



**Comprehensive Diagnostic of Gender Sensitive
Innovative Disaster Risk Financing Instrument
for Resilience Building**

Final Summary Report

March 21, 2023

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List of Acronyms

CARE	Caribbean Action for Resilience Enhancement
CC	Climate Change
CCAF	Canada-CARICOM Climate Adaptation Fund
CDB	Caribbean Development Bank
CCCCC	Caribbean Community Climate Change Centre
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CDEMA	Caribbean Disaster Emergency Management Agency
CIMH	Caribbean Institute for Meteorology and Hydrology
CISI	Critical Infrastructure Spatial Index
CSO	Chief Security Officer
DDO	Deferred Drawdown Option
DRF	Disaster Risk Financing
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ESU	Environmental Sustainability Unit
GDP	Gross Domestic Product
IPCC	Inter-Governmental Panel on Climate Change
NCDs	Non-communicable Diseases
ORM	Office of Risk Management
SSD	Social Section Division
UKCIF	United Kingdom Caribbean Infrastructure Fund
UNDP	United Nations Development Programme
UoWI	University of the West Indies

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Executive Summary

Natural hazards present one of the most serious threats to the sustainable development of the Caribbean. Due to location, geomorphology, and socio-economic characteristics, the Caribbean is vulnerable to many hydro-meteorological (hurricanes, tropical storms, storm surges, flooding, and drought) and geological (earthquakes, volcanoes, landslides, and tsunamis) hazards. From 2000-2019, the Borrowing Member Countries (BMCs) of the Caribbean Development Bank (CDB) experienced 190 disaster events resulting from natural hazard impacts. During the period, single events cost countries many times the value of their annual economic activity. Recurring natural hazard events and disasters undermine economic growth and contribute to high levels of debt accumulation, making BMCs' sustainable development outcomes much harder to achieve.

According to the Sixth Assessment Report of the Inter-Governmental Panel on Climate Change (IPCC), climate change is expected to intensify hydro-meteorological impacts on the Caribbean in the coming decades. In addition, the IPCC acknowledges that different vulnerabilities and exposure to, as well as the effect of, climate change stems from non-climatic factors including multidimensional inequalities. Social processes result in these inequalities such as discrimination based on gender which shape differential risks from climate change. There is rising concern with the differential impacts of climate change and disaster risks on the well-being and livelihoods of women, men and their families, increasing the vulnerability of poor households, many of which are headed by women. Women, girls, the poor, people with disability and minority groups are likely to be worst hit because of existing pervasive social, cultural and economic disadvantages. When a disaster impacts the loss of assets can lead to increased vulnerability of the already most at-risk populations creating a downward spiral of deepening poverty and increasing risk.

A range of financing instruments currently exist to facilitate a layered approach to disaster risk financing (DRF). There is a strong demand from BMCs for additional financing instruments including innovative DRF options to strengthen financial preparedness for disasters, and a clear need for this, given the rising impact of disaster events. In addition, uncertainty exists around the various financing instruments, their roles, timing etc. as the appropriateness of different instruments varies depending on the circumstances. A comprehensive diagnostic of existing DRF instruments in the market was undertaken to determine the most suitable gender sensitive innovative DRF instruments for deployment in the Caribbean.

Working closely with the CDB, WTW and Sustainability Managers have undertaken a comprehensive diagnostic of existing DRF instruments in the market to determine the most suitable gender sensitive innovative DRF instruments for deployment across BMCs. The diagnostic was completed between March 2022 and March 2023, with outputs delivered in a series of reports and presentations: Risk Audit Report, Assessment of Disaster Risk Management Actions Report, Situational Analysis Report, and DRF Instrument Selection and Recommendations Report.

The diagnostic was undertaken drawing on both desk-based reviews of relevant documents, literature, technical papers, and through stakeholder consultations which involved engaging with a total of ninety stakeholders from national DRM, gender and finance ministries and agencies, as well as Civil Society Organisations (CSOs) across the BMCs. The diagnostic was also informed by relevant case studies, regional and international best practices, and lessons learned across various spheres.

This diagnostic reinforced existing research and practice that recognises the critical requirement to consider gender issues when identifying, introducing, and creating an enabling environment for the use of DRF instruments. This is necessary given the differing roles of men and women in society and recognising that natural hazard impacts often impact men and women and their respective livelihoods in different ways. Gender mainstreaming must therefore be central to any disaster risk financing strategy aiming to enhance resilience to disasters.

1 Introduction

This final summary report provides an overview of the key findings from the reports comprising this diagnostic. These reports were developed through engagement with national DRM, gender and finance ministries and agencies as well as CSOs across the BMCs. The outputs of this assignment are captured in a series of reports:

- **Report 1: Risk Audit** – providing a quantitative and qualitative account of the key hazards, exposures, and vulnerabilities impacting the BMCs;
- **Report 2: Assessment of Disaster Risk Management Actions Report** – including a review of available DRM actions, organised by actions to reduce, retain, and transfer risk to manage the risks and impacts of the key hazards ;
- **Report 3: Situational Analysis Report** – describing the elements of an optimal gender-sensitive DRM framework and the needs, priorities, constraints, and opportunities of the BMCs;
- **Report 4: DRF Instrument Selection and Recommendations** – presenting the DRF instruments currently being used in the Caribbean and internationally, and recommending a prioritisation and suitability? of instruments based on the needs, priorities, constraints, and opportunities of the BMCs; and
- **Final Summary Report** – summarising key findings from the diagnostic of gender sensitive innovative DRF instruments for greater financial resilience to disasters across the BMCs.

The remainder of this summary report highlights key findings from each of the four substantive reports.

2 Approach and Methodology

The Risk Audit, Assessment of Disaster Risk Management Actions, Situational Analysis, DRF Instrument Selection and Recommendations reports were developed using both a quantitative and qualitative methodology by drawing on stakeholder consultation and desk-based research. Five sets of stakeholder consultations were undertaken, involving policy officers from national DRM, policy officers, gender and finance ministries and agencies, as well as CSOs across the BMCs. A total of ninety stakeholders were engaged through these consultations. The stakeholder consultations employed various methodologies and approaches including the use of Google Docs to help capture country specific information around DRM actions, the use of Mentimeter (an interactive questionnaire tool), and an online quantitative survey. Stakeholder consultations were complemented through desk-based review and research into gender-responsive DRM frameworks across the BMCs.

3 Risk Audit Report

Proper understanding of the underlying disaster risk in the Caribbean is necessary to help inform the selection of innovative DRF instruments. The Risk Audit Report provides a quantitative and qualitative assessment of key hazards, exposure, and vulnerability across the BMCs to provide a regional view of risk. The report summarises and harmonises probabilistic hazard modelling studies that have been conducted across the region to provide a refreshed view of risk to natural hazards, primarily at the national level. The analysis includes tropical cyclone wind, earthquake shaking, drought, excess rainfall and associated flooding, as these were considered regionally important hazards, although this varies by country.

Table 1 provides a simple, qualitative, classification of the BMCs into severe, high, and moderate / low groupings by hazard. This classification is based on the probabilistic analysis undertaken in the report (for earthquake shaking and tropical cyclone wind), the SPHERA probabilistic modelling (that underpins the CCRIF Risk Profiles), and a review of historical hazard events across the region. It is noted that in reality, each country faces different hazards, of varying severities, making it difficult to determine a ranking based on hazard alone. Rather, this analysis can be used to direct more detailed national and sub-national hazard modelling studies towards the hazard(s) that impact relatively higher proportions of the population.

	TC Wind	EQ Shaking	Excess Rainfall
Anguilla	Severe	High	Moderate/Low
Antigua and Barbuda	Severe	High	Moderate/Low
Barbados	High	High	Moderate/Low
Belize	High	High	Severe
British Virgin Islands	Severe	High	Severe
Cayman Islands	Severe	High	Severe
Dominica	High	Severe	Severe
Grenada	High	High	High
Guyana	High	High	Severe
Haiti	High	Severe	High
Jamaica	High	Severe	Severe
Montserrat	Severe	Severe	High
Saint Kitts and Nevis	Severe	Severe	Severe
Saint Lucia	High	High	High
Saint Vincent and the Grenadines	High	High	High
Suriname	High	High	Severe
The Bahamas	Severe	High	High
Trinidad and Tobago	High	Severe	High
Turks and Caicos Islands	Severe	High	Severe
	Severe	High	Moderate/Low

Table 1 Summary of hazard exposure across the BMCs.

Alongside the quantitative risk analysis, the perception of hazards and disaster risk among key stakeholders drawn from across the BMCs was captured through a series of stakeholder consultation. Consultation included a questionnaire, interactive surveys, and open discussion. Key findings emerged that 72% of respondents strongly agreed that the costs of natural hazards were increasing, with the remaining 28% agreeing. There was also a widespread perception that the frequency of these events had increased in the recent past.

An indicator-based approach was adopted since this allows for consistent comparison across the BMCs. A range of shortlisted indicators / indexes was gathered, targeting sex-disaggregated or gender sensitive data where possible, to create a standardised score for each BMC. In the analysis, five indicators were considered for exposure: population density (people per km²); population living in urban areas (% of total population); coral reef area exposed to high or very high threat (% of land area); Critical Infrastructure Spatial Index (CISI); and multi-hazard average annual loss as a percentage of GDP.

Vulnerability is captured by using two indicator classes, sensitivity and adaptive capacity. Sensitivity indicators included: life expectancy at birth (sex-disaggregated); infant mortality rate; child dependency ratio; old age dependency ratio; unemployment (% of total labour force); poverty rate; ratio of female-to-male labour force participation rate; environmental performance index; and building quality control index. Adaptive capacity indicators included: Human Development Index; GDP per capita; total public debt as a % of GDP; educational expenditure as a % of GDP; school enrolment (secondary, sex-disaggregated, % gross); proportion of population using basic drinking water services; government effectiveness index; control of corruption index; voice and accountability index; and the proportion of seats held by women in national parliament (%). The full methodology is provided in the Risk Audit Report.

	Exposure		Vulnerability	
	Norm.	Rank	Norm.	Rank
Antigua & Barbuda	0.38	4	0.31	13
Barbados	0.35	8	0.39	11
Belize	0.14	13	0.92	4
Dominica	0.37	5	0.57	6
Grenada	0.30	10	0.55	7
Guyana	0.10	14	1.16	2
Haiti	0.43	2	4.14	1
Jamaica	0.35	6	0.32	12
Saint Kitts & Nevis	0.39	3	0.44	10
Saint Lucia	0.22	12	0.45	9
Saint Vincent & the Grenadines	0.35	7	0.57	5
Suriname	0.29	11	0.97	3
The Bahamas	0.63	1	0.21	14
Trinidad & Tobago	0.33	9	0.49	8

Table 2 Summary of exposure and vulnerability across the BMCs.

Table 2 presents normalised, aggregated exposure and vulnerability scores for each of the BMCs where sufficient vulnerability data was available. Haiti emerged as having the highest exposure / vulnerability combination. A number of countries score highly in terms of exposure but with relatively lower vulnerability scores (e.g., Barbados and The Bahamas). Alongside Haiti, Guyana, Belize, and Suriname score relatively higher on vulnerability versus exposure.

A key outcome from the risk audit was a need to prioritise the collection of key disaster risk indicators in countries where this information is currently lacking. For instance, Table 2 excludes Anguilla and Montserrat because, although they scored highly in terms of hazard, it was not possible to assess exposure and vulnerability quantitatively in this study due to a lack of indicators. This also applies to gender-related indicators, where a lack of data availability makes generating a regional view of gender-related vulnerability / risk exposure / resilience needs challenging. The approach developed in this report is flexible in that the indicators can be updated as new information is made available.

The regional risk audit presented here provides a foundation for understanding what risk needs to be managed across BMCs. This forms the basis for the subsequent Assessment of DRM Actions by identifying the drivers of hazard, exposure, and vulnerability to disaster risk across the region.

For further details, please refer to the [Risk Audit Report](#).

4 Assessment of Disaster Risk Management Actions Report

Based on the risk audit, a range of DRM actions that can be undertaken by BMCs to manage the underlying risks was determined through a structured desk-based review, complemented by the stakeholder consultations. The Assessment of Disaster Risk Management Actions Report identifies and appraises DRM actions that have been implemented by BMCs to cost-effectively reduce risk. The report also provides a view on which risks need to be retained and which transferred. Drawing on examples from across the region and globally, the report focuses on particular actions that are responsive to the needs and priorities of women and vulnerable groups.

Overall, eight categories of disaster risk management actions, were identified namely: Risk Identification and Assessment; Disaster Preparedness; Modern Governance, Legislative and Institutional Frameworks; Mainstreaming of DRR Across all Sectors and in all National Policies; Financing and Investment; Integration of DRR and Climate Change Adaptation; Multi-stakeholder Partnerships, Collaboration and Volunteerism; and Knowledge and Capacity Building, Education and Training. This report provides key insights that may help the BMCs to prioritise risk reduction interventions; for instance, through reference to relevant regional and international examples, the report found that structural interventions tend to have lower benefit-cost ratios compared to non-structural interventions. When comparing between hazard types, the report found that interventions focused on storms and earthquakes tend to have lower benefit-cost ratios than those focused on drought and flooding. These insights may help the BMCs to prioritise risk reduction interventions, when considered alongside less tangible benefits of any given intervention and broader social and political influences on investment decisions.

Actions were identified to manage residual risk, in recognition that not all elements of disaster risk can be reduced or transferred. Those responsible for developing and implementing disaster risk management plans should recognise that it is not cost-effective or desirable to reduce or transfer all aspects of risk. Rather, the presence of residual risk should be the focus for developing emergency response plans and enhancing recovery capacities, as part of Comprehensive Disaster Risk Management. It is also important to recognise that it may not be possible to fully quantify the sources and extent of residual risk owing to uncertainties in both our understanding of the initial risk, and uncertainty in the performance of risk reduction measures during an event. Where risk is retained, management actions should focus on emergency response plans, and strategies to enhance recovery capabilities and community resilience. Several relevant examples were included, particularly around encouraging community-level resilience (e.g., in the British Virgin Islands¹), and empowering women and vulnerable groups to rebuild their communities after disaster events (e.g., in Peru²).

Where risk can be transferred through the use of Disaster Risk Financing (DRF), applying a gender lens to DRF is crucial to capture and address the vulnerabilities that characterise women and other groups within society. Women and vulnerable groups are often unable to, or have limited access to funds due

¹ In the British Virgin Islands the Flood-Resilient SMART Communities project aimed to increase resilience to floods by Increase awareness of disaster risk reduction, climate change adaptation and healthy lifestyle practices; Improve physical infrastructure and early warning systems; and Establish a community-based monitoring and management framework.

² Following severe flooding in Peru in 2017 the UNDP led an initiative that brought together six associations of women artisans to rebuild their economies. This initiative, known as the Tejiendo Futuro (“Weaving the Future”) Programme, empowered approximately 250 women and people with disabilities to create opportunities to rebuild their communities and livelihoods.

to entrenched societal and economic inequalities. The report also identifies ten barriers to finance that are experienced by women and vulnerable groups:

- Lower financial knowledge and confidence of women compared to men in financial systems
- Dated financial laws and policies
- Collateral requirements, with women-led and women-owned firms finding it more difficult to access credit compared to male-dominated firms.
- Financial regulators operate in traditional ways
- Lack of financial inclusion policies across the Caribbean
- The nature of female led business and Micro, Small, Medium Enterprises (MSME)
- Absence of female leaders in public and private sector institutions
- Limited understanding of the benefits of providing credit for women
- Limited or insufficient disaggregated sex data
- Informality and the informal economy
- Disproportionate impact of COVID-19 on women and vulnerable groups, with smaller firms specifically facing greater difficulty in accessing finance

The report also presents ways in which these barriers can be overcome; for instance, emphasising that financial institutions need sex-disaggregated data to develop financial products tailored to women. and presents ways in which these barriers can be overcome; for instance, emphasising that financial institutions need sex-disaggregated data to develop financial products tailored to women.

The report reveals that the current state of DRM actions varies considerably across the BMCs. For instance, while many countries have early warning systems for some or multiple hazards, typically these systems are not sensitive to the needs of vulnerable groups such as women. This may compromise the effectiveness of such systems. Mainstreaming of disaster risk reduction actions across the economy and dedicated disaster risk financing and investment strategies were often not present across the BMCs. These results were found to correspond to the responses in the stakeholder consultation (Figure 1) where one-third of respondents suggested a lack of representation of women and women-led organisations on DRM agency boards. Furthermore, there was found to be a perception that local level and community DRM committees typically did not include a gender focal point.

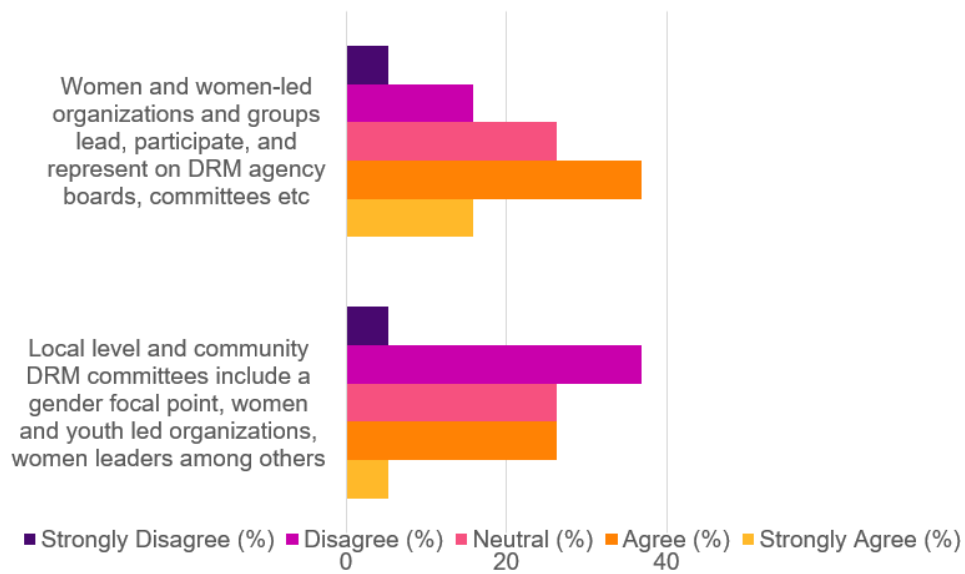


Figure 1 Stakeholder respondents were encouraged to reflect on the extent to which women were involved in DRM decision-making processes.

Overall, the exercise of identifying and cataloguing DRM actions undertaken during this report was found to be valuable in itself, since it aims to encourage a structured approach towards appraising existing actions, enables gaps to be identified, and opens opportunities for learning between BMCs.

For further details, please refer to the [Assessment of Disaster Risk Management Actions Report](#).

5 Situational Analysis Report

The Situational Analysis Report builds on the Assessment of DRM Actions reports by identifying and elaborating the dimensions of financing needs that must be satisfied to implement comprehensive disaster management across the BMCs. The dimensions of financing need vary across the BMCs because of their varying priorities, constraints, and opportunities. Our assessment draws on a series of consultations conducted with key stakeholders from across the BMCs and relevant regional organisations, complemented through desk-based research.

When investigating DRM frameworks and policies across the BMCs, specific attention was paid towards the ways in which DRM frameworks can be made gender sensitive. This includes alignment with international, regional, and national policies and frameworks as well as specific elements that should be integrated to existing DRM frameworks. Interestingly, stakeholder consultations with DRM and gender agencies found that in the majority of BMCs, the needs of men and women, boys and girls and vulnerable groups (including, though not limited to female-headed households, LGBTQI+ persons, persons with chronic non-communicable diseases (NCDs), socially isolated men and women, the elderly, youth and boys and girls) are not explicitly addressed in DRM policies. Figure 2 shows only 23% respondents said this was happening. Furthermore, 73% of respondents indicated that their gender policy did not address natural hazards and the varying needs of women and vulnerable groups. Overall, while there is some level of gender integration in DRM policy, participating BMCs did not believe that this was sufficient, with no BMC being able to identify its approach as a best practice.



Figure 2 (left) National DRM and gender agencies' perspectives on the extent to which their country's DRM policy addresses the needs of women and other vulnerable groups. (right) The inclusion of DRM issues in national gender policy.

The level of awareness of DRF instruments varied among stakeholders. During stakeholder consultations, only 27% of respondents said that their government has a disaster risk financing policy in place, while 70% remained unsure, and 3% noting that no policy was in place. The literature review

revealed that approximately 30% of the BMCs have a national DRF policy in place, so the fact that few participants were aware of the existence of such a policy was unsurprising. Figure 3 shows that the majority of respondents were unsure whether the government had a suite of DRF instruments; following a similar pattern, only 25% were aware of at least 4 different DRF instruments. An important strategy identified will be to raise awareness surrounding the different DRF instruments that are available, and the different purposes that they may fulfil. The DRF landscape of Barbados was provided as an example of how different DRF instruments may be deployed to fund different risk “levels”.³

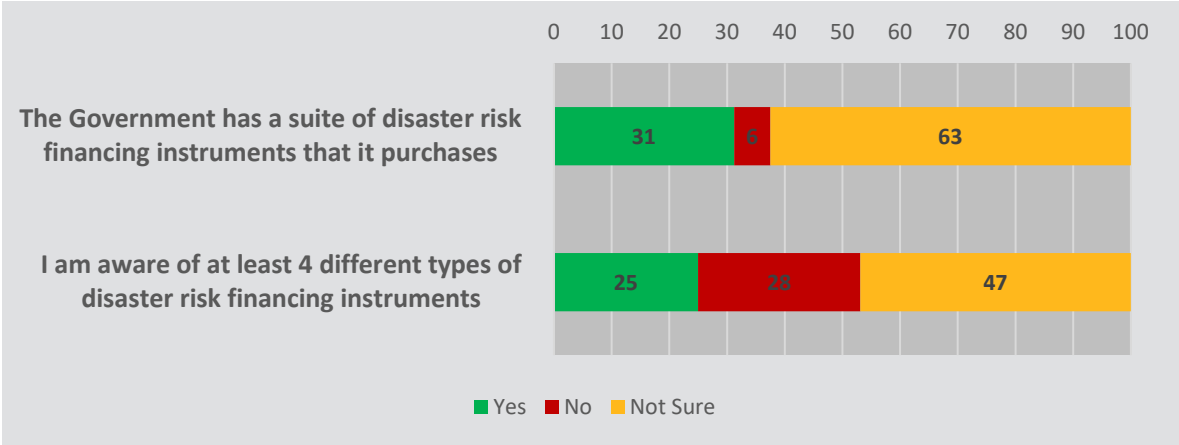


Figure 3 Awareness of DRF instruments among BMC governments.

A high-level classification of DRF instruments is ex-ante (before the event) and ex-post (after the event). This classification makes explicit reference to the timing of these approaches. Ex-ante risk financing involves setting aside public funds explicitly to respond to emergency needs instruments. Risk transfer instruments are examples of ex-ante risk financing. Using ex-ante risk financing instruments such as catastrophe insurance requires proactive advance planning and involves investing in national catastrophe risk management prior to a natural hazard occurring. Ex-post risk financing instruments are funding sources implemented without advance planning. These instruments include budget reallocation, domestic credit, external credit, tax increase, and donor assistance. Ex-post strategies provide emergency response, rescue and emergency relief services in the aftermath of disasters from natural hazards.

When it comes to operationalising DRF across the BMCs, the report puts forward two high-level strategies: applying a gender and vulnerable people’s lens to DRF; and creating shock-responsive social protection systems. The application of a gender and vulnerable people’s lens is critical to understand the needs of these members of society with respect to DRF, and to inform the tailoring of DRF instruments that respond to these needs. Microinsurance represents an especially promising example of a financial product that can support financial inclusivity and provides financial resilience to disaster events. Shock-responsive social protection systems aims to extend the types of risks covered to include additional challenges which often impact many households at once, such as natural hazards, economic crises, health crises and conflict. Shock responsive social protection is about building resilience – taking action before an exogenous event – focusing on preparedness and also looking at how persons can

³ Barbados responds to the most extreme events by “risk layering” by accessing contingent credit through the IADB (US\$ 80 million), to cover immediate extraordinary public expenditures during emergencies caused by severe or catastrophic natural disasters. For “high and medium risk layer” Barbados receives parametric insurance cover for tropical cyclone wind, excess rainfall and earthquake. Disasters that fall within “low risk layer” are eligible to funding through the Barbados Catastrophe Fund Act.

financially protect themselves and their families. Another clear outcome from these consultations was the view that governments should play a central role in supporting these populations.

For further details, please refer to the [Situational Analysis Report](#).

6 DRF Instrument Selection and Recommendations

This report presents a catalogue of DRF instruments that are currently in place globally and across the Caribbean, with specific attention towards DRF instruments that have an element focused on gender and/or vulnerable segments of society. Some DRF instruments are better suited to be used to fund risk reduction and climate adaptation interventions, while others are effective for providing quick liquidity after a disaster that can be used for response and recovery. Therefore, it is recommended that BMCs of CDB use a range of DRF instruments, in line with widely endorsed risk-layering approaches. The risk layering approach looks at various “layers” of disaster risk which are determined depending on the relative frequency of occurrence and magnitude of hazard impacts. For instance, high frequency, low magnitude events, such as nuisance flooding would occupy a different layer to low frequency, high magnitude events such as a major earthquake. Due to the differing frequency and extent of impacts, the different financing instruments will be appropriate in each case.

Across the Caribbean a range of DRF instruments are available. Table 3 shows that to date, throughout the BMCs there has been a greater uptake of indemnity insurance, sovereign parametric insurance, annual budget allocation for DRM and social protection (though not necessarily linked to disaster impacts). Application of other instruments are less common among existing DRM financing strategies, including microinsurance, contingent credit facilities, catastrophe bonds, catastrophe swaps, Cat DDOs, and national reserve funds.

	Indemnity insurance	CCRIF parametric insurance	Micro-insurance	Contingent credit facility	Cat bond	Cat DDO	National reserve funds	Annual budget allocation for DRM	Annual budget allocation for social protection
AIA	✓	✓						✓	✓
ATG	✓	✓					✓	✓	✓
BRB	✓	✓						✓	✓
BHS	✓	✓		✓				✓	✓
BVI	✓	✓					✓	✓	✓
BZE	✓	✓	✓					✓	✓
CYM	✓	✓						✓	✓
DOM	✓	✓						✓	✓
GRD	✓	✓	✓			✓		✓	✓
GUY	✓							✓	✓
HTI	✓	✓	✓					✓	✓
JAM	✓	✓	✓	✓	✓		✓	✓	✓
MSR	✓	✓						✓	✓
KNA	✓	✓					✓	✓	✓
LCA	✓	✓	✓					✓	✓
SVG	✓	✓						✓	✓
SUR	✓							✓	✓
TCI	✓	✓						✓	✓
TTO	✓	✓	✓					✓	✓

Table 3 Disaster Risk Financing instruments used by BMCs.

Using the findings from the Situational Analysis Report and the associated stakeholder consultations and desk-based review, the needs, constraints, priorities, and opportunities of BMCs were identified. Figure 4 displays the criteria used as a guiding framework to assess the various DRF instruments that could be implemented across the region. It was clear that some instruments, for example, catastrophe swap, Debt-for-Climate Swap and resilience bonds while they did address the needs of BMCs in terms of providing quick liquidity after a disaster and improving the response capacity of a country, they did not address the needs of women and vulnerable.

NEEDS	CONSTRAINTS
<ul style="list-style-type: none"> ■ DRF instruments that are appropriate to the frequency/impact characteristics of key hazards; ■ DRF instruments that are tailored to finance different stages in the DRM cycle; ■ Increased private insurance penetration, to complement public disaster funds and budgetary reallocations; ■ Enabling environment for private sector market development; ■ Building DRF expertise, including capacity building among government officials, and government-owned analytics; ■ Develop structured approaches to knowledge management, including capturing lessons learned nationally, regionally, and internationally. 	<ul style="list-style-type: none"> ■ Limited fiscal space of countries; ■ Limited capacity in some countries; ■ Limited accessibility of instruments, with uptake remaining low; ■ Limitations on governments' accessing funding; ■ Some Caribbean governments are unable to access international funding to support disaster risk management and social protection programmes; ■ Lack of sex-disaggregated client data on insurance coverage and usage, which allows insurance providers to determine important trends and relationships
PRIORITIES	OPPORTUNITIES
<ul style="list-style-type: none"> ■ Capacity building among governments, Civil Society Organisations (CSOs), and private sector; ■ Increase awareness and understanding among the different target groups of DRF instruments and associated benefits; ■ Collect and analyze data to determine gender-specific risks, needs and preferences; ■ Incorporate participatory and inclusive feedback loops into disaster risk financing to ensure that financing provisions, mechanisms and processes are effectively meeting different needs; ■ Create platforms for gender lens investing that require the incorporation of a gender analysis in the process of directing DRF investments and grants into activities or organizations which support disaster resilience building and risk protection; ■ Improve the enabling environment to scale up access to a suite of DRF instruments. 	<ul style="list-style-type: none"> ■ The impact of hazards such as hurricanes, rainfall/flooding and earthquakes have placed added focus on DRF ■ Growing the range of DRF instruments available to governments and individuals; ■ Building on the progress made through CCRIF SPC; ■ Expansion of shock responsive social protection partly to enable quick access to financial resources; ■ Take advantage of the growing female market opportunity in insurance; ■ Make use of and further develop the role that local insurance and banking companies play in offering and servicing DRF products.

Figure 4 Summary of the needs, constraints, priorities, and opportunities of BMCs with respect to DRF.

The report identifies a number of ways in which DRF instruments can be adapted to target women and vulnerable groups. The key areas identified were: building trust with the target population, incorporating participatory and feedback loops; designing payment triggers that are sensitive to the disproportionate

impacts experienced by vulnerable groups; establishing effective delivery mechanisms; undertaking critical assessment of existing social protection mechanisms; and implementing pilot projects to develop successful use cases that can be scaled-up and applied elsewhere.

Finally, the report provides a priority list of DRF instrument that are believed to be suitable to the BMC context. The proposed priorities include:

- Governments will need to commit existing budget lines and consider dedicating resources towards accessing international climate funds, such as the Green Climate Fund (GCF), Global Environment Facility (GEF), and Adaptation Fund (AF). International funds are established to promote investment in disaster risk reduction and climate change adaptation investments;
- The establishment of national reserve funds, with associated plans for sustainable maintenance of these funds, which can be drawn upon to manage high frequency, lower impact events. The establishment of reserves must also be accompanied by detailed plans for how these funds are used. This not only ensures that funds are used efficiently but also should help to ensure that they can be drawn-down quickly so that they can effectively support emergency response.
- Disaster risk finance, particularly designed to support vulnerable populations, should be seen as complementary to social support systems that are already in place. Thus, establishing and strengthening of existing social protection programmes to make them shock-responsive, where they can scaled up in the time of a disaster would bolster the climate resilience of groups that depend on this form of support;
- Support for microinsurance schemes which extend financial inclusion to marginalised groups including men, women, the elderly, the differently abled, and those working in volatile and informal sectors - such microinsurance schemes could be coupled with incentives to promote resilience-increasing behaviours such as Fonkoze in Haiti⁴, and continued support for, and expansion of participation in parametric insurance programmes to support emergency response to high impact events
- Resilient debt management, including debt restructuring, coupled with DRF can be an effective way to unlock funds which can be invested in longer-term resilience increasing actions that deliver disaster risk reduction, climate adaptation, and ecosystem restoration and recovery.

For further details, please refer to the [DRF Selection and Recommendations Report](#).

⁴ When providing micro insurance loan coverage to women in Haiti the Microinsurance Catastrophe Risk Organization (MiCRO), with loans from Fonkoze,, coupled the loans with financial and development services to lift their families out of poverty.

7 Conclusion

This diagnostic study provides a comprehensive appraisal of the key drivers of disaster risk across the BMCs, the risk management actions required to address this risk, and associated challenges, opportunities, constraints, and priorities. Furthermore, drawing on international and regional best-practice, this study recommends ways to finance these actions in a way that is gender-sensitive and innovative.

The conclusions of this study, which are summarised for each report above, should be considered acknowledging several limitations. Limited availability of high resolution hazard, exposure, and vulnerability data across the BMCs meant that the risk audit necessarily adopted a regional approach to quantifying disaster risk. Since a consistent approach was adopted across all BMCs (where data availability allowed), comparisons can be drawn between the countries. However, more detailed risk modelling would be required to make recommendations on, for example, specific disaster risk reduction and climate change adaptation investments in a given national context. Institutions such as CDEMA, CIMH, CCCCC, and UWI, among others have a role to play in facilitating the establishment of data collection strategies and building capacity among key officials at the national level.

All of the reports produced as part of this study combine insights from a series of stakeholder consultations with structured desk-based reviews. It is important to acknowledge that although the consultations captured views from a range of DRM officials, regional experts, CSO representatives, and gender experts, these discussions inevitably represent a snapshot in time. It is critical that continuous dialogue between these stakeholder groups is promoted to ensure that national disaster risk management plans, and approaches to financing them, respond to national and regional challenges and constraints whilst taking advantage of opportunities (e.g., international funding windows) and identifying and pursuing priority actions.

The Caribbean Development Bank has played, and should continue to play, a central role in the financing of disaster risk management actions. Since the emergence of more structured and proactive approaches to DRM, the CDB has been considering how disasters (and climate change) may impact on their investments and activities across the BMCs. Furthermore, the CDB has been a key supporter of regional initiatives such as CCRIF, and facilitator of access to climate finance on behalf of the BMCs. Looking forward, the CDB can aid the BMCs in accessing several sources of climate and disaster risk financing, for example premium financing through the Global Risk Financing Facility (GRiFF), and funding climate change adaptation and disaster risk reduction investments through the Adaptation Fund, the Global Environment Facility, and the Green Climate Fund.

Notwithstanding numerous constraints and challenges, the BMCs, and the Caribbean as a whole, has an international reputation for effective action on disaster risk management. The region is home to strong scientific institutions, proactive disaster risk management organisations, and can already point to several gender-sensitive disaster risk financing instruments that have been successfully implemented. With support from the international community, the CDB and BMCs must continue to dedicate funds to promote continued innovation in disaster risk financing and management, and to build on success stories to scale them upwards and outwards. In doing so, climate and disaster risk can be addressed in a way that is responsive and attentive to the most vulnerable segments of society.