



A Framework for Vulnerabilities in the Caribbean

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PRESENTATION OVERVIEW

- Introduction to CDEMA
- The Caribbean Hazard Landscape
- CDM – A Regional Framework for Disaster Management
- Vulnerability of the Fisheries and Aquaculture Sector in the Caribbean

INTRODUCTION TO CDEMA

Introduction to CDEMA

- CDEMA, originally called CDERA (Caribbean Disaster Emergency Response Agency), was established in 1991 through an Agreement of the Heads of Government of the Caribbean Community
- CDERA was responsible for **16** Participating States

CDERA PARTICIPATING STATES



Introduction to CDEMA

- On September 1, 2009, CDERA officially transitioned to the Caribbean Disaster Emergency Management Agency (CDEMA)
- Two new Participating States – Haiti and Suriname
- Now have a membership of 18 States

CDERA to CDEMA

Caribbean Disaster Emergency
Response Agency (CDERA)

Caribbean Disaster Emergency
Management Agency (CDEMA)

- Expanded mandate
- Broader stakeholder base
- Improved governance structure

THE CARIBBEAN HAZARD LANDSCAPE



Natural and Anthropogenic Hazards

- Natural Hazards

- Hurricanes
- Floods
- Drought
- Earthquakes
- Volcanoes
- Landslides
- Tsunamis



- Human Induced

- Fires
- Oil Spills
- Chemical Explosions
- Epidemic
- Water Pollution
- Accidents
- Bomb Threats



Disaster Experiences:



Flooding St. Vincent 2010
(Acknowledgement Caribbean 360)



**Hurricane Tomas, Saint Lucia
2010**



**Volcanic Eruption, Montserrat
(Montserrat Volcano Observatory)**



Earthquake, Dominica, 2004



Earthquake, Dominica, 2004



Haiti Earthquake 2010

Vulnerability of the Region

- 2nd most hazard prone region in the world
- Regular Annual disaster losses of US \$3 billion
- Significant loss to social and productive sector
- >68% Loss to GDP
- 60% of population, 70% of economic activity with 2 miles of coastline

CDM – A REGIONAL FRAMEWORK FOR DISASTER MANAGEMENT



What is CDM?



- Comprehensive Disaster Management (CDM) is the management of **all hazards**
- through **all phases** of the disaster management cycle – prevention and mitigation, preparedness, response, recovery and rehabilitation
- by **all peoples** public and private sectors, all segments of civil society and the general population in hazard prone areas.
- CDM involves **risk reduction & management** and
- **integration of vulnerability assessment** into the development planning process. (CDEMA 2001, 2006)

Development of a CDM Strategy and Framework

- Developed in 2001 through broad based stakeholder consultations.
- In 2006, the CDM Strategy was reviewed and reshaped to emphasize disaster loss reduction through risk management, and to follow a more Programme Based Approach (PBA) with an emphasis on Results Based Management (RBM).
- *GOAL - Regional Sustainable Development enhanced through Comprehensive Disaster Management*

CDM Framework 2007-2012 - OUTCOMES

1. Enhanced institutional support for CDM Program implementation at national and regional levels
2. An effective mechanism and programme for management and sharing of CDM knowledge is established and utilized for decision making
3. Comprehensive Disaster Management has been mainstreamed at national levels and incorporated into key sectors of national economies (including tourism, health, education, infrastructure, planning and agriculture)
4. Enhanced community resilience in CDEMA states/ territories to mitigate and respond to the adverse effects of climate variability and change and disasters

CDM STRATEGY AND FRAMEWORK

GOAL <i>Regional Sustainable Development enhanced through Comprehensive Disaster Management</i>			
PURPOSE <i>'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.'</i>			
OUTCOME 1:	OUTCOME 2:	OUTCOME 3:	OUTCOME 4:
Enhanced institutional support for CDM Program implementation at national and regional levels	An effective mechanism and programme for management of comprehensive disaster management knowledge has been established	Comprehensive Disaster Management has been mainstreamed at national levels and incorporated into key sectors of national economies (including tourism, health and agriculture)	Enhanced community resilience in CDERA states/ territories to mitigate and respond to the adverse effects of climate change and disasters
1.1 National Disaster Organizations are strengthened for supporting CDM implementation and a CDM program is developed for implementation at the national level	2.1 Establishment of a Regional Disaster Risk Reduction Network to include a Disaster Risk Reduction Centre and other centres of excellence for knowledge sharing and management in the region	3.1 CDM is recognised as the road map for building resilience and Decision-makers in the public and private sectors understand and take action on Disaster Risk Management	4.1 Preparedness, response and mitigation capacity (technical and managerial) is enhanced among public, private and civil sector entities for local level management and response
1.2 CDERA CU is strengthened and restructured for effectively supporting the adoption of CDM in member countries	2.2 Infrastructure for fact-based policy and decision making is established/enhanced	3.2 Disaster Risk Management capacity enhanced for lead sector agencies, National and regional insurance entities, and financial institutions.	4.2 Improved coordination and collaboration between community disaster organizations and other research/data partners including climate change entities for undertaking comprehensive disaster management
1.3 Governments of participating states/ territories support CDM and have integrated CDM into national policies and strategies	2.3 Improved understanding and knowledge sharing on priority hazards	3.3 Hazard information and Disaster Risk Management is integrated into sectoral policies, laws, development planning and operations, and decision-making (in the tourism, health and agriculture sectors, planning and infrastructure	4.3 Communities more aware and knowledgeable on disaster management and related procedures including safer building techniques
1.4 Donor programming integrates CDM into related environmental, climate change and disaster management programming in the region.	2.4 Existing educational and training materials for Disaster Risk Reduction and Disaster Management are standardized in the region.	3.4 Sectoral Prevention, Preparedness and Response/Mitigation Procedures developed and Implemented (in the tourism, health and agriculture, planning and infrastructure	4.4 Standardized holistic and gender-sensitive community methodologies for natural and anthropogenic hazard identification and mapping, vulnerability assessments and early warning systems developed and applied in selected communities.
1.5 Improved coordination at national and regional levels for disaster management 1.6 Capacity for monitoring, evaluation and reporting is built	2.5 A Strategy and curriculum for building a culture of safety is established in the region		4.5 Early Warning Systems for disaster risk reduction enhanced at the community and national levels

Priority Sectors

- Six Sectors have been prioritized in the Enhanced CDM Strategy for focus during the period 2007-2012. These sectors include – *Education, Health, Civil Society, Agriculture, Tourism and Finance.*
- The following Sector Leads have been confirmed
 - ✓ **Tourism:** *Caribbean Tourism Organization;*
 - ✓ **Education:** *University of the West Indies;*
 - ✓ **Agriculture:** *Food and Agriculture Organization*
 - ✓ **Health:** *Pan American Health Organization.*
 - ✓ **Civil Society:** *Caribbean Policy Development Centre (CPDC) and IFRC*

VULNERABILITY OF THE FISHERIES AND AQUACULTURE SECTOR IN THE CARIBBEAN

Caribbean Fishing Communities

- Significant components of the natural environment to consider in understanding the vulnerability of the CDEMA Participating States include:
 - corals,
 - sea grass beds,
 - fishing grounds,
 - sandy beaches,
 - rivers etc.

Strategic Response

- Climate change adaptation and disaster risk management in fisheries and aquaculture in the CARICOM region

Strategic Response

Purpose

- To strengthen regional and national cooperation and develop capacity in addressing climate change impacts and disasters in the fisheries and aquaculture sector

- **Objectives**
- Assess vulnerability to disasters and climate change in CARICOM countries by understanding potential impacts to the system, the sensitivity of the system to such changes and the current adaptive capacity of the system;
- Identify gaps in the existing knowledge to assess vulnerability in this system;
- Determine potential measures for reducing vulnerability to disasters and climate change;

Objectives cont'd

- Provide policy guidance to reduce the system's vulnerability within the wider sustainable development objectives;
- Develop a strategy and action plan for integrating DRM and CCA into small-scale fisheries and aquaculture;
- Suggest a programme for funding;

Caribbean Fishing Communities

Characteristics:

- sub-standard living conditions;
- poor housing ;
- low levels of formal education;
- inadequate access to basic services - water, schools, health care;
- inadequate access to credit and low savings;

Caribbean Fishing Communities

Past attempts at reducing poverty in the sector have failed due to:

- Overemphasis on technology to promote economic growth and development
- overreliance infrastructure projects and the application of market oriented economic policies

The Diagnostic Study to Determine Poverty Levels in Fishing Communities in CARICOM

Main Objective:

- To determine poverty levels of fishing communities in selected CRFM members States, and its effects on quality of life and structure, in order to identify suitable planning models and implement alternative livelihood and poverty alleviation programs in these communities.

The Diagnostic Study to Determine Poverty Levels in Fishing Communities in CARICOM

- Implemented in 10 selected CARICOM Member States
- Selected countries had to be representative of the fishing sector in the entire CARICOM region and reflect the most common problems facing the sector

Thank You.