

2022

Comprehensive Disaster  
Management Policy for  
Barbados



Government of Barbados



# Abbreviations

CC	Climate Change
CCA	Climate Change Adaptation
CBO	Community-based Organisations
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CERO	Central Emergency Response Organisation
COVID-19	Coronavirus disease
DEM	Department of Emergency Management
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EOC	Emergency Operations Centre
GIS	Geographical Information System
ICT	Information and Communications Technology
MER	Monitoring, Evaluation and Reporting
MHEWS NMHDMP	Multi-hazard Early Warning System National Multi-hazard Disaster Management Plan

MTESP	Medium Term Economic Strategy Paper
NDO	National Disaster Office
NEMS	National Emergency Management System
NEOC	National Emergency Operations Centre
NESDP	National Economic and Social Development Plan
NGO	Non-governmental organisations
PAE	Public Awareness and Education
PPE	Personal Protective Equipment
PRSP	Poverty Reduction Strategy Paper
PSIPS	Public Sector Investment Portfolio
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction 2015-2030
SIDS	Small Island Developing States
UNDRR	United Nations Office for Disaster Risk Reduction
UNISDR	United Nations International Strategy for Disaster Risk Reduction

## **Acknowledgements**

**Message from the [Prime] Minister**

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## Purpose

The Barbados Comprehensive Disaster Management (CDM) Policy 2022 ensures that there is a strategic direction to keeping people safe and making communities more resilient to disaster and climate related risks and impacts.

## Mission

To provide the supportive governance and accountability arrangements to guide the development and mainstreaming of CDM policies and programs by all Ministries, Departments, statutory bodies, community-based organisations, private sector entities, non-governmental organizations, faith-based organizations, communities and individuals, for reduced losses and damages, safer communities, more resilient people, a protected environment, a stable society, and sustainable economy.

## Background

In 2003, the Government of Barbados adopted the Comprehensive Disaster Management (CDM) mandate that would provide for the management of all hazards, both natural and man-made in origin, through all phases of the disaster management cycle rather than focusing only on preparedness and response. The impetus for this paradigm shift was driven by international and regional disaster risk reduction strategies (in 2005 and 2001 respectively) that were catalysed by the International Decade for Natural Disaster Reduction (in the 1990s). The overarching aim of CDM is reduced losses and damages, and resilient and safer societies through the engagement of all people, sectors, and society. In support of establishing the architecture to implement the broadened mandate of CDM, the Government proclaimed the Emergency Management Act Cap. 160A (2006) that provided for the transitioning of the Central Emergency Response Organisation (CERO), a relief organisation, to a disaster management organisation- the Department of Emergency Management (DEM) with the broader mandate of CDM.

Further arrangements are required to concretize Barbados' pathway towards building resilience to disasters and to support Barbados in meeting the requirements of regional and international disaster risk reduction (DRR) and climate risk related strategies to which it is a signatory. Namely, the regional CDM Strategy and Results Framework 2014-2024; The CARICOM Strategic Plan; The 2030 Agenda for Sustainable Development that outlines the Sustainable Development Goals; The Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 and The Paris Agreement (2015) which seeks to strengthen the global response to climate change.

Barbados has been cited by many as punching well above its weight. Indeed, as a Small Island Developing State (SIDS), although only 166 square miles and with a population of 286,641, Barbados has attained a very high development ranking, according to international standards. Notwithstanding this, our development gains are being eroded as the nation seeks to manage the impacts from climate change, environmental threats (such as oil spills and sargassum seaweed), biological hazards, and the perennial and increasing impacts from floods, storm surge, hurricanes, fires, drought and the potential for landslides and tsunamis. The last major Category 5 hurricane to have struck Barbados directly was Hurricane Janet in 1955 however damages from less intense and frequent events demonstrate underlying vulnerabilities. In 2010, Tropical Storm Tomas severely impacted the country with damages estimated at US \$8.5 million<sup>1</sup> and in 2021 Barbados was affected by the ash from the eruption of La Soufriere in nearby Saint Vincent and the Grenadines. The same year, Hurricane Elsa, although only a category 1 hurricane, affected 2,372 houses, more than half of which suffered roof damage. The COVID-19 pandemic has highlighted the acute impact that health emergencies can have on the social and economic stability of the nation. Debt reduction ability, tied to the performance

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<sup>1</sup> Tropical Cyclone Report: Hurricane Tomas. National Hurricane Centre (Pasch and Kimberlain, 2011)

of the tourism sector has been hampered. Globally, trade and supply have also been disrupted and livelihoods lost, and climate change is increasing risks.

The Barbados economy is small, and highly dependent on tourism which accounts for 45% of GDP and employs a significant amount of the workforce. The high debt to GDP ratio, together with high dependency on external influences and linkages for financial support and trade, mean that the economy is exposed to real shocks of intensity not experienced in larger countries, and therefore economic resilience is a top priority for sustainable development. Disaster governance arrangements in SIDS like Barbados must also minimize the imposing economic factors that can make it difficult to have resources for risk management and can also exacerbate vulnerability to disasters<sup>2</sup>. Efficiency, and innovation are therefore required to manage scarce local skills, human and financial resources, high per capita costs for infrastructure and services that are required to support the nation's disaster risk management approach. Additionally, complexities that arise from the concentration of the population in coastal zones and high interdependencies within and amongst our fragile socio-environmental systems, are requiring a comprehensive approach to disaster risk management that is efficient, highly coordinated, and flexible. Barbados' very high development status also means that it no longer qualifies for special development aid so it must fully bear the cost of its development.

As Barbados seeks to manage these socio-economic challenges it is also grappling with gaps in its disaster management system that are limiting its delivery of CDM. These include institutional arrangements that must be strengthened for full sector engagement and accountability including at the community level, and inadequate resource streams. Limited mainstreaming of CDM and CC in planning, and ministries' objectives as well as the need for increased resilience of critical infrastructure. Across the disaster management system, improvements are needed to sustain preparedness and response capacity and to realise significant reductions in risk. The Government is unable to finance its own risk<sup>3</sup>. Persistent gaps in knowledge, and research on CDM and the availability of risk information to inform decision making, require strategic attention for accelerated progress in reducing risk. Investments are needed in recovery planning, community resilience building, and stronger requirements are required for the uptake of business continuity in the private sector and government. This Policy sets out Barbados' solutions to addressing disaster and climate related risks, which are ours 'to find, to craft and to implement'.

## **Aim of the Policy**

The Policy aims to:

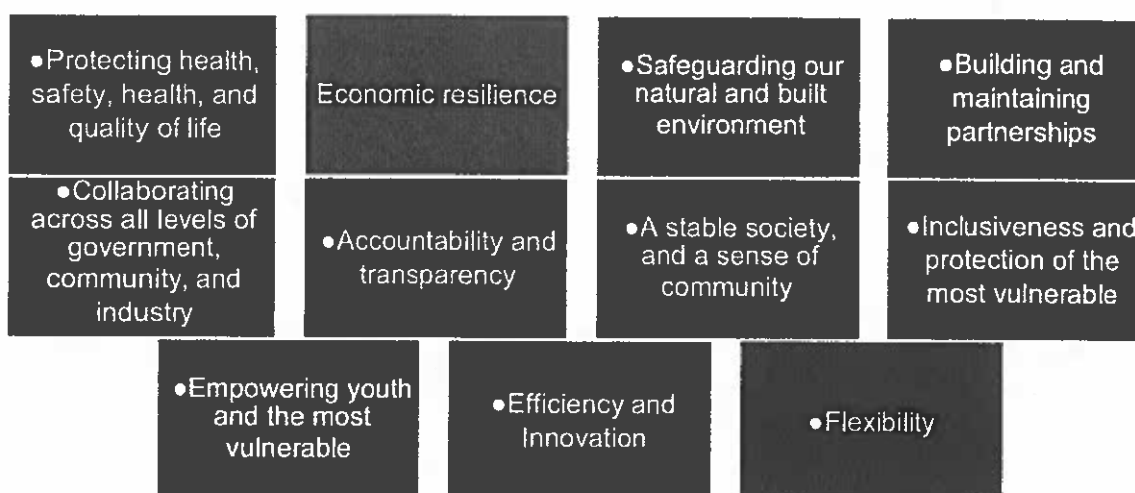
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<sup>2</sup> *From Shared Risk to Shared Value – The Business Case for Disaster Risk Reduction. Global Assessment Report on Disaster Risk Reduction.* Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNISDR), 2013) <sup>3</sup> IDB, 2010



- Provide the strategic direction and supportive governance and accountability arrangements for a safer, more resilient and sustainable Barbados through comprehensive disaster management
- Guide the development and mainstreaming of CDM policies and programs for a resilient Barbados society.
- Ensure Barbados meets its regional and international disaster management obligations.
- Articulate the vision and goals for comprehensive disaster management for the Government of Barbados in line with the objectives of the Emergency Management Act, Cap. 160A (2006)

## Values



## Guiding Principles for Comprehensive Disaster Management

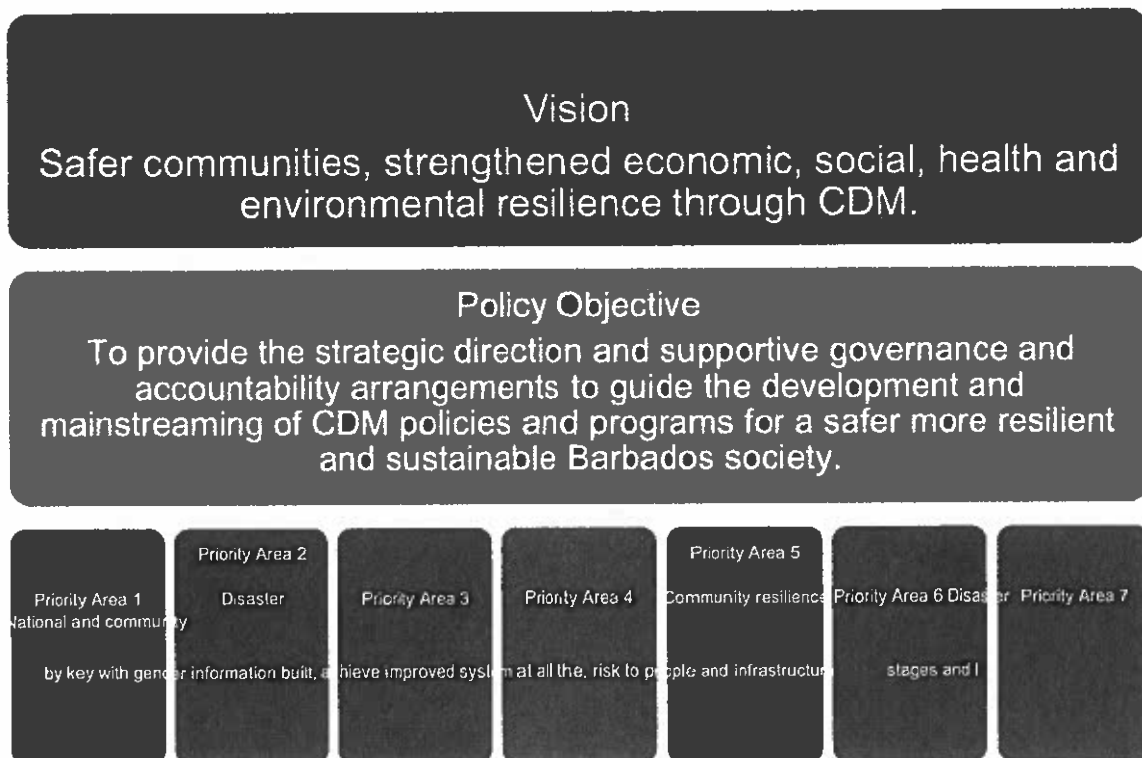
The Policy is underpinned by the following general principles:

- A CDM approach that addresses 'all-phases' of disaster management- mitigation, preparedness, response, and recovery; all hazards - natural and man-made, including those related to climate change and climate variability; and that aims to build resilience of 'all-people' including the public and private sectors, all segments of society including civil society.
- A resilience approach that is timely efficient and is able to bounce forward quickly in a manner that reduces susceptibility to the impact of the same hazard.
- Promotion of sustainable development through the reduction of disaster risks and vulnerability of society to natural and man-made hazards.

- Integrated of CDM in all national development plans and instruments and at all levels of everyday activity by the entire society.
- Risk assessment is incorporated in all aspects of the national development planning process from visioning, problem definition, goal, strategy and solutions articulation.
- Stakeholders understand their role and share responsibility with the National Disaster Office for managing disaster risk.
- Promotion of an evidence-based, systematic, and consistent approach for risk assessment, planning and management.
- Decision making is proactive, consultative, and participatory.
- All levels of government are committed to continuous improvement of policy, programs, practices, lessons learning and service delivery to improve community safety.
- ICTs, are utilized for knowledge sharing, information management, and large-scale transformation.
- Governance arrangements and capacity for key players is adequate – communities, government, and the private sector to reduce risk and deliver the CDM programme.

## Policy Statement

The policy statement consists of three (3) major parts: A Vision, Policy Objective and Priority Areas.



## ***Vision***

Safer communities, more resilient people, protected environment, a stable society, and sustainable economy through CDM.

## ***Policy Objective***

To provide the strategic direction and supportive governance and accountability arrangements to guide the development and mainstreaming of CDM policies and programs for a safer more resilient and sustainable Barbados society.

## ***Priority Areas for Action***

1. Robust, and well-resourced governance system at all levels delivers CDM results. [Work Programme 1.1]
2. Disaster mitigation supported by risk analysis, prevents the creation of risk and reduces risk to people and infrastructure [WP 4.1- O 1.2]
3. Operational readiness at the national, sectoral and community levels. [WP 2.1] [WP3.1]
4. CDM is mainstreamed and led by key sectors. [WP 2.2]
5. Community resilience enhanced for the most vulnerable with gender concerns addressed at all stages and levels. [WP 3.1]
6. Disaster research, knowledge and information built, managed, and sustained. [WP 4.2] [WP 4.1]
7. National and community recovery is timely and organized to achieve improved development conditions that minimize risk and serves the most vulnerable. [WP 5.1]

## ***Policy Strategy***

The Policy Strategy consists of delivering seven priority areas of action, that address the challenges that emerged from the review of the issues, gaps and challenges to deliver CDM. These focus on governance, disaster mitigation, operational readiness, sector mainstreaming resilience building in sectors, ensuring communities are central to the disaster management strategy, building the knowledge base and organising for recovery. These priority areas are being delivered through the CDM approach that addresses all people, hazards and phases of DRM, and are being delivered in a context that is providing the CDM Enabling environment which consists of the ICT platforms for knowledge sharing, information management, and large-scale transformation. Adequate governance arrangements and capacity for key players also support the enabling framework for communities, government, and the private sector to reduce risk and deliver the CDM programme. A mainstreaming framework is the main approach for delivery whereby CDM is integrated in all national development plans and instruments, including Poverty reduction strategies, the national sustainable development plans, the physical development plan, Medium Term Economic Strategy Papers (MTESPs), Public Sector

Investment Portfolios (PSIPs); and is integrated into all aspects of development at all levels of everyday activity by the entire society. Each priority area provides the basis for implementation through the Barbados CDM Work Programme (CWP) which is a 3–5-year strategic document that operationalises the CDM Policy. The CWP is aligned with the Regional CDM Strategy. The current Barbados CWP is for the period 2019-2023.

## **Strategic Interventions**

### ***1. A Robust and well-resourced governance system at all levels delivers CDM results.***

The robust governance system provides the enabling environment for CDM. This will be achieved through interventions that support more effective, efficient, and sustainable governance mechanisms, as well as improved standards. The legislative and regulatory frameworks, and business processes for disaster management will be established. It will seek to ensure that there are adequate resources for implementing disaster risk management (DRM) programmes and projects. An incremental approach will be taken to finance building resilience within each of the sectors based on the availability of resources and that also seeks to build on previous initiatives using programmatic approaches that focus on the most critical areas over longer timeframes. More longer-term budgeting periods have been adopted to plan for commitments more strategically. Additionally, access to policy/programme-based loans rather than traditional project -based loans also gives the country the ability to meet the sustainable development goals incrementally through CDM. Public private investment frameworks are other options being employed eg under *Roofs to Reefs*. Opportunities will be sought out to access new financing from development partner- resource streams including for climate change such as the Green Climate Fund. Novel means of public sector financing under *roofs to reefs* can be upscaled to support the wider DRM work. Capacity for monitoring and evaluation of programmes and projects will be improved. A joined-up governance approach will be instituted that utilises national instruments that provides relevant points of entry for CDM including the National Sustainable Development Plan, the Physical development Plan, PSIP, social development programmes etc. It will include streamlining of committees, departments, and ministries. Removal of barriers to information sharing supported by robust information sharing policies. Duplication will be tackled with the strategy of maximising smallness advantages for cooperation, and better efficiency. CDM and CC will be mainstreamed in planning and ministries' objectives and CDM will be included in budget estimates as a defined line item.

### **Strategic Interventions:**

- 1.1. Review, re-structure and strengthen existing organisation, institutional, policy and legal frameworks to support the CDM process and contribute to the mainstreaming of CDM in national planning and development. Includes articulating DRR roles for subcommittees of the EMAC.
- 1.2. Strengthen the National Emergency Management System for effective implementation, monitoring and reporting.
- 1.3. Build capacity, establish and maintain clear and appropriate MER mechanisms for CDM at all levels so that all stakeholders involved in CDM are held responsible for their individual roles and responsibilities and to allow for regular reporting and evaluation of their activities.
- 1.4. Develop regulations to implement the Emergency Management Act for each agency that has a role/ responsibilities in the DRR and CCA including specific roles of community and social sector entities.
- 1.5. Legislate the roles of the DEOs, the community development department and other community-based organisations in DRM.
- 1.6. Extend legislation to enunciate roles for risk governance/ for all stakeholders at all levels, as well as the modality for coordination, information management, and flexible arrangements.
- 1.7. Undertake assessments of the technical, financial, and administrative DRM capacity to deal with the identified risks at national and local level, allocate resources and establish strategic partnerships for implementation of the National DRM Programme.
- 1.8. Review existing CDM oversight mechanisms, e.g. the national disaster management technical and advisory council, to ensure the inclusion of all sectors that are involved in some aspect of disaster risk reduction, and climate change adaptation; and to support MER.
- 1.9. Review existing planning and impact assessment legislation and incorporate elements from the CDM Enabling and Mainstreaming Frameworks.
- 1.10. Establish a joined-up governance approach that includes cohesive planning, funding, budgets, implementation to DRR and CCA across all sectors and government ministries.
- 1.11. Establish/ enhance an appropriate governance structure that will allow for more formalised and legislated mechanisms for inter-sectoral and inter-agency coordination, reporting, and monitoring. These could include inter-ministerial working groups, a coordinating and technical forum for co-production of knowledge risk governance.
- 1.12. Facilitate the convergence of the national climate change adaptation policy, legislation, and work programme with that of similar CDM instruments. Evaluate and streamline CCA and DRR structures and coordinate portfolios at the ministerial level.
- 1.13. Establish adequate/ minimum standards of capacity to deliver the CDM programmes established and met.
- 1.14. Formulate a National CDM Strategy and Multi-Year Country Work Plan that encompasses the CDM Approach and identifies the necessary elements of a CDM Enabling and Mainstreaming Frameworks.

- 1.15. Decentralise some of the CDM processes – preparedness and disaster risk reduction – to other more appropriate sectoral agencies, NGOs and CBOs supported with requisite capacity building and policy.
- 1.16. Establish ex ante financial mechanisms to resource CDM.
- 1.17. Review fiscal rules on government expenditure on DRM and refine the model for measurement.

## ***2. Disaster mitigation supported by risk analysis, prevents the creation of risk and reduces risk to people and infrastructure.***

Disaster and climate related risk issues are included in national development plans, such as the Town and Country Planning Physical Development Plan (2017) and some risk has been transferred through insurance (CCRIF SPC). Moreover, the Government is involved in specific activities targeting flood management through drain cleaning and soil stabilization in landslide prone areas. The Emergency Management Act (18.1) speaks to the role of the DEM and the Chief Town Planner in preparing draft area plans for vulnerable areas which are strategies to deal with structures in vulnerable areas—standards for environmental and hazard impact assessments for contemplated development in vulnerable areas but the DEM needs to have the resources to undertake this role. Mainstreaming CDM in national sustainable development plans must be undertaken. Policy, legislation, and regulations for reducing risk and building more resilient systems will be strengthened.

Priority will be given to enforcing the national building code and ensuring the legislative authority is provided, along with supporting programmes for compliance. These include ensuring that insurance is accessible as most of the population is not insured or is underinsured and establishing attractive incentive initiatives and products. Additionally, interventions that provide safe, effective, and economic housing options for low and low middle income public housing will be a priority. Several interventions will consolidate efforts towards preventing the creation of risk and reducing existing and anticipated risk to people and infrastructure. Risk analysis that accounts for drivers of risk, systemic risks, interconnectedness amongst systems, and uncertainty will be at the core for risk reduction efforts, informing the decision-making processes for development and resilience building. Harmonised governance of DRR and CCA will be a priority and ecosystem based/ nature based DRR solutions and long-term green growth and development strategies will be promoted.

### **Strategic Interventions:**

- 2.1. Limit the adverse impact of natural hazards, climate change, ecosystems/ environmental degradation, and technological hazards through mainstreaming CDM and CCA into national sustainable development planning

- 2.2. Ensure that the design of interventions, programmes, and projects for building resilience and reducing risk are informed by risk analysis.
- 2.3. Ensure disaster risk is considered, in the design and siting of public housing, investment projects, critical infrastructure, and minimizes losses.
- 2.4. Integrate governance arrangements for disaster mitigation and climate change adaptation programming for complementarity and efficiency.
- 2.5. Implement nature based and Eco-DRR solutions, sustainable consumption and production, sustainable waste disposal solutions in support of a long-term green growth and development strategy, and DRR.
- 2.6. Establish mechanisms including a risk register for risk-informed decision making including for multi-stakeholder coordination on DRR policies across sectors.
- 2.7. Establish and/or strengthen ICT and other infrastructure for fact-based decision-making.
- 2.8. Establish insurance mechanisms to cover infrequent risks including chemical and oil spills.
- 2.9. Enhance risk assessments through hazard monitoring, forecasting and mapping and account for drivers of risk, systemic risks, interconnectedness amongst systems, and uncertainty.
- 2.10. Provide and promote incentives (financial and legal) programmes for DRR to encourage risk sensitive building (new/ upgraded), recovery, reconstruction of businesses, sustainable consumption and production, environmental/ ecosystems restoration/conservation/enhancement, (Eco-DRR and nature based solutions) and productive asset protection including of livestock and crops.
- 2.11. Establish a dedicated budget line for DRR and CCA that can be monitored, and accessed by sectors and local governments for all aspects of DRR including preventing new disaster risk.
- 2.12. Enforce the building code and establish a supportive programme to encourage compliance including certifications of building professionals, provision of safe, effective, and economic housing options for low and low-middle income public housing.
- 2.13. Promote the acquisition of insurance for residential properties and provide supporting legislation.
- 2.14. Establish a resilience building programme for new government developments and older Critical facilities.
- 2.15. Assess and improve critical Infrastructure (CI) and supporting systems to be resilient to disasters and climate change.

### **Operational readiness at the national, sectoral and community levels**

Barbados' long-time investment in infrastructure and resources for preparedness and response, and public awareness is paying off as it is an area where the country has made significant strides. The NEMS coordinated by the DEM is operational however it must

maintain the National Multi-hazard Disaster Management Plan (NMHDMP) and emergency response mechanisms. Training and exercises will be increased to test and enhance plans and improve CDM capabilities across the system and promote disaster planning at the sectoral level. The strong Public Awareness and Education (PAE) systems identified in the Barbados Audit on CDM must also be maintained and strengthened. Interventions however to address gaps on NEOC operations, EWS, damage assessments and logistics have been prioritised. The NEOC operations will be provided with the space and resources to operate and community EOCs will be established. Community organisations will need to be provided with the capacity and training for generating resources to adequately support their function in disaster relief- Personal Protective Equipment (PPE), emergency telecoms equipment, water supply, and emergency power generators are costly.

#### Strategic Interventions

- 2.16. Update the NMHDMP and related procedures informed by risk assessments and achieve approval at the national level.
- 2.17. Prepare/ enhance the NMHDMP for key sectors including emerging critical sectors such as the cultural heritage sector for operational management.
- 2.18. Ensure the NMHDMP and sector DM plans are updated and exercised.
- 2.19. Maintain and improve training and exercising programmes to improve CDM capabilities across the NEMS and promote disaster planning at the sectoral level.
- 2.20. Maintain national EOCs, establish community EOCs and provide adequate space and resources for operations.
- 2.21. Develop and implement MHEWS policy and improve communications at all levels- national and community levels.
- 2.22. Enable the application of a national standard methodology for damage and loss assessment and the establishment of a repository for data on damages on losses.
- 2.23. Enhance the operational component of the Sub Regional Focal Point in line with responsibilities under the CDEMA Agreement.
- 2.24. Establish standards and maintain adequate communication systems for operations.
- 2.25. Appropriately equip the DEM Headquarters building to be purpose-built to withstand multi-hazard impacts.
- 2.26. Clearly define and establish in legislation the composition, roles, and responsibilities of stakeholders in the NEOCs.
- 2.27. Review procurement arrangements to facilitate agility in times of disaster.

### ***3. CDM is mainstreamed and led by key sectors***

There are sectoral plans that address DRR, such as the Tourism Master Plan, as well as DRM plans in health, and housing. Plans for other sectors are in the pipeline such as in



the education sector, in the form of the Model Safe School Programme, and in agriculture. Achievements in these sectors will be advanced and there will be emphasis however on cultural heritage, the blue economy, energy, finance, and the private sectors. All sectors must be addressed as part of the CDM approach. Alignment with national programmes such as *roof to reef* will be an imperative to ensure linkages are made with shared priorities and to maximise limited resources. Legislation will be a priority for sectors, mandating CDM responsibilities that are aligned to the national disaster legislation supported with requisite sector plans and strategies. For example, Ministers of Government should have the authority to lead in sector level CDM implementation. Overall, the aim is for disaster resilience to be enhanced within key sectors.

### **Strategic Interventions:**

- 3.1. Build capacity of DEM and NEMS to have the authority, and resources to support key sectors in governing risk including for plan reviews and approvals.
- 3.2. Establish guidelines for DRR and resilience and assist sectoral agencies with reviewing or developing sectoral strategies and plans so that disaster risk reduction becomes one of the central elements of these plans and strategies.
- 3.3. Develop and implement a mechanism requiring all key sectors including the private sector to develop, implement and maintain up-to-date CDM policies and plans informed by risk assessments.
- 3.4. Align initiatives for mainstreaming CDM in sectors with the Roof to Reef initiative.
- 3.5. Establish and implement guidelines for key sectors including private sector on minimum requirements including dedicated resources for DRM
- 3.6. Establish a national sector coordination committee to govern CDM implementation across the sectors.
- 3.7. Develop guidance notes and other such related tools to provide inter-sectoral and inter-agency training in the principles of CDM and the tools used in mainstreaming CDM<sup>4</sup>.
- 3.8. Mainstream principles of DRR into national policy.
- 3.9. Establish mechanisms for the periodic assessment and public reporting on progress on national and local DRR strategies.
- 3.10. Establish partnerships with the financial sector including lending agencies for risk informed and resilient investments and development
- 3.11. Enable and initiate DRR planning in the private sector.
- 3.12. Enable and advance DRR planning in key sectors, agriculture, tourism, environment, education and health and initiate action and in other emerging critical sectors including finance, the blue economy (ocean based sectors) and energy sectors
- 3.13. Establish and implement risk-informed sector CDM Work Programmes supported through strategic partnerships.
- 3.14. Provide for Ministers of Government to have the authority to lead in sector level CDM implementation.

- 3.15. Ensure that key sectors and emerging sectors have the authority and clearly defined roles and responsibilities in identifying risk and taking action to prevent and manage risk.
- 3.16. Assess disaster risk, establish policies, adapt and implement a critical infrastructure protection plan or strategy to protect such infrastructure and environmental assets (natural resources and ecosystems) from disasters and other shocks such as climate change- includes maintenance of key infrastructure, (electricity, drainage, water management, transportation) and critical environmental assets, that assess disaster risk and retrofit and can ensure full operation.
- 3.17. Facilitate the review of existing sectoral policies to incorporate relevant elements of this CDM Policy.
- 3.18. Where feasible, institutionalise training resources and capacities or develop a cadre of national consultants to whom these services can be outsourced.

#### ***4. Community resilience enhanced for the most vulnerable with gender concerns addressed at all stages and levels.***

There are local level (community) Disaster and/or Response Plans that are informed by risks and vulnerability assessments. DEOs will need to be strengthened through addressing their role in the Emergency Management Act. Even in normal (disaster-free)

4.0 This includes through hazard characterisation; profiling vulnerable groups; hazard mapping, risk assessments and analyses – and how the resultant analyses and information should be incorporated into development planning; project development and management; impact assessments, etc.

times, social assistance, non-contributory support for the poor, is fragmented and patchy. Key partners will include stakeholders commissioned to develop communities and improve the lives of people with disabilities and other vulnerable groups as well as those organisations with a role in community development. Sustainable financing for delivering the community resilience agenda by community-based organisations must be a priority.

#### **Strategic Interventions:**

- 4.1. Ensure that community needs assessments are undertaken to inform Community Based Disaster Management
- 4.2. Update legislation to articulate the role and responsibilities of DEOs, the Roving Team and other community-based organisations to support CDM.
- 4.3. Develop guidelines for communities to formulate risk reduction and resilience plans, as well as provide training in the use of these guidelines.
- 4.4. Facilitate the mapping and profiling of vulnerable groups, areas and sectors in collaboration with the appropriate sectors and agencies and develop community

based plans that are informed by up-to-date risk information and seek to build resilience.

- 4.5. Work with the National Climate Change Committee/ National Sustainable Development Committee and relevant entities to assist communities in undertaking small -scale- small grants programmes for adaptation and mitigation
- 4.6. Establish resource mobilisation streams for community profiling.
- 4.7. Undertake community needs assessments, risk assessments through hazard monitoring, forecasting and mapping, vulnerability and capacity assessments and account for drivers of risk.
- 4.8. Facilitate the training of communities, DEOs and NGOs in delivering community based DRM, including training in community risk assessments, damage assessments, capacity appraisals and in mitigating these risks.
- 4.9. Work with the private sector and other relevant entities to assist communities in undertaking small-scale mitigation activities.
- 4.10. Where technical capacities exist, work with community groups and NGOs, through demonstrative mitigation activities protecting common assets (roads and pathways, shelters, retaining walls, water catchments, etc) to develop core preparedness skills, monitoring of hazards, disaster planning, and early warning.
- 4.11. Develop mechanisms and programmes to ensure that community DRR is seen by all local stakeholders as an integral part of plans and actions to achieve wider community goals (e.g. poverty alleviation, quality of life).
- 4.12. Provide a supportive legislative, political, administrative, and financial environment for Community Based DRM and community-based development.

## ***5. Disaster research, knowledge and information built, managed and sustained***

Public awareness, education and communication are strong points of the Barbados NEMS. The information/ knowledge base for CDM must be strengthened for fact-based decision-making. Additionally, changes in the operational context as well as conditions of vulnerability and risk are dynamic and must be kept up-to-date. Impacts from previous events must be documented and response must be informed by information on vulnerability and risk. Monitoring, forecasting, and early warning scenario development will be supported and undertaken for priority hazards. Barbados has begun to lay the foundation for the national Spatial Decision Support Systems (SDSS) through the National Coastal Risk Information Platform (NCRIP) and there is also a resilient platform that includes resilience projects that available for private financing. Situational analyses and the creation of crisis maps, damage assessments are also a necessity. Learning for CDM must be enhanced supported by information sharing. Formal and informal avenues of learning about DRM must be enhanced and established as needed particularly at the technical and vocational levels. Furthermore, CDM related concepts, issues and materials must be integrated more deeply into school curricula at the primary and

secondary levels. Awareness and sensitization to CDM must be year round and must be broadened to address other hazards. Various entry points for accessing the differing audiences will be utilised. NEMS' capacity to implement PAE will enhance the opportunities for NEMS members to be exposed to current DRM knowledge and thinking.

#### **Strategic Interventions:**

- 5.1. Establish/ improve and maintain a national electronic repository for hazard and risk knowledge, lessons learnt, good practices, disaster impacts that is accessible to all stakeholders and the general population for decision making as a national priority.
- 5.2. Utilise Spatial Decision Support Systems (SDSS) that support integrated DRR and CCA solutions (for forward planning) and that consider multiple stakeholder perspectives.
- 5.3. Establish clear roles for governing the DSS and establish networks and protocols for sharing information and considering risk issues within multistakeholder arrangements.
- 5.4. Integrate DRM into the curriculum of all education institutions.
- 5.5. Provide DRM education, training, and knowledge sharing opportunities to the NEMS including on the roles and responsibilities of different agencies including the DEOs.
- 5.6. Strengthen the Public Awareness Programmes to address all hazards and build the public consciousness throughout the year on their roles in mitigating against and managing disasters and to build a culture of safety.
- 5.7. Build awareness amongst stakeholders (including amongst youth and children) on available DRM services and how to access assistance in varying circumstances.
- 5.8. Provide training, sensitisation, targeted public awareness and education on the CDM Approach and the CDM mainstreaming tools as described in this CDM Policy.
- 5.9. Identify and/or develop a framework for incorporating local knowledge with scientific knowledge.
- 5.10. Establish partnerships including with boundary organisations that can bridge between knowledge generated by academic institutions and decision making bodies, to inform CDM policy development.
- 5.11. Provide mechanisms for private sector and academia to support the production and sharing of risk knowledge.

#### ***6. National and community recovery is timely and organized to achieve improved development conditions***

Early Recovery and Reconstruction has been a strong area for the Government of Barbados. However, it can be improved noting the global economic crisis and weaknesses that are being identified in the context of less familiar by potentially catastrophic threats such as biological hazards- pandemics and seismic threats. As it relates to threats from hydro-meteorological and seismic events, trained personnel at the

local and national levels in debris removal and disposal in worst case scenarios will be a priority. Business continuity planning will be promoted as a requirement, particularly among micro, small, and medium enterprises. Mechanisms that will support the psychological recovery of the population post-disaster will be strengthened including through community and youth councils. There will be a stronger role for actors involved in providing social safety nets for the most vulnerable to disasters. Effective governance arrangements for recovery, building back better, minimising risk and achieving improved development conditions through the recovery process will be advanced.

### **Strategic Interventions:**

- 6.1. Evaluate recovery readiness using the CDM Audit and model recovery framework.
- 6.2. Enhance the National Recovery Framework to be responsive to all priority hazards, including pandemics and to consider economic, social, environmental and infrastructural dimensions of recovery, incorporating the best lessons learnt, acceptable regional and national standards policies, legislation, implementation arrangements, governance arrangements and SOPs.
- 6.3. Establish Continuity of Government arrangements.
- 6.4. Establish Business Continuity Planning (BCP) as a requirement for the private sector.
- 6.5. Establish and promote a policy and procedures for ex ante disaster recovery planning including from environmental hazards (chemical and oil spills) that will maximise limited national resources.
- 6.6. Improve mechanisms for providing post-disaster support to the population particularly socio-economic and mental health- psychological recovery.
- 6.7. Develop and implement a Recovery plan that addresses the immediate, short term and long-term recovery needs of the community (including a checklist).

## **Application**

The Ministry of Finance is leading Barbados' approach to incorporating risk mitigation and reduction in development investments as part of the mix of instruments for financing risk, inclusive of parametric insurance and emergency financing through the CDB. The Ministry therefore is a key stakeholder in ensuring that the resources are being made available to deliver on the goal of this Policy. They will be the driving force towards accelerated resilience through this CDM Policy and will be provide the requirement for objectives of CDM to be mainstreamed into the budgets of ministries.

Governance arrangements being applied under the Roof for Reef project relating to coordinating an all of government, all sectors approach provide a basis for engaging at the ministerial level through a cadre of specialists and a technical working group consisting of members/ agencies that lead on specific priority areas of the programme should be built on for the application of the Policy. Moreover, monitoring and evaluation is done annually on 10-year targets. Interactions are weekly with interdisciplinary groups

of the working group. Frequent and meaningful interaction is critical. For this Policy it is recommended that this approach is also applied led by The Director of DEM who will have operational responsibility for the CDM Policy and will provide annual reports on the progress of its implementation to the meetings of the EMAC and for the Cabinet through the Minister with the responsibility for the DRM Portfolio. The work of the DEM should be supported by CDM liaisons in each of the ministry as well as identification of CDM Champions.

It is proposed that the EMAC established under the Emergency Management Act serve as an inter-ministerial committee to recommend policies, programmes and activities to enhance the emergency management programme, be charged with oversight for policy coordination and implementation. The EMAC will have a Working Group dedicated to the Monitoring, Evaluation and Reporting on the work of the DEM Office and System. It could be enhanced to report to the Cabinet on the co-ordination of the National Comprehensive Disaster Management Policy among Ministries; and create a partnership among the Government, the nongovernmental agencies and the communities so as— (a) to facilitate an integrated approach to disaster risk management; and (b) to ensure that disaster risk management and, more particularly, risk reduction is incorporated into development procedures and policies with Government, non-governmental agencies and communities to address comprehensive disaster management. A technical working group dedicated to implementation of the Policy should be set-up and coordinate with the Roof to Reef Project Working Group and the National Sustainable Development Committee

A series of country work programmes will support the implementation of the policy. The current CWP is underway for the period 2019-2023. A first step to implementation will be identify the leads for each area of the policy and identifying the responsible agencies.

## **Monitoring, Evaluation and Reporting**

A MER system is required for the Policy to measure and monitor changes over time, track the effectiveness of the CDM implementation and guide future planning. The purpose of the MER framework is to inform decision makers whether targets are being met, when circumstances have changed, whether policies are on track, or not being implemented. Information would be provided on which decisions can be made about changes needed in implementation mechanisms.

A key output under expected outcome will lead to the establishment of clear MER mechanisms and frameworks so that all stakeholders involved in CDM are accountable for their individual roles and responsibilities and allow for learning and improvement, regular reporting and evaluation for all activities for all phases of DRM. It is recommended

that a Working Group attached the EMAC is established to be responsible for the MER. Key policies for consideration<sup>3</sup>:

The CDM National Disaster Offices (NDOs) in collaboration with National M&E units and Central Statistical Offices:

- (a) Establish and maintain a monitoring and evaluation function at national level for all relevant CDM programmes and projects relevant;
- (b) Ensure that the statistics and M&E functions are clearly allocated to specific units within the relevant national MAs, including the Central Statistical Office.
- (c) Ensure proper coordination and oversight of MER activities related to CDM programmes and projects in Barbados, respecting overall guidelines given by CDEMA CU;
- (d) Organize training and coaching to all units involved in CDM MER at country level;
- (e) Ensure that a national CDM Management Information System is in place and functioning efficiently, capturing and providing data on immediate outcome and output indicators of CDM programmes and projects in the country and outcomes/impacts at country level. This system will either be a national companion system similar to the CDM MER online data base monitoring information system run by CDEMA CU or, if the system already exists, be articulated with this regional system;
- (f) Validate national data entered by MAs on PMF indicators for all CDM programmes and projects relevant for their country;
- (g) Prepare a yearly performance report on implementation and results of all CDM programmes and projects relevant for their country (following the reporting template provided by CDEMA CU) and present it to CDEMA CU and other relevant stakeholders.

The country Ministries and Agencies (MAs) involved in CDM programme management and supervision:

- (a) Produce an annual policy statement and budget proposal, in line with their planning and budgeting framework documents, including key performance indicators and targets;
- (b) Ensure that the planning or policy unit contains one or more positions responsible for statistical production, monitoring and evaluation as defined in relevant job descriptions
- (c) Ensure that a Management Information System is in place in their MA and functioning efficiently, capturing and providing data on key output and outcome indicators. This system should be articulated with the national CDM management information system run by the NDO and the CDEMA CU MER on line data base monitoring information system;

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<sup>3</sup> Based on the CDM MER Policy

- (d) Plan and budget for monitoring and statistics annually, and review performance against work plans for enhancing this area. Sufficient resources should be allocated to monitoring and statistics for a functioning MER system;
- (e) Plan and budget for evaluation of all large projects and programmes;
- (f) Ensure proper coordination and oversight of M&E activities in the MA, in relation to this policy, related strategies, norms and guidance from CDEMA CU and other coordinating institutions;
- (g) (Enter data (following the data entry templates provided by CDEMA CU) on targeted and actual values of PMF indicators for the CDM programmes, programme components and projects they supervise at national level. MA programme managers will be responsible for providing data on the immediate outcome indicators of their programmes while the data on input, activity, output indicators for programme components and projects will be provided by executing agencies, validated by programme managers, and entered at their level;
- (h) Hold quarterly MA performance review meetings to determine progress and feed findings into Sector quarterly meetings;
- (i) Provide on an appropriate frequency progress and performance reports to the NDO and supporting partners;
- (j) Utilize M&E findings to inform programme decisions and resource allocation.

## Policy Review

A review of the Policy will be undertaken at agreed periods that relate to existing national and regional reporting, to assess whether it aligns with the Regional CDM Strategy, climate change and disaster risk reduction policy and other developments

The EMAC will establish the review period, oversee and consider the outcomes of the review of the Policy and determine if it is to be amended or replaced.

## Glossary

**Build Back Better-** The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment.

**Comprehensive Disaster Management-** The management of all hazards through all phases of the disaster management cycle – prevention, mitigation, preparedness, response, recovery and rehabilitation – by all peoples – public and private sectors, all segments of civil society and the general population in hazard prone areas. CDM involves risk reduction and management, and integration of vulnerability assessment into the development planning process. (CDEMA).



**The CDM Approach:** Is a seamless set of activities and interventions from preparation to mitigation, planning to prediction and response to recovery. Every activity is directed towards a never-ending quest for disaster resilience. It is an ongoing process by which governments, businesses, and civil society plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred.

**The CDM Enabling Framework:** Provides the necessary institutional, policy and legislative framework; a robust governance system, and a suite of decision support systems that will allow key players – communities, government and the private sector – to engage in risk reduction behaviour.

**The CDM Mainstreaming Framework:** Provides the necessary tools and guidelines for mainstreaming CDM into national development and sectoral plans. It also provides important toolkits for mainstreaming cross-sectoral issues such as gender, vulnerable groups and poverty into disaster management programmes and interventions.

**Disaster-** A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.

**Disaster Management-** The organization, planning and application of measures preparing for, responding to and recovering from disasters.

**Disaster Risk Management-** The application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.

**Disaster Risk Reduction-** Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.

**Disaster Risk-** The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.

**Emergency** is sometimes used interchangeably with the term disaster, as, for example, in the context of biological and technological hazards or health emergencies, which, however, can also relate to hazardous events that do not result in the serious disruption of the functioning of a community or society.

**Ex-ante financing-** Ex-ante risk financing instruments require proactive advance planning and involves investing in national catastrophe risk management prior to a natural disaster occurring e.g. Building Fiscal Buffers, Insurance Approaches, Mainstreaming Climate Risk into Infrastructure Lending, Innovative Financing Mechanisms, Blended Finance Approaches

**Exposure-** The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas.

**Hazard-** A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

**Mitigation-** The lessening or minimizing of the adverse impacts of a hazardous event.

**Preparedness-** The knowledge and capacities developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.

**Recovery-** The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster affected community or society, aligning with the principles of sustainable development and “build back better”, to avoid or reduce future disaster risk.

**Resilience-** The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.

**Response-** Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

**Vulnerability-**The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

**Vulnerable Groups-** the elderly, disabled, vulnerable women and children.