Jamaica National Legislative and Institutional framework for Disaster Risk Reduction (DRR) and its application at the local level.

Making Cities Resilient: My City is getting Ready!

MAY 7, 2013
Introduction

• About Disaster Risk Management in Jamaica
• 1993 Legislation
• National Disaster Management Framework
• Achievements Successes
About DRM In Jamaica
Natural and Technological/manmade Hazards Affecting Jamaica

• NATURAL
  Floods, Hurricanes, Storm surges, Earthquakes, Landslides
  Droughts

• TECHNOLOGICAL
  - Hazardous Material release, Epidemics, Plant and animal diseases, Fires
The concept of DRM accepts that some hazard events may occur……..But tries to lessen the impact by improving the community’s ability to absorb the impact with minimum damage or destruction.
Disaster Risk Management (DRM) – What and Who?

Disaster risk management includes administrative decisions and operational activities that involve:

- Prevention
- Mitigation
- Preparedness
- Response
- Recovery and Rehabilitation

- DRM involves all levels of government – decision makers and local government

Non-governmental and community-based organizations play a vital role in the process

- Communities themselves are first responders
Legislation and Institutional Framework
Legislation and Institutional Framework

- Disaster Management Act 1993
- National Disaster Plan
- Establishment of National Disaster Fund
- Institutional framework for Disaster Management
- National Hazard Mitigation Policy
- Guideline for National Disaster Relief policy
- Review of Disaster Management Act 1993
Disaster Management Act

The Disaster Preparedness and Emergency Management Act establishes the Office of Disaster Preparedness and Emergency Management (ODPEM) (section 3).

The Act provided that the principal objects of ODPEM were to advance disaster preparedness and emergency measures in Jamaica by facilitating and co-ordinating the development and implementation of integrated disaster management systems.

The collection and publication of data pertaining to disaster mitigation, preparedness and emergency management
Supporting Acts and Regulations

- Fire Act
- Public Health Act
- NRCA
- Town and Country Planning Act
- Parish Development Orders
- Severe Weather Orders
- Draft National Building Codes
- International legislative considerations and guidelines
National Disaster Management Framework
National Disaster Plan

• Developed in 1993 and revised 1997
• Requires additional review to reflect up-to-date thinking and technologies relating to disaster management in the wider context of sustainable national development
• Intended to provide the legal framework upon which disaster preparedness, operations and training are based
• Government Officers can be held accountable for disaster responsibilities
• All the legislation comes together under the national coordination mechanism during a response under the National Disaster Plan.
National Disaster Plans

Sub Plans of the National Disaster Plan
• National Oil Spill Response Plan
• Hazardous Materials Response Plan
• Joint - Portmore Evacuation Plan
• National Fire Management Plan
• National Damage Assessment Plan
• Overseas Assistance Plan
• Shelter and Welfare plan and policy
• National Hazard Mitigation Policy
The National Disaster Response Mechanism functions at three (3) levels:

- National Level
- Parish Level
- Community Level
National Emergency Organization (NEO)

The **NEO** is the term used to refer to all participants in national disaster management efforts,

- Government (GO’s)
- Non-Government Organizations (NGO’s)
- Private Voluntary Organizations (PVO’s)
- Volunteers
Sub-committees

**ADMINISTRATION FINANCE & PLANNING COMMITTEE MFP/ODP**
- Equipping/Staffing EOC
- Funding of Emergency Activities

**DAMAGE ASSESSMENT RECOVERY & REHABILITATION COMMITTEE MTW/ODPEM**
- Damage Assessment
- Coordinate Restoration

**EMERGENCY OPERATIONS COMMUNICATION, TRANSPORT JFB/ODPEM**
- Rescue Evacuation
- Law Enforcement
- Establish and Maintain Communication Links
- Coordinate Transport

**HEALTH PLANNING MOH/ODPEM**
- Emergency Health Care
- Health Care

**PUBLIC INFORMATION AND EDUCATION JIS/ODPEM**
- Disseminate Information
- Conduct Training Exercises

**WELFARE/SHELTER RELIEF CLEARANCE MLSSS/ODPEM**
- Shelter Relief
- Coordinating Clearance of Relief Supplies
- Oversee Parish Programmes
ZONAL COMMITTEES

ADMINISTRATIVE CHAIRMAN

VICE CHAIRMAN

SECRETARY

ASSISTANT SECRETARY

PUBLIC EDUCATION INFORMATION AND TRAINING SUB COMMITTEE
- Co-ordinator
- Media Personnel
- Teachers
- Librarians

WELFARE SUB COMMITTEE
- Co-ordinator
- Shelter Managers
- Volags
- Churches

COMMUNICATION AND TRANSPORTATION SUB COMMITTEE
- Co-ordinator
- CB Operators
- Other Radio Users
- Transport Operators
- H/Duty Owners/Operators
National Emergency Operations Centre Structure - Operations group

EMERGENCY OPERATION CENTRE

- HEALTH WELFARE
  - MOH POOR RELIEF
    - Emergency Health & Welfare Plan
    - Relief Plan
    - Data Collection of Victims

- PUBLIC UTILITIES
  - MOC (W)
    - Emergency Restoration of utilities
    - Development of Transportation Plan
    - Resource ID
    - Damage Assessment

- DISTRICT COMMITTEE
  - PDC
    - Community Welfare

- EMERGENCY OPERATIONS
  - JFB
    - Rescue
    - Evacuation
    - Law Enforcement

- COMMUNICATION PUBLIC ED.
  - CB/JIS
    - Dissemination of Information
    - Maintenance of Communication Links

- ADMIN
  - EXECUTIVE
    - Funding of Emergency Activities
    - Equip EOC Staff
    - Rehab Plan
National Disaster Fund

An important sub-committee of the National Disaster Committee is Finance & Administration which is charged with management of the NDF.

In essence the F&A sub-committee is responsible for the growth of the fund as well as approval of disbursements from the fund.

Request for disbursements from the fund are routed through ODPEM by way of a formal letter to the Chairman of the F & A committee.

Funds usually released to facilitate relief cheques and disaster mitigation initiatives.
The National Hazard Mitigation Policy

This policy recognizes that successful integration of hazard-risk reduction into national development strategies is predicated on the awareness that a community-based approach to the design and implementation of related measures must be the focus of any intervention.

Policy promotes

- active participation and partnership of communities,
- governmental and non-governmental organizations,
- the private sector and development partners, in the conceptualization, design and implementation of hazard-risk reduction measures,
- and provide the basic guidelines for realization of the benefits of these measures in overall disaster management to support the sustainable development process.
National Hazard Mitigation Policy

HAZARD-RISK REDUCTION

Pre-emergency Measures
- Preparedness Measures
  - Organization
  - Legislation
  - Planning
  - Facilities
  - Equipment
  - Training

Prevention Measures
- Relocation
- Structures
- Maintenance
- Equipment
- Regulation/Procedure
- Personnel

Emergency Response Measures
- Early Warning
- Evacuation
- Shelter & Supplies
- Search & Rescue
- Communication
- Public Information
- Coordination
- Return to Normality

Post-emergency Measures
- Reconstruction
- Rehabilitation

Hazard Impact Mitigation
Review of the Disaster Management Act 1993

• Declaration of Disaster Areas – no provisions were under the old act.
• Guidelines under the plan – Act gives the bodies and documents legal standing speaks of NDC and Parish disaster committees, membership and how they should be operated.
• Evacuation orders
• Power of the organisation in the creation of regulations in disaster management these approved by the minister _ legal instrument put forward under the act
National Strategy

• **Ensuring** preparedness for the Nation
• Coordinate warning, emergency response and relief operations
• **Encouraging** and supporting mitigation measures
• **Provide** training in all areas of disaster preparedness
• **Continuous** public education and awareness on disaster management issues. Includes NEO, exercising them in their roles and responsibilities.
• **Hazard** identification assessments and research
• Promote mutual assistance and cooperation among local response and international donor agencies. National strategy
• This is achieved by:

  *Rigorous Mitigation, Prevention and Preparedness programmes*
JAMAICA is getting Ready
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How?

- Building Disaster Resilient Communities
- Early warning system implementation & upgrades
- Vulnerability and risk Studies (towns and cities)
- Training and simulation exercises
- Development approval – integrated hazard and vulnerability assessments
- Mitigation and risk reduction activities
BUILDING DISASTER RESILIENT COMMUNITIES

PROJECT DRIVEN:

a) BDRC (CIDA) Project - 32 communities
b) IDB Project – 28 communities

Total of 64 Community Disaster Risk Management Plans (CDRMP) developed over the last three years.

32 out of 56 community hazard maps digitized.

Community knowledge provide information on:

- Hazard history
- Elements at risk and how they value them
- Factors contributing to vulnerability
- Coping strategies and capacities to confront disasters
PARTICIPATORY GIS (PGIS) AT COMMUNITY LEVEL

Participatory Mapping in Process

Example of Community Hazard Map
USE OF GIS AT ODPEM

The use of GIS at ODPEM can be categorized into:

- Preparedness
- Response
- Recovery
- Mitigation & Planning

HAZARD, VULNERABILITY AND RISK ASSESSMENT

PARTICIPATORY GIS (PGIS) AT THE COMMUNITY LEVEL

DAMAGE ASSESSMENTS

GIS IN ODPEM

- SCENARIO PLANNING
- CRITICAL FACILITIES DATABASE – Shelters etc

EMERGENCY OPERATIONS
- Incidents maps
- Situation Reports
VULNERABILITY AND RISK ASSESSMENT
Studies (townships)

Vulnerability and Risk Assessment - Projects Based

- 2010/11 - IDB funded risk assessments in Three (3) coastal towns – Black River, Savanna-La-Mar and Ocho Rios; GOJ/Annotto Bay CBO

- Develop hazard, vulnerability and risk maps for all 3 areas

- Development of Risk Management Plans

- Risk Assessment for town of Annotto Bay

Other Projects with Partner Agencies:

- 2010 GOJ and Worldbank – Coastal Multi-hazard Mapping and Vulnerability Assessment Project for Manchioneal, Portland Cottage and Morant Bay
HAZARD AND VULNERABILITY MAP FOR OCHO RIOS

FLOODING EVENTS

10 YR EVENT
20 YR EVENT
50 YR EVENT
100 YR EVENT
Hazard Assessment

- Forms part of the development approval process for:
  a. Subdivision Applications
  b. Environmental Impact Assessments

- Process involves multi-hazard assessment of proposed sites – flooding, landslide, storm surge and earthquakes.

HVA Process Involves:

- Review historic records
- Interpretation of geological, topographical and hydrological datasets
- Imagery Analysis
- Recommend appropriate mitigation measures
HAZARD ASSESSMENT FOR A SUBDIVISION APPLICATION

Geotechnical characteristics of the proposed site:
- Marsh, Swamp - very poor bearing capacity, liquefaction and high erodability.
- Alluvium – slope stability dependent on soil strength; cave-ins below water table; high erodability.

Overall Assessment
- Site is low-lying and flood prone
- Proposed development lies within the 50 year inundation return period
- The banks of the Goodens River are likely to be breached in cases of heavy rainfall
- ODPEM refused application
DAMAGE ASSESSMENT

Affected Areas in Westmoreland caused by Tropical Depression 16

- Use of GPS for damage assessment and post-disaster study
TRAINING AND EXERCISE

- TRAINING – takes place at several levels – community, sectors, businesses, schools
- SIMULATION EXERCISES – National Simulation Training Exercise Programme (NSTEP):
  1. Annual Simulation Exercise (Discussion based to full scale)
MITIGATION AND RISK REDUCTION ACTION

21 MICRO-MITIGATION PROJECTS IMPLEMENTED IN 3 YEARS:

- “Soft” mitigation measures – mangrove replanting, tree planting
- Preparedness – shelter retrofitting, community storage facilities
- Mitigation – Drain construction, roof retrofitting, tyre soil retaining wall
EARLY WARNING SYSTEM

• Strengthening of National Emergency communication network – Tier 3 ranking
• Emergency Affiliate Radio Service (EARS)
• National Early Warning and Alerting Platform
• Public Safety network
Thank You

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