



# Regional Comprehensive Disaster Management (CDM) Strategy and Programming Framework 2014-2024 (DRAFT)

A publication of the Caribbean Disaster Emergency Management Agency, Building No. 1,
Manor Lodge Complex.
Lodge Hill,
St. Michael,
Barbados.
Tel: 1 (246) 435 0386. Fax: 1 (246) 425 8854.

www.cdema.org www.weready.org

This document may be reproduced and/or adopted in whole or in part providing that there is acknowledgement of CDEMA and no material change in the content, the procedures advocated or the policy recommended. Anyone wishing to reproduce or adopt should notify CDEMA in writing.

ISBN: 978-976-8243-21-8

An e-book version of this book is also available on the CDEMA website. ISBN 978-976-8243-22-5 Printed in Barbados.

© 2014

# **Acknowledgements**

The Caribbean Disaster Emergency Management Agency (CDEMA) is grateful to the consulting team of **Sage Consulting** - Joseph Smith Abbott, Donovan Gentles and Marlene Smith-Barrett - who led the process in elaborating the CDM Strategy 2014-2024.

The elaboration of the ten year CDM Strategy required extensive input and collaboration from the following development, regional and national partners who participated and gave freely of their expertise and knowledge - National Disaster Coordinators, members of the CDM Expert Panel, the CDM Coordination and Harmonization Council, the Gender Working Group, the established Sector Sub-Committees (Health, Tourism, Education, Agriculture, Civil Society) and the emerging sector sub-committees (Finance and Economic Development and Physical and Environmental Planning).

Members from these stakeholder groupings participated in an initial stakeholder consultative meeting, which took place in June 2013 in Barbados where the revised Logic Model was considered and refined. The meeting representatives were from the following agencies: NODS (Antigua and Barbuda), DDM (Anguilla), DEM (Barbados), NEMA (The Bahamas), ODM (Commonwealth of Dominica), NaDMA (Grenada), CDC (Guyana), NEMO (St. Vincent and the Grenadines), NEMA (Saint Kitts and Nevis), DDME (Turks and Caicos Islands), DDM (Virgin Islands), CCCCC, DRRC-UWI, UWI (ICSAC – Barbados), CCEO, DFATD, CPDC, DFID Caribbean, Delegation of the European Union to Barbados & OECS, IFRC, PAHO, UNDP CRMI, UNDP DRR, UNISDR, Kitch Consulting, and CDEMA.

A subsequent meeting took place in October 2013 in Barbados where the Logic Model was further refined and the Performance Monitoring Framework was considered and reviewed. Representatives from the National Disaster Coordination Offices included NODS (Antigua and Barbuda), DEM (Barbados), ODM (Dominica), NaDMA (Grenada), CDC (Guyana), CPD (Haiti), ODPEM (Jamaica), DMCA (Montserrat), NEMA (St. Kitts and Nevis), NEMO (St. Vincent and the Grenadines), ODPM (Trinidad and Tobago), DDME (Turks and Caicos Islands) and DDM (Virgin Islands). The Private and Finance Sectors included CDB, Caribbean Risk Managers Ltd/ CCRIF, and CCCU. The Physical Planning and Economic Development Sector included CCEO. Members of the Education Sector Sub-Committee included DRRC-UWI, University of Guyana, UTECH, UNICEF and CAS. Members of the Civil Sector Sub-Committee included CPDC, IFRC -Caribbean Regional Representation Office, ADRA Caribbean, HelpAge International and CANARI. The Health Sector Sub-Committee included Ministry of Health – Jamaica and Ministry of Health – Saint Lucia. The Agriculture Sector Sub-Committee included CABA, CAFAN, CCCCC, IICA and CFNO. The Tourism Sector Sub-Committee included Ministry of Tourism - The Bahamas. Members of the CHC included DFATD, DFID Caribbean, Delegation of the European Union to Barbados & OECS, UNDP and OECS. Members of the CDEMA CU included Ronald Jackson (Executive Director), Elizabeth Riley (Deputy Executive Director), Andria Grosvenor (Alliance & Cooperation Services Manager), Dr. Elvis Nurse (Director - Resource Management & Administration Division), Oronde Lambert (ICT Manager), Donna Walker (HR Manager), Joanne Persad (Programme Manager-Response and Recovery), Robert Harewood (Programme Manager-Response and Recovery), Donna Pierre (Mitigation and Preparedness Specialist – Roving Technical Support Team), Claudine Roberts (Community Disaster Planning Specialist - Roving Technical Support Team), Atiba Morris (ICT Support Specialist), Patricia Maughan (Project Coordinator – RPG2), Stacy Harris (Conference Coordinator), Cisne Pascal (Programme Coordinator - CDM HIP), Ricardo Yearwood (Programme Officer - CDM HIP), Gayle Drakes (Programme Officer - CDM HIP), Saudia Rahat (Senior Programme Officer – CDM HIP) and Michelle Harris (Secretary – CDM HIP)

CDEMA also expresses its appreciation to the **Department for International Development (UK Aid), the Canadian International Development Agency (CIDA) and the Australian Agency for International Development (AusAID)** for the financial support provided for the process and publication of the report through the Comprehensive Disaster Management Harmonised Implementation Programme (CDM HIP), Phase 1.

Above all, this plan is drafted with the paramount concern and unflinching desire that it should make a difference in the lives of Caribbean people; that through the collective efforts of national, regional and international partners, who have decided to harmonise plans and pool their resources that lives, livelihoods and property will be saved from the ravages of disasters and hazard events, which impact our region and do not discriminate in their outcome by class, gender, political status or age.

# Acronyms

ADRA Adventist Development and Relief Agency

AusAID Australian Agency for International Development

CABA Caribbean Agribusiness Association

CAFAN Caribbean Farmers Network

CANARI Caribbean Natural Resources Institute

CARICOM Caribbean Community

CAS Caribbean Academy of Sciences

CBDM Community-Based Disaster Management

CCA Climate Change Adaptation

CCCCC Caribbean Community Climate Change Centre
CCEO Council of Caribbean Engineering Organizations

CDB Caribbean Development Bank

CDEMA Caribbean Disaster and Emergency Management Agency

CDEMA CHC Caribbean Disaster and Emergency Management Agency Council on Harmonisation and

Coordination

CDEMA CU Caribbean Disaster and Emergency Management Agency Coordinating Unit

CC Climate Change

CCA Climate Change Adaptation

CCCU Caribbean Confederation of Credit Unions
CCRIF Caribbean Catastrophe Risk Insurance Facility

CDC Civil Defense Commission

CDERA Caribbean Disaster and Emergency Response Agency

CDM Comprehensive Disaster Management
CIDA Canadian International Development Agency
CNFO Caribbean Network of Fisher Folk Organizations

COE Centres of Excellence
CPD Civil Protection Directorate

CPDC Caribbean Policy Development Centre
CSME Caribbean Single Market and Economy

CWP Country Work Programme

DDM Department of Disaster Management

DDME Department of Disaster Management and Emergencies

DEM Department of Emergency Management

DFATD Department of Foreign Affairs, Trade and Development

DFID Department for International Development

DM Disaster Management

DMCA Disaster Management Coordination Agency

DRM Disaster Risk Management
DRR Disaster Risk Reduction

DRRC Disaster Risk Reduction Centre

EWS Early Warning Systems
HFA Hyogo Framework for Action

HVA Hazard and Vulnerability Assessment

ICT Information, Communications and Technology

IFRC International Federation of Red Cross

IICA Inter-American Institute for Cooperation on Agriculture

IPCC Inter-governmental Panel on Climate Change
IUCN International Union for Conservation of Nature

MDG Millennium Development Goals
MER Monitoring, Evaluation and Reporting
NaDMA National Disaster Management Agency

NDO National Disaster Organisation

NEMA National Emergency Management Agency
NEMO National Emergency Management Office
NEOC National Emergency Operations Centre
NODS National Office of Disaster Services
ODM Office of Disaster Management

OECD DAC Organisation for Economic Co-operation and Development – Development Assistance

Committee

OECS Organisation of Eastern Caribbean States

ODPM Office for Disaster Preparedness and Management

ODPEM Office of Disaster Preparedness and Emergency Management

PBA Programme Based Approach

PMF Performance Monitoring Framework

POA Programme of Action
PS Participating State

RBM Results Based Management SSC Sector Sub-Committee

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change

UNICEF United Nations Children's Fund

UNISDR United Nations International Strategy for Disaster Reduction

USAID United States Agency for International Development

UTECH University of Technology

# **Definitions/Glossary**

**Building code** 

A set of ordinances or regulations and associated standards intended to control aspects of the design, construction, materials, alteration and occupancy of structures that are necessary to ensure human safety and welfare, including resistance to collapse and damage. Comment: Building codes can include both technical and functional standards. They should incorporate the lessons of international experience and should be tailored to national and local circumstances. A systematic regime of enforcement is a critical supporting requirement for effective implementation of building codes (UNISDR, 2009).

Capacity

The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.

Comment: Capacity may include infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management. Capacity also may be described as capability. Capacity assessment is a term for the process by which the capacity of a group is reviewed against desired goals, and the capacity gaps are identified for further action (UNISDR, 2009).

Capacity Development The process by which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals, including through improvement of knowledge, skills, systems, and institutions.

Comment: Capacity development is a concept that extends the term of capacity building to encompass all aspects of creating and sustaining capacity growth over time. It involves learning and various types of training, but also continuous efforts to develop institutions, political awareness, financial resources, technology systems, and the wider social and cultural enabling environment (UNISDR, 2009).

Climate change

(a) The Inter-governmental Panel on Climate Change (IPCC) defines climate change as: "a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural (b) The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods".

Comment: For disaster risk reduction purposes, either of these definitions may be suitable, depending on the particular context. The UNFCCC definition is the more restricted one as it excludes climate changes attributable to natural causes. The IPCC definition can be paraphrased for popular communications as "A change in the climate that persists for decades or longer, arising from either natural causes or human activity." (UNISDR, 2009)

Climate Change Adaptation The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Comment: This definition addresses the concerns of climate change and is sourced from the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC). The broader concept of adaptation also applies to non-climatic factors such as soil erosion or surface subsidence. Adaptation can occur in autonomous fashion, for example through market changes, or as a result of intentional adaptation policies and plans. Many disaster risk reduction measures can directly contribute to better adaptation (UNISDR, 2009).

Climate Variability

Variations in the mean state and other statistics (such as standard deviations, the occurrence of extremes, etc.) of the climate on all temporal and spatial scales beyond that of individual weather events (IPCC, 2007).

Departures from long-term averages or trends over seasons or a few years (CARICOM,

2003)

Community

Rural villages and/or urban neighbourhoods, which include shared experiences, locality, culture, language and social interests. These characteristics imply that a community should have some common cohesive social structures, which can be schools, community policies, common rules and regulations and most often a clearly defined geographical area. It could be difficult for an outsider to identify a community as the description of "where a community starts and ends" and therefore, it depends on feedback from the community itself (UNISDR, 2006). Within the context of the performance measurement frameworks contained in the strategy, it is defined geographically by the *Participating State's electoral districts*, irrespective of other prevailing commonalities (Sage Consultancy Services).

Contingency planning

A management process that analyses specific potential events or emerging situations that might threaten society or the environment and establishes arrangements in advance to enable timely, effective and appropriate responses to such events and situations.

Comment: Contingency planning results in organized and coordinated courses of action with clearly identified institutional roles and resources, information processes, and operational arrangements for specific actors at times of need. Based on scenarios of possible emergency conditions or disaster events, it allows key actors to envision, anticipate and solve problems that can arise during crises. Contingency planning is an important part of overall preparedness. Contingency plans need to be regularly updated and exercised. (UNISDR, 2009)

Coping capacity

The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters.

Comment: The capacity to cope requires continuing awareness, resources and good management, both in normal times as well as during crises or adverse conditions. Coping capacities contribute to the reduction of disaster risks. (UNISDR, 2009)

Cross-Cutting Theme

A subject, topic or interconnected topics that flow across multiple sectors and impacts in more than one field. Cross-cutting themes require action in multiple fields and should be integrated into all areas of development agendas/programs (adapted from a number of UN references on governance and development planning reports/publications)

Disaster

A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.

Comment: Disasters are often described as a result of the combination of: the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease and other negative effects on human physical, mental and social well-being, together with damage to property, destruction of assets, loss of services, social and economic disruption and environmental degradation. (UNISDR, 2009)

Disaster risk

The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period. Comment: The definition of disaster risk reflects the concept of disasters as the outcome of continuously present conditions of risk. Disaster risk comprises different types of potential losses which are often difficult to quantify. Nevertheless, with knowledge of the prevailing hazards and the patterns of population and socio-economic development, disaster risks can be assessed and mapped, in broad terms at least. (UNISDR, 2009)

Disaster risk management

The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

Comment: This term is an extension of the more general term "risk management" to address

the specific issue of disaster risks. Disaster risk management aims to avoid, lessen or transfer the adverse effects of hazards through activities and measures for prevention, mitigation and preparedness. (UNISDR, 2009)

Disaster reduction

The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Comment: A comprehensive approach to reduce disaster risks is set out in the United Nations-endorsed Hyogo Framework for Action, adopted in 2005, whose expected outcome is "The substantial reduction of disaster losses, in lives and the social, economic and environmental assets of communities and countries." The International Strategy for Disaster Reduction (ISDR) system provides a vehicle for cooperation among Governments, organisations and civil society actors to assist in the implementation of the Framework. Note that while the term "disaster reduction" is sometimes used, the term "disaster risk reduction" provides a better recognition of the ongoing nature of disaster risks and the ongoing potential to reduce these risks. (UNISDR, 2009)

Early warning system

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

Comment: This definition encompasses the range of factors necessary to achieve effective responses to warnings. A people-centred early warning system necessarily comprises four key elements: knowledge of the risks; monitoring, analysis and forecasting of the hazards; communication or dissemination of alerts and warnings; and local capabilities to respond to the warnings received. The expression "end-to-end warning system" is also used to emphasize that warning systems need to span all steps from hazard detection through to community response. (UNISDR, 2009)

**Ecosystem services** 

The benefits that people and communities obtain from ecosystems.

Comment: This definition is drawn from the Millennium Ecosystem Assessment. The benefits that ecosystems can provide include "regulating services" such as regulation of floods, drought, land degradation and disease, along with "provisioning services" such as food and water, "supporting services" such as soil formation and nutrient cycling, and "cultural services" such as recreational, spiritual, religious and other non-material benefits. Integrated management of land, water and living resources that promotes conservation and sustainable use provide the basis for maintaining ecosystem services, including those that contribute to reduced disaster risks. (UNISDR, 2009)

Emergency management

The organization and management of resources and responsibilities for addressing all aspects of emergencies, in particular preparedness, response and initial recovery steps.

Comment: A crisis or emergency is a threatening condition that requires urgent action. Effective emergency action can avoid the escalation of an event into a disaster. Emergency management involves plans and institutional arrangements to engage and guide the efforts of government, non-government, voluntary and private agencies in comprehensive and coordinated ways to respond to the entire spectrum of emergency needs. The expression "disaster management" is sometimes used instead of emergency management. (UNISDR, 2009)

Environmental degradation

The reduction of the capacity of the environment to meet social and ecological objectives and needs.

Comment: Degradation of the environment can alter the frequency and intensity of natural hazards and increase the vulnerability of communities. The types of human-induced degradation are varied and include land misuse, soil erosion and loss, desertification,

wildland fires, loss of biodiversity, deforestation, mangrove destruction, land, water and air pollution, climate change, sea level rise and ozone depletion. (UNISDR, 2009)

Environmental impact assessment

Process by which the environmental consequences of a proposed project or programme are evaluated, undertaken as an integral part of planning and decision-making processes with a view to limiting or reducing the adverse impacts of the project or programme.

Comment: Environmental impact assessment is a policy tool that provides evidence and analysis of environmental impacts of activities from conception to decision-making. It is utilized extensively in national programming and project approval processes and for international development assistance projects. Environmental impact assessments should include detailed risk assessments and provide alternatives, solutions or options to deal with identified problems. (UNISDR, 2009)

Environmental Sustainability See definitions for "Sustainable" and "Sustainable Development"

Gender

The social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/time-specific and changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender is part of the broader socio-cultural context. (UNISDR, UNDP and IUCN, 2009)

Gender analysis

Assessment of the vulnerabilities and inequalities between men and women before, during and after a disaster event. It requires collection of sex disaggregated data for baseline and situational analysis. Analysis of this data leads to the development of policies, programs and projects which take account of gender in all phases of design and implementation and close existing gaps. A process of understanding the different activities and responsibilities of women and men, and their access to resources and decision making. Gender analysis helps us understand the roles and relations of men and women. It frames questions about who does what, when and why. (Kambon, 2013)

Gender mainstreaming

Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality. (UNISDR, UNDP and IUCN, 2009)

Hazard

A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

Comment: The hazards of concern to disaster risk reduction as stated in footnote 3 of the Hyogo Framework are "... hazards of natural origin and related environmental and technological hazards and risks." Such hazards arise from a variety of geological, meteorological, hydrological, oceanic, biological, and technological sources, sometimes acting in combination. In technical settings, hazards are described quantitatively by the likely frequency of occurrence of different intensities for different areas, as determined from historical data or scientific analysis. (UNISDR, 2009)

Impact (Disaster Risk context)

A sudden occurrence without prior warning (EMA Manual 1998)

Impact (Results Based context)

Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended. (OECD DAC)

Livelihood

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base. (Chambers, 1991). Livelihoods are viewed as systems and provide a way to understand: (1) the assets people draw upon, (2) the strategies they develop to make a living, (3) the context within which a livelihood is developed, and (4) those factors that make a livelihood more or less vulnerable to shocks and stresses. Assets may be tangible, such as food stores and cash savings, as well as trees, land, livestock, tools, and other resources. Assets may also be intangible such as claims one can make for food, work, and assistance as well as access to materials, information, education, health services and employment opportunities. Another way of understanding the assets, or capitals, that people draw upon to make a living is to categorize them into the following five groups: human, social, natural, physical, financial, and political capitals. Livelihoods are formed within social, economic and political contexts. Institutions, processes and policies, such as markets, social norms, and land ownership policies affect the ability to access and use assets for a favorable outcome. As these contexts change they create new livelihood obstacles or opportunities. Livelihoods are also shaped by the changing natural environment. The quality of soil, air and water; the climatic and geographic conditions; the availability of fauna and flora; and the frequency and intensity of natural hazards all influence livelihood decisions. How people access and use these assets, within the aforementioned social, economic, political and environmental contexts, form a livelihood strategy. The range and diversity of livelihood strategies are enormous. An individual may take on several activities to meet his/her needs. One or many individuals may engage in activities that contribute to a collective livelihood strategy. Within households, individuals often take on different responsibilities to enable the sustenance and growth of the family. In some cultures, this grouping may expand to a small community, in which individuals work together to meet the needs of the entire group. The strength of a given livelihood is not only measured by its productive outcomes, but equally by its resilience to shocks, seasonal changes and trends. Shocks might include natural disasters, wars, and economic downturns. Availability of resources, income-generating opportunities, and demand for certain products and services may fluctuate seasonally. More gradual and often predictable, trends in politics and governance, technology use, economics, and availability of natural resources, can pose serious obstacles to the future of many livelihoods. These changes impact the availability of assets and the opportunities to transform those assets into a "living". Under such conditions, people must adapt existing strategies or develop new strategies in order to survive. One final important characteristic of livelihoods is their interdependence. Very few livelihoods exist in isolation. A given livelihood may rely on other livelihoods to access and exchange assets. Traders rely on farmers to produce goods, processors to prepare them, and consumers to buy them. Livelihoods also compete with each other for access to assets and markets. Thus positive and negative impacts on any given livelihood will, in turn, impact others. This is a particularly important consideration when planning livelihood assistance. (International Recovery Platform, UNDP and ISDR)

Logical Framework/
Logic Model

Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution and evaluation of a development intervention. (OECD DAC)

Mitigation

The lessening or limitation of the adverse impacts of hazards and related disasters.

Comment: The adverse impacts of hazards often cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness. It should be noted that in climate change policy, "mitigation" is defined differently, being the term used for the reduction of greenhouse gas emissions that are the source of climate change. (UNISDR, 2009)

Outcome

The likely or achieved short-term and medium-term effects of an intervention's outputs. (OECD DAC)

Outputs

The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes. (OECD DAC)

Performance Indicator A variable that allows the verification of changes in the development intervention or shows results relative to what was planned. (OECD DAC)

Performance Measurement A system for assessing performance of development interventions against stated goals. (OECD DAC)

Performance Monitoring A continuous process of collecting and analysing data to compare how well a project, program, or policy is being implemented against expected results. (OECD DAC)

Preparedness

The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions. Comment: Preparedness action is carried out within the context of disaster risk management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response through to sustained recovery. Preparedness is based on a sound analysis of disaster risks and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities. The related term "readiness" describes the ability to quickly and appropriately respond when required. (UNISDR, 2009)

Prevention

The outright avoidance of adverse impacts of hazards and related disasters.

Comment: Prevention (i.e. disaster prevention) expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance. Examples include dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high risk zones, and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake. Very often the complete avoidance of losses is not feasible and the task transforms to that of mitigation. Partly for this reason, the terms prevention and mitigation are sometimes used interchangeably in casual use. (UNISDR, 2009)

Program Based Approach A way of engaging in development cooperation based on the principle of coordinated support for a locally owned programme of development. The approach includes four key elements:

- Leadership by the host country or organization.
- A single programme and budget framework.
- Donor coordination and harmonization of procedures.
- Efforts to increase the use of local procedures over time with regard to programme design and implementation, financial management, and monitoring and evaluation." (Baastel-ESL (Canada-Jamaica), 2007)

Public awareness

The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards.

Comment: Public awareness is a key factor in effective disaster risk reduction. Its development is pursued, for example, through the development and dissemination of information through media and educational channels, the establishment of information centres, networks, and community or participation actions, and advocacy by senior public officials and community leaders. (UNISDR, 2009)

Recovery

The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors. Comment: The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended, and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programmes, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the "build back better" principle. (UNISDR, 2009)

Resilience

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to 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.

Comment: Resilience means the ability to "resile from" or "spring back from" a shock. The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need. (UNISDR, 2009)

Increasingly, communities must account for the effects that Climate Change may have on their ability to spring back. The inclusion of climate change considerations into development programming will allow countries to remain on their projected paths by minimising economic and environmental losses, thereby ensuring greater sustainability (CDEMA, 2013).

Response

The provision of emergency services and public assistance 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.

Comment: Disaster response is predominantly focused on immediate and short-term needs and is sometimes called "disaster relief". The division between this response stage and the subsequent recovery stage is not clear-cut. Some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage. (UNISDR, 2009)

Results-Based Management A management strategy focusing on performance and achievement of outputs, outcomes and impacts. (OECD DAC). Rather than focusing programme/project management efforts on the monitoring of inputs, activities and processes, an RBM approach concentrates on 'results' and places emphasis on the following dimensions: Defining realistic results based on appropriate analysis and context; Clearly identifying programme beneficiaries and designing programmes/projects that meet their needs and priorities; Using results information to make effective management decisions; Monitoring the progress made towards expected results with the use of appropriate indicators (Baastel-ESL (Canada-Jamaica), 2007)

The combination of the probability of an event and its negative consequences.

Comment: This definition closely follows the definition of the ISO/IEC Guide 73. The word

Risk

"risk" has two distinctive connotations: in popular usage the emphasis is usually placed on the concept of chance or possibility, such as in "the risk of an accident"; whereas in technical settings the emphasis is usually placed on the consequences, in terms of "potential losses" for some particular cause, place and period. It can be noted that people do not necessarily share the same perceptions of the significance and underlying causes of different risks. (UNISDR, 2009)

Risk assessment

A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend. Comment: Risk assessments (and associated risk mapping) include: a review of the technical characteristics of hazards such as their location, intensity, frequency and probability; the analysis of exposure and vulnerability including the physical social, health, economic and environmental dimensions; and the evaluation of the effectiveness of prevailing and alternative coping capacities in respect to likely risk scenarios. This series of activities is sometimes known as a risk analysis process. (UNISDR, 2009)

Risk management

The systematic approach and practice of managing uncertainty to minimize potential harm and loss.

Comment: Risk management comprises risk assessment and analysis, and the implementation of strategies and specific actions to control, reduce and transfer risks. It is widely practiced by organizations to minimise risk in investment decisions and to address operational risks such as those of business disruption, production failure, environmental damage, social impacts and damage from fire and natural hazards. Risk management is a core issue for sectors such as water supply, energy and agriculture whose production is directly affected by extremes of weather and climate. (UNISDR, 2009)

Safety (Safer)

The control of recognized hazards to achieve an acceptable level of risk. The maintenance of an environment that is relatively free from actual or potential hazards that can injure people – Industrial Accident Prevention Association

Sustainable

A system (natural/ecological or human) which has the capacity to endure. The potential for long-term maintenance of well-being, which has ecological, economic, political and cultural dimensions. Sustainability requires the reconciliation of environmental, social equity and economic demands.. (World Commission on Environment and Development, 1987)<sup>1</sup>

Sustainable development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Comment: This definition coined by the 1987 Brundtland Commission is very succinct but it leaves unanswered many questions regarding the meaning of the word development and the social, economic and environmental processes involved. Disaster risk is associated with unsustainable elements of development such as environmental degradation, while conversely disaster risk reduction can contribute to the achievement of sustainable development, through reduced losses and improved development practices. (UNISDR, 2009)

Vulnerability

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

Comment: There are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors. Examples may include poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise

<sup>&</sup>lt;sup>1</sup> Definition is adapted from the full report of the Brundtland's Commission.

environmental management. Vulnerability varies significantly within a community and over time. This definition identifies vulnerability as a characteristic of the element of interest (community, system or asset) which is independent of its exposure. However, in common use the word is often used more broadly to include the element's exposure. (UNISDR, 2009)

# **Table of Contents**

Acknowledgements	iii
Acronyms	v
Definitions/Glossary	vii
Executive Summary	3
The Caribbean Hazard Landscape	7
2. Genesis and Evolution of CDM in the Caribbean Region	7
3. Purpose of the CDM Strategy 2014-2024	8
4. Guiding Principles for Defining the CDM Strategy 2014-2024	8
5. The CDM Strategy 2014 – 2024: What is New?	9
6. CDM and International Development Agendas	9
6.1. Hyogo Framework for Action 2005 – 2015	10
6.2. Hyogo Framework Post 2015	10
6.3. Millennium Development Goals	11
6.4. Rio Plus 20	11
7. CDM and Regional Development Agendas	
7.1. CARICOM Regional Framework 2005 – 2015	12
7.2. Organisation of Eastern Caribbean States (OECS) – St. George's Declaration Environmental Sustainability	•
7.3. A Regional Framework for Achieving Development Resilient to Climate Chang	
8. Process to Define the CDM Strategy 2014-2024	14
8.1. Status of implementation of the CDM Strategy 2007 – 2012	14
8.2. Sector Analysis – Areas of Convergence	15
8.3. Broad-Based Stakeholder Consultation	16
9. The Future Desired State	17
9.1. CDM Blueprint	17
10. The CDM Strategy Logic Model	19
11. The Long Term Goal of the CDM Strategy – The Impact Statement	22
12. The Short to Medium Term Results of the CDM Strategy 2014-2024	25
12.1. Priority Outcome 1	26
12.2. Priority Outcome 2	27
12.3. Priority Outcome 3	28
12.4. Priority Outcome 4	29
12 Cross-Cutting Thomas	30

13.1	. Climate Change30
13.2	. Gender Mainstreaming31
13.3	Information, Communications and Technology
13.4	Environmental Sustainability
14.	The CDM Governance Mechanism
15.	Mainstreaming CDM in Sectors
15.1	Emerging Sector of Finance and Economic Development
15.2	Emerging Sector of Physical and Environmental Planning
16.	Monitoring, Evaluation and Reporting
17.	Conclusion
Impleme	List of Representatives and Organisations Consulted in the Elaboration of the CDM Strategy ntation Plan and the Performance Measurement Framework
	es38
Endnotes	540
List of	Figures
Figure 1:	Results Framework for the Comprehensive Disaster Management Strategy 2014 - 2024 with
Cross-Cu	tting Themes5
Figure 2:	Elements of the Future Desired State for CDEMA PS for the strategic period of 2014 - 2024 17
Figure 3:	Elements of the CDM Blueprint at the National Level18
Figure 4:	Logic Model for the Comprehensive Disaster Management Strategy 2014 – 2024 displaying the
interrelat	ionships between various results20
Figure 5:	Logic Model for the CDM Strategy outlining the plan's purpose and cross cutting themes 21
Figure 6:	Prevailing factors informing the impact statement for the CDM Strategy 2014 - 202423
Figure 7:	Components of the Unifying Theme for the CDM Strategy 2014 - 2024: Resilient Caribbean
Commun	ities22
Figure 8:	Outcome 1 and associated outputs26
Figure 9:	Outcome 2 and associated outputs27
Figure 10	: Outcome 3 and associated outputs28
Figure 11	: Outcome 4 and associated outputs29
Figure 12	: CDM Governance Mechanism33

# **Executive Summary**

Sage Consultancy Services was contracted to provide technical services for the review of the 2007 – 2012 Comprehensive Disaster Management Strategy and Programming Framework, elaborate the CDM Strategy 2014-2024 and supporting Implementation Plan and Performance Monitoring Framework. The outcomes of an extensive process of consultation with national, regional and development partners was used to inform and elaborate a CDM Strategy for the period 2014- 2024. The strategic period has been lengthened from five to ten years to reflect the reality that meaningful developmental change will be measured by actions at the community and sectoral levels, which takes time. The CDM Strategy 2014 – 2024 builds on the strengths of well-founded and functional governance structures. It is designed to continue the process of embedding and institutionalizing CDM as the Caribbean's platform for achieving risk reduction. It proposes to do this over a ten year strategic period and expands on the original key sectors embraced (Agriculture, Tourism, Health, Civil Society and Education) to include Finance/Economic Development and Physical and Environmental Planning. Additionally it places increased focus on integrating disaster risk reduction and climate change considerations and their impact on vulnerable groups.

# Genesis and Evolution of the CDM in the Caribbean Region

In recognizing the critical link between disaster management and sustainable development, the Caribbean Disaster Emergency Response Agency (CDERA), now the Caribbean Disaster Emergency Management Agency (CDEMA), spearheaded the adoption of a strategic CDM framework in 2001 in collaboration with stakeholders. The strategic objective of Comprehensive Disaster Management (CDM) is the integration of disaster management considerations into the development planning and decision-making process of CDEMA's PS.

In 2007, the CDEMA CU, with the support of and in collaboration with its partners, completed a revised and Enhanced Regional Strategy and Programming Framework to guide CDM programming in the Caribbean for the period 2007-2012 in the first instance. This Strategy was established within the context of the 2005-2015 CARICOM Regional Framework and developed in-line with Results-Based Management (RBM) principles and approaches. The Enhanced CDM Strategy was baseline in 2010 and reviewed 2012, the findings of which were used as the basis for developing the 2014-2024 CDM Strategy presented in this report.

#### Defining the 2014-2024 CDM Strategy and Framework

The 2014-2024 Framework was informed by findings from an evaluation of the progress made on the CDM Strategy 2007-2012 and broad-based stakeholder consultation over one year. These processes yielded valuable data and a set of emerging priorities on which the framing of the strategic plan going forward was based.

The goal of the draft CDM Strategy 2014-2024 is to realize "Safer, more resilient and sustainable CDEMA Participating States through Comprehensive Disaster Management". This goal is supported by four high level priority outcomes and sixteen outputs as represented in the CDM Logic Model. The strategic framework also embodies seven elements which when realized will lead to the desired future state of Participating States. These are:

- i. National, regional and sectoral institutions with adequate/minimum standards of capacity to deliver the CDM program
- ii. Knowledge management which is applied for fact-based decision-making

- iii. Disaster resilience which is enhanced within key sectors of the economy
- iv. Operational readiness at regional, national, sectoral and local levels
- v. A clearly established and understood nexus between CCA and DRR with programming and governance harmonised
- vi. Community resilience which has been enhanced for the most vulnerable with gender concerns addressed at all stages and levels
- vii. Resource allocation which underpins the ability to deliver the strategy

#### **Implementation Context**

Implementation of the CDM Strategy going forward will see the maintenance of cross-cutting themes featured in the previous strategic period with the inclusion of a new one. These are;

- a. Gender
- b. Climate Change
- c. Information and Communications Technology
- d. Environmental Sustainability\*\*

Implementation of CDM in the region is increasingly maturing and is being endorsed and bought into by many stakeholders and partners at all levels across the region. This has allowed for the formulation of a very inclusive governance mechanism which provides support, oversight and guidance to CDEMA in managing the process. The CDM Governance Mechanism that is evolving is an innovative and pioneering, inter-institutional partnership that allows for cooperation, coordination and participation in the mainstreaming of disaster risk reduction at all levels across the region.

The CDM Governance Mechanism will also be instrumental in ensuring that CDM is mainstreamed at all levels in the region. The CDM Strategy 2014-2024 will continue to further integrate existing participating sectors whilst providing the environment for emerging sectors to come onboard through the articulation of sector policies, plans and programs. It is anticipated that finance and economic development, and physical and environmental planning sectors will be sufficiently engaged to adopt CDM during this strategic period.

#### The Results Framework for the Comprehensive Disaster Management Strategy 2014 - 2024

Local, national and regional needs have been identified and documented through a highly consultative and participatory process of review and assessment, which led to the reformulation of the results framework for this strategy. The CDM Expert Group and over 50 national and regional level organisations were involved in the determination of priorities and the results to be delivered over the upcoming ten-year period. Therefore, the results framework builds on the strengths of the former one and strategically aligns an integrated risk management approach with climate change considerations, the need for greater penetration of CDM within sectors and local communities, the continued focus on gender and a greater emphasis on the needs of vulnerable groups. The cross-cutting themes of climate change, gender, information and communications technology and environmental sustainability underpin all of the actions and results to be delivered.

The outcomes and outputs presented below represent the vision of a safer, more resilient Caribbean through Comprehensive Disaster Management and will provide the focus for the collective effort of many stakeholders who will remain engaged throughout the strategy's term.

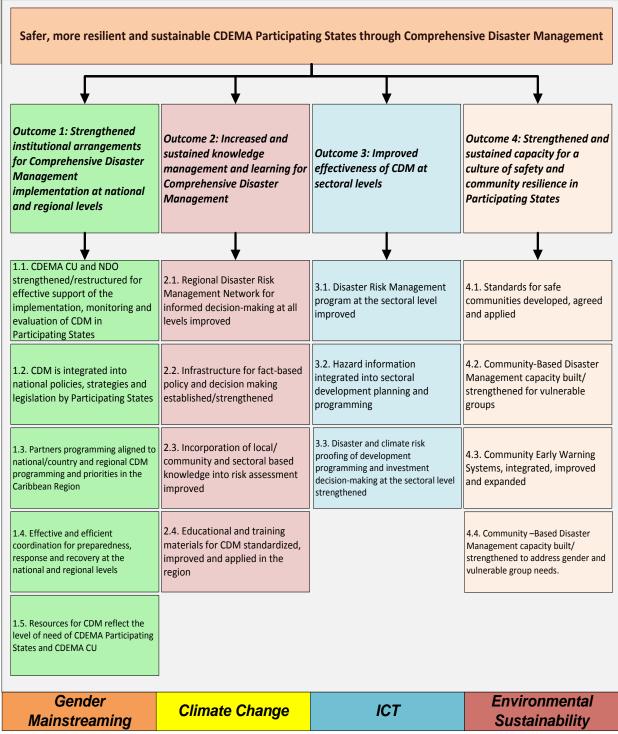


Figure 1: Results Framework for the Comprehensive Disaster Management Strategy 2014 - 2024 with Cross-Cutting Themes

# **Monitoring and Evaluation**

To monitor and measure progress over the strategic period, a performance monitoring and evaluation framework has been designed to ensure that the region will have access to the required tools and be assured of timely reviews to reflect on progress being made, challenges being encountered and corrective actions required to ensure that the future desired state is realized within the agreed upon timeframes.

#### **Conclusion**

Ultimately, the Comprehensive Disaster Management Strategy 2014 – 2024 differs as it will expand the stakeholder base with the inclusion of the emerging priority of Physical and Environmental Planning and Finance and Economic Development sectors. It is strongly centred on actions which enhance public-private partnerships and which must be treated within all the sector groupings. It focuses on a more strategically aligned and integrated risk management approach, where climate change considerations are positioned as a vehicle for implementation of this agenda and it finally enhances results-oriented programming whilst elaborating an Implementation Plan, Performance Measurement Framework and an online database

# 1. The Caribbean Hazard Landscape

The vulnerability of the Caribbean region to a diverse set of hazards is well documented. Most of the countries are within the recognized hurricane belt and there is seismic activity throughout the Caribbean with frequent events being recorded. A number of Islands are mostly the tops of volcanoes, which are situated along major transportation and trans-shipment routes exposing them to migratory vector borne diseases and are increasingly becoming industrialized heightening the possibility and potential for major accidents.

Within recent decades the region has experienced repeated losses from hurricanes and associated wind, rain and storm surge damage. The Caribbean is the second most hazard prone region in the world. Regular annual disaster losses are estimated at \$3 billion with significant loss to social and productive sectors. Volcanic eruption destroyed the economy and social life in Montserrat. Flooding and landslides have repeatedly occurred in several territories and continue to damage physical infrastructure. Droughts have reduced agricultural output and water supply. Impacts from hazards will only intensify as a result of Climate Change, as 60% of the region's population and 70% of economic activity are within two miles of coastlines.

This landscape precipitated the need for the development of multi-hazard contingency and coordinated response plans as a means to mitigating and lessening the potential impacts from these hazards.

# 2. Genesis and Evolution of CDM in the Caribbean Region

In 2001, the Caribbean Disaster Emergency Management Agency (CDEMA), then called the Caribbean Disaster Emergency Response Agency (CDERA), recognising the critical link between disasters and sustainable development, spearheaded the development and adoption of a strategic framework for Comprehensive Disaster Management (CDM). The development of the strategy was supported by the United Nations Development Program (UNDP) and the United States Agency for International Development (USAID). The strategic objective of CDM is the integration of disaster management considerations into the development planning and decision-making process of CDEMA's Participating States (PS).

After over 5 years (2001 – 2006) of CDM operations in the region, CDEMA updated and revised the CDM strategy producing an enhanced CDM Strategy to guide Disaster Risk Management (DRM) programming in the Caribbean for the 2007-2012 period. The review was conducted within a Results Based Management (RBM) framework which identified four priority outcomes to inform programming support over five years. The baseline for the CDM Strategy 2007-2012 was established in 2010 through the development and finalization of the MER framework for the CDM Strategy.

The review of the CDM Strategy 2007-2012 indicated that after twelve (12) years of embracing CDM in the region, the need still exists to ensure that the region remains steadfast on its course towards reducing loss of lives and property whilst continuing to reflect the principles and requirements of related regional and international platforms, policies and strategies. Moving forward, CDM must become the *status quo* approach and practice for saving lives and property in the region.

# 3. Purpose of the CDM Strategy 2014-2024

This iteration of the CDM Strategy is designed to continue the process of embedding and institutionalizing CDM as the Caribbean's platform for achieving risk reduction. The timeframe associated with this strategic period has been extended to ten years (10) to make provision for a phased approach to implementing activities by stakeholders with differing capacities and capabilities.

This strategic programming framework was not intended to replace or supersede any existing programming frameworks or policy instruments but embrace and integrate relevant initiatives underway whilst identifying gaps which needed addressing. Successive enhancements of the CDM Strategy have built on this principle and now represent an agreed consensus approach to achieving disaster risk reduction in the region.

# 4. Guiding Principles for Defining the CDM Strategy 2014-2024

The current cycle of revision has maintained all the tried and tested processes utilized in developing and maintaining previous iterations of the CDM Strategy. These include:

#### Research and Documentation Review

A number of existing reference documents including international, regional, national and local reports, strategies, plans and polices were reviewed to inform continuity, alignment and consistency in purpose and intent.

#### **Inclusiveness and Consultation**

All relevant stakeholders were included and participated in either formal assessments, interviews and focus groups meetings.

#### **Building on Conditions Precedent**

The status of implementation of previous CDM frameworks has been established through assessments, audits and reports. The current framework has taken cognizance of these findings and lessons learnt, incorporated current expressed priorities and key thematic areas for consideration to inform the 2014 – 2024 strategy and desired state.

#### Applied Knowledge

The current review exercise has benefited from the collective knowledge and expertise of a specialist team of practitioners who have over 20 years' core experience in Caribbean Disaster Management matters generally and specifically on the CDM Strategy from inception to present. The team's detailed working knowledge of monitoring, evaluation and reporting (MER) theories coupled with its expertise on performance measurement and development of performance indicators, have been applied to this exercise.

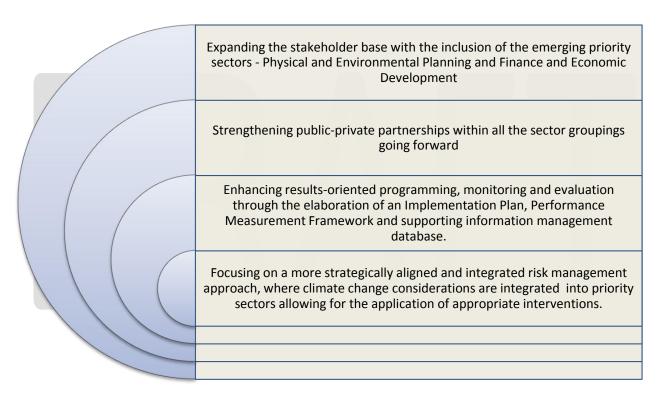
The collective knowledge and experience of the CDM stakeholders including from the regional, national and community levels have also significantly factored into the development of a strategy which is relevant, practical and achievable.

#### Program Based Approach (PBA)/Results Based Management

The revision and process utilized in developing the new strategic framework continues to benefit from the application of PBA and RBM principles. This involved the engagement of development partners and other stakeholders to coordinate program support and a focus on results rather than on individual activities. The strategic framework also further entrenches the principles of mutually supporting outcomes and outputs to achieve the desired impact.

# 5. The CDM Strategy 2014 - 2024: What is New?

The CDM Strategy builds on the successes and addresses the priority challenges ahead for improved disaster risk reduction at all levels by:



In particular, the development of the Implementation Plan is a new feature since the first CDM Strategy was developed over a decade ago. The Implementation Plan will not only guide interventions in the region at the national, regional and sectoral levels, but will be the foundation for guiding investment in an improved Monitoring and Evaluation System.

# 6. CDM and International Development Agendas

The Caribbean Region is a microcosm of a larger global geo-political and inter-connected environmental landscape where its Member Countries are signatories to numerous international and UN based conventions, treaties and platforms. In its pursuit of sustainable development and poverty reduction, the region has articulated a regional framework of action (Caribbean Community, 2005) and individual national strategies and POAs aligned to the regional strategy that seek to fulfill the obligations of the

international agendas ratified. There is now international acknowledgement that efforts to reduce disaster risks must be systematically integrated into policies, plans and programmes for sustainable development and poverty reduction.

The importance of promoting disaster risk reduction efforts on the international and regional levels as well as the national and local levels has now truly been clearly accepted and recognized over the past few years as demonstrated in the number of key multilateral frameworks and declarations that have been implemented or are now in operations. This section highlights the key frameworks that the CDM Strategy has historically been aligned to, and continues to support over the period 2014-2024.

#### 6.1. Hvogo Framework for Action 2005 - 2015

A foundational plank and core element of the international agenda on disaster risk reduction is the Hyogo Framework for Action which was the main outcome of the 2004 World Conference on Disaster Reduction held in Yokohama, Japan. The objectives and expected outcomes articulated then are still very relevant today and are used as benchmarks against which various regions around the world have pegged their own indigenous disaster risk management frameworks.

#### **OBJECTIVES OF THE HYOGO FRAMEWORK 2005-2015**

- (a) To conclude and report on the review of the Yokohama Strategy and its Plan of Action, with a view to updating the guiding framework on disaster reduction for the twenty-first century;
- (b) To identify specific activities aimed at ensuring the implementation of relevant provisions of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development on vulnerability, risk assessment and disaster management;
- (c) To share good practices and lessons learned to further disaster reduction within the context of attaining sustainable development, and to identify gaps and challenges;
- (d) To increase awareness of the importance of disaster reduction policies, thereby facilitating and promoting the implementation of those policies;
- (e) To increase the reliability and availability of appropriate disaster-related information to the public and disaster management agencies in all regions, as set out in relevant provisions of the Johannesburg Plan of Implementation

The CDM Strategy from inception incorporated the principles of the Hyogo Framework and referenced it during the early developmental stages. This ensured that there was alignment going forward and facilitated the region's reporting and evaluation of achievement and progress against the international expectations. The 2014 - 2024 strategy will continue the tradition of alignment and integration with a strong suite of outcomes and outputs designed to achieve a "CDM Ready" region by the end of the strategic period.

## 6.2. Hvogo Framework Post 2015

The current Hyogo Framework will expire in 2015 culminating with a series of regional reports rolled up to inform a report from the UN Secretary-General at the 2015 World Conference on Disaster Risk Reduction and Resilience. The Americas' report which was produced from a series of regional consultative processes such as the Regional Platforms for Disaster Risk Reduction and the Ministerial Conferences on Disaster Risk Reduction has already identified recommendations for consideration at the international level. These are:

- A post-2015 framework for disaster risk reduction should consider lessons learned in areas of public policy, disaster risk reduction financing and territorial development.
- This framework should strengthen programmes concerned with education, scientific research and technological development at all levels and among all sectors. It should also incorporate traditional and local knowledge into risk reduction and disaster resilience practices.
- It should encourage private sector involvement; link academics, science and technology to social demands for sustainability and disaster risk reduction; and recognize the role of women and children in resilience building.
- HFA2 should be aligned with different global mechanisms for sustainable development (MDGs and post-2015 development agenda, UNFCCC and its main decisions related to adaptation to climate change, Rio+20 Declarations).
- Integrate disaster risk reduction into sectors particularly those that emphasize disaster risk reduction in both private and public investment projects (finance).
- Strengthen local government decentralization processes by improving regulations, creating mechanisms for resource use, and providing monitoring and accountability instruments to guarantee law enforcement.
- Provide better coordination between the government and civil society (concerning both their rights and corresponding responsibilities) at all decision-making levels, and implement public policies that reinforce spreading financial resources to the local level

The CDM Strategy 2014 – 2024 has considered these recommendations and has incorporated where appropriate, outcomes and outputs which will lead to the achievement of the future desired state.

#### 6.3. Millennium Development Goals

The 2013 Report on the Millennium Development Goals (MDGs) notes that significant and substantial progress has been made in meeting many of the targets and has been the most successful global anti-poverty push in history. As the 2015 target for achieving targets approaches the report further notes that the achievements have been uneven among and within countries. It calls for continued efforts to build a more just, secure and sustainable future for all. The CDM Strategy and associated MER/PMF will continue to serve as a platform in the region for the further advancement of the MDGs and for measuring and reporting on progress been made.

## 6.4. Rio Plus 20

The Caribbean DRM agenda and the vision of the Rio +20 principles are inextricably linked as is demonstrated in the shared aim of eradicating poverty and achieving sustainable development. In this regard, the 2012 – 2024 strategic period will have major focus on and earnestly consider issues related to vulnerable groups, livelihoods, gender and climate change as key pillars of the framework going forward.

Focus on other principles of the Rio +20 agenda such as integration, stakeholder engagement, strengthening of institutional frameworks and the strengthening of intergovernmental arrangements continues to be embraced in the revised strategic framework.

# 7. CDM and Regional Development Agendas

#### 7.1. CARICOM Regional Framework 2005 - 2015

The CARICOM Regional Framework has now been in operation for over eight years. This framework was closely aligned to the CDM Strategy from its inception as it sought to advance the implementation of the articulated outcomes and outputs (Intermediate Results). As the implementation period draws to a close in the next 18 months, the founding pillars and principles on which it was constructed will continue to inform the current CDM Strategy and others in the future. With the maintenance of this approach during the strategic period, the CDM Strategy and Regional Framework will continue to be harmonized with the Caribbean Single Market and Economy (CSME) protocols. In particular the revised outcomes and outputs will significantly contribute to the achievement of the protocols related to technology transfer and the enactment of CDM legislation.

The priority thematic areas which the regional framework seeks to promote continues to be of significance in the revised CDM strategic period as the region builds capacity in hazard mapping and vulnerability assessments (HVA), Community Based Disaster Management, early warning systems, climate change, vulnerable populations and knowledge management.

# 7.2. <u>Organisation of Eastern Caribbean States (OECS) - St. George's Declaration of Principles for Environmental Sustainability</u>

The aim of the revised 2006 St. Georges Declaration of the OECS is to: "Foster Equitable and Sustainable Improvement in the Quality of Life in the OECS Region". This aim is supported by the articulation of 21 principles which span a range of critical issues important to the sub-region.

Principle # 9 in particular speaks to Integrated Disaster Management whereby "Governments will integrate disaster management initiatives with environmental priorities to help the peoples of the region in their preparation for and management of the impacts of natural and man-made disasters." The revised CDM Strategy will continue to be harmonized with the St Georges Declaration in support of the OECS' covenant to sustainable development in the region.

# 7.3. <u>A Regional Framework for Achieving Development Resilient to Climate Change 2009-2015</u>

The Caribbean Community Climate Change Centre articulated a regional framework in 2007 to cover the period 2009 – 2015 with a strategic vision of "regional society and economy that is resilient to a changing climate." The vision is supported by four key strategies related to:

- 1. Promoting actions to reduce greenhouse gas emissions through energy reduction and conservation, and switching to renewable and cleaner sources of energy;
- 2. Promoting actions to minimize the effects of greenhouse gas emissions through initiatives and measures designed to reduce the vulnerability of natural and human systems to the effects of climate change (e.g., flood defences, and changing land use patterns);
- 3. Promoting the development and implementation of educational and public awareness programmes as well as public access to information and citizen participation across the Caribbean region; and
- 4. Building the Caribbean Community Climate Change Centre's organisational capacity to manage adaptation to climate change, through training of scientific, technical, and

managerial personnel; institutional strengthening; providing systematic long-term technical assistance; and strengthening information support capacity that allows the CCCCC to effectively support the Member States.

# A fifth strategy seeks to:

5. Promote the dissemination of successful adaptation experiences to address the impacts of climate change on: (a) water supply; (b) coastal and marine ecosystems; (c) tourism; (d) coastal infrastructure; and (e) health.

The revised CDM Strategy acknowledges the CCCCC's regional framework as an important companion protocol and has reflected climate change as a cross-cutting theme which must be treated with throughout all stages and phases of implementation. It is also recognized as one of the contributing elements "A clearly established and understood nexus between CCA and DRR with programming and governance harmonised" to achieve the desired future state.

# 8. Process to Define the CDM Strategy 2014-2024

The CDM Strategy 2014 – 2024 is informed by an analysis of implementation of the CDM Strategy 2007-2012, a review of CDEMA Participating States and Sector Work Programmes and stakeholder consultations with targeted groupings including the Gender Working Group, the CDM Expert Panel, the CDM Coordination and Harmonization Council.

## 8.1. Status of implementation of the CDM Strategy 2007 - 2012

The performance monitoring framework and indicator questions for the CDM Strategy developed in 2010 was transformed into an online Survey Monkey® tool resulting in a questionnaire with over 460 questions. The survey tool was administered using a variety of modalities including telephone interviews and facilitated groups sessions. The data ensuing was utilized to assess the achievements and gaps in implementing the CDM Strategy 2007-2012. The assessment was also useful in identifying emerging priorities for consideration in the next strategic period – 2014-2024.

The assessment indicated that the CDM Strategy is indeed a significant landmark which has now set the platform for continued disaster risk reduction initiatives in the Caribbean. The noteworthy summary findings and recommendations are:

- i. The enabling environment (through the presence of model CDM legislation, policies and strategies) at the national level has been selectively advanced in some countries and remains an area of priority for others. Moreover, the degree to which sectors have an enabling environment which increasingly integrate DM, climate and gender considerations was greater than the former strategic period. This will serve as a platform for a more holistic approach for the development and involvement of sectors in CDM. There was an uneven improvement in terms of the use and adoption of model tools for CDM implementation and especially, a greater emphasis to be placed on monitoring, evaluation and reporting at various levels.
- ii. The disaster management landscape in the Caribbean Region has evolved from the provision of unique and dynamic systems necessary to facilitate effective delivery of CDM services to respective countries. In a broader context, information about disaster preparedness in case of an emergency, disaster management plans, policies and guidelines have been in existence and accessible for many years. However, communities have been severely affected by disasters due to lack of adequate coping capacity. This may be attributed to limited access to resources to address risk exposure. In order to enhance the information sharing and management of the knowledge generated from various sources, it is highly essential to closely network the organizations/ institutions and moreover people working at the community level to increase resilience. The network of institutions will create a common platform and enable its stakeholders and people to capture, organize, share and reuse the knowledge generated in the area of disaster management. Greater access to knowledge management systems at the regional level is required. National and sectoral partners must continue, where relevant, to develop ICT platforms and enhance the degree of interoperability of ICT platforms within and across the region. Clarity on the role and contributions of Centre of Excellence (COE) is essential and ultimately, a greater penetration of learning and knowledge management systems at the community levels must increase.
- iii. There was an overall high positive change in mainstreaming efforts over the period; however, there is still need for a continued focus on the integration of work plans and the provision of resources for CDM implementation at sector level. Moreover, the congruence of National Sustainable Development Plans or Strategies with sector plans and CDM policies must continue to be supported and aligned. Evidence of the integration of gender into national and sector plans must be increased and the presence and adoption of Emergency Response Plans and Business Continuity Plans must be fostered at the sector level.
- iv. DRM is a multi-sectoral and multi-stakeholder endeavour requiring that all involved work towards the same objectives. Key to the success of a national government's ability to effectively improve delivery on DRM programs is the level to which all relevant departments understand concepts and aim to achieve similar goals. The success of DRM is predicated on the ownership by governments for their risk reduction

- agenda and the initiation of larger strategic partnerships and disaster risk reduction platforms. Participating States must advance the mainstreaming of DRM into national policies, planning processes and decision-making at all levels and across key sectors.
- v. Over the implementation periods, Participating States have examined the community resilience framework, improved on the framework which would have led to a greater role for schools, youth and families in the overall process leading to greater resilience, built partnerships and multidisciplinary perspective in approaching Disaster Risk Reduction measures at the community level, recognized the importance of readiness, providing public education and enhanced their response during periods of crisis, developed recovery programs that focus on physical and social factors, set evidence-based guidelines for practice and established an interface between research and practice.
- vi. Whilst community resilience measures were addressed over the period, a few countries considered their community resilience to be low. On a more positive note though, a few indicated that level of participation of local communities in DRM initiatives was minimally adequate or better. The number of communities with disaster management programs has increased over the period. Increasingly, communities are employing the HVA process to develop their plans and there is still a need for increased community participation in exercises; a greater access of communities to DM products (hazard maps, etc.); and a greater penetration of EWS at the community level which must continue to be fostered.

# 8.2. <u>Sector Analysis - Areas of Convergence</u>

CDM Sector Sub-Committees have established shared priorities, which have informed the upcoming strategic period (CDEMA, 2009; CDEMA, 2012). National priorities, as articulated in Country and Sector Work Programmes have further refined the view of the critical areas which will provide the focus for the 10-year strategic period. Areas of convergence of sector work are:

- i. Developing training materials for sector actors where education and training programmes need to be further developed and implemented for sector actors. Training and education efforts should address the fundamentals of DRR within a multi-hazard environment. Additionally, the quality of CBDM training materials should be enhanced.
- ii. Building local/community level capacities for CDM where Local capacity for sector specific disaster mitigation, preparedness and response is improved, community mobilization increased with a concomitant increase of resources for communities at risk and individual/family preparedness is promoted.
- iii. Building sector level capacities for CDM where SSC are strengthened, resources, particularly funding, mobilized, institutional capacities enhanced within the sector, sector DRM strategies are developed, hazard information incorporated into sector planning and development, Emergency Plans are either developed or enhanced within the sector, recovery/reconstruction is enhanced and key sector actors are sensitized about DRM
- iv. Improving information sharing where management systems and services (inventories, directories etc.) are developed for sectors and levels of information-sharing are increased within sectors
- v. Enhancing collaboration and dialogue (among actors across sectors and at different levels) where Coordination among sectors is enhanced, synergies identified and partnerships established where appropriate and dialogue and cooperation within and across sectors is promoted and improved
- vi. Performing various types of assessments (including risk, vulnerability, needs and capacities) where capacity for disaster damage assessment is enhanced, there are improved methods for predictive multirisk assessments and socio-economic analysis of risk reduction actions, capacity for developing and applying methodologies, studies and models is strengthened and sectoral needs and vulnerability assessments completed at the national level.
- vii. Enhancing public awareness efforts where communities have increased knowledge/awareness of hazards, their level of risk and risk reduction approaches, particularly "at risk" communities, communities are aware of and trained to use EWS, promoting the integration of DRR into the regional school curricula is encouraged along with the use of informal and formal modes to educate youth about DRM, the public is aware of the importance of DRM to a specific sector and gender-specific impacts of disasters.
- viii. Standardizing CDM tools and approaches where vulnerability assessment methodologies are consolidated and improved with risk management protocols developed for the sector.

# 8.3. <u>Broad-Based Stakeholder Consultation</u>

At its core, the CDM Strategy 2014-2024 reflects the values and principles of stakeholder participation in the definition of the goals, objectives and the results to be delivered over the ten-year term. An initial stakeholder consultative meeting took place in June 2013 in Barbados where the revised Logic Model was considered and refined. The outputs of that workshop were used to update the results framework and strategic objectives. A desired state for Participating States, regional and international partners was confirmed. A subsequent meeting took place in October 2013 in Barbados with wide sectoral and national representation where the Logic Model was further refined and the Performance Monitoring Framework was considered and reviewed. A full *Annex I - List* of Representatives and Organisations Consulted appears on page 36.

Broad stakeholder participation in the formulation of the Strategy, the Performance Monitoring Framework and Implementation Plan are the hallmarks that have laid the foundation for the 2014 – 2024 period and will underpin the continued success and advancement of Comprehensive Disaster Management throughout the Caribbean Region.

#### 9. The Future Desired State

A key output of the assessments and stakeholder consultations was the agreement on seven elements, which comprise the future desired state for CDEMA Participating States. Figure 2 outlines the elements which comprise the future desired state to advance the integration and mainstreaming of CDM at all levels.

- National, regional and sectoral institutions with adequate/minimum standards of capacity to deliver the CDM program
- 2. Knowledge management which is applied for fact-based decision-making
- 3. Disaster resilience which is enhanced within key sectors of the economy
- 4. Operational readiness at regional, national, sectoral and local levels

- 5. A clearly established and understood nexus between CCA and DRR with programming and governance harmonised
- 6. Community resilience which has been enhanced for the most vulnerable with gender concerns addressed at all stages and levels
- 7. Resource allocation which underpins the ability to deliver the strategy

Figure 2: Elements of the Future Desired State for CDEMA PS for the strategic period of 2014 - 2024

The elements of the future desired state form the basis of the plan's purpose and implementation plan (refer to Figure 2).

## 9.1. CDM Blueprint

The harmonisation process requires the conceptualization of ideal organizational structures and processes in order to facilitate CDM implementation at the national level. The CDM Blueprint provides a conceptual framework for the development of effective National Disaster Offices through the definition of the enabling environment, capacity, which must reside within the NDO, the presence of strategic frameworks, which are measurable and the definition of functional areas and core competencies and skills required for effective delivery of CDM (DaBreo, 2010). The CDM Blueprint for advancing CDM at the national level has been developed through a participatory process with the CDEMA Participating States and has been endorsed at the level of the CDEMA Council. In keeping with the expressed need to support and commit to exploring further opportunities for supporting CDM advancement at the national level, the elements comprising the blueprint have been identified and are displayed in Figure 3.

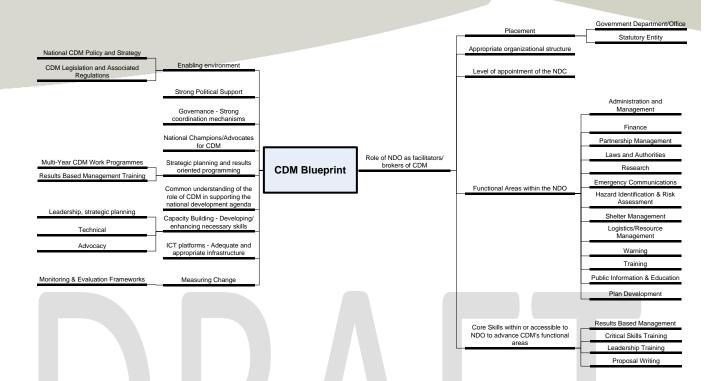


Figure 3: Elements of the CDM Blueprint at the National Level.

# 10. The CDM Strategy Logic Model

The Logic Model for the former strategic period of 2007 - 2012 was fully revised and updated for the upcoming ten-year period which would span 2014 - 2024. The revisions reflect the stated desire of community-level, national, regional and development partners to review the achievements, gaps and challenges under the former strategic period to inform the results framework despite an initial decision at the outset of the strategic period of 2012 to minimally modify the pre-existing Logic Model<sup>1</sup>. The change in focus away from leaving the 2007 - 2012 results framework relatively intact to the focused attention to revise and update the model was significant. The underlying assumptions for deriving the new strategy for the period of 2014 - 2024 evolved from ratification of the relevance of the former version of the Logic Model to a full-fledged consultative process to ensure the reflection of the new context and meaning to be derived in the Logic Model. Stakeholders were engaged in the re-evaluation of the core principles which should guide the upcoming period.

The Logic Model is comprised of four outcomes which were partially or fully revised to represent new perspectives and focus for the upcoming strategic period. The outcome statements still address the overarching principles of CDM in that they are meant to address all phases of DM by sectors, within the context of the cross-cutting themes.

**Error! Reference source not found.** Figure 4 illustrates the Logic Model in its entirety with all of the directly and indirectly associated outputs. Figure 5 illustrates the Logic Model inclusive of the purpose statements and cross cutting themes.

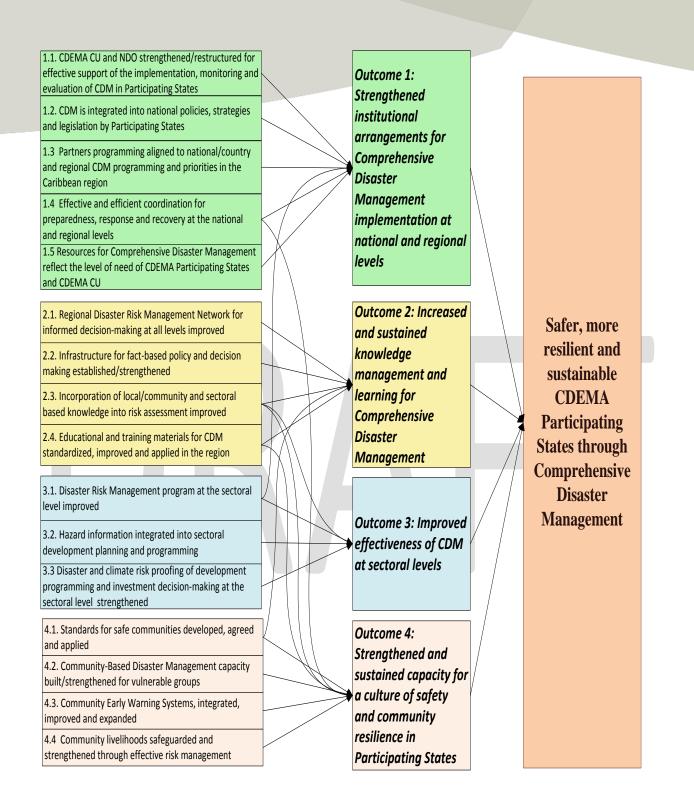


Figure 4: Logic Model for the Comprehensive Disaster Management Strategy 2014 – 2024 displaying the interrelationships between various results.

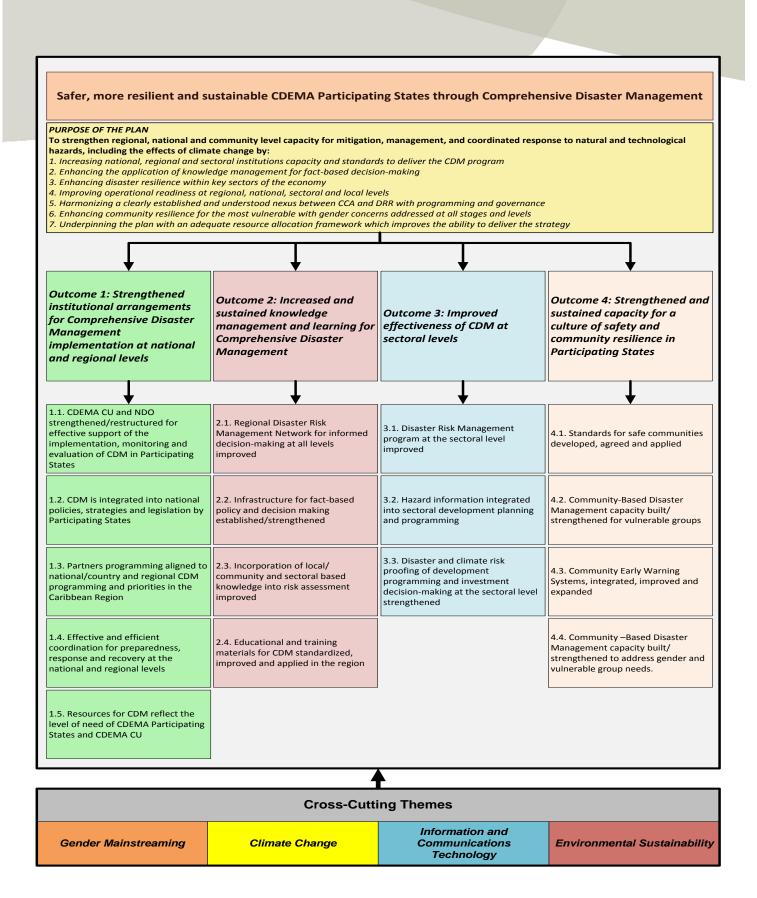


Figure 5: Logic Model for the CDM Strategy outlining the plan's purpose and cross cutting themes.

#### 11. The Long Term Goal of the CDM Strategy - The Impact Statement

The Impact Statement for the Comprehensive Disaster Management's Strategy for 2014 – 2024 is:

Safer, more resilient and sustainable CDEMA Participating States through Comprehensive Disaster Management

The impact statement reflects the growing understanding that Participating States must define what acceptable levels of risk acceptable levels of risk may be within their context, define approaches and mechanisms that will enhance their capacity to enhance their capacity to endure and increase their ability to resist, absorb, accommodate to and recover from the effects of recover from the effects of a hazard impact in a timely and efficient manner. Consensus was gained for the revision of the the revision of the current Impact Statement found in the CDM Strategy for the period 2007 – 2012 at the CDM Strategy's the CDM Strategy's Consultative Meeting held in Barbados in May 2013. The impact statement galvanizes attention and galvanizes attention and action around the need for continued focus on Comprehensive Disaster Management for CDEMA Management for CDEMA Participating States during the upcoming period of 2014 – 2024. Five critical factors are factors are encapsulated and reflected in the statement, either explicitly or implicitly, which are (

#### Figure 6):

- 1. The need to ensure that lives and livelihoods are saved;
- 2. The need to ensure that property and assets are saved/safeguarded;
- 3. The concept of resilience being paramount in an understanding of the guiding principles directing action at all levels;
- 4. The critical link between Disaster Risk Reduction and its integration into the National Sustainable Development agenda be forged and understood; and
- 5. The need to focus on vulnerable groups and overarching issues related to vulnerability within communities and stakeholders.

The impact statement accounts for the fact that a safer and more resilient society promotes sustained economic development. Comprehensive Disaster Management within the region assists in the attainment of the principles of various multilateral agreements, such as the Millennium Development Goals and the Hyogo Framework for Action, amongst several and the national development agenda of Participating States.

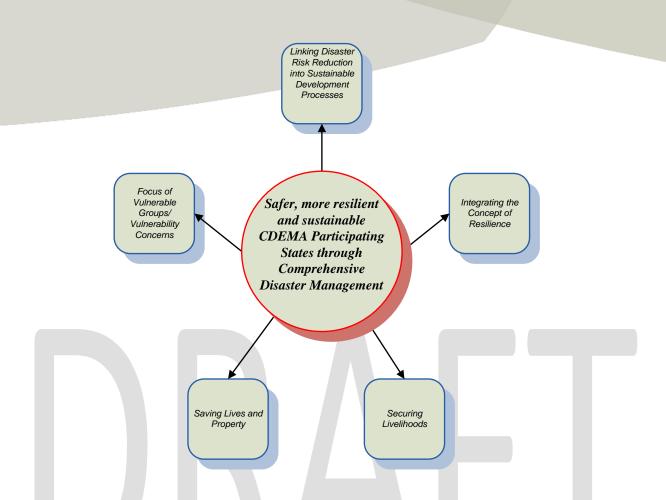


Figure 6: Prevailing factors informing the impact statement for the CDM Strategy 2014 - 2024

#### 11.1. <u>Building Safer and Resilient Communities – Unifying Theme for the Strategic</u> Period 2014-2024

Building on the concerns outlined along the Impact Statement for the Strategy, synergy may be derived from the adaptation of the UNISDR's "Safer Cities" Campaign and the use of the CDM Strategy's goal of "Safer, more resilient CDEMA Participating States through Comprehensive Disaster Management". A greater emphasis on resiliency and community level actions is sought over the new strategic period. The stated emphasis sought during the upcoming period is addressed in the statement of purpose of the strategy, which is:

"To strengthen regional, national and community level capacity for mitigation, management, and coordinated response to natural and technological hazards, and the effects of climate change".

A unifying theme under the strategy for the upcoming period is partly based and inspired on the "Safer Cities" campaign. In this context, the '*Resilient Caribbean Communities*' unifying theme and campaign would provide a simple yet powerful and effective measure built on the DM phases (Figure 7):

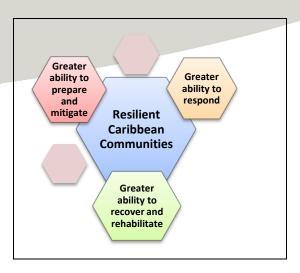


Figure 7: Components of the Unifying Theme for the CDM Strategy 2014 - 2024: Resilient Caribbean Communities

The "Resilient Caribbean Communities" unifying theme and campaign can galvanise interest and provide a focus that may permeate to the community and local levels. Similar to the UNISDR's campaign, it can provide a single unifying theme which may direct public awareness efforts and bring into focus the need to address areas of deficiency in terms of results in the current version of the strategy. Relevant principles and best practices derived from the international campaign can be adapted at the national level.

## 12. The Short to Medium Term Results of the CDM Strategy 2014-2024

Table 1 below illustrates the emerging priorities defined by Stakeholders for the Region for the short to medium term. In keeping with the guiding principles, the emerging priorities were elaborated using a results based management approach. As such, outcome and supporting output level statements were articulated, all of which support the achievement of the overarching Goal of the CDM Strategy 2014-2024, which was discussed in the section above.

Priority Outcomes (Short to Medium Term)		Outputs (Short Term)
in ar	Strengthened institutional arrangements <sup>2</sup> for Comprehensive Disaster Management implementation at national and regional levels	1.1. CDEMA CU and NDO strengthened/restructured for effective support of the implementation, monitoring and evaluation of CDM in Participating States <sup>3</sup>
		1.2. CDM is integrated <sup>4</sup> into national policies, strategies and legislation by Participating States
in		1.3. Partners programming aligned <sup>5</sup> to national/country and regional CDM programming <sup>6</sup> and priorities in the Caribbean region
		1.4. Effective and efficient coordination for preparedness, response and recovery at the national and regional levels <sup>7,8</sup>
		1.5. Resources for Comprehensive Disaster Management reflect the level of need of CDEMA Participating States and CDEMA CU
	ncreased and ustained knowledge	2.1. Regional Disaster Risk Management Network <sup>9</sup> for informed decision-making at all levels improved
le	management and learning for Comprehensive Disaster	2.2. Infrastructure for fact-based policy and decision making established/ strengthened
Di		2.3. Incorporation of local/community and sectoral based knowledge into risk assessment improved <sup>10</sup>
M	lanagement	2.4. Educational and training materials for CDM standardized, improved and applied in the region <sup>11</sup>
3. In	nproved	3.1. Disaster Risk Management program at the sectoral level improved <sup>12</sup>
	ffectiveness of CDM t sectoral levels	3.2. Hazard information <sup>13</sup> integrated into sectoral development planning and programming <sup>14</sup>
		3.3. Disaster and climate risk proofing of development programming and investment decision-making at the sectoral level <sup>15</sup> strengthened
	sustained capacity	4.1. Standards for safe communities developed, agreed and applied 16
	or a culture of	4.2. Community-Based Disaster Management capacity built/strengthened
	afety and	for vulnerable groups
	ommunity esilience in	4.3. Community Early Warning Systems, integrated, improved and expanded <sup>17</sup>
	articipating States	4.4. Community livelihoods safeguarded and strengthened through effective risk management

Table 1: Results Framework for the Comprehensive Disaster Management Strategy 2014 - 2024

The overarching objectives of each of the outcomes are briefly defined below and will provide the focus of actions to be undertaken at various levels. The outcomes provided below are individually followed by the directly and indirectly associated outputs.

#### 12.1. Priority Outcome 1

Outcome 1 seeks to address the institutional arrangements and capacity at the national and regional levels by:

- Strengthening capacities for the implementation, monitoring and evaluation of CDM;
- 2. Addressing the required enabling legislative, strategic and policy framework;
- 3. Aligning CDM priorities amongst all partners with that of the Regional Priorities;
- 4. Addressing the allocation of the various types of resources to meet the needs of Countries;
- 5. Maintaining a focus and capacity for preparedness, response and recovery

Outcome 1: Enhanced CDM Program Implementation (2007 – 2012)

**PROGRESS:** the enabling environment (policy, legislation and strategies) for CDM implementation at the national level has been advanced. NEOCs have been strengthened for effective inter-agency coordination with clearly identified roles and responsibilities supported by legislation.

**RECOMMENDATION:** The process of incorporation of CC and gender considerations into these policy and regulatory frameworks must be strengthened. There is scope for the assessment of the effectiveness of the national coordination mechanisms.

- 1.1. CDEMA CU and NDO strengthened/ restructured for effective support of the implementation, monitoring and evaluation of CDM in Participating States
- 1.2. CDM is integrated into national policies, strategies and legislation by Participating States
- 1.3 Partners programming aligned to national/country and regional CDM programming and priorities in the Caribbean region
- 1.4 Effective and efficient coordination for preparedness, response and recovery at the national and regional levels
- 1.5 Resources for Comprehensive Disaster Management reflect the level of need of CDEMA Participating States and CDEMA CU
- 3.1. Disaster Risk Management program at the sectoral level improved

Outcome 1:
Strengthened
institutional
arrangements for
Comprehensive
Disaster
Management
implementation at
national and regional

Figure 8: Outcome 1 and associated outputs

#### 12.2. Priority Outcome 2

Outcome 2 seeks to address the *information*, knowledge management and learning at all levels by:

- Emphasizing the role that existing and expanded knowledge networks will continue to play in the information required for sound and rational decision-making;
- 2. Addressing the technological backbone that will support data sharing for fact-based policy and decision making;
- 3. Emphasizing the critical role that local and community level actors will play in the generation of data decision making and risk assessment processes.
- 4. Highlighting the need for the generation and application of educational and training materials that will support learning and continued development of CDM stakeholders

Outcome 2: Enhanced Management of CDM Knowledge (2007 – 2012)

**PROGRESS:** information about disaster preparedness in case of an emergency, disaster management plans, policies and guidelines have been in existence and accessible. However, people are severely affected by disasters which may be attributed to the fact that the information available **is not transformed into lifesaving knowledge for the communities at risk.** 

**RECOMMENDATION:** Greater coordination in the development of content and delivery of training is required during the next strategic period. This should be guided by a regional educational policy.

- 2.1. Regional Disaster Risk Management Network for informed decision-making at all levels improved
- 2.2. Infrastructure for fact-based policy and decision making established/strengthened
- 2.3. Incorporation of local/community and sectoral based knowledge into risk assessment improved
- 2.4. Educational and training materials for CDM standardized, improved and applied in the region
- 4.1. Standards for safe communities developed, agreed and applied

Outcome 2: Increased and sustained knowledge management and learning for Comprehensive Disaster Management

Figure 9: Outcome 2 and associated outputs

#### 12.3. Priority Outcome 3

Outcome 3 seeks to address how sector stakeholders plan, coordinate and implement CDM at the national and regional levels by:

- 1. Promoting DM programs in sectors;
- Integrating hazard and disaster information and concerns into sector development agendas;
- 3. Highlighting the need for investing in disaster-proof measures/initiatives by sectors;
- 4. Coordinating preparedness, response and recovery efforts amongst various stakeholders;

# Outcome 3: DRM Mainstreamed into Key Sectors (2007 – 2012)

**PROGRESS:** Much progress in advancing the mainstreaming of DRM into national policies, planning processes and decision-making at all levels and across key sectors was made.

**RECOMMENDATION:** There is need for the development of more DRM plans within sectors which are congruent with the National Sustainable Development Plans/Strategies and CDM policies. Additionally, more evidence of the integration of climate change adaptation and gender into sector plans must take place.

- 3.1. Disaster Risk Management program at the sectoral level improved
- 3.2. Hazard information integrated into sectoral development planning and programming
- 3.3. Disaster proofing of development programming and investment decision-making at the sectoral level strengthened
- 1.4 Effective and efficient coordination for preparedness, response and recovery at the national and regional levels

Figure 10: Outcome 3 and associated outputs

Outcome 3: Improved

effectiveness of CDM
at sectoral levels

#### 12.4. Priority Outcome 4

Outcome 4 seeks to address community level concerns and integration within the overall framework for Disaster Management by:

- Building community level capacity for CBDM;
- Harnessing the knowledge within communities to refine national level standards, knowledge and procedures;
- Improving and further vertically integrating EWS;
- 4. Emphasizing the need to safeguard livelihoods in addition to assets and life; and
- Emphasizing the need to focus on actions that will address vulnerable groups and how they are impacted by hazard events

## Outcome 4: Enhanced Community Resilience (2007 – 2012)

**PROGRESS:** The number of communities with disaster management programs has increased. Increasingly, communities are employing the HVA process to develop their plans.

**RECOMMENDATION:** There is continued need for increased community participation in exercises; greater access of communities to DM products (hazard maps, etc.) and greater penetration of EWS. Effectiveness of the committees at the community level must be measured.



- 4.2. Community-Based Disaster Management capacity built/strengthened for vulnerable groups
- 4.3. Community Early Warning Systems, integrated, improved and expanded
- 4.4 Community livelihoods safeguarded and strengthened through effective risk management
- 1.4 Effective and efficient coordination for preparedness, response and recovery at the national and regional levels
- 2.3. Incorporation of local/community and sectoral based knowledge into risk assessment improved
- 2.4. Educational and training materials for CDM standardized, improved and applied in the region

Outcome 4:
Strengthened and
sustained capacity for
a culture of safety
and community
resilience in
Participating States

Figure 11: Outcome 4 and associated outputs

#### 13. Cross-Cutting Themes

The strategic period of 2007 – 2012 was defined by the presence of three cross-cutting themes which featured in the planning and implementation phases of the strategy at the national level. The three cross-cutting themes were maintained and an additional one was added for the new strategic period. The cross cutting themes are:



The cross-cutting themes will be bridged into the new 10-year strategic period and are discretely addressed in the complement of future desired state statements (see Figure 2 on page 17). For instance, a clear articulation of the need of the required technological backbone to implement the strategy is addressed for knowledge management (information) and operational readiness (communications) in statements 2 and 4, respectively. There is the explicit connection expressed for the harmonisation of DRR and CCA in statement 5. Gender-differentiated impacts and the manner in which they should be addressed at all levels and stages are addressed in statement 6. Gender differentiated impacts will be accounted for both women and men with the possible performance of gender analyses as a precursor to the formulation of Country Work Programmes and National Strategies, which incorporate the input and feedback from practitioners and stakeholders involved in development work.

#### 13.1. Climate Change

Growing evidence of the adverse effects of heightened levels of greenhouse gas emissions on hydrological, terrestrial and marine systems point to the continued need for Caribbean countries to mitigate and adapt to climate change. The majority of Caribbean countries being SIDS, which are vulnerable to the effects of climate change and impacts on their natural and human environments must address the increasing costs of natural disasters and the impacts on the built and natural environment, economies, health and safety as well as livelihoods. The effects of climate change can have serious consequences on the Region's productive sectors, especially tourism due to the proximity of major infrastructure to low lying coastal areas and agriculture based on the effects of project droughts and higher and irregular rainfall patterns. Climate Change can endanger the achievement of targets set in regional and international development agenda and therefore, countries must proactively address the very real threat that it poses. The integration of Disaster Risk Reduction and Climate Change Adaptation in pursuit of sustainable development goals should lead to the ultimate goal of reducing vulnerability to weather and climate hazards and would result in the enhancement of preparedness and response to climate hazards, the reduction of the potential impacts of climate change on development and livelihood security, the more efficient use of financial, human and natural resources and the increase in effectiveness and sustainability of both climate change adaptation and hazard mitigation approaches (CDEMA).

#### 13.2. <u>Gender Mainstreaming</u>

Gender mainstreaming entails the assessment of the differences between women and men, girls and boys, and how this should be taken into account in the design of policies, strategies and programmes aimed at safeguarding our populations in the face of the negative effects of disasters and in the recovery and reconstruction thereafter. (Kambon, 2013; Joseph-Brown & Tuiloma-Sua, 2012; UNISDR, UNDP and IUCN, 2009) Men and women, the young and elderly across the Caribbean are the main beneficiaries of better designed, targeted and implemented CDM programmes. Gender issues, or the differences which the examination of such issues makes clear, have been identified as one of the cross cutting themes to be integrated into all CDM programme areas. Notwithstanding, social and economic data in the Caribbean suggest that the conditions of women in their capacity as heads of households, income earners and community activists, often leave them disadvantaged when compared to their male counterparts. Female headed households are significantly represented among poor households, thus increasing their vulnerability at the time of disasters and increasing their challenges in bouncing back after an event. Three basic needs will assist in mainstreaming gender in DRM:

- The presence or enhancement of legal or policy frameworks that enable gender mainstreaming into DRM in the region. The CDM Framework provides the guiding principles within which DRM in the region is structured and implemented.
- The capacity at the regional, national and subnational levels, wherever DRM is being implemented, to undertake gender analysis and the ability to formulate gender sensitive strategies, plans and programmes in the pre disaster and post disaster phases of DRM.
- The framework where the gender skills within research institutions devoted to a better
  understanding of gender differentials collaborate with civil society organisations of women and
  men, at the level of the communities, national, regional and development partners to attain
  greater gender equality.

#### 13.3. <u>Information, Communications and Technology</u>

The term 'ICT' covers a range of technologies for getting, storing, retrieving, processing, analysing and transmitting information. This includes networks, computers and any other processing and transmitting equipment and software. It can cover a wide range of system designs and configurations. (BusinessTech Research Inc., 2010). ICT activities must operate within a framework of availability during normal and emergency conditions and that information is secured by means of risk management procedures. The intention is to cost-effectively plan for abnormalities in normal circumstances from the viewpoint of operational demands and to create a solid foundation for ICT preparedness in emergency conditions.

National and regional disaster management organisations in the Caribbean must have the capability to effectively communicate, transfer and manage information, as required to support their emergency response activities, before, during and after disaster events. Moreover, software and hardware platforms must facilitate knowledge management initiatives within and between institutions within the region. The ICT capacity and capabilities must be strengthened to facilitate greater collaboration and learning.

#### 13.4. <u>Environmental Sustainability</u>

Natural and anthropogenic disasters impact the natural and built environment in significant ways and are addressed through the inclusion of Disaster Risk Reduction measures into sustainable development landscape for environmental sustainability and climate change adaptation. The regulation of physical development, the prevention of environmental degradation and the conservation of biodiversity and

ecosystem functions which support livelihoods throughout the Caribbean Region are essential functions which must be addressed within the context of Disaster Risk Reduction. The current role that sound physical planning and environmental management will continue to play in risk management and the importance that civil society and public and private sectors will play in fulfilling the vision of an enhanced and strengthened framework for the management of healthy ecosystems<sup>2</sup> and the physical environment that can make a valuable contribution to disaster risk reduction, climate change adaptation and the maintenance of sustainable livelihoods must be fully embraced.

#### 14. The CDM Governance Mechanism

The CDM Governance Mechanism (Figure 12) has its genesis in the desire of Caribbean DRM stakeholders to mainstream Comprehensive Disaster Management (CDM) at the sector level. The establishment of the CDM Coordination and Harmonization Council (CHC) is further underpinned by the philosophical approach of Comprehensive Disaster Management, of which one of the guiding tenets is the need to engage all levels of society in disaster risk management (CDEMA, 2012).

The 2014 – 2024 Strategy builds on the broad based stakeholder consultations. The goal of linking CDM to development decision-making and planning continues to be paramount. The CDM Strategy is managed by the Caribbean Disaster Emergency Management Agency (CDEMA); it was reviewed and reshaped in 2012 – 2013 to emphasize disaster loss reduction through risk management, and to continue follow a programme-based approach (PBA) with an emphasis on Results Based Management (RBM). The resulting CDM Strategy 2014 – 2024 articulates four (4) Priority Outcomes for advancing CDM in the Caribbean, of which Outcome Three specifically addresses the continued need to mainstreaming CDM at the sector level (CDEMA, 2012).

The review and elaboration of this Strategy, with the end of the implementation period for the Enhanced CDM Strategy in December 2012, further enhanced the CDM Governance Mechanism articulated in Priority Outcome Three. Representation from the initial sector partners<sup>18</sup>, donors and CDEMA PS, which comprise the CDM CHC is further enhanced with the strengthening of the Finance Sector and the inclusion of the Economic Development, Physical Planning and Environment Sectors for the upcoming 10-year period. The CDM GM is an innovative and pioneering, inter-institutional partnership that allows for cooperation, coordination and participation in the mainstreaming of disaster risk reduction at the sector level across the region, whose links will be further strengthened over the upcoming strategic period.

<sup>&</sup>lt;sup>2</sup> Ecosystems are defined as dynamic complexes of plants, animals and other living communities and their non-living environment interacting as functional units (Millennium Ecosystem Assessment, 2005). They are the basis of all life and livelihoods, and are systems upon which major industries are based, such as agriculture, fisheries, timber and other extractive industries as well as tourism. The range of goods and other benefits that people derive from ecosystems contributes to the ability of people and their communities to withstand and recover from disasters. The term "sustainable ecosystems" or healthy ecosystems, implies that ecosystems are largely intact and functioning, and that resource use, or demand for ecosystem services, does not exceed supply in consideration of future generations.

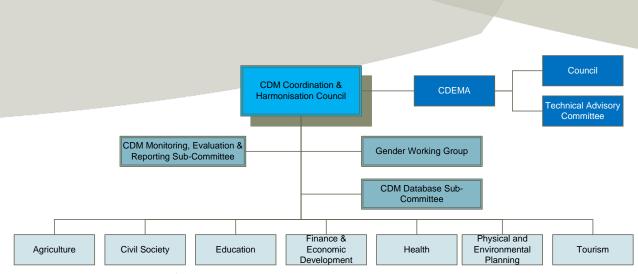


Figure 12: CDM Governance Mechanism

### 15. Mainstreaming CDM in Sectors

National Disaster Management Organisations, which are comprised of several sectors, are the national level actors responsible for the delivery of CDM results. Governments in particular have a crucial role in advancing CDM at both the sector and community levels. Their role in facilitating and coordinating the mainstreaming of CDM throughout sectors is of paramount importance and must always be accounted in the delivery of the CDM Strategy 2014 - 2024.

Various sectors have articulated or updated Sector Plans at the regional level, which must be increasingly adapted at the national level. The priority sectors that were operationalized in the former strategic period (2007-2012) were:

- 1. Health
- 2. Education
- 3. Tourism
- Agriculture
- 5. Civil Society

These sectors will be fully integrated and three additional sectors have been identified for greater engagement and inclusion into the CDM Framework and Governance Mechanism for the strategic period of 2014 - 2024, which are:

- 6. Finance and Economic Development
- 7. Physical and Environment Planning

#### 15.1. <u>Emerging Sector of Finance and Economic Development</u>

Increasingly, an emphasis will be placed for emerging sectors to develop and implement their respective work plans. For emerging sectors such as the finance and economic development, work planning will take place within the context of national sustainable plans and development agenda. The sector must continue to innovate on additional risk transfer and disaster financing products, in the context of hazards to which key economic sectors are exposed. The sector must develop and intensify the agenda to further assist policy makers to devise financial protection strategies against natural disasters. Such

strategies are required to help member governments mobilise resources in the aftermath of a disaster, while buffering their long-term fiscal impacts

#### 15.2. <u>Emerging Sector of Physical and Environmental Planning</u>

The physical and environmental planning sector must ensure that activities are construed to ensure the disaster proofing of development choices. Their principal functions have traditionally been the regulation of physical development, the prevention of environmental degradation, as well as the conservation of biodiversity and ecosystem functions and as principal planning and implementing entities in the management of climate change adaptations within the broader national framework. Improved land use planning, the increased application of Hazard and Vulnerability Assessments to guide development planning and Environmental Impact Assessments processes are critical areas of convergence and action required within the sector. Integrated Coastal Zone and Watershed Management are traditional tools available for environmental management and Climate Change Adaptation measures are increasingly being factored into practical methodologies applied at the national level. There is scope for the full treatment of hazard mitigation and for disaster recovery and rehabilitation efforts to account for the maintenance of ecosystem values and functions within preexisting and new tools under development. In particular, decisions taken post-hazard event should not result in the further degradation of habitats, which may support livelihoods and reduce the biodiversity values of an area. Therefore, the natural environment should feature within the scope of disaster preparedness to ensure that the selection of resettlement and development sites does not result in the further loss of biodiversity and environmental degradation. Finally, the increasing engagement with the Physical and Environmental Planning sector should lead to an improved landscape in the implementation of climate change adaptation and an enhanced framework of environmental management to maximize ecosystem services, thereby mitigating losses from disasters while contributing towards securing livelihoods within the region.

### 16. Monitoring, Evaluation and Reporting

The MER framework will form the basis for tracking the progress and effectiveness of the CDM strategy. Monitoring and evaluation of the CDM strategy defined in the supporting plan for implementation and measurement. In order to facilitate the evaluation of every outcome and the progress monitoring of each associated output measurable and verifiable indicators have been identified for the entire period of implementation for all the results some of which are quantitative or qualitative in nature. Where possible, the delivery of outputs will be defined within the implementation period and progress will be monitoring within prescribed cycles of review at agreed upon times. The MER framework is an integral part of the CDM Strategy 2014 - 2024.

#### 17. Conclusion

The ten-year strategic period presents an opportunity for the advancement of Comprehensive Disaster Management within the region. The two initial periods of implementation over a twelve-year period have resulted in great strides in the awareness, integration and mainstreaming of CDM as an overarching framework for disaster risk reduction within the region. The 2014 – 2024 strategic period seeks to ensure greater penetration and integration of CDM into new sectors and to reach community actors in an increasing manner.

Four priority outcomes are proposed to address:

- 1. Institutional arrangements and capacity at the national and regional levels;
- 2. Information, knowledge management and learning at all levels;
- 3. Planning, coordination and implementation at sectoral levels; and
- 4. Community level concerns and integration within the overall framework for Disaster Management.

The strategy has been informed by broad-based engagement and consultation with national, regional and international partners. It is founded primarily on lessons learned and emerging priorities articulated in the regional and international context. Eighteen Participating States, regional and development partners have harmonised programming and therefore, have committed to the success of the strategy. The next ten-year period will be the harbinger of continued progress in ensuring that lives are saved, property and livelihoods are safeguarded for the benefit of Caribbean people.

# Annex I - List of Representatives and Organisations Consulted in the Elaboration of the CDM Strategy, Implementation Plan and the Performance Measurement Framework

#### **National Disaster Offices**

National Office of Disaster Services (Antigua and Barbuda) – Mr. Philmore Mullin

Department of Emergency Management (Barbados) - Ms. Kerry Hinds

Department of Emergency Management (Barbados) – Ms. Danielle Skeete

Department of Disaster Management (Virgin Islands) – Ms. Evangline Inniss

Office of Disaster Management (Commonwealth of Dominica) – Ms. Merrina Williams

National Disaster Management Agency (Grenada) – Mr. Terrence Walters

Civil Defense Commission (Guyana) – Major Kester Craig

Civil Protection Directorate (Haiti) – Mr. Moise Jn Pierre

Office of Disaster Preparedness and Emergency Management (Jamaica) - Mr. Horace Glaze

Disaster Management Coordination Agency (Montserrat) - Mr. Billy Darroux

National Emergency Management Agency (St. Kitts and Nevis) – Mr. Carl Herbert

National Emergency Management Office (St. Vincent and the Grenadines) – Ms. Michelle Forbes

Office for Disaster Preparedness and Management (Trinidad and Tobago) - Dr. Stephen Ramroop

Department of Disaster Management and Emergencies (Turks and Caicos Islands) Ms. Sophia Mitchell

#### **Regional and International Organisations**

ADRA Caribbean – Pastor Alexander Isaacs

High Commission of Canada, Ministry of Foreign Affairs Trade and Development (DFATD) – Ms. Natalie Hutchinson

High Commission of Canada, Ministry of Foreign Affairs Trade and Development (DFATD) – Mr. Zahir Meghii

Caribbean Agribusiness Association – Mr. Ramgopaul Roop

Caribbean Community Climate Change Centre - Mr. Keith Nichols

Caribbean Confederation of Credit Unions – Mr. Ralph Wharton

Caribbean Development Bank (CDB) - Mr. Yuri Chakalall

Caribbean Disaster Emergency Management Agency

Caribbean Farmers Network – Ms. Pamella Thomas

Caribbean Natural Resources Institute (CANARI) - Ms. Nicole Leotaud

Caribbean Network of Fisher Folk Organizations (CNFO) – Ms. Vernel Nicholls

Caribbean Policy Development Centre – Ms. Shantal Munro-Knight

Caribbean Risk Managers Ltd - CCRIF Faculty Advisor - Ms. Ekhosuehi Iyahen

Caribbean Academcy of Sciences – Ms. Tracy-Ann Hyman

Council of Caribbean Engineering Organizations (CCEO) - Mr. Anthony Farrell

Delegation of the European Union to Barbados & OECS – Mr. Anthony Robert

Department For International Development – Caribbean – Mr. Steve Hillier

Department For International Development – Caribbean – Mr. Alex Harvey

Disaster Risk Reduction Centre - University of the West Indies - Ms. Jenna Blackwood

HelpAge International – Mr. Jeffrey James

Inter-American Institute for Cooperation on Agriculture (IICA) – Mr. Kervin Stephenson

International Federation of Red Cross - Caribbean Regional Representation Office - Ms. Lorraine Mangwiro

International Federation of Red Cross - Caribbean Regional Representation Office - Ms. Cecile Clarke Marshall

Ministry of Health – Jamaica – Dr. Marion DuCasse

Ministry of Health – Saint Lucia – Dr. Alisha Eugene

Ministry of Tourism - The Bahamas – Mr. John Nixon

Organisation of Eastern Caribbean States– Mr. Cornelius Isaac
UNICEF - Ms Violet Speek-Warnery
United Nations Development Programme – Mr. Marlon Clarke
United Nations International Strategy for Disaster Reduction
United Nations Women
University of Guyana – Dr. Paulette Bynoe
UTECH – Mr. Laurence Neufville

#### References

Baastel-ESL (Canada-Jamaica). (2007). *Comprehensive Disaster Management Strategy and Programme Framework*. Barbados: CDEMA.

BusinessTech Research Inc. (2010). *Regional infrastructure for information sharing and development and adaptation of model contingency.* Barbados: CDEMA.

BusinessTech Research Inc. (2010). Regional infrastructure for information sharing and development and adaptation of model contingency ICT plan: Revised interim Report - Volume II - Country Summaries. Barbados: CDEMA.

Caribbean Community. (2005). *Caribbean Community Regional Programme of Action: World Conference on Disaster Reduction*. CDEMA.

CDEMA. (2009). CDM Coordination and Harmonisation Council Sector Sub-Committees: Report Report on Analysis of Areas of Convergence in Priority Results. Barbados: CDEMA.

CDEMA. (2012). CDM Coordination and Harmonisation Council Sector Sub-Committees: Report Report on Analysis of Areas of Convergence in Priority Results. Barbados: CDEMA.

CDEMA. The regional programme and plan of action for Climate Change Adaptation and Disaster Risk Reduction for the Mainstreaming Climate Chage into Disaster Risk Management for the Caribbean Region (CCDM) Project. Barbados: CDEMA.

CDEMA. (2012). Working Session of the Third Meeting of the Technical Advisory Committee of the Caribbean Disaster Emergency Agency (CDEMA): Emerging areas for the Work Programme of the CDEMA CU Beyond 2012. Barbados.

Chambers, R. &. (December de 1991). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. Recuperado el 7 de November de 2013, de Institute of Development Studies: http://www.ids.ac.uk/files/Dp296.pdf

DaBreo, S. (2010). *CDEMA Programming Consultation*. Obtenido de CDEMA: http://www.cdera.org/cdm/presentations/National\_LevelProgressonCDMImplementationBluePrintforC DM Implementation.pdf

International Recovery Platform, UNDP and ISDR. (s.f.). *Guidance note on recovery: Livelihood.* Recuperado el 7 de November de 2013, de UNISDR: http://www.unisdr.org/files/16771\_16771guidancenoteonrecoveryliveliho.pdf

Joseph-Brown, L. S., & Tuiloma-Sua, D. (2012). *Integrating Gender in Disaster Management in Small Island Developing States: A Guide*. UNDP Cuba, UNDP Barbados and OECS, and UNDP Pacific Centre: Caribbean Risk Management Initiative.

Kambon, D. A. (2013). *Issues paper: Gender mainstreaming in DRM in the CDM mandate.* Barbados: CDEMA.

Le Group-conseil baastel Itée. (July 2010). *Regional Monitoring, Evaluation and Reporting Manual and Tools: Volume II.* CDEMA.

OECD DAC. (s.f.). Glossary of Key Terms in Evaluation and Results Based Management. Obtenido de The Organisation for Economic Co-operation and Development: Development Assistance Committee: http://www.oecd.org/development/peer-reviews/2754804.pdf

UNISDR. (2006). *A guide to Community-Based Disaster Risk Reduction in Central Asia*. Recuperado el July de 2013, de United Nationns International Strategy for Disaster Reduction: http://www.unisdr.org/files/2299\_ACommunityGuideeng.pdf

UNISDR. (2009). UNISDR Terminology on Disaster Risk Reduction. Recuperado el July de 2013, de United Nationns International Strategy for Disaster Reduction: http://www.unisdr.org/files/7817 UNISDRTerminologyEnglish.pdf

UNISDR, UNDP and IUCN. (2009). *Making Disaster Risk Reduction Gender-Sensitive: Policy and Practical Guidelines*. Geneva, Switzerland: United Nations.

United Nations. (2013). *Millennium Development Goals Report*. Obtenido de http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2013/English2013.pdf
World Commission on Environment and Development. (1987). *Report of the World Commission on Environment and Development: Our Common Future*. Obtenido de http://www.un-documents.net/ourcommon-future.pdf

#### **Endnotes**

<sup>&</sup>lt;sup>1</sup> The decision to retain the former version of the Logic Model was taken at the 2011 CDM Partners Consultation meeting which had indicated in principle that the results of the existing Enhanced CDM Strategy and Programming Framework 2007-2012 were to a large extent still relevant. At that time the goal in relation to the strategy and next programming cycle was to seek to build on the national, sectoral and regional strengths, processes, partnerships, synergies and momentum gained thus far with a limited need to modify the results framework.

<sup>&</sup>lt;sup>2</sup> Better and increased accountability at all levels would be an integral part of the manner in which institutional arrangements are framed and delivered.

<sup>&</sup>lt;sup>3</sup> The principles encapsulated in Value for Money (VFM) will guide the assessment of efficiency and efficacy of operational efforts at the regional and national levels.

<sup>&</sup>lt;sup>4</sup> This result addresses inclusion into the institutional structures at various levels.

<sup>&</sup>lt;sup>5</sup> The proposed alignment can correspond to existing and new sectoral partners for CDM implementation in addition to various other types of partners. For existing sectoral partners with well-defined work programmes which are aligned to CDM, the goal is for greater penetration, which would have begun during the former period. For the new sectors of concern, which include Finance/Economic Development, Planning and the Environment, it will entail the inclusion of their programming into the new framework.

<sup>&</sup>lt;sup>6</sup> Donor programming and projects in the region have been aligned over time to the regional and national strategies and integrated within the CDM Strategy. Greater levels of integration and deeper penetration will be sought during the upcoming period. CDM programming by necessity must include the treatment of the three cross-cutting themes of Climate Change, ICT and Gender. The existing programming for each of the themes and their relationship to DRR are at varying stages of development and implementation and therefore, greater penetration into regional and national considerations will be sought during the strategic period.

This result can address the need expressed by National Disaster Coordinators to allow for the inclusion of operational and ongoing concerns that are part of the services provided to various stakeholders at the national level.

<sup>&</sup>lt;sup>8</sup> If Output 1.4 is achieved, it will assist in meeting/achieving Outputs 4.1 and 4.2

<sup>&</sup>lt;sup>9</sup> The result takes into account existing and possibly new partners for inclusion into the network apart from the pre-existing Regional Disaster Risk Reduction Network.

10 If Output 2.3 is achieved, it will assist in meeting/achieving Outputs 4.1 and 4.3

<sup>&</sup>lt;sup>11</sup> If Output 2.4 is achieved, it will assist in meeting/achieving Output 4.3

<sup>&</sup>lt;sup>12</sup> If Output 3.1 is achieved, it will assist in meeting/achieving Outputs 1.2, 1.3 and 1.4.

<sup>&</sup>lt;sup>13</sup> This result addresses inclusion of hazard information into the DRM framework, which tends to be more programmatic.

<sup>&</sup>lt;sup>14</sup> If Output 3.2 is achieved, it will assist in meeting/achieving Outputs 2.2, 2.4 and 4.2.

<sup>&</sup>lt;sup>15</sup> Development planning and control decision, tourism infrastructure, capital investments in other infrastructure are some of the considerations to be addressed by the output. The same may apply to key sectors identified in the plan. Moreover, the mainstreaming and integration of CCA and DRR should be accounted for not only in government planning but also within the budgeting processes, hereby assuring establishment of priorities, allocation of budgets and accountability. Output 3.3 will be assisted by the achievement of Outputs 1.5, 2.2 and 2.3.

 $<sup>^{16}</sup>$  If Output 4.1 is achieved, it will assist in meeting/achieving Output 2.3 and 3.3.

<sup>&</sup>lt;sup>17</sup> If Output 4.3 is achieved, it will assist in meeting/achieving Outputs 3.3.

<sup>&</sup>lt;sup>18</sup> The CDM CHC is supported by six (6) sector sub-committees (SSC), namely education, health, agriculture, tourism, civil society and finance. With the exception of the Finance Sector Sub-Committee, each of the SSC is functioning and is chaired by a regional agency that has agreed to undertake a leadership role for CDM implementation in their respective sectors.