

programmes (79% versus 74%); accordingly, a higher proportion of females than males indicated that they were currently contributing to the National Insurance Scheme (32% versus 23%) or currently participating in a private health insurance scheme (13% versus 8%). These findings suggest that some beneficiaries remain exposed and are at heightened risk to severe impacts from future climate disasters, due to a lack of participation in social protection programmes or schemes.

Figure 6.8.1: Percent of respondents currently participating in social protection programmes by type of programme and gender



6.8.2 Social Services Required to Assist Vulnerable Groups with the Effects of Climate-Related Disasters

The key social service needs of beneficiaries were examined through the survey. Respondents were asked to indicate whether they attempted to access services in the aftermath of a climate event, the type of service, the ease of access to service and the level of satisfaction with the social support services received. The findings point to a dependence of vulnerable populations on social services that are ordinarily needed for survival and more so to deal with the effects of climate-related disasters. They also shed light on heightened levels of vulnerabilities, particularly

experienced amongst female beneficiaries.

Table 6.8.2a highlights the attempt to access social services by gender. Half (50%) of all those who experienced a climate-related disaster during 2010 to 2020 tried to access government social services to help deal with the aftereffects. However, when examined by gender, disparities were evident, with females being more likely than males (53% versus 42%) to attempt to access social services.



Table 6.8.2a: Attempts to access social services from the government by gender

Attempted to access services	Gender		Total (n=169)
	Female (n=124)	Male (n=145)	
Yes	53%	42%	50%
No	47%	58%	50%
Total	100%	100%	100%

Table 6.8.2b further highlights the types of social services that beneficiaries tried to access. In the aftermath of climate disasters, most beneficiaries looked for help or support from the government through public assistance programmes. Nearly eight in every ten (78%) beneficiaries tried to access public assistance programmes⁴², including food or food assistance, which was cited by respondents as an important

social service need. Other types of social services that respondents tried to access the most were shelter/housing services (22%), medical care/health services (12%) and employment services (9%). Attempts to access services such as GBV, sexual and reproductive health, prenatal and postnatal care, drug rehabilitation and immigration services were not made at all.

Table 6.8.2b: Percent of survey respondents who tried to access social services in the aftermath of disaster

Type of social services respondents tried to access	Total (n=82)
 Public assistance programme	78%
 Shelter/housing	22%
 Medical care/health services	12%
 Employment services	9%
 Education support/reintegration services	5%
 Victim support services	3%
 Individual counselling services	2%
 Psychosocial support services for adults	2%
 Psychosocial support services for children	2%
 Family counselling/therapy	1%
 Other	1%

* Multiple responses allowed

42 Such as school feeding programme, emergency and compassionate grants, etc.

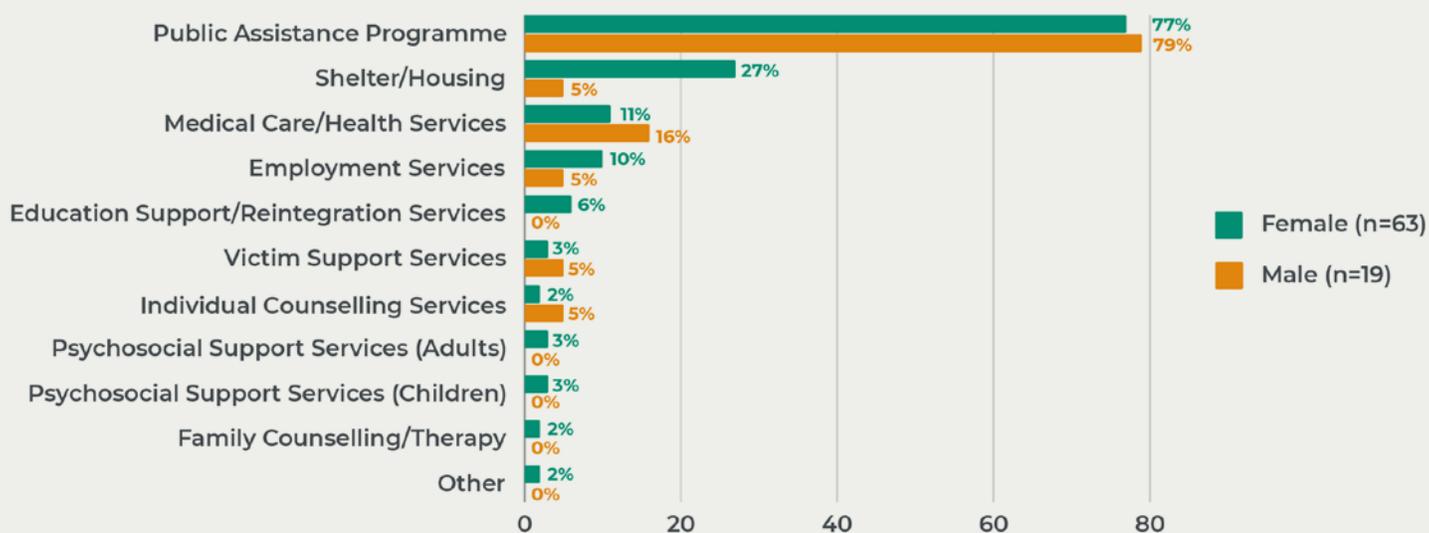


Figure 6.8.2b shows the percent of survey respondents who tried to access social services by type of service and gender. Males were a little more inclined than females to try to access support through public assistance programmes (79% versus 77%), medical care (16% versus 11%), victim support services (5% versus 3%) and individual counselling services (5% versus 2%).

However, for services which females were more likely than males to pursue, gender disparities were more glaring. Females were 5.4 times more likely than males to seek

shelter/housing services (27% versus 5%) and twice as likely as males to seek employment services (10% versus 5%). Moreover, only females indicated they tried to access education/reintegration services (6%), psychosocial support for adults (3%), psychosocial support for children (3%), family counselling (2%) and other services (2%). This finding points to a somewhat specialised and important role assumed by females in the aftermath of a climate disaster event, to address mental and emotional health needs which often arise from, or are exacerbated by, the aftermath of a climate event.

Figure 6.8.2b: Percent of survey respondents who tried to access social services by type of service and gender



NGO service providers reported on requirements to enable their organisations to better support the recovery needs of beneficiaries from climate-related events. These services include:

- Accessing increased knowledge and expertise in using information, communication and technology in implementing the work programme.
- Attaining access to necessities such as food and clothing items to assist beneficiaries with immediate needs.
- Improving the capacity of staff to provide psycho-social support to recover from various types of losses: **“Some of our people have not yet**

recovered from Hurricane Erika (2015) and were compounded by Hurricane Maria (2017).” Key Informant

- Supporting farmers and agro-processors to purchase amenities to store ground provisions and access seedlings and seeds to grow crops that are resilient.
- Providing and accessing rehabilitation and adaptive equipment and services. After enduring disasters, the disabled population increases, whether it be from post-traumatic stress, traumatic experiences such as amputations or loss of sight. During the COVID-19 pandemic, persons who relied on the clinics for blood pressure medicines



increased. These new injuries put added pressure on an overburdened healthcare system.

- Accessing capacity building opportunities and certification in responding to: (a) landslides, flooding, fire and other emergency situations; (b) child protection and intimate partner violence.
- Supporting anti-violence education and making referrals to access suitable housing and employment opportunities, particularly for the most vulnerable in the LGBTQI community, as

noted by this participant: **“Some of them have been turned out in their community, their own family, by thugs and gangs. I see where they literally eat and sleep and defecate in the same place they sleep.”**
Key Informant.

Table 6.8.2c presents the ability to access needed services by gender. Most of those who tried to access social services in the aftermath of disasters were successful (74%). Nevertheless, one in every four persons (26%) indicated that they were not able to access needed services. Gender disparities also exist, with females being less likely than males (71% versus 84%) to access needed services.

Table 6.8.2c: Ability to access needed services by gender

Attempted to access services	Gender		Total (n=85)
	Female (n=66)	Male (n=19)	
Yes	71%	84%	74%
No	29%	16%	26%
Total	100%	100%	100%

Ease of access to services (Self)

The experience of accessing needed services in the aftermath of disaster was not always easy for beneficiaries. **Figure 6.8.2c** highlights the ease with which beneficiaries were able to access needed services. For those who were able to access needed services for themselves, 53% indicated that the process was very easy (16%) or moderately easy (37%). However, nearly half (47%) indicated that the process was either somewhat difficult

(42%) or very difficult (5%). **Table 6.8.2d** further shows the ease of access to services disaggregated by gender. Females were more likely than males to indicate that the process to access needed services was moderately or very easy (55% versus 50%). Meanwhile, males were more likely than females to indicate that the process was somewhat or very difficult (51% versus 46%).

Figure: 6.8.2c: Ease of access to needed services

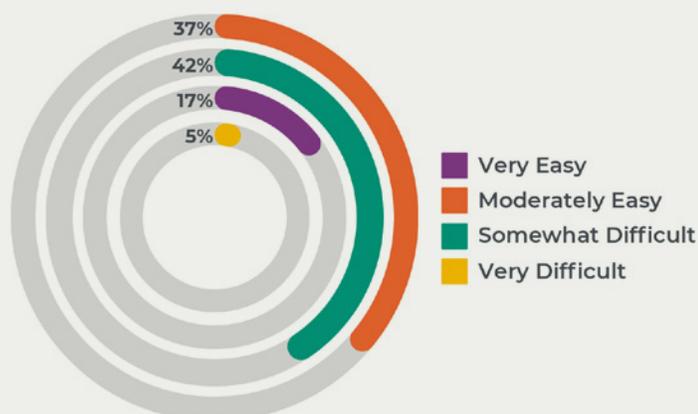


Table: 6.8.2d: Ease of access to needed services by gender

Ease of Access	Gender	
	Female (n=46)	Male (n=16)
Very easy	20%	6%
Moderately easy	35%	44%
Somewhat difficult	44%	38%
Very difficult	2%	13%
Total	100%	100%



Ease of access to services (Children)

Figure 6.8.2d highlights the ease with which beneficiaries were able to access needed services for children. For those who were able to access needed services for children, 57% indicated that the process was very easy (17%) or moderately easy (40%). Notwithstanding, more than four in every ten persons (43%) indicated that the process was either somewhat difficult (37%) or very difficult (6%). Table 6.11.2e further shows the ease of access to services for children, disaggregated by gender of beneficiaries. Females were approximately three times more likely than males (69% versus 22%) to indicate that the process to

access needed services for children was moderately or very easy. Conversely, male beneficiaries were more likely than their female counterparts (78% versus 31%) to indicate it was somewhat or very difficult to access services for children.

The findings point to a general need for more attention to be given to ensure that the necessary mechanisms, structures and supporting information technology systems are implemented to support easy access of vulnerable groups to needed services in the aftermath of disasters

Figure: 6.8.2d: Ease of access to needed services for children

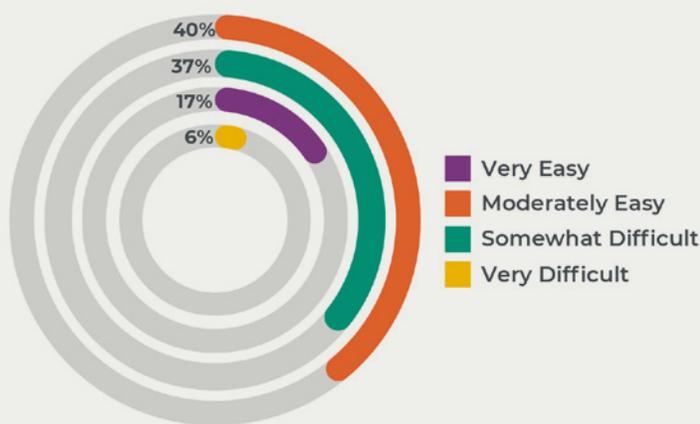


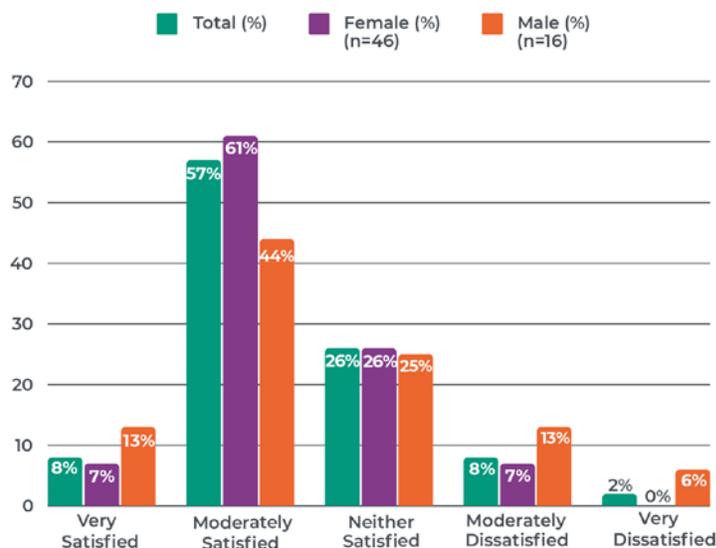
Table: 6.8.2e: Ease of access to needed services for children by beneficiary gender

Ease of Access	Gender	
	Female (n=26)	Male (n=9)
Very easy	23%	0%
Moderately easy	46%	22%
Somewhat difficult	31%	56%
Very difficult	0%	22%
Total	100%	100%

6.8.3 Satisfaction with Social Support Services

Beneficiaries were largely satisfied with the social support services they received. **Figure 6.8.3** highlights beneficiaries' level of satisfaction with social support services. Having received social support, more than six in every ten beneficiaries (65%) were very satisfied (8%) or moderately satisfied (57%) with the social support services they received. Female beneficiaries were also more likely than male beneficiaries (68% versus 57%) to express some level of satisfaction with services received.

Figure 6.8.3: Level of satisfaction with social support services



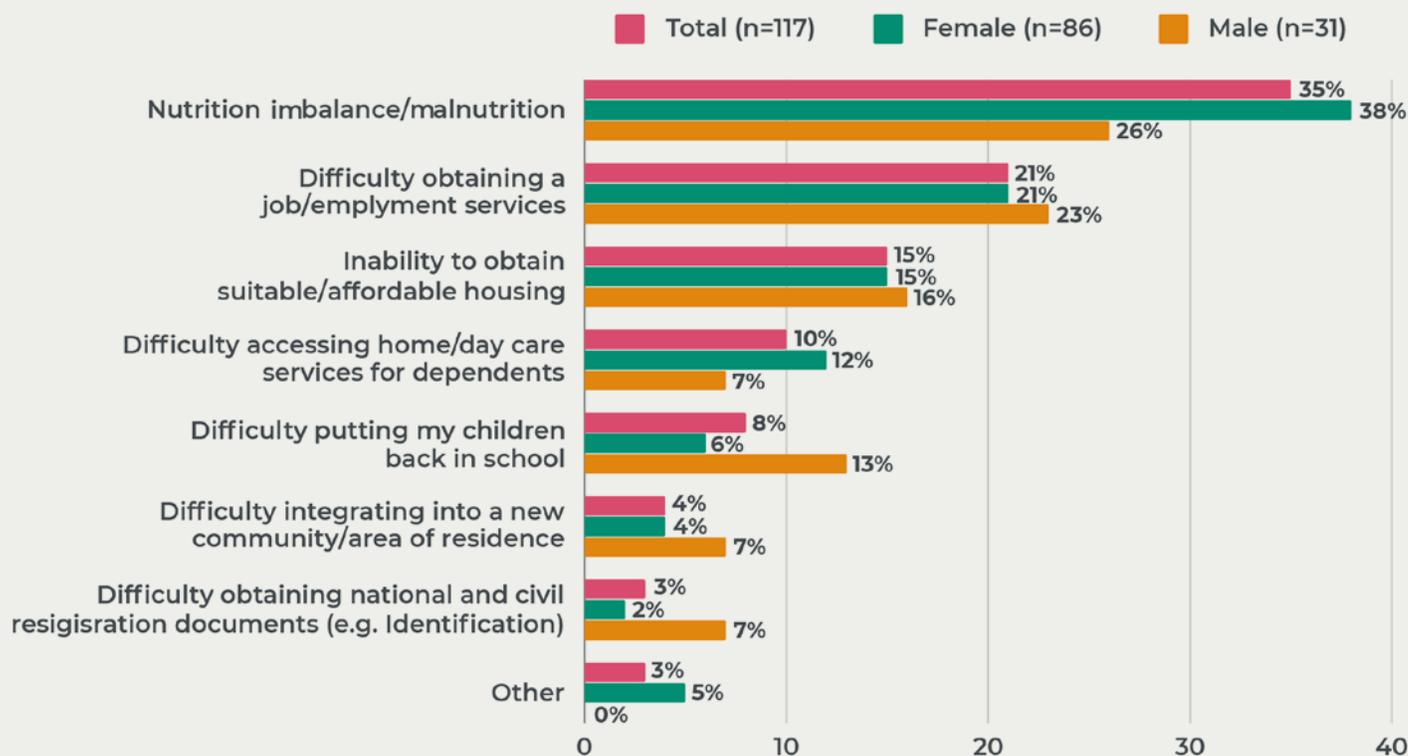
6.9 Development Challenges of Vulnerable Populations Experienced After Climate-Related Disasters

The development challenges identified by beneficiaries in the aftermath of climate disasters bring into greater focus the severity of impact that climate disasters can have on vulnerable groups in the aftermath of disasters. The challenges identified by beneficiaries demonstrate the potential of climate disasters to undermine gains and progress being made toward the sustainable development goals in small island and less developed states.

In the aftermath of a climate disaster, vulnerable populations are mostly challenged with the need to meet the basic needs of the household and ensure their survival and well-being. **Figure 6.9** presents the most pressing developmental challenges experienced following climate-related disasters during the 2010 to 2020 period. **The four most pressing developmental challenges identified by beneficiaries were nutrition imbalance/malnutrition (35%), difficulty obtaining a job/employment (21%), inability to obtain suitable/affordable housing (15%) and difficulty accessing home/day care services for dependents (10%).** Other pressing development challenges identified by beneficiaries were difficulty putting children back in school (8%), difficulty integrating into a new community/area of residence (4%), difficulty obtaining national and civil registration documents (3%) and 'other challenges' (3%), including having to start all over again, difficulty clearing landslides and home surroundings, difficulty accessing drinking/bathing water and difficulty children had in accessing the internet for school.

Gender disparities were evident. Females were more likely than males to identify nutrition imbalance/malnutrition as a pressing development challenge (38% versus 26%), in addition to having difficulty accessing home/day care services for dependents (12% versus 7%) and 'other challenges'⁴³ (5% versus 0%). In contrast, males were more likely than females to report having difficulty obtaining a job (23% versus 21%) or unable to obtain suitable/affordable housing (16% versus 15%), albeit slightly.

Figure 6.9 Most pressing developmental challenges experienced after climate-related disasters during 2010 to 2020



* Multiple responses allowed

43 As previously highlighted, this includes having to start all over again, difficulty clearing landslides and home surroundings, difficulty accessing drinking/bathing water and difficulty children had in accessing the internet for school.



Group discussions provided additional development challenges informed by the experiences of various vulnerable groups. These additional challenges have the potential to be mainstreamed into national development priorities, and are listed below:

- **Failure to understand the importance of gender equality in national development. There are different needs for men and women as well as boys and girls.**
- **Lack of inclusive communication. The absence of inclusive communication, especially during and immediately after disasters, has adverse implications, particularly for persons with disabilities. There is uncertainty in where to go, what to do and who to contact. This level of uncertainty creates added exclusion.**
- **Lack of knowledge in social networking to access other social services and recovery resources.**
- **Political and other social divisions cause victimisation and limited accesses to resources such as job opportunities.**

- **Inability to afford agricultural insurance to help offset income loss from crops, animals, or fisheries as a result of price and weather risks as well as risk from pests and pandemics such as COVID-19. There is ongoing dependence on external sources for assistance.**

6.9.1 Advocacy

International disaster risk reduction frameworks are supportive of the participation of vulnerable groups in all phases of the disaster risk management cycle. The overall aim is to ensure that the response and recovery strategies are inclusive, sustainable and resilient. Findings from the country surveys revealed that the three most important issues that government and civil society organisations should advocate for are **disaster risk reduction, that is, approaches to reduce the risk of persons suffering from a disaster (32%), investment in early warning systems/infrastructure at the national level (20%) and disability inclusion in disaster preparation and recovery (13%).**

Some beneficiaries proffered priority areas outside of the eight that were presented.





Recommend that a scheduled delivery time be announced for water trucks in each affected community



Recommend community-based training for persons to assist the vulnerable groups within times of disaster.



Provide more assistance for community development



Ensure that those who truly need assistance receive it.



Government should focus on old age pension.



Education and mental health care



Government should help the younger children with jobs and retire the older persons, so the young generation does not leave the country



The government needs to improve the livelihood of Bahamians, making the Bahamians the number one priority.

The three most important issues for which government and civil society organisations need to advocate to reduce the impact of climate disasters are: (i) disaster risk reduction; (ii) investment in early warning systems/infrastructure at the national level; and (iii) disability inclusion in disaster

preparation and recovery. **Table 6.9.1a** highlights the most important issues that government and civil society organisations need to advocate for to reduce the impact of climate disasters by gender. The findings show that the priorities were the same, irrespective of gender.

Table 6.9.1a Most important issues that government and civil society organisations need to advocate for to reduce the impact of climate disasters by gender

Issue	Gender		Total (n=234)
	Female (n=178)	Male (n=56)	
Disaster risk reduction, i.e. approaches to reduce the risk of persons suffering from a disaster	33%	27%	32%
Investment in early warning systems/infrastructure at the national level	19%	23%	20%
Disability inclusion in disaster preparation and recovery	12%	16%	13%
Mainstreaming inclusion for all vulnerable groups in disaster risk reduction plans/policies at the national level	8%	9%	9%
Other	7%	5%	7%
Continuation of education (in the context of migration)	5%	9%	6%
Preventing sexual exploitation and abuse (PSEA) in disasters	7%	5%	6%
Mobility of social security benefits (in the context of migration)	6%	2%	5%
Gender inclusion in disaster preparation and recovery	3%	4%	3%

*Percentages may exceed 100% due to rounding up of figures

 PRIORITY AREA #1

 PRIORITY AREA #2

 PRIORITY AREA #3

Figure 6.9.1 illustrates the three most important issues, highlighted by beneficiaries, that government and civil society organisations need to advocate for to reduce the impact of climate disasters by country. Similar priority areas were highlighted by beneficiaries in the countries under investigation. However, there were variations in the priority sequence. Further, Dominica was the only country that prioritised **mainstreaming inclusion for all vulnerable groups in disaster risk reduction plans/policies at the national level**.

The absence of inclusivity corroborates with other areas of the country's legislative agenda. A finding from the social protection review for Dominica (**see Chapter 4**) revealed that critical legislation that deals with vulnerable groups such as persons with disabilities, indigenous people and the poor and vulnerable are not enshrined in Dominica's legislation. The Social Protection Policy being developed must address this gap.



Figure 6.9.1: Three most important issues that government and civil society organisations need to advocate for to reduce the impact of climate disasters by country



Country:	Priority #1:	Priority #2:	Priority #3:
Antigua & Barbuda 	Disaster risk reduction (approaches to reduce the risk of persons suffering from disaster) 24%	Disability inclusion in disaster preparation and recovery 24%	Investment in early warning systems/ infrastructure at the national level 21%
Bahamas 	Disaster risk reduction (approaches to reduce the risk of persons suffering from disaster) 32%	Investment in early warning systems/ infrastructure at the national level 17%	Disability inclusion in disaster preparation and recovery 11%
Dominica 	Mainstreaming inclusion for all vulnerable groups in disaster risk reduction plans/policies at the national level 30%	Disaster risk reduction (approaches to reduce the risk of persons suffering from disaster) 25%	Investment in early warning systems/ infrastructure at the national level 25%
Jamaica 	Disaster risk reduction, (approaches to reduce the risk of persons suffering from disaster) 39%	Investment in early warning systems/ infrastructure at the national level 24%	Disability inclusion in disaster preparation and recovery 11%

The views of key interview informants and NGO service providers were generally supportive of findings from the country surveys. The responses comprise a combination of legislative and programmatic actions supportive of reducing the impact of climate-related events on vulnerable people (and vulnerable geographic communities) within a context of national debt. **The perspectives are:**

- **Entrench systems of authority and accountability for inclusive disaster risk reduction:**
 - Ensure national legislation and policies for disaster risk management have inclusive imperatives such as gender, children, persons with disabilities and ethnicity, where appropriate. Additionally, all DRR legislation will require established regulatory and operational frameworks for accountability.
 - Upgrade national disaster plan of actions to include a national response matrix. A national response matrix defines the lead and supporting entities and their roles and responsibilities in disaster.
 - Establish and entrench dedicated national budgetary support to respond to climate-related events.

- **Promote a participatory approach for the development of national work programmes geared towards disaster risk reduction. This is supportive of networking opportunities in addressing all phases of response and recovery in climate-related events as well as avoiding duplicity of efforts and overspending.**

- **Standardise shelter management policies.**

- **Advocate for CSOs who support vulnerable groups to be included in the national budgets.**

Country focus groups advocated more operational considerations for reducing the impact of climate-related events on vulnerable people (and vulnerable geographic communities). It is important that NGO service groups and the CPDC are aware of these issues to provide the relevant solutions through donor funding and social networking with local, regional and international non-governmental organisations. The areas of support required for the response/preparation and recovery stages are presented in **Table 6.9.1b**.

Encourage and mobilise vulnerable populations to actively participate in recovery and relief activities at the community, provisional and national levels



Ensuring needed therapy sessions for people with disabilities



Response teams are required to clear debris within 24 hours of the disaster. This is a major priority for farmers.



Table 6.9.1b: Areas for advocacy supported by beneficiaries of government public assistance programmes and NGO services

Areas of advocacy: Preparation/Response	Areas of advocacy: Recovery
<ul style="list-style-type: none"> ■ Provide access in gaining technical and basic life skills and resources to include training in: <ul style="list-style-type: none"> ○ Search and rescue techniques ○ First aid ○ Swimming and use of life rafts ○ Purchasing life raft ■ Undertake public education in rural areas on water preservation and farming techniques to avoid during the dry season 	<ul style="list-style-type: none"> ■ Encourage and mobilise vulnerable populations to actively participate in recovery and relief activities at the community, provisional and national levels
<p>Establish a repository of screened and trained first responders</p>	<p>Establish a repository of screened and trained first responders</p>
<ul style="list-style-type: none"> ■ An updated repository that has volunteers who have been screened to ensure that their background is not associated with any forms of violence, molestation, paedophilia as well as mental illness ■ First responders who possess the emotional capacity to deliver trauma care 	<ul style="list-style-type: none"> ■ Volunteers certified to detect and address behaviour risk and trauma in shelters. Some areas of focus are persons trained in trauma care, child protection, mediation, and health care workers understanding the needs of persons with disabilities "... if something happens to the disabled person you needed someone trained to address the compounded illnesses." - Focus Group Participant
<p>Obtain psycho-social counselling programmes</p>	<p>Obtain psycho-social counselling programmes</p>
<ul style="list-style-type: none"> ■ Having access to counselling hotlines throughout the year to address trauma and challenges resulting from the trauma 	<ul style="list-style-type: none"> ■ Prioritising counselling and therapy for emotional distress experienced by the elderly and children ■ Ensuring needed therapy sessions for people with disabilities
<p>Secure investment in resilient and modern infrastructure and operational procedures. This requires:</p>	<p>Secure investment in resilient and modern infrastructure and operational procedures</p>
<ul style="list-style-type: none"> ■ New and existing housing developments need to be more resilient and adaptable. This includes using durable materials and ensuring that the facilities are accessible and safe. ■ New shelter policies require standardisation of amenities such as toilets, bathing areas and well as construction using resilient materials such as stones and concrete. ■ Implement underground services for cable and power supply to facilitate quicker restoration after the event. 	<ul style="list-style-type: none"> ■ Response teams are required to clear debris within 24 hours of the disaster. This is a major priority for farmers.
<p>Food and water security</p>	<p>Food and water security</p>
<ul style="list-style-type: none"> ■ Support agricultural practices of resilient crops such as cassava, dasheen and coconut through: <ul style="list-style-type: none"> ○ Investing in food storage amenities in communities with livelihoods developed around agriculture ○ Maintaining community tanks for periods of long water lock offs 	<ul style="list-style-type: none"> ■ National agricultural departments need to establish seed banks to store native seeds as part of the recovery and food security promotion ■ Consider offering support services and reasonable accommodation during recovery to farmers with disabilities ■ Community disaster management committees which prioritise access to water to households with small children, elderly, persons with disabilities



Table 6.9.1c: Preparation and recovery areas for advocacy among Kalinago community

Consistent with an element of the Paris Agreement of 2015 (articles 7.5 and 7.12) that focuses on having transparency and participation of indigenous peoples in adaptation action and using traditional knowledge, this section informs the areas of preparation and recovery that the Kalinago community is advocating. It is important that the study brings these concerns about the status of the region's largest indigenous community to the attention of the CPDC, NGO service providers and policymakers to facilitate ways to improve their quality of life and improve their ability to withstand the effects of climate-related events.

PREPARATION FOR A CLIMATE-RELATED EVENT

Infrastructure upgrade is the main priority of the Kalinago community in preparing for climate-related events. The specific areas for advocacy were identified as follows:



INFRASTRUCTURE UPGRADE

- Better access to cash and commerce as there are no banks, ATMs, credit unions, etc. Financial transactions are primarily conducted in the capital city of Roseau.
- Upgrade existing medical facility with modern equipment and staff.
- Acquiring emergency services that serve the community. The services in nearby communities of Castle Bruce and Marigot are inaccessible in periods of flooding as the bridges may be blocked by debris and/or damaged.
- Access to heavy equipment for clearing fallen trees that make the community impassable to rescue teams.
- Stored water facilities for emergencies. The Kalinago territory is not perceived as a priority area for the national water authority accessing potable water after a weather-related event.
- Upgraded telecommunications facilities to receive connections from Guadeloupe or St Maarten. After the passage of Hurricane Maria, it took time to regain internet connection. Internet connectivity is an important public good.
- Installing electricity power lines underground to restore the service in reasonable time.
- Building more resilient homes as opposed to focusing on building public shelters. This is important to protect children from all abuses.



FOOD SECURITY

- Prioritise creating storage capacity for excess ground provisions because there is difficulty in accessing food locally and nationally after a disaster.



RECOVERY PROCESS

- Accessing food stock and building materials which are in demand after disaster.
- Intensifying the production of foods traditionally identified with the Kalinago: maize, arrowroot and cassava. These tubers are part of the solution to the national and communal food security challenge after disasters.
- Investing in wind turbines as an alternative source of energy, since before and after a hurricane there is usually not much sunlight, which would affect solar power systems.

6.9.2 Conclusion

Climate-related disasters exacerbate the living conditions of vulnerable groups. The main economic challenges reported were reduced ability to buy goods, loss or damage to housing and reduced or loss of income. Females experienced a reduced ability to buy goods or inputs for their business. The social challenges are equally impactful. Women were more likely to experience psychosocial/mental health conditions, limited access to clean water, and increased duties/responsibilities at home. There is a greater demand for public assistance in the aftermath of disasters. However, whilst there was satisfaction with the social services received, it was difficult to access.

6.10 Organisational Capacity NGO Services, Social Service Ministries and Departments and Disaster Management Offices

6.10.1 Overview

This section focuses on the organisational capacity of non-governmental organisations, national disaster offices, and social services ministries and departments in enabling the livelihoods of the most vulnerable populations within the context of national debt, climate-related events and pandemics. Organisational capacity relates to the capability of institutions to mobilise their human, financial and technological resources as well as social networks to positively change the communities and clients served.

Whilst an assessment of organisational capacity was not an objective of the research, it adds value to the study. It provides the CPDC with the necessary information to liaise and coordinate with service organisations to offer practical recommendations on how their services can be adjusted to meet the needs of vulnerable groups, particularly in the context of responding to and recovering from climate-related events.

6.10.2 Capacity of Non-Governmental Organisations to Support Challenges of Vulnerable Groups

The study engaged with several civil society groups geared towards improving the quality of life of some of the most vulnerable groups, including farmers, women, men and other genders, children, persons with disabilities, and organisations representing indigenous communities.

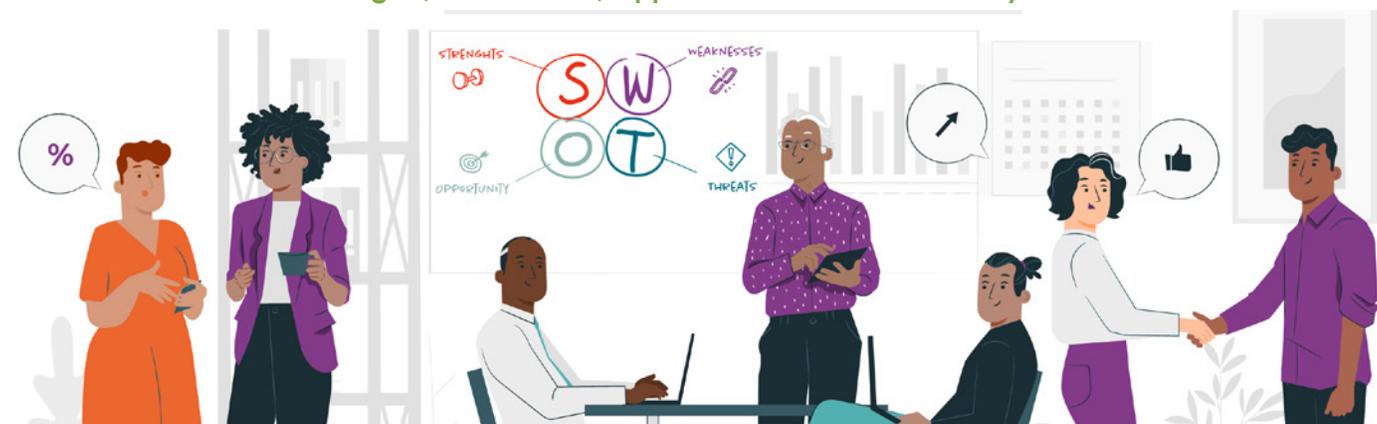
The national debt situation and the early phases of the COVID-19 pandemic impact the delivery of their services. International donor support and the reliance of volunteers to support their operations were cited as the main strengths. Focus group participants cited the importance of mobilising human and technical resources from international development partners to support their organisations' work during the early phases of the COVID-19 pandemic and the aftermath of Hurricane Maria, as seen in the following comments:



Maintaining positive relationships, stakeholder management and investing in core competences of its volunteers and staff are essential for the survival of NGOs and their ability to help beneficiaries recover from natural disasters and

pandemics. A SWOT Analysis assessed the capacity of NGO service providers to support the delivery of the services to vulnerable groups in the context of national debt, climate-related events and pandemics (see Table 6.10.2).

Table 6.10.2: Strengths, Weaknesses, Opportunities and Threats Analysis of NGO Services



INTERNAL FACTORS		EXTERNAL FACTORS	
Strengths:	Weaknesses:	Opportunities:	Threats:
Delivering work programme using effective strategies.	Poor networking with other civil society groups.	Technical assistance is available from international development partners to support programmes geared towards building resilience and climate change.	Donor agencies provide technical assistance; however, such assistance does not always support administration. Hence, whilst projects are implemented, they are not sustainable. There is reputational risk to the organisation and negative impacts on people and communities targeted for assistance.
Recruiting and retaining a cadre of trained volunteers.	Limited visibility of programmes/services.	Expansion of support services to neighbouring CARICOM states in periods of disaster.	The islands are in the track of hurricanes. There is always the possibility of a direct or indirect hit from the passage of a hurricane or a tropical storm.
Support from our overseas network and external donors.	Competing priorities of members affects their availability to contribute as advocates.	Accessing online technologies to maintain work programme during pandemic and recent climate-related events (flooding).	Geographical terrain prohibits regular visits needed to support the growth and development of organisations and its members- <i>"If I do not have the finances to buy the gas and to be on the road, it becomes a hindrance to sustaining these groups."</i> NGO service provider representing farmers, Dominica
Using virtual platforms and technology to support work.			
Using virtual platforms and technology to support work.			Government policies and procedures remain reactive and non-inclusive. There are limited actions and resources in place that cover mitigation and sustainability for vulnerable groups.



6.10.3 Organisational Capacities of Ministries and Departments of Social Services to Support Challenges of Vulnerable Groups

The social protection systems in some of these countries are woefully inadequate and lend themselves to inefficiencies such as errors of inclusion and exclusion. All key interview informants reported that their social protection system is gender responsive. Social protection systems in the four

countries were made more resilient or adaptive in the areas of establishing or revising existing policies and administration, changes in organisation structure, accessibility of services, complementary services/new services and being more inclusive (see Table 6.10.3).

Table 6.10.3: Strategies towards improving the resilience of social protection systems in the context of national debt, climate-related events and pandemics

Area of focus	Description
Policies and administration	<ol style="list-style-type: none"> 1. Working towards establishing: <ul style="list-style-type: none"> ■ Social Protection Policy (Dominica) ■ Standard Operating Procedures (SOP) for the Public Assistance Programme (PAP) (Dominica) ■ Provision of a synthesis of best practices and recommendations to improve the shock-responsiveness of the national social protection systems, and particularly the Public Assistance Programme (Dominica) 2. Existing review of the Social Protection Legislation (Antigua and Barbuda) that supports the: <ul style="list-style-type: none"> ■ Establishment of a social protection board, social protection commission and an appeals tribunal ■ Establishment of a modern protection system that is reflected in the legislation and the social protection policy ■ Strengthened capacity of the Ministry of Transformation (Department of Social Policy, Research and Planning) to measure the impact of its interventions and mobilise resources for projects to support existing vulnerable groups and persons at-risk at becoming vulnerable (Antigua)⁴⁴ 3. Digitising client services database (Jamaica) 4. Improved protocols to manage infection from existing pandemics and emerging epidemics resulting from natural disasters (Jamaica) 5. Increasing staff (temporary) to address the demands of vulnerable population (The Bahamas)

44 This in line with the revised legislation



Table 6.10.3: Strategies towards improving the resilience of social protection systems in the context of national debt, climate-related events and pandemics
(continued)

Area of focus	Description
Changes in organisation structure and leadership	<ol style="list-style-type: none"> 1. Establishing within the Ministry of Health, Wellness and Social Services three units in the Social Welfare Division with supporting staff to provide more attention to the needs of vulnerable groups (Dominica) 2. Assigning two Permanent Secretaries in the Ministry of Health, Wellness and Social Services, one of whom is specifically assigned to lead the operations of the Social Services (Dominica)
Accessibility of services	<ol style="list-style-type: none"> 1. The Department of the Environment has overseen the establishment of the Sustainable Island Framework Fund to support the building of resilient shelters. Churches and other establishments that provide shelter during hurricanes have benefited from grants (Antigua and Barbuda) 2. Home Advancement for the Poor and Indigent that provides assistance for renovation and expansion for poor and vulnerable households provided that they own the land. In cases where they neither own the house nor the land, approval must be sought from the landlord (Antigua and Barbuda)
Offering complementary and/ or new services	Including new programmes (e.g., rental assistance and food programmes) (The Bahamas)
Being more inclusive	Strengthening case management approach (Jamaica)

Case study 6 highlights the ways the Poor Relief System in Jamaica has been strengthened to improve its delivery of social support services to its beneficiaries.

Case Study 6

Improving the Delivery of Poor Relief Services to the Vulnerable and Destitute During COVID-19 and Beyond: A Case study of the Board of Supervision, MLGRD Jamaica

The COVID-19 pandemic is a health crisis with rippling effects on society. The Caribbean region reported its first COVID-19 case on March 10, 2020, in Jamaica. Subsequently, the Government of Jamaica introduced a plethora of social and economic interventions to ensure that the population was safe and that systems were resilient to withstand the effects of the pandemic and recover from loss quickly. Social service institutions such as the Board of Supervision, an entity of the Ministry of Local Government and Rural Development (MLGRD), created various mechanisms to adapt to the protocols for the safety and reduce the risk of elevated destitution of its target population.

These protocols have been mainstreamed into existing operations and now strengthen the organization's approach to reduce the risk of destitution and entry into anti-social behaviour patterns and reduce the transmission of diseases that can spread because of climate and non-climate-related events. The following are ways the poor relief system in Jamaica has been strengthened or made more resilient:



- Improved information gathering. Electronic databases have been created (in selected sites such as the St. James Municipal Council) to store and provide more accurate numbers and descriptors of the beneficiaries;
- Improved methodical case planning. Care plans with clearly written goals and milestones to be achieved as well as referrals to prospective human services. Strengthening the living and coping situations of the clients improves response mechanism to shocks, and reduces the risk of destitution and entry into violence and crime;
- Strengthened public health and infection control and monitoring procedures within infirmaries;
- Increased staff within facilities to better care for persons;
- Improved opportunities for staff to network with other organisations to deliver more impactful services to clients and communities that are socio-economically vulnerable; and
- Improved coordination with the Ministry of Health to maintain health regulations and mental health support services such as assessment and treatment for persons with mental health conditions so they can cope better. This is an important consideration given that mental health situations worsened globally during the COVID-19 pandemic.

6.10.4 Organisational Capacity of Disaster Management Offices to Support National Response and Recovery Efforts

At the national level, country size, quality of infrastructure (road networks, houses, telecommunications networks, etc.) and experiences with hydrometrical events as well as the capacity of the national coordination mechanism impact on response and recovery from climate-related events.

Table 6.10.4 presents the organisational apparatus for each country. These mechanisms enable the organisation to lead national disaster coordination and response and recovery activities that impact on the population, particularly the most vulnerable groups.

Table 6.10.4: Organisational capacity supporting response and recovery from climate-related and non-climate-related events

Organisational assets	Antigua and Barbuda	The Bahamas	Dominica	Jamaica
Name	National Office of Disaster Services (NODS)	National Emergency Management Agency (NEMA)	Office of Disaster Management (ODM)	Office of Disaster Preparedness and Emergency Management (ODPEM)
Available National Disaster Contingency Fund	There is a national disaster fund estimated at EC\$300,000.00	Initially, funds of NEMA are provided by the Parliament and private donations. Financial provisions for the new Disaster Reconstruction Authority are broader in scope (see Case study 7)	Not available. Funds designated for recovery are coordinated by the Ministry of Finance	A national disaster fund was established in 2019. There is an estimated US\$13,290,802 or equivalent JM\$2 billion dollars allocated to respond to natural disasters
Structure for Reporting	National Disaster Preparedness National Disaster and Response Advisory Committee	Inter-Ministerial Committee on Disaster Risk Management chaired by the Prime Minister	National Emergency Planning Organization is chaired by the Prime Minister	The National Disaster Council comprises seven committees and is chaired by the Prime Minister.
National Legislation/Policy/Framework	Disaster Management Act 2002	Disaster Risk Management Act, 2022	<ul style="list-style-type: none"> ■ The National Disaster Plan 2001 ■ Assessment of Gender and Disability Inclusion in Public Emergency Shelters 2021 	<ul style="list-style-type: none"> ■ National Response, Coordination Plan 2021 ■ Disaster Risk Management Act, 2015 ■ National Disaster Response Framework



Table 6.10.4: Organisational capacity supporting response and recovery from climate-related and non-climate-related events (continued)

Organisational assets	Antigua and Barbuda	The Bahamas	Dominica	Jamaica
<p>Adaptation measures introduced since last major climate-related event and/or COVID-19</p>	<ol style="list-style-type: none"> 1. Creation of a donor coordination platform 2. Training in mainstreaming gender in shelter management supported by the Directorate of Gender Affairs and UNFPA 3. The development of the Building Damage Assessment tool by UNDP, which is now used throughout the region 4. Introducing hydroponics into the school curriculum and re-energizing in response to national food security 5. Reviewing the health and social protection systems and their ability to cover affected populations during extended periods of emergencies 	<ol style="list-style-type: none"> 1. Establishing a new Disaster Risk Management Act in 2022 2. Establishment of a Disaster Reconstruction Authority that focuses on repair and recovery in a disaster zone. 	<ol style="list-style-type: none"> 1. Post-hurricane Maria the government formed the Climate Resilience Execution Agency for Dominica (CREAD). Its mandate focuses on expediting government reconstruction projects 2. Construction of satellite warehouses and emergency shelters to serve vulnerable groups. These new buildings were constructed in the most disaster-prone communities in the country. The buildings are also designed to support the needs of persons with disabilities 3. Support from IOM to upgrade the shelter manual in Haitian Creole and Spanish because of the immigrant communities 4. The organisations for persons with disabilities and the Council on Aging are increasingly invited to planning sessions to inform disaster management strategies 	<ol style="list-style-type: none"> 1. The National Response Coordination Plan emerged from the events of Hurricane Sandy 2012 and the Tropical Depression of 2016 2. Improving the response communications apparatus through funding from the Japanese Government 3. Development of a chemical plan in the event of an industrial accident or leakage during the passage of a hurricane or earthquake 4. Increasing the capacity of the national disaster management authority to undertake search and rescue requirements beyond hurricanes. Jamaica and the Caribbean remain susceptible to earthquakes and with the proliferation of high rise buildings in Jamaica, improved search and rescue capabilities must be prioritised



Case study 7 details ways the National Disaster Management Authority in The Bahamas is strengthening its ability to conduct risk identification and analysis to respond and lead recovery efforts

from climate-related events. This is likely to positively impact the preparation and recovery techniques for vulnerable groups and in so doing reduce negative social and economic implications.

Case Study 7

Strengthening National Response to Risk Identification, Response, and Recovery: National Disaster Management Authority, The Bahamas

The Bahamas will always be vulnerable to storms. Its communities are low lying, and the 23-island archipelago makes it difficult to undertake evacuation procedures.

The extensive damage caused from Hurricane Dorian resulted in new policy decisions regarding response, recovery, and reconstruction. The Prime Minister appointed a Minister, Permanent Secretary and conceptualized an entity that would manage repairs and reconstruction in a disaster zone.

The need to avoid duplication and consolidate different entities addressing response and recovery in disasters and the findings from an IDB-commissioned study influenced the formation of one robust entity called the Disaster Risk Management Authority. The report concluded that risk identification, risk analysis, financing for disaster preparedness, financing for post disaster recovery as well as post disaster repair and reconstruction were among weaknesses of the country's disaster management processes.

The new Disaster Risk Management Authority will consolidate all the technical personnel from the several response and recovery entities to guide the recovery and reconstruction phase of the disaster management cycle. Skillsets such as risk identification and analysis will be recruited from outside of The Bahamas.

The Ministry of Finance was tasked to prepare a budget for financing for preparedness and for post disaster recovery and reconstruction. The Risk Management Authority is expected to be operational by July 1, 2023, with the new budget.



6.11 Partnerships Supporting Resilience, Sustainability, and Inclusivity in Climate-related Events

Establishing partnerships with national, regional and international organisations is an important aspect of responding to and recovering from climate-related events. Key informant interviews with senior personnel from national disaster offices in the four study countries revealed that partnerships with national, regional and international stakeholders facilitate access to resources that enable their operations to become more transformative, inclusive and impactful. Knowledge of these partnerships is important for the CPDC so as to potentially collaborate with these organisations in improving the human and technical

capacity of civil society networks in addressing disaster risk reduction among its beneficiaries.

Table 6.11 outlines some partnerships informed by key informant interviews with senior personnel in national disaster management offices. These partnerships provide an enabling environment that helps reduce the impact of disasters and epidemics on vulnerable groups in light of the mandates of major international disaster risk reduction frameworks (see Chapter 2).

Table 6.11: Partnerships supporting inclusive, sustainable and resilient disaster response and recovery in Antigua and Barbuda, The Bahamas, Dominica and Jamaica

Scope	Antigua and Barbuda	The Bahamas	Dominica	Jamaica
National	Disaster Management Act secures partnership in the management and recovery from disasters from all sectors. There are operational partnerships forged by the NODS .	National Emergency Management Agency (NEMA) Disaster Risk Management Act, 2022 mandates all government ministries and departments to assist in times of natural disasters. Membership from ministries, departments and NGOs is represented across 14-sub-committees, which includes animal care.	Office of Disaster Management (ODM) The constitution makes provision for personnel from public and private sector entities and NGOs to serve on the National Emergency Planning Organization. The ODM is the Secretariat.	Office of Disaster Preparedness and Emergency Management (ODPEM) The National Disaster Council (NDC) is chaired by the Prime Minister. There are seven sub-committees that allow for partnership based on legislation and operational function.
Regional	Membership with CDEMA , part of CARICOM , gives accessibility to regional resources (see Section 5.3.4). All four countries are members of CCRIF , a regional catastrophe fund for Caribbean governments to limit the financial impact of hurricanes and earthquakes to Caribbean governments by quickly providing short term liquidity when a policy is triggered.			



Partnerships provide an enabling environment that helps reduce the impact of disasters and epidemics on vulnerable groups in light of the mandates of major international disaster risk reduction frameworks

Table 6.11: Partnerships supporting inclusive, sustainable and resilient disaster response and recovery in Antigua and Barbuda, The Bahamas, Dominica and Jamaica *(continued)*

Scope	Antigua and Barbuda	The Bahamas	Dominica	Jamaica
International	<ul style="list-style-type: none"> ■ FAO is supporting the development of disaster risk management plans for the sectors. ■ USAID enabling the safe school and safe hospital initiative. ■ UNICEF, UNFPA and UN Women collaborated with the government of Antigua and Barbuda to provide psycho-social support and school reintegration programme post hurricanes Irma and Maria. ■ UNICEF supported the national water, sanitation and hygiene (WASH) programme during the pandemic. 	<p>United States Military and Coast Guard have assisted with medical expertise, project equipment and rescue boats.</p> <p>USAID has supported capacity building in shelter management and damage assessment as well as granted access to their warehouse in Florida and provides supplies during emergencies.</p> <p>Pacific Disaster Center based in Hawaii undertakes annual disaster management exercises.</p> <p>MOU between University of Hawaii with and University of The Bahamas to build expertise in disaster management.</p> <p>The Japanese Embassy has given a grant to purchase new heavy duty equipment and radio systems to support their communication system.</p>	<p>The Japanese Government provided trucks.</p> <p>UNESCO delivered the school safety programme.</p> <p>IOM has assisted with:</p> <ul style="list-style-type: none"> ■ Renovating shelters ■ Providing alternate power supply to shelters ■ Building capacity in disaster management services ■ Developing shelter manual for disaster workers 	<p>The Government of Argentina has partnered with the government of Jamaica to develop the National Volunteers programme and a national volunteer database for disaster risk management.</p> <p>The Government of Japan is funding the master communication platform for national response during disasters.</p> <p>United States Southern Command, through USAID, conducts training in disaster risk management.</p> <p>The Government of Chile through the Chile Espana programme provides technical capacity support for the country's seismic response capabilities.</p>



CONCLUSION AND RECOMMENDATIONS

Chapter 7



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St. Andrew, Jamaica

7.0 Conclusion

Population dynamics and poverty

There is a demographic transition occurring in the region, evidenced by an increase in life expectancy. The population of the elderly has been growing. All countries in the study reported a working age population that is reducing. Poverty and vulnerability in the four countries is best characterised as structural in nature. Therefore, social protection programmes must directly target these structural factors, such as the low level of education and skills of the poor and their over-representation in the informal economy, which precludes them from benefiting from economic growth. Additionally, frequent occurrences of hurricanes, flooding and drought and the COVID-19 pandemic have further exacerbated the precarious living conditions of these vulnerable populations, with inflation rates causing spikes in prices of food, energy and transportation. Children and youth, persons with disabilities and indigenous groups are most affected by economic downturns and inflation, which is further heightened during climate-related events. Intersectionalities of age, gender and geographical location further compound their vulnerability.

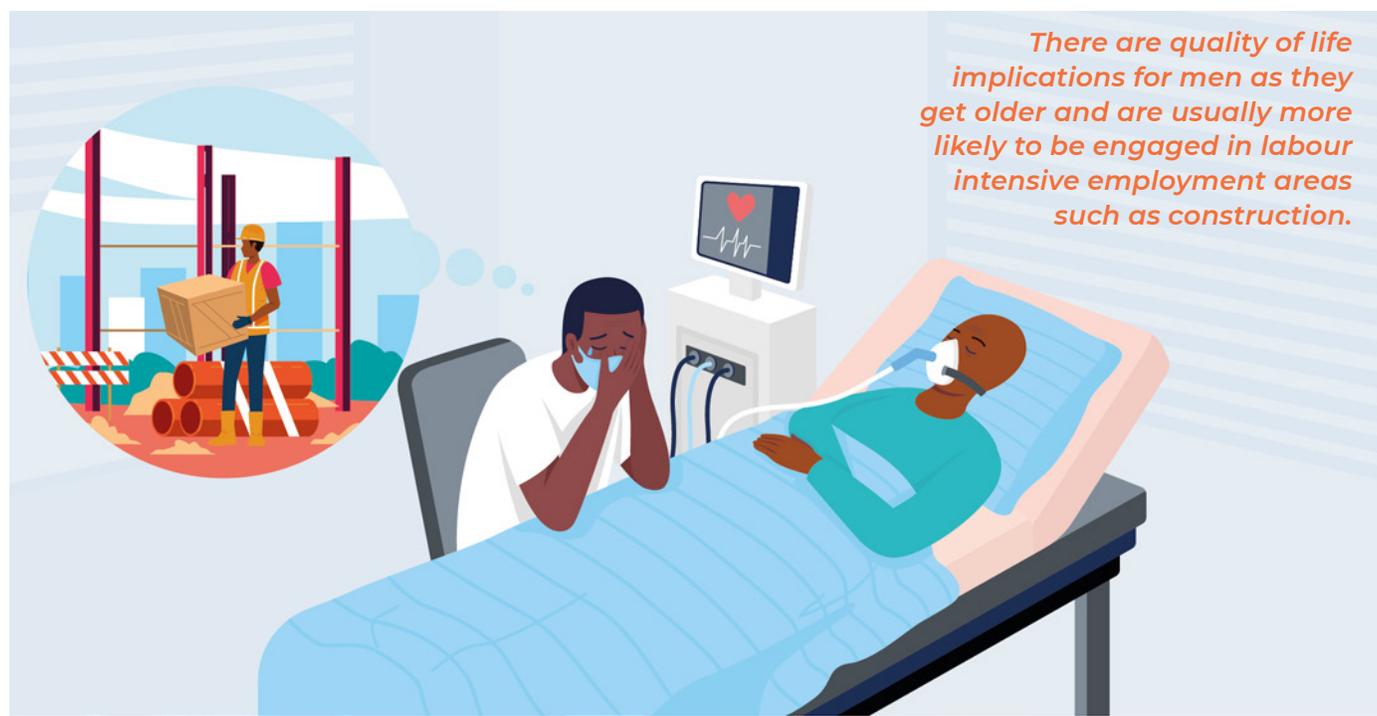
Quality of life and livelihood

The quality of life of vulnerable groups is impacted in distinct ways by the complexities of sovereign debt exacerbated by climate-related events and pandemics. These impacts include: (a) experiences of malnutrition/food insecurity especially among women; (b) difficulty obtaining

employment for men; (c) limited access to suitable and affordable housing; (d) accessing day/home care for dependent; (e) school disruption for children and youth; (f) psychosocial trauma for all demographics, particularly the elderly who experience health-related issues due to trauma; and (g) limited accessibility of undocumented migrant groups to social and economic services post-recovery. Perennial exposure to risk and reduced abilities to cope at the household and individual levels have adverse social, economic and psychological implications. Ministries of social services, health and wellness, as well faith-based groups and NGO services, may consider prioritising a standardised approach to address post-traumatic stress within the context of shocks such as climate-related events and pandemics so that families and caregivers as well first responders can address personal trauma and support others.

Expenditure and enrolment in social protection schemes

Among the four study countries, expenditure on social protection is low. Generally, less than 5% of GDP is allocated to social protection expenditure. Only The Bahamas was able to offer unemployment insurance to support those affected by the COVID-19 pandemic. Additionally, beneficiaries are at heightened risk of severe impacts from future climate disasters due to a lack of participation in contributory social protection programmes such as the National Insurance Scheme or owning private health insurance. More females are enrolled in government social protection and private



medical health schemes compared to men. There are quality of life implications for men as they get older and are usually more likely to be engaged in labour intensive employment areas such as construction.

Preparedness and responsiveness

There are organisations and institutional frameworks such as legislations and policies to respond to shocks resulting from global economic recessions, natural disasters and pandemics. However, there is a need for increased investments in disaster management and recovery and social protection to better improve infrastructure and support the social and economic needs of vulnerable groups whose living conditions further deteriorate with shocks.

Vulnerable groups were generally not prepared leading up to climate-related disasters regardless of gender and country of residence. This has implications on personal resilience and generally the length of time for recovery, particularly in a context of limited household financial resources, participation in social protection schemes and ownership of personal insurance.

Accessibility to social safety nets and social services

Vulnerable groups depend on social services to cope with the effects of climate-related events. Nearly 80% of beneficiaries tried to access public assistance programmes, including food or food assistance, which was cited by respondents as an important social service need.

Females were more likely than males to seek shelter/housing services and employment services. Males sought assistance from public assistance programmes, medical care, victim support services, and individual counselling services.

Food insecurity

Food security has become a major development challenge for the Caribbean region. The main income generating activities for the region, agriculture and tourism, are located along coastal areas and as such, environmental hazards increase vulnerability of the livelihood of those employed in these industries. Droughts are also a major concern for farmers. The effects from these natural disasters usually result in shortages of food items and increased food prices. Given that income levels are low, there is a reduced ability to consume the necessary nutritional requirements and/or frequency of meals. The situation is likely to affect females more than males, given that they were more than twice as likely as males to not have any income (11% versus 5%). The outcome of food insecurity at the household level is malnutrition. This has dire implications for the growth and development of children and the worsening of non-communicable diseases where specific food consumption practices are required for optimal health.

This section comprises recommendations emanating from the study as well as prospective new areas for exploration.

The effects from these natural disasters usually result in shortages of food items and increased food prices. Given that income levels are low, there is a reduced ability to consume the necessary nutritional requirements and/or frequency of meals.



7.1 Recommendations from the study

a. Updating Poverty and Vulnerability Diagnostics and Monitoring Data

Except for Jamaica, poverty data in the region is outdated, with most Household Budget Surveys and Survey of Living Conditions (SLC-HBS) and UNICEF Multiple Indicator Cluster Surveys (MICS) implemented over a decade ago. Given that these countries have experienced multiple exogenous shocks (economic, climate and price and inflation) during the intervening period, it is essential that countries prioritise conducting such surveys. **Importantly, the data can be used to monitor progress on SDG targets.**

- The CPDC should also advocate that updated poverty data be used to strengthen and update proxy means tests to enhance and improve the accuracy of targeting poor households for social protection benefits.

b. Regional governments should prioritise improving governance and creating fiscal space for resilient social protection systems

Governments should develop negotiating strategies and advocate, in regional and international policy spaces, changes to unsustainable sovereign debt levels that constrain their fiscal space and hinder the ability to provide social services. Additionally, a paradigm shift is required to design socio-economic development planning and financing of development plans to address decades of structural poverty. Importantly, the need to allocate and create the fiscal space must be given serious consideration. **As such the study is recommending the following:**

- Enhancing governance systems to ensure proper management and accountability.
- The design and development of long-term development planning frameworks that are adaptive and prioritise resilient economic growth and social development and make sufficient considerations for social protection.
- Government must gradually remove universal energy and food subsidies that oftentimes outweigh budget allocations on social protection, are regressive in nature and incentivize the over-consumption by the more

affluent in society. Removal of subsidies should be allocated directly toward the enhancement and strengthening of social protection systems.

- Seek international financial reform (multilateral level) to have more bespoke options for sovereign borrowing. For governments seeking debt cancellation, there should be a matching integrity and governance structure that supports the proper use of the funds.
- The inclusion of social protection as part of the payout scheme of the various catastrophe risk insurance policies, such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF).
- Governments should establish a social protection floor as part of their long-term national development strategy that costs and outlines the minimum suite of social protection services that they are guaranteeing their population and endeavour to deliver on these gradually over time.
- Expedite the Public Modernization programme as a strategy to increase efficient implementation of programmes. Low levels of efficiency adversely impact public sector fiscal operations.
- Prioritise gender and youth inclusion in economic policies to mitigate the risk of structural exclusion from economic participation.

c. Improve targeting and allocation of social protection resources

- Social protection systems in the four study countries are inadequate in reach and depth. They do not cover the entire population requiring support and the quantum of resources and support services falls short of what is required to lift the poor and vulnerable out of poverty. **Therefore:**
 - Governments must move with alacrity to rationalise and merge social programmes for greater efficiency and effectiveness. Countries have numerous social protection programmes targeting the same population, with each having their own administrative cost. This erodes the



effectiveness of social programmes and could be one of the major reasons for poverty remaining elevated in the region.

- Rationalisation of the existing social protection programmes by developing a flagship programme that targets multiple deprivations of the poor and vulnerable. This will reduce inefficiency within the system and curtail fragmentation.
- Review targeting approaches in using social protection to address social problems. For example, in tackling the intractable unemployment challenges, governments are increasingly resorting to social protection labour market programmes as a short-term solution. Many of the programmes are not enhancing the skills and employability of participants but are crowding out spending on other critical poverty alleviating programmes.
- Greater emphasis must be placed on increasing the share of social protection expenditure to women, given the mounting

evidence pointing to the increased role of women's economic participation and empowerment in social and economic development.

- Ensure that the education systems are preparing school leavers for the world of work and jobs for the future and that their economies are buoyant enough to generate decent paying employment. This is against the backdrop of a relatively youthful population in the study countries.
- Prioritise support for livelihood insurance mechanisms. The COVID-19 pandemic and recent natural disasters have laid bare the structural gaps of the present social protection systems. These shocks revealed the critical absence of unemployment insurance, health insurance frameworks to safeguard the vulnerable, and affordable livelihood and crop insurance. For countries such as Jamaica and Dominica where agriculture accounts for a significant share of national output and employment, this investment is critical.

The COVID-19 pandemic and recent natural disasters have laid bare the structural gaps of the present social protection systems. These shocks revealed the critical absence of unemployment insurance, health insurance frameworks to safeguard the vulnerable, and affordable livelihood and crop insurance.

S O C I A L P R O T E C T I O N O F F I C E



d. Strengthen institutional mechanisms in the national disaster authorities and social sectors as well as NGO services in supporting inclusive disaster risk reduction

■ **The CPDC should prioritise:**

- Advocating for inclusivity in the review and amendments to national legislation and system procedures (e.g., standard operating procedures, manuals). This should also include methodologies related to the review, preparation, response, recovery and relief regarding climate-related and other events. Special attention should be paid to ensure the participation of women, youth, elderly, persons with disabilities, LGBTQI and various ethnicities. This is especially required for Dominica, which prioritised *mainstreaming inclusion for all vulnerable groups in disaster risk reduction plans/policies at the national level as well as having critical legislations that fail to address vulnerable groups such as persons with disabilities, indigenous people and the poor and vulnerable.*

- Advocating for regional institutions such as the CARICOM Secretariat and OECS Commission to address the potential long-term commitments towards undocumented immigrants in view of international humanitarian treaties is an important step towards building societal resilience and reducing xenophobia. Civil unrest and economic instability have resulted in the migration of Haitian immigrants to several islands in the Caribbean.

- Implementing capacity building training with CSOs and NGOs in mainstreaming gender and disability inclusion in their organisations' disaster management and response plans.

- Continue to improve upon the accessibility, adaptability and resilience of social protection systems and social services: 65% of survey respondents were satisfied with the social support services received as a result of climate-related disasters. However, the need to provide services and supports such as rehabilitation services and assistive devices is greater in the post-disaster stage of the climate event.

- Better coordination amongst social service providers, including government human and social services and NGOs in sharing data and information during search and rescue efforts, as they respond to vulnerable groups, particularly children, elderly and persons with disabilities living in areas at risk to climate change events.

e. Integrate Information, Communication and Technology (ICT) in the accessibility and delivery of human and social services

- Ministries and Departments of social services need to continue investing in structures and supporting information technology systems to facilitate ease of access to social services including access to education services at all levels in the aftermath of disasters. **Specifically:**

- Digitising a list of beneficiaries of government public assistance programmes to facilitate accessibility to multiple services for recovery

- Decentralising services, particularly where vulnerable groups inhabit

- Develop user friendly application forms to access services, including braille and audio formats

- Updating and expanding databases, including with geo-spatial/ mapping technologies, to ensure more effective and targeted preparation and response before, during and after climate events

- The CPDC should prioritise building the capacity of NGO service providers in the use of ICT hardware and social media platforms in the delivery of their work programmes and advocacy engagements.

f. Improve opportunities for livelihood and psychosocial recovery in the aftermath of natural disasters and pandemics

- Climate-related events exacerbate previous vulnerabilities experienced by women, women with disabilities and farmers. Institutions should prioritise removing barriers of access to improve livelihoods, **some of which include:**



- Removing attitudinal barriers that discourage women, persons with disabilities and ethnic minorities from seeking opportunities to improve their livelihoods
- Identifying the needs and building the capacity of women with disabilities who are also farmers
- Providing financing, training in entrepreneurship and mentorship to women, youth and indigenous populations who have commenced, or are desirous of commencing, small businesses
- Expanding the technical capacities and knowledge on crop resilient farming practices to farmers and agro-processors
- Explore the tax exemptions on hygiene and sanitary products used by women, elderly and children as a means of stabilising costs and improving reproductive health and wellness. Climate-related events and the COVID-19 pandemic exacerbated the cost of these basic items.
- Psychosocial responses require a multi-disciplinary approach to help victims who engage in negative coping strategies to revert to normal as soon as possible. Collaboration with National Drug and Substance Abuse Associations, Ministries of Health, Mental Health Groups and Social Work networks should be considered.
- Psychosocial support is an essential element in disaster response and recovery. The survey reveals that men were more likely to engage in survival and coping activities that may cause them to neglect the need for counselling,

especially in the context of loss of livelihoods. As such, health practitioners need to create frameworks and programme interventions which encourage men to seek support in getting through these difficult periods.

- Unpaid care work is a prominent feature of climate-related response. Women prioritise ensuring that the home and family get back to normal, while balancing the demands of work outside the home. Again, opportunities need to be created for psychosocial interventions that support their role as caregivers in the home and contributors to the labour force.
- The elderly require structured and ongoing psychosocial interventions to support their recovery. Failure to provide this service results in other health complications or even early death.

g. Support inclusive communication and advocacy requirements

- The CPDC should consider sharing the findings of this report with a broad cross-section of stakeholders, namely NGO service providers and policy makers in the financial, education, social protection, social services and environmental/ disaster management sectors. The findings and recommendations could be incorporated in existing country sector strategies.
- The CPDC may wish to consider making the findings of this report more inclusive and accessible to various populations, that is, make the report available in print, braille and audio, including both the official (or "standard") language and the creolized/vernacular languages of the region (English, Dutch, French, Spanish and their variants).

Explore the tax exemptions on hygiene and sanitary products used by women, elderly and children as a means of stabilising costs and improving reproductive health and wellness.



- There needs to be greater public education and/or social marketing on the importance of making NIS/NIC contributions and the benefits to be derived, given that for a region that is in transition, that is, people are living longer, only 30% of respondents across all countries benefited from the National Insurance Scheme or Corporation. This is low.
- Encourage major telecommunications networks in the region to establish and promote making information more accessible to persons with disabilities using modern optic and audio technologies.
- The television is the second highest source used to access information for disaster preparation. It is important that the use of sign language interpretation be mainstreamed into the dissemination of information.

h. Promote greater knowledge about free movement treaties and efficiency in climate-related migration within CARICOM amongst skilled professionals supporting response and recovery efforts

- Collaboration with the CARICOM Secretariat and OECS Commission in expanding public education programmes associated with the Treaty of Chaguaramas and Treaty of Basseterre. It is important that NGO service providers are engaged in these discussions. The groups which they serve are least aware of these treaties and their benefits.
- CDEMA, Ministries of Foreign Affairs and Professional Associations (Medical Associations, Teacher's Associations, Engineering Associations, Social Work Associations) should work toward standardising a framework for allowing skilled professionals to travel hassle-free across the region, more specifically, CARICOM nationals entering OECS countries, and lend support to the recovery process in climate-related contexts.
- Regional education policymakers should explore (re)entry and (re)integration of students from disaster-affected countries into their national education programmes. This is to facilitate continuity in face-to-face instruction, socialisation and the necessary support for wellness.

i. Strengthen the infrastructure to withstand the damage that comes with more frequent and intense hurricanes, floods and other disasters

- The CPDC should prioritise engaging with national disaster authorities and national engineering and architectural associations to conduct a review of existing building standards with current building codes, to ascertain the capacity or resilience of the buildings against major disasters such as flooding, hurricanes and earthquakes.
- The CPDC may want to explore with regional finance and development institutions and national governments, procedures for getting disaster financing earmarked for the region, as one of the commitments coming out of COP27 in November 2022. This disaster financing could be instrumental in supporting investments in upgrading the physical infrastructure including housing, public shelters and road networks across countries.
- Opportunities exist for 'building back better' to ensure greater resilience and productivity following climate disasters, especially in communities occupied by socio-economic and cultural minorities. **Specific actions include:**
 - Ensuring that communications, electricity and water mains or pipes are securely positioned underground;
 - Equipment to clear debris is well-maintained and accessible to communities within 24 hours to facilitate access to farmlands, medical facilities, shelters and other critical institutions;
 - CDEMA regional response focal points need to continue providing the necessary storage and logistical arrangements to facilitate the entry of food, medication and other critical services at the ports of entry of the affected countries after the passage of climate-related events.



j. Maintaining food security

- Food security has become a major concern for the vulnerable. Nearly one in four (23%) survey respondents identified reducing their meals or daily portions as a coping strategy; 33% reported that nutrition imbalance or malnutrition was the number one development concern, and research confirms that food prices increased in periods of drought, hurricanes and flooding.

As such, policymakers must collaborate with Ministries of Agriculture, technical institutions and global development partners in:

- (i) gaining more resilient inputs into agriculture (e.g., seeds, fertilisers)
 - (ii) obtaining reasonably priced alternative nutritional substitutes
 - (iii) obtaining facilities for the storage of produce as part of the preparation, response to and recovery from disasters
 - (iv) investing in more resilient strains for the production of tubers and grains, including cassava, arrowroot and corn
 - (v) negotiating for technical and financial assistance from commitments made at COP27 regarding disaster financing for SIDS
- Increase food grants to vulnerable households. Groups such as single parent households, elderly and persons with disabilities should be prioritised.
 - Enforce systems that increase accessibility to farm produce and profitability from the sale of crops, livestock and poultry. Collaboration between Ministries of Agriculture and National Security is essential. **Some strategies may include:**
 - delegating farm wardens and police with the authority to conduct stop and search checks on potential suspects
 - increasing fines and non-custodial sentences on offenders
 - encouraging farmers to secure property
 - Reduce child malnutrition and hunger through:
 - Engaging in a mix of private-public sector partners as well as international development partners to support the continuation of national school feeding programmes across the region. This is an important mechanism in reducing malnutrition and hunger.
 - Strengthening partnerships between Ministries of Agriculture and Ministries of Education to promote the development and maintenance of school gardens for meeting nutrition needs as well as an income generating activity.

Food security has become a major concern for the vulnerable.

Nearly one in four survey respondents identified reducing their meals or daily portions as a coping strategy;

23%



33%

reported that nutrition imbalance or malnutrition was the number one development concern.



7.2 Recommendations for Further Research

The following are prospective areas which the CPDC may want to commission to further build resilience, adaptability and inclusivity across countries, in responding to the challenges of national debt, compounded by climate-related events and pandemics which could result from climate-related events.

Some possible areas of focus are:

1. Examining the impact of unpaid care work on climate-related disaster reconstruction and recovery
2. Institutional assessment of the inclusivity of national disaster organisations in responding to disasters
3. Examining the impact of school feeding programmes and gardens as strategies to reduce childhood hunger and malnutrition
4. Exploring strategies towards improving the resilience of Social Protection Systems
5. Assessment of the impact of key social protection programmes on social outcomes such as school feeding programmes, active labour market programmes, and cash transfer programmes
6. Empirical analysis of the impacts of debt and climate change on the Caribbean and on government's allocation of social protection expenditure
7. Determining and quantifying social protection floors for the Caribbean, taking climate change and natural hazards into account
8. Proposing a Regional CARICOM Social Protection and Labour Strategy
9. Social Protection Expenditure Tracker to guide policy making and the international development community support.

Examining the impact of school feeding programmes and gardens as strategies to reduce childhood hunger and malnutrition



BIBLIOGRAPHY

- Alleyne, Dillon, Michael Hendrickson, Sheldon McLean, Machel Pantin, and Nyasha Skerrette. 2021.** Economic Survey of the Caribbean. <https://repositorio.cepal.org/handle/11362/48667>
- Alleyne, Trevor, Inci Ötoker, Uma Ramakrishnan, and Krishnan Srinivasan. 2017.** Unleashing Growth and Strengthening Resilience in the Caribbean. DOI <https://doi.org/10.5089/9781484315194.071>
- Bowen, Glen A. 2007.** "The Challenges of Poverty and Social Welfare in the Caribbean." *International Journal of Social Welfare* 16: 150-158. DOI: 10.1111/j.1468-2397.2006.00453.x
- CARICOM Secretariat. 2021.** Overview of Population and Housing Censuses in the Caribbean Countries. https://www.cepal.org/sites/default/files/presentations/overview_-_population-_housing-censuses-caribbean-caricom-23-nov2021.pdf
- Collombat, Thomas. 2014.** "The International Labour Movement and the Global Social Protection Floor." *Global Social Policy*, 14(3), 432-435. Retrieved 1 22, 2023, from <http://journals.sagepub.com/doi/abs/10.1177/1468018114544414c>
- Economic Commission for Latin America and the Caribbean. 2021.** The High Prevalence of Non-Communicable Diseases in the Caribbean is Exacerbating the Pandemic's Impact and Hindering the Subregion's Progress Towards Sustainable Development. <https://www.cepal.org/en/presreleases/high-prevalence-non-communicable-diseases-caribbean-exacerbating-pandemics-impact-and>
- Ferguson, James. 2003.** Migration in the Caribbean: Haiti, the Dominican Republic and Beyond. https://minorityrights.org/wp-content/uploads/2015/07/MRG_Rep_Caribbean.pdf
- Francis, Ana. 2019.** Free-Movement Agreement & Climate-Induced Migrant: A Caribbean Case Study. https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1061&context=sabin_climate_change
- Government of the Commonwealth of The Bahamas. 2022.** The Bahamas Updated NDC. <https://unfccc.int/sites/default/files/NDC/2022-11/Bahamas%20Updated%20Nationally%20Determined%20Contribution.pdf>
- Global Funded by Disaster Risk Reduction and the World Bank Group. n.d.** Gender-Responsive Disaster Preparedness and Recovery in the Caribbean: Desk Review <https://openknowledge.worldbank.org/bitstream/handle/10986/35215/Gender-Responsive-Disaster-Preparedness-and-Recovery-in-the-Caribbean-Desk-Review.pdf>
- Henry-Lee, Aldrie. 2004.** Social Protection and Poverty Reduction in the Caribbean: Examining Policy and Practice: Saint Lucia Country Review. https://stats.gov.lc/wp-content/uploads/2018/08/ST_LUCIA- SOCIAL PROTECTION POVERTY REDUCTION 2004.pdf
- Inter-American Development Bank. 2021.** "The Fragile Path to Recovery." *Caribbean Quarterly Bulletin* 2:3-53
- Internal Displacement Monitoring Centre. 2020.** Displacement in Paradise Hurricane Dorian slams The Bahamas. https://www.internal-displacement.org/sites/default/files/publications/documents/202005-displacement-in-paradise_FINAL.pdf,
- Internal Displacement Monitoring Centre. 2021.** Global Report on Internal Displacement 2022. https://www.internal-displacement.org/sites/default/files/publications/documents/IDMC_GRID_2022_LR.pdf. Norwegian Refugee Council.
- Jamaica Information Service. 2022.** Strategies Being Implemented to Tackle Praedial Larceny. <https://jis.gov.jm/strategies-being-implemented-to-tackle-praedial-larceny/>

BIBLIOGRAPHY (cont'd)

- Alleyne, Dillon, Michael Hendrickson, Sheldon McLean, Machel Pantin, and Nyasha Skerrette. 2021.** Economic Survey of the Caribbean. <https://repositorio.cepal.org/handle/11362/48667>
- Alleyne, Trevor, Inci Ötöker, Uma Ramakrishnan, and Krishnan Srinivasan. 2017.** Unleashing Growth and Strengthening Resilience in the Caribbean. DOI <https://doi.org/10.5089/9781484315194.071>
- Bowen, Glen A. 2007.** "The Challenges of Poverty and Social Welfare in the Caribbean." *International Journal of Social Welfare* 16: 150-158. DOI: 10.1111/j.1468-2397.2006.00453.x
- CARICOM Secretariat. 2021.** Overview of Population and Housing Censuses in the Caribbean Countries. https://www.cepal.org/sites/default/files/presentations/overview_-_population-_housing-censuses-caribbean-caricom-23-nov2021.pdf
- Collombat, Thomas. 2014.** "The International Labour Movement and the Global Social Protection Floor." *Global Social Policy*, 14(3), 432-435. Retrieved 1 22, 2023, from <http://journals.sagepub.com/doi/abs/10.1177/1468018114544414c>
- Economic Commission for Latin America and the Caribbean. 2021.** The High Prevalence of Non-Communicable Diseases in the Caribbean is Exacerbating the Pandemic's Impact and Hindering the Subregion's Progress Towards Sustainable Development. <https://www.cepal.org/en/pressreleases/high-prevalence-non-communicable-diseases-caribbean-exacerbating-pandemics-impact-and>
- Ferguson, James. 2003.** Migration in the Caribbean: Haiti, the Dominican Republic and Beyond. https://minorityrights.org/wp-content/uploads/2015/07/MRG_Rep_Caribbean.pdf
- Francis, Ana. 2019.** Free-Movement Agreement & Climate-Induced Migrant: A Caribbean Case Study. https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1061&context=sabin_climate_change
- Government of the Commonwealth of The Bahamas. 2022.** The Bahamas Updated NDC. <https://unfccc.int/sites/default/files/NDC/2022-11/Bahamas%20Updated%20Nationally%20Determined%20Contribution.pdf>
- Global Funded by Disaster Risk Reduction and the World Bank Group. n.d.** Gender-Responsive Disaster Preparedness and Recovery in the Caribbean: Desk Review <https://openknowledge.worldbank.org/bitstream/handle/10986/35215/Gender-Responsive-Disaster-Preparedness-and-Recovery-in-the-Caribbean-Desk-Review.pdf>
- Henry-Lee, Aldrie. 2004.** Social Protection and Poverty Reduction in the Caribbean: Examining Policy and Practice: Saint Lucia Country Review. https://stats.gov.lc/wp-content/uploads/2018/08/ST_LUCIA- SOCIAL PROTECTION POVERTY REDUCTION 2004.pdf
- Inter-American Development Bank. 2021.** "The Fragile Path to Recovery." *Caribbean Quarterly Bulletin* 2:3-53
- Internal Displacement Monitoring Centre. 2020.** Displacement in Paradise Hurricane Dorian slams The Bahamas. https://www.internal-displacement.org/sites/default/files/publications/documents/202005-displacement-in-paradise_FINAL.pdf
- Internal Displacement Monitoring Centre. 2021.** Global Report on Internal Displacement 2022. https://www.internal-displacement.org/sites/default/files/publications/documents/IDMC_GRID_2022_LR.pdf. Norwegian Refugee Council.
- Jamaica Information Service. 2022.** Strategies Being Implemented to Tackle Praedial Larceny. <https://jis.gov.jm/strategies-being-implemented-to-tackle-praedial-larceny/>

BIBLIOGRAPHY (cont'd)

- Latin American Economic Outlook. 2019.** Special Feature: The Caribbean Small States. <https://www.oecd.org/dev/americas/LEO-2019-Chapter-6.pdf>
- Law, Siong H., Chee. H. Ng, Ali M. Kutan, and Zhi K. Law. 2021.** "Public Debt and Economic Growth in Developing Countries: Nonlinearity and Threshold Analysis." *Economic Modelling*, 98, 26-40.
- Lora, Eduardo, and Mauricio Olivera. 2007.** "Public Debt and Social Expenditure: Friends or Foes?" *Emerging Markets Review*, 8, 299-310.
- Maldonado, Franco and Kevin P. Gallagher. 2022.** Climate Change and IMF Debt Sustainability Analysis, https://www.bu.edu/gdp/files/2022/02/TF_WP_005_FIN.pdf
- Ministry of Economic Affairs, Planning, Resilience, Sustainable Development, Telecommunications and Broadcasting. 2020.** Dominica Climate Resilience and Recovery Plan 2020-2030. Roseau. Government of the Commonwealth of Dominica. <http://www.dominica.gov.dm/images/documents/CRRP-Final-042020.pdf>
- Ministry of Finance and Corporate Governance. 2015. Medium-Term Development Strategy 2016 to 2020.** St. John's. Government of Antigua and Barbuda. https://observatorioplanificacion.cepal.org/sites/default/files/plan/files/antigua_barbuda_medium_term_development_strategy.pdf
- Ministry of Planning and Economic Development. (n.d).** National Resilience Development Strategy 2030. Roseau. Government of the Commonwealth of Dominica. https://socialprotection.org/discover/legal_policy_frameworks/national-resilience-development-strategy-2030
- Morgan, Elizabeth. 2021.** "CARICOM: GDP as an Indicator of the Status of National Economies – A False Impression." <https://today.caricom.org/2021/12/15/caricom-gdp-as-an-indicator-of-the-status-of-national-economies-a-false-impression/>
- Munevar, Daniel. 2018.** Background paper on: Climate Change and Debt Sustainability in the Caribbean: Trouble in Paradise? <https://mobilizingdevfinance.org/research-material/climate-change-and-debt-sustainability-caribbean-trouble-paradise>
- O'Connell, Philip. J., and Frances McGinnity. 1997.** "What Works, Who Works? The Employment and Earnings Effects of Active Labour Market Programmes among Young People in Ireland." *Work, Employment & Society*, 11(4), 639-661. <https://ideas.repec.org/a/sae/woemps/v11y1997i4p639-661.html>
- Ortiz, Isabel, Fabio Durán-Valverde, Karuna Pal, Christina Behrendt, and Andrés Acuña-Ulate. 2017.** Universal Social Protection Floors: Costing Estimates and Affordability in 57 Lower Income Countries. *wcms_614407.pdf* (https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_614407.pdf ilo.org)
- Oxfam international. 2023.** <https://www.oxfam.org/en/5-natural-disasters-beg-climate-action#:~:text=Climate%20hazards%20are%20natural%20events,wildfires%2C%20flooding%20and%20high%20winds>
- Planning Institute of Jamaica. 2009.** Vision 2030 Jamaica National Development Plan. Kingston. Planning Institute of Jamaica. <https://www.pioj.gov.jm/wp-content/uploads/2019/08/Vision-2030-Jamaica-NDP-Full-No-Cover-web.pdf>
- Presbitero, Andrea F. 2012.** Total public debt and growth in developing countries. *The European Journal of Development Research*, 24, 606-626

BIBLIOGRAPHY (cont'd)

- Rasmussen, Tobias. 2004.** Macroeconomic Implications of Natural Disasters in the Caribbean. IMF Working Papers, 04(224), 1. Retrieved 1 22, 2023. <https://imf.org/en/publications/wp/issues/2016/12/31/macro-economic-implications-of-natural-disasters-in-the-caribbean-17812>
- Shabbir, Sadia, and Hafiz M. Yasin. 2015.** "Implications of Public External Debt for Social Spending: A Case Study of Selected Asian Developing Countries." The Lahore Journal of Economics, 71.
- Sharm el-Sheikh Implementation Plan. 2022.** Sharm el-Sheikh Climate Change Conference, November 2022. Accessed February 23, 2023. <https://unfccc.int/documents/624444>
- Slater, Rachel. 2011.** "Cash Transfers, Social Protection and Poverty Reduction." International Journal of Social Welfare, 20(3), 250-259. Retrieved 1 22, 2023, from <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1468-2397.2011.00801.x>
- Social Expenditures Database. (n.d.).** Retrieved January 22, 2023, from OECD: <https://www.oecd.org/social/expenditure.htm>
- Sutton, Heather and Inder Ruprah, eds. 2017.** Restoring Paradise in the Caribbean Combatting Violence with Numbers. <https://www.oas.org/ext/DesktopModules/EasyDNNNews/DocumentDownload.ashx?portalid=11&moduleid=1698&articleid=185&documentid=228>
- United Nations Convention on the Elimination of All Forms of Discrimination against Women. 2018.** General Recommendation No. 37 (2018) on the Gender-Related Dimensions of Disaster Risk Reduction in the Context of Climate Change. <https://digitallibrary.un.org/record/1626306?ln=en>
- United Nations Development Programme. 2022.** Human Development Report 2021/2022. Uncertain times, Unsettled Lives Shaping our Future in a Transforming World. https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf
- United Nations Department of Economic and Social Affairs, UN Women, United Nations Climate Change Secretariat. 2016.** Implementation of Gender-Responsive Climate Action in the Context of Sustainable Development. https://unfccc.int/files/gender_and_climate_change/application/pdf/egmreport.pdf
- United Nations Economic Commission for Latin America and the Caribbean. 2021.** Disasters and inequality in a protracted crisis: Towards universal, comprehensive, resilient and sustainable social protection systems in Latin America and the Caribbean. https://repositorio.cepal.org/bitstream/handle/11362/47376/3/S2100467_en.pdf
- The World Bank. 2021.** Gender Dimensions of Disaster Risk and Resilience. <https://openknowledge.worldbank.org/bitstream/handle/10986/35202/Gender-Dimensions-of-Disaster-Risk-and-Resilience-Existing-Evidence.pdf?sequence=1&isAllowed=y>
- The World Bank. (n.d).** Gender equality and women's empowerment in disaster recovery. <https://www.gfdr.org/sites/default/files/publication/gender-equality-disaster-recovery.PDF>

APPENDIX 1

List of Government Stakeholders

Name	Designation	Organisation	Contact Email
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Ms. Catherine Gibson	Financial Advisor	Ministry of Finance	catherinegibson@bahamas.gov.bs
Ms. Denise Edwards	Financial Secretary	Ministry of Finance, Economic Development, Climate Resilience and Social Security	financialsecretary@dominica.gov.dm
Mrs. Joan Moses-Carrott	Permanent Secretary	Ministry of Social Transformation, Human Resource Development & The Blue Economy	joan.carrott@ab.gov.ag
Ms. Sarah E Stuart	Permanent Secretary	Ministry of Health Wellness, Social Transformation and the Environment	sarah.stuart@ab.gov.ag
Mrs. Almira Henry	Director	Department of Social Policy, Research & Planning	almira.henry@ab.gov.ag
Ms. Rashauna Adams-Matthew	Environmental Social Safeguard and Gender Officer	Department of Environment	rashauna.adams-matthew@ab.gov.ag
Mr. Joel Lewis	Permanent Secretary	Ministry of Social Services	joellewis@bahamas.gov.bs
Ms. Charlamae Fernander	Deputy Director (Acting)	Department of Social Services	charlamaefernander@bahamas.gov.bs
Ms. Lorraine Duvalier	Deputy Director (Acting)	Department of Social Services	lorraineduvalierbahamas.gov.bs
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List of Government Stakeholders

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Captain Stephen Russell	National Disaster Coordinator	National Emergency Management Agency	stephenrussell@bahamas.gov.bs
Mr. Fitzroy Pascal	National Disaster Coordinator	Office of Disaster Management	odm@dominica.gov.dm
Mr. Richard Thompson	Director General (Acting)	Office of Disaster Preparedness and Emergency Management	ddgrichardthompson@gmail.com

List of NGO Service Providers

Country	Name	Designation	Organisation	Email
Antigua and Barbuda	Ms. Alexandrina Wong	Executive Director	Women Against Rape	womenagainstrapeab@gmail.com
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The Bahamas	Mrs. Martha Hannah-Smith	President	Bahamas Network of Rural Producers	marthahanna@gmail.com
Dominica	Beverly Le Blanc	Executive Director	Achievement Learning Centre	achieve074@gmail.com
Dominica	Tina Alexander	Executive Director	Lifeline Ministries	lifelinedominica@hotmail.com
Dominica	Natasha Greene	Founder	Kalinago Connections	nato.green@gmail.com
Dominica	Vanya David	President	Dominica National Council for Women	vanyamarthadavid@gmail.com
Jamaica	Kemar Brooks	Field Officer	Jamaica Coalition Against Domestic Violence	kemarbrooks117@gmail.com

List of Social Protection Programmes in Antigua and Barbuda

Social Protection Programme	Implementing Agency	Social Protection Type	Target Group	2010 \$	2015 \$	2020 \$
Cash Transfer and Food Vouchers	Board of Guardians	Social Assistance	Poor and Vulnerable	\$1,273,481	\$1,211,336.00	\$1,300,000.00
Funeral Grant	Board of Guardians	Social Assistance	Poor and Vulnerable	\$17,000.00	\$28,800.00	\$80,000.00
Housing Programme	Board of Guardians	Social Assistance	Poor and Vulnerable	\$108,800.00	\$42,500.00	\$75,000.00
Government Residential Assistance and Care of the Elderly and Eligible (GRACE Programme)	Family and Social Services	Social Care	Elderly	\$1,918,990.00	\$1,169,146.00	\$2,199,547.00
Youth Education and Empowerment Programme	Department of Youth Affairs	Labour Market Programme	Youth	n/a	\$693,191.00	\$1,362,037.00
Foster Care Programme	Family and Social Services	Social Care	Children	\$261,920.00	\$165,933.43	\$365,820.00
Counselling Services	Family and Social Services	Social Care	Poor and Vulnerable	\$272,496.00	\$112,080.00	\$153,341.00
Juvenile Probation Services	Family and Social Services	Social Care	Children	\$592,170.00	\$607,231.00	\$780,969.00
Substance Abuse and Prevention Services	Family and Social Services	Social Care	Poor and Vulnerable	\$337,162.00	\$420,823.00	\$848,259.00
Over 80 yrs. Utility Subsidy Programme	Directorate of Gender Affairs	Social Assistance	Elderly	0.00	\$23,236.00	0.00
Gender Affairs Services (Counselling, Support, Crisis Intervention)	Directorate of Gender Affairs	Social Care	Women	\$757,846.00	\$705,984.00	\$874,784.00
Senior Citizen's Programme	Board of Guardians	Social Assistance	Elderly	\$100,000.00	\$50,000.00	\$50,000.00

Source: Division of Family and Social Services Government of Antigua and Barbuda

Social Protection Programme Implemented in Bahamas including Transfers to Non-Profit Social Protection Agencies

Programme	Social Protection Type	Target Group/ Beneficiaries	2014 \$	2017 \$	2020 \$
Bureau Women's Affairs/ Department of Gender Affairs	Social Assistance	Women	100,000.00	350,000.00	350,000.00
Centre for Children with Disabilities (Cheshire House)	Social Care	Children with Disabilities	50,000.00	50,000.00	50,000.00
Children with Special Needs	Social Care	Children with Disabilities	288,000.00	330,000.00	330,000.00
Circumstance and Relief Emergency Desk Assistances	Social Assistance	Poor and Vulnerable	67,992.00	2,350,000.00	4,350,000.00
Coleby House	Social Care	Children in Need of Care and Protection	75,000.00	68,000.00	68,000.00
Columbus House for Boys 1 & 2 Grand Bahama	Social Care	Children in Need of Care and Protection	55,000.00	88,000.00	88,000.00
Columbus House for Girls	Social Care	Children in Need of Care and Protection	864,900.00	88,000.00	88,000.00
Community & Family Life	Social Care	Poor and Vulnerable	100,000.00	30,000.00	30,000.00
Community Affairs Division	Social Assistance	Poor and Vulnerable	3,000.00	55,000.00	55,000.00
Contribution Deportee Assistance Programme	Social Assistance	Deportees	30,000.00	15,000.00	15,000.00
Development of Skills Bank	Labour Market Programme	Working Age	300,000.00	9,000.00	9,000.00
Disability Affairs Operating Expenses	Social Assistance	Persons with Disabilities	0.00	50,000.00	50,000.00
Early Childhood Development Centre	Social Assistance	Children	21,000.00	38,000.00	82,200.00
Foster Care Programme	Social Assistance	Children in Need of Care and Protection	17,000.00	702,750.00	452,750.00
Fresh Start	Labour Market Programme	Youth	75,000.00	300,000.00	50,000.00
Funeral Expenses	Social Assistance	Poor and Vulnerable	75,000.00	2,700.00	2,700.00

APPENDIX 4 (cont'd)

Social Protection Programme Implemented in Bahamas including Transfers to Non-Profit Social Protection Agencies

Programme	Social Protection Type	Target Group/ Beneficiaries	2014 \$	2017 \$	2020 \$
Global Summer Employment	Labour Market Programme	Youth	2,951,500.00	2,500,000.00	3,000,000.00
Global Summer Employment	Labour Market Programme	Youth	53,000.00	1,000,000.00	1,000,000.00
Grand Bahama Children Home	Social Care	Children in Need of Care and Protection	150,000.00	195,000.00	195,000.00
Grand Bahama Youth Programmes	Labour Market Programme	Youth	363,000.00	40,000.00	40,000.00
Grant – Centre for The Deaf	Social Care	Persons with Disabilities	39,000.00	30,000.00	30,000.00
Grant – School for The Blind	Social Care	Persons with Disabilities	5,000.00	30,000.00	30,000.00
Grant – Students at Risk	Social Assistance	At-Risk Youth	500,000.00	500,000.00	500,000.00
Legal Aid	Social Assistance	Poor and Vulnerable	53,000.00	45,000.00	45,000.00
Legal Aid	Social Assistance	Poor and Vulnerable	150,000.00	600,000.00	600,000.00
Legal Aid	Social Assistance	Poor and Vulnerable	363,000.00	22,000.00	30,000.00
Links Safe House	Social Care	Women (Domestic Violence)	39,000.00	75,000.00	75,000.00
National Commission for Persons with Disabilities	Social Assistance	Persons with Disabilities	5,000.00	147,000.00	147,000.00
National Committee – Families & Children	Social Assistance	Children	150,000.00	5,000.00	5,000.00
National Committee for Child Abuse Prevention	Social Assistance	Children	96,700.00	21,000.00	21,000.00
National Council for the Int'l Year of Older Persons	Social Assistance	Elderly	10,000.00	17,000.00	17,000.00
National Health Insurance	Social Insurance	Entire Population	0.00	0.00	0.00
National Health Insurance – NHI – Secretariat	Social Insurance	Entire Population	0.00	0.00	0.00
National Health Insurance Authority	Social Insurance	Entire Population	0.00	0.00	18,000,000.00

APPENDIX 4 (cont'd)

Social Protection Programme Implemented in Bahamas including Transfers to Non-Profit Social Protection Agencies

Programme	Social Protection Type	Target Group/ Beneficiaries	2014 \$	2017 \$	2020 \$
National Health Insurance Authority	Social Insurance	Entire Population	0.00	40,000,000.00	20,000,000.00
National Mental Health Programme	Social Insurance	Entire Population	0.00	0.00	0.00
National Lunch Programme	Social Assistance	Children/Youth	30,000.00	2,500,000.00	4,000,000.00
National Parenting Programme	Social Assistance	Parents	500,000.00	30,000.00	30,000.00
National Task Force for Ending Gender Based Violence	Social Assistance	Women (Domestic Violence)	30,000.00	39,000.00	39,000.00
National Training Agency	Labour Market Programme	Youth	470,000.00	930,000.00	985,000.00
National Youth Programme	Labour Market Programme	Youth	441,500.00	100,000.00	100,000.00
Nazareth Centre	Social Care	Children in Need of Care and Protection	30,000.00	555,000.00	555,000.00
Operational Expenses - Simpson Penn Centre for Boys	Social Care	At-Risk Youth	0.00	290,000.00	290,000.00
Operational Expenses - Willamae Pratt Centre for Girls	Social Care	At-Risk Youth	0.00	233,000.00	233,000.00
Ranfurlly Childrens Home	Social Care	Children in Need of Care and Protection	60,000.00	105,000.00	105,000.00
Rehabilitative Welfare Services - Operational Expenses	Social Care	Poor and Vulnerable	3,725,600.00	150,000.00	150,000.00
Rental Assistance	Social Assistance	Poor and Vulnerable	75,000.00	42,000.00	68,500.00
Rental Assistance	Social Assistance	Poor and Vulnerable	25,000.00	3,456,000.00	3,456,000.00
Rental Assistance	Social Assistance	Poor and Vulnerable	0.00	0.00	0.00
Salvation Army Emergency Shelter	Social Care	Poor and Vulnerable	75,000.00	75,000.00	75,000.00
Salvation Army School for The Blind	Social Care	Poor and Vulnerable	2,000,00.00	10,000.00	10,000.00

APPENDIX 4 (cont'd)

Social Protection Programme Implemented in Bahamas including Transfers to Non-Profit Social Protection Agencies

Programme	Social Protection Type	Target Group/ Beneficiaries	2014 \$	2017 \$	2020 \$
School Bus Service Contracts	Social Assistance	Children/Youth	1,500,000.00	7,164,000.00	6,447,600.00
Self-Starter Programme	Labour Market Programme	Youth	30,000.00	50,000.00	840,000.00
Skills for Current and Future Jobs in The Bahamas	Labour Market Programme	Youth	0.00	0.00	1,000,000.00
Small and Medium Size Businesses Support	Labour Market Programme	Working Age	0.00	0.00	5,500,000.00
Small and Medium Size Businesses Support	Labour Market Programme	Working Age	0.00	1,000,000.00	250,000.00
Social Safety Net Programme	Social Assistance	Poor and Vulnerable	0.00	1,000,000.00	0.00
Social Safety Net Programme	Social Assistance	Poor and Vulnerable	30,000.00	0.00	1,000,000.00
Special Employment Projects	Labour Market Programme	Working Age	750,000.00	0.00	12,000,000.00
Special Employment Projects	Labour Market Programme	Working Age	0.00	20,000,000.00	0.00
Special Employment Projects	Labour Market Programme	Working Age	0.00	700,000.00	2,200,000.00
Special Employment Projects	Labour Market Programme	Working Age	0.00	2,000,000.00	1,500,000.00
The Crisis Centre	Social Care	Women (Domestic Violence)	8,500.00	30,000.00	30,000.00
The PACE Centre (Grand Bahama)	Social Care	Pregnant Teenagers	250,000.00	62,000.00	62,000.00
Uniform Assistance	Social Assistance	Children/Youth	100,000.00	360,000.00	270,000.00
Victim Care Fund (Trafficking of Persons)	Social Assistance	Children/Youth	100,000.00	0.00	0.00
Youth Enterprise Fund	Labour Market Programme	Youth	45,000.00	100,000.00	250,000.00
Zion Children Home (Current Island)	Social Care	Children in Need of Care and Protection	50,000.00	62,000.00	62,000.00

Source: Annual Revenue and Expenditure Budget Estimates for Bahamas

Social Protection Programmes Implemented in Dominica

Programme	Social Protection Type	Cash/In-kind Programme/	Target Group	Sector/ Objective
Scholarships	Social Assistance	Cash-based transfers	Youth	Education
Financial Assistance	Social Assistance	Cash-based transfers	Youth	Education
School Transfer Grant	Social Assistance	Cash-based transfers	Youth	Education
Secondary School Students (CXC) Exam Fees	Social Assistance	Fee waivers	Youth	Education
School Registration Fees	Social Assistance	Fee waivers	Youth	Education
Transportation Subsidies	Social Assistance	Subsidies	Youth	Education
School Textbook	Social Assistance	Food, in-kind	Youth	Education
Uniform Assistance	Social Assistance	Food, in-kind	Youth	Education
Transportation (Secondary Education)	Social Assistance	Food, in-kind	Youth	Education
School Feeding	Social Assistance	Food, in-kind	Youth	Education
Education Trust Fund (ETF)	Social Assistance	Cash-based transfers	Youth	Education
National Employment Programme (NEP)	Public Works Programme	Income	Working Age Population	Poverty Alleviation
Apprenticeship Programme	Active Labour Market Programmes	Training	Working Age Population	Skills Training
Kalinago Territory Programme	Social Assistance	Food, in-kind	Indigenous People	Vulnerable Group
Carib Territory Community Capacity Building Project	Social Assistance	Food, in-kind	Indigenous People	Vulnerable Group
Non-Contributory Allowance for People 70 Years and Older	Social Assistance	Cash-based transfers	Elderly	Poverty Alleviation
Youth Environmental Service Corp	Active Labour Market Programmes	Training	Youth	Education
Adult Education	Active Labour Market Programmes	Training	Adult	Education
Youth Centre Life Skills	Active Labour Market Programmes	Training	Youth	Education

Social Protection Programmes Implemented in Dominica

Programme	Social Protection Type	Cash/In-kind Programme/	Target Group	Sector/ Objective
4-H Programme	Active Labour Market Programmes	Labor market intervention	Youth	Education
Free Medical Care	Social Assistance	Fee waivers	Entire Population	Health
Off Island Medical Care	Social Assistance	Food, in-kind	Vulnerable Population	Health
Public Support	Social Assistance	Food, in-kind	Vulnerable Population	Health
Pilot Health Insurance	Social Assistance	Health insurance	Mothers	Health
Pit Latrine Elimination	Social Assistance	Food, in-kind	Vulnerable Population	Housing
Housing Assistance	Social Assistance	Food, in-kind	Vulnerable Population	Housing
Road Maintenance	Public Works Programme	Income	Working Age	Infrastructure
Cooperative Division Training	Active Labour Market Programmes	Training	Working Age	Entrepreneurship
Small Business Enterprise Development	Active Labour Market Programmes	Training	Working Age	Entrepreneurship
Rural Business Employment Programme	Active Labour Market Programmes	Training	Working Age	Entrepreneurship
Public Assistance Programme (PAP)	Social Assistance	Cash-based transfers (CBT)	Vulnerable	Poverty Alleviation
Dominica Youth Business Trust	Active Labour Market Programmes	Labour market intervention	Youth	Entrepreneurship
Youth Skills Training Programme	Active Labour Market Programmes	Labour market intervention	Youth	Skills Training
Abilities Unlimited	Active Labour Market Programmes	Labour market intervention	Working Age	Skills Training
Yes We Care	Social Care	In-Kind	Elderly	-
Care For the Aged	Social Care	In-Kind	Elderly	-
CHANCES (Children's Home for the Abused, Abandoned, Neglected, Cheated and Emotionally Scarred)	Social Care	-	Youth	-
Child Welfare	Social Care	-	Youth	-

Source: Annual Revenue and Expenditure Budget Estimate Ministry of Finance Dominica

APPENDIX 6

Social Protection Programmes Implemented in Jamaica

Programme Name	Social Protection Type	Demographic	2011 \$	2015 \$	2020 \$
Early Childhood Stimulation for the Disabled (0-6 years)	Social Care	Children	18,262.00	48,641.00	117,896.00
Jamaica PATH Conditional Transfer Programme	Social Assistance	Elderly, Women and Children	3,497,283.00	4,805,604.00	6,500,619.00
School Feeding Programme	Social Assistance	Children and Youth	3,300,172.00	4,383,901.00	3,464,010.00
Rehabilitation Grant	Social Assistance	Entire Population	235,650.00	300,923.00	305,546.00
Social Intervention Programme (SIP), formerly Special Youth Employment and Training Project	Labour Market Programme	Youth	70,920.00	121,122.00	118,692.00
Poor Relief Programme	Social Assistance	Adult	85,076.00	981,047.00	2,042,242.00
Infirmaries	Social Assistance	Adult		637,058.00	799,463.00
Outdoor Relief	Social Assistance	Adult	50,000.00	298,510.00	337,689.00
Homeless (Street People) Programme	Social Assistance	Adult	35,076.00	45,479.00	905,090.00
Grant of Golden Age Homes - Elderly Homes/ Residential Care for the Elderly	Social Care	Elderly	149,797.00	283,052.00	128,042.00
Manpower Services (formerly Steps to Work)	Labour Market Programme	Adult	164,501.00	214,290.00	358,119.00
Jamaica Council for Persons with Disabilities	Social Assistance	Persons with Disabilities	54,849.00	96,545.00	135,940.00
National Council for Senior Citizens	Social Assistance	Elderly	55,185.00	87,699.00	139,508.00
Abilities Foundation of Jamaica	Labour Market Programme	Persons with Disabilities	6,500.00	9,609.00	9,609.00
Ex-Service Men	Social Assistance	Elderly	6,500.00	7,865.00	9,752.00

APPENDIX 6 (cont'd)

Social Protection Programmes Implemented in Jamaica

Programme Name	Social Protection Type	Demographic	2011 \$	2015 \$	2020 \$
Private Sector Social Welfare Organisations	Social Care	Children	20,500.00	20,568	31,867
Bureau of Women's/Gender Affairs	Social Assistance	Women	156,388.00	189,845.00	527,179.00
Grants to Women's Support Center	Social Assistance	Women	113,877.00	132,110.00	293,593.00
Street Children Support Services - Possibilities Programme	Social Care	Youth	12,000.00	17,182.00	5,000.00
Early Childhood Commission	Social Care	Children	10,070.00	26,650.00	0
Child Development Agency	Social Care	Children	1,549,465.00	2,097,840.00	2,468,824.00
Delivery of Child and Family Services	Social Care	Children	291,771.00	440,225.00	641,045.00
Children's Homes	Social Care	Children	647,072.00	869,956.00	821,464.00
Places of Safety	Social Care	Children	294,052.00	444,908.00	468,485.00
Foster Care	Social Care	Children	71,597.00	101,818.00	257,196.00
Special Education	Social Assistance	Children with Disabilities	904,059.00	1,109,950.00	1,395,409.00
Career Advancement Programme	Labour Market Programme	Youth	0	590,958.00	961,513.00
Student Welfare Services (Financial Assistance)	Social Assistance	Youth	10,000.00	2,000.00	2,624.00
National Insurance Scheme (NIS)	Social Security	Entire Population	0	0	0
Jamaica Drug for the Elderly Programme	Social Assistance	Elderly	0	0	0
TOTAL			10,307,177.00	15,395,291.00	18,722,391.00

Source: Annual Revenue and Expenditure Estimates Ministry of Finance and the Public Service of Jamaica

Key Development Frameworks

Frameworks	Scope
<p>Sustainable Development Goals (SDG) Agenda 2030: Leaving No One Behind</p>	<p>Goal 1: End poverty in all its forms everywhere</p> <ul style="list-style-type: none"> ■ Proportion of population living below the national poverty line, by sex and age (Target 1.2.1) ■ Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions (Target 1.2.2) ■ Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims, and the poor and the vulnerable (Target 1.3.1) ■ Direct disaster economic loss in relation to global gross domestic product (GDP) (Target 1.5.2) ■ Number of countries with national and local disaster risk reduction strategies (Target 1.5.3) ■ Proportion of total government spending on essential services (education, health and social protection) (Target 1.a.2) ■ Proportion of government recurrent and capital spending to sectors that disproportionately benefit women, the poor and vulnerable groups (Target 1.b.1)
	<p>Goal 3: Ensure healthy lives and promote well-being for all at all ages</p> <ul style="list-style-type: none"> ■ Number of people covered by health insurance or a public health system per 1,000 population (Target 3.8.2)
	<p>Goal 5: Achieve gender equality and empower all women and girls</p> <ul style="list-style-type: none"> ■ Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence (Target 5.2.2) ■ Proportion of time spent on unpaid domestic and care work, by sex, age and location (Target 5.4.1)
	<p>Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <ul style="list-style-type: none"> ■ Annual growth rate of real GDP per capita (Target 8.1.1) ■ Total government spending in social protection and employment programmes as a proportion of the national budgets and GDP (Target 8.b.1) ■ Unemployment rate, by sex, age and persons with disabilities (Target 8.5.2)

Key Development Frameworks

Frameworks	Scope
	<p>Goal 17: Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development</p> <ul style="list-style-type: none"> ■ Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries (Target 17.9.1)
<p>Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) No. 37: Gender-related dimensions of disaster risk reduction in the context of climate change</p>	<p>Women, girls, men and boys are affected differently by climate change and disasters, with many women and girls experiencing greater risks, burdens and impacts. Situations of crisis exacerbate pre-existing gender inequalities and compound the intersecting forms of discrimination against several categories of women. These include women living in poverty, indigenous women, women belonging to ethnic, racial, religious and sexual minority groups, women with disabilities, women who have been internally displaced, migrant women, rural women and others. The cross-cutting principles of: (a) participation and empowerment, (b) equality and non-discrimination and (c) accountability and access to justice are fundamental to ensuring that remedies are presented to women and girls who are most marginalised.</p>
<p>The Caribbean Regional Comprehensive Disaster Management (CDM) Strategy and Results Framework 2014-2024,</p>	<p>Men and women, the young and elderly across the Caribbean are the main beneficiaries of better designed, targeted and implemented CDM programmes. Gender consideration has been identified as one of the cross-cutting themes to be integrated into all CDM programme areas in CDEMA participating states.</p>
<p>Convention on the Rights of Persons with Disabilities (CRPD)</p>	<p>The United Nations Convention of the Rights of Persons with Disabilities emphasises the protection of women with disabilities (Article 6) and ensuring the protection and safety of all people with disabilities in situations of risk, including armed conflict, humanitarian emergencies and natural disasters (Article 11).</p>

APPENDIX 8

International Conventions Ratified

Suite of International Conventions	Jamaica	Dominica	Antigua and Barbuda	Bahamas
International Bill of Human Rights				
International Covenant on Economic, Social and Cultural Rights	Yes	Yes	Yes	Yes
International Covenant on Civil and Political Rights	Yes	Yes	Yes	Yes
Optional Protocol to the International Covenant on Civil and Political Rights	Yes	Yes	Yes	Yes
Second Optional Protocol to the International Covenant on Civil and Political Rights, aiming at the abolition of the death penalty				
Prevention of Discrimination on the Basis of Race, Religion, or Belief; and Protection of Minorities				
International Convention on the Elimination of All Forms of Racial Discrimination	Yes	Yes	Yes	Yes
Women's Human Rights				
Convention on the Elimination of All Forms of Discrimination against Women	Yes	Yes	Yes	Yes
Rights of the Child				
Convention on the Rights of the Child	Yes	Yes	Yes	Yes
Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour	Yes	Yes	Yes	Yes
Freedom of Association	Yes	Yes	Yes	Yes
Freedom of Association and Protection of the Right to Organise Convention	Yes	Yes	Yes	Yes
Right to Organise and Collective Bargaining Convention	Yes	Yes	Yes	Yes
Employment and Forced Labour	Yes	Yes	Yes	Yes
Convention concerning Forced or Compulsory Labour	Yes	Yes	Yes	Yes
Equal Remuneration Convention	Yes	Yes	Yes	Yes

International Conventions Ratified

Suite of International Conventions	Jamaica	Dominica	Antigua and Barbuda	Bahamas
Abolition of Forced Labour Convention	Yes	Yes	Yes	Yes
Discrimination (Employment and Occupation) Convention	Yes	Yes	Yes	Yes
Employment Policy Convention	Yes	Yes	Yes	Yes
Convention concerning Occupational Safety and Health and the Working Environment	No	No	No	No
Education				
Convention against Discrimination in Education	Yes	Yes	No	No
Persons with Disabilities				
Convention on the Rights of Persons with Disabilities	Yes	Yes	Yes	Yes
Social Protection				
Social Security (Minimum Standards)	No	No	No	No
Equality of Treatment (Social Security)	No	No	No	No
Social Protection Floor Recommendation 2012	No	No	No	No
Invalidity, Old-Age and Survivor Benefits 1967	No	No	No	No

Estimation Results

In model 1, which is the base model, government expenditure has a statistically significant impact on social protection spending, measured by a 3.8% increase in social protection spending relative to a 1% increase in overall government

expenditure. However, the sign of the government revenue goes contrary to what is expected, which is an interesting finding worthy of further investigation.

Variables	Model 1	Model 2	Model 3	Model 4
Government Expenditure as % of GDP	3.817*** -0.34	3.410*** -0.488	2.376*** -0.516	2.913*** -0.552
Government Revenue as % of GDP	-3.521*** -0.407	-1.711** -0.668	-1.386* -0.737	-1.537* -0.755
Interest Expenditure as % of GDP	-	-2.113** -0.721	-2.624*** -0.612	-2.734*** 0.698
Primary Balance	-	0.0903 -0.0639	0.0776 -0.0487	0.0689 -0.0557
Public Debt	-	-1.032* -0.568	-1.1291** -0.401	-1.234** -0.436
Population	-	-	-0.910** -0.366	-
Population above age 65	-	-	-	-0.66 -0.387
Constant	-2.408*** -0.262	0.577 -3.21	16.04** -6.64	9.297 -5.763
Observations	37	37	37	37
R-Squared	0.76	0.976	0.983	0.981

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When interest payments, primary balance and public debt are incorporated, the magnitude of government expenditure on social protection is reduced from 3.8% to 3.4%. Similarly, government revenue magnitude falls by almost half, suggesting that these variables jointly impact the model significantly. Importantly, the model observes that interest expenditure is strongly significant at the 1% level of significance and negatively impacts social protection expenditures by -2.1% for every 1% increase in interest expenditure. This confirms the crowding out effect of interest expenditure on social protection expenditure. Similarly,

public debt has a negative and significant impact on social protection expenditures of -1.03% for every 1% increase in the stock of public debt. When total population is added it is observed that it has a negative effect on social protection expenditure, which goes opposite to the expected sign, but, importantly, the model remains robust to the inclusion of population. To consider the impact of the elderly, the population of persons 65 years and above was included; however, it was not significant in explaining variations in social protection spending.

Estimation Results Disaggregated by Vulnerable Groups

Table 5.3.3b: Estimation Results Disaggregated by Vulnerable Groups

Variables	Poor	Elderly	Children	Women
Government Expenditure as % of GDP	2.686*** (0.446)	-2.642 (2.278)	3.397*** (0.758)	0.0120 (0.687)
Government Revenue as % of GDP	-0.00711 (0.680)	9.377* (4.644)	-1.817* (0.883)	2.816* (1.319)
Interest Expenditure as % of GDP	-3.228*** (0.660)	-5.539* (2.929)	-2.137*** (0.600)	-2.044* (0.975)
Primary Balance	0.132* (0.0593)	0.0703 (0.225)	0.0966 (0.0914)	-0.0223 (0.0649)
Public Debt	1.218* (0.629)	9.983** (4.443)	-0.312 (0.513)	2.903** (1.261)
Constant	-12.48** (3.544)	-62.71** (24.47)	-3.574 (2.846)	-23.39*** (6.988)
Observations	37	37	37	37
R-Squared	0.976	0.874	0.954	0.970

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The Pooled Ordinary Least Squares estimation methodology is applied to the various vulnerable groups, i.e., the poor, elderly, children, and women. The study finds that the social protection expenditure for the poor and children was positively impacted by increases in government expenditure. Equally, all vulnerable groups were negatively impacted by interest expenditure, with the social protection expenditures for the elderly being most impacted at 5.5%. The results for public debt, however, are significant but follow the opposite sign. Despite the shortcomings of the Pooled Ordinary Least Squares method, which does not account for heterogeneity bias, the estimation results unanimously point to the fact that interest expenditure has a significant and negative impact on social protection expenditure in aggregate as well as

for various vulnerable groups, in particular the poor and the elderly. Accordingly, the results confirm the anecdotal view that interest expenditure crowds out social protection expenditure. Mindful of the impact of interest expenditure on social protection spending, greater effort must be made by governments to reduce interest payments by pursuing active liability management such as contracting debt that is more concessional both in terms of price (interest rates) and duration (longer maturity profiles). Such approaches will create the needed fiscal headroom to increase the public outlays on social protection. Importantly, increased attention should be given to the elderly, who are a growing segment of the population, but are disproportionately impacted by the interest payments.



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