Jamaica

National progress report on the implementation of the Hyogo Framework for Action (2009-2011)

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Outcomes for 2007-2009

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Outcomes:

The process to fully established Hazard Information within the Planning and Development process has progressed significantly. It is now a Policy that all Development Applications are submitted to th National Disaster Management Office for review and comments prior to approval. The process is however challenged by limited Human Resources and inadequate island wide coverage of multi hazard maps. Hazards and Vulnerability Assessment and Ranking Tools developed and are being applied.

National Action Plan to be developed by May 2011 and will provide practical support to the National Hazard Mitigation Policy. A Vision 2030 Development Plan has also been prepared and features Hazard Risk Reduction and Climate Change Adaptation as a major objective. The National Disaster Office and the Meterological Service currently chairs a Thematic Working on Disaster Risk Management and Climate Change Adaptation.

Baseline Assessment has been conducted for Jamaica with support from CDEMA and will be utilized in the 2011-2013 programme period.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Outcomes:

The efforts to mainstream DRR within Key Sectors and Agencies have been accelerated with the Ministry of Agriculture and the Ministry of Tourism establishing DRM focal points. Both sectors have also incorporated DRR activities in their respective sector work programmes inclusive of the Policy and legislative review necessary to effectively integrate the DRR at the sector level. The National Disaster Office has initiated several Community Capacity and Resilience Building Projects which have are already yielding positive outputs. National Disaster Management Framework is being reviewed to ensure greater effectiveness in tackling the identified areas of weaknesses in the areas of Risk Analysis Risk Reduction and Risk Transfer and further enhance areas that have been traditionally stronger such as preparedness, response coordination.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Outcomes:

The preparedness capcity has remained fairly static over the period. Efforts have been made to improve preparedness Capacity in the areas of Earthquake Response and Hazardous Materials/Waste. The Community Programme is currently being re-established with strong ties to the Local Governance Mechanism.

Improvements have been noted in the utilization of technical findings in some infrastructure



Strategic goals

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statement 2011-2013:

Sustainable Development in Jamaica enhanced by and strategically aligned to Comprehensive Disaster Management.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Strategic Goal Statement 2011-2013:

Create a motivating, challenging and safe work environment for ODPEM employees. Now housed at an appropriate, safe, and well-equipped location, the organization remains committed to proving a work environment that is conducive to high output, worker satisfaction and skills improvement. Levels of satisfaction have been benchmarked to determine ongoing levels of improvement.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Strategic Goal Statement 2011-2013:

Strengthen ODPEM's institutional capacity and raise the corporate profile, by raising visible standards and by strengthening brand recognition by the population through its ongoing programmes.

Priority for action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 1: Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Is DRR included in development plans and strategies? -- not complete --
- * Yes: National development plan
- * Yes: Sector strategies and plans
- * Yes: Climate change policy and strategy
- * Yes: Poverty reduction strategy papers
- * No: Common Country Assessments (CCA)/ UN Development Assistance Framework (UNDAF)

Description:

The promulgation of the hazard mitigation policy represents a significant achievement for the country as it has long been recognized as a tool for promoting DRR. The limitation however is that there has been no wide scale dissemination and public sensitization about the policy. This will limit implementation. Facilitating awareness building about the policy will ensure its incorporation in other plans and policies and so will drive DRR. A strategy and an Action Plan to facilitate the implementation of the policy and identify responsibilities for achieving policy objectives is to be developed.

The Disaster Preparedness and Emergency Management Act was passed in 1993. While it has provided the legal framework for disaster management in the country, it is generally felt that the provisions are not sufficient to deal with the shift in focus from disaster management to disaster risk management. Efforts at drafting a new Act have started, and if passed, will repeal the existing act and provide a strengthened framework for DRR in the country. Shifts in government priority, changes in the parent ministry of the national disaster office caused a temporary lag in the review of the Bill. The organisation will be renewing its efforts in this regard in its current strategic plan 2008-2011. The revised legislation along with the current thrust to achieve Local Government Reform should result in a further strengthening of the Local Authorities to effectively provide more effective management of Disaster Risk at the local level.

- Vision 2030 Plan has been completed and disseminated since 2009
- National Climate Change Adaption Framework adapted based on UNFCC
- Second national communication on Climate change completed
- National Energy policy approved Wind and solar energy identified as cleaner, more sustainable sources of energy. Discussion underway regarding the use of Liquid natural Gas as an alternate
- Regional Protocol for tsunami being developed for Jamaica

- Parish development Orders currently being developed for two of fourteen municipalities.
- Mainstreaming of DRR has commenced in key sectors (agriculture and tourism)
- First attempt at developing a country work programme to enable sectors to be more integrated in Disaster Risk Management
- National Poverty Eradication Strategy in place

Context & Constraints:

Challenges

- •The National Hazard Risk Reduction policy has not been disseminated on a wide scale and currently there is no implementation or action plan in place. The strategy and the action plan to be developed. Currently the National Disaster Management Agency has been implementing a three year strategic planning for DRR. This strategy while comprehensive is not fully integrated in key sectors and agencies.
- •The current Disaster Preparedness and Emergency Management Act needs revision to make it more applicable to changing disaster management practices. It currently does not recognize some of the elements of risk management and does not address critical issues such as evacuation, no build zones and sanctions for breaches of the Act. The Legislation has however been revised and is schedule to be considered by the Parliament.
- Political machinery slow to implement local government reform

Priority for action 1: Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Is there a specific allocation of budget for DRR in the national budget?
- * 0 % allocated from national budget
- * 0 USD allocated from overseas development assistance fund
- * 0 USD allocated to hazard proofing sectoral development investments (e.g transport, agriculture, infrastructure)
- * 0 USD allocated to stand alone DRR investments (e.g. DRR institutions, risk assessments, early warning systems)
- * 0 USD allocated to disaster proofing post disaster reconstruction

Description:

The organization has always recognized the need for plan development and has always incorporated risk reduction plans and activities in its strategic plan. However, attaining the necessary resources to effectively deliver has been a challenge.

Until December 2005, when the Hazard Risk Reduction Policy was passed by Cabinet, the only overarching framework guiding the process was the National Disaster Plan and the Strategic Plan of the National Disaster Office Notwithstanding several efforts

have been made at mitigation in several sectors albeit a disjointed approach. For Example:

- Tourism sector, some amount of budgetary allocation for DRM
- Transport and Infrastructure DRR incorporated during maintenance and for new developments
- Overseas Development assistance to various sectors Agriculture, infrastructure, education, health etc.
- Some progress made with sector DRR plans which will justify requests for budgetary allocation

Context & Constraints:

Challenges

- Absence of dedicated budgetary allocation at the local and national levels to expedite risk reduction programmes.
- •Absence of substantial annual allocations to the National Disaster Fund.
- Absence of a Risk Mitigation Strategy and Action Plan
- · Absence of local action plans for DRR
- Too much dependency on overseas development assistance for DRR activities

Priority for action 1: Core indicator 3

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Do local governments have legal responsibility and budget allocations for DRR? Yes
- * Yes: Legislation
- * Yes: Budget allocations for DRR to local government

Description:

The national disaster management structure includes at the third tier a community disaster management framework which is intended to ultimately support the efforts at the national level. They have been functioning well and have been the recipients of several disaster related training and Capacity Building. Not withstanding there are a pockets of communities islandwide which have not been fully trained.

- Community Development Funds have been established to provide elected officials access to funds for DRR activities among other things among other things, DRR activities
- Legislations available to local authorities for DRR include Building Acts and By-Laws, Planning Laws,
 Public Health Act

Community involvement is articulated in the current disaster preparedness Act, 1993 and proposed to be strengthened in the new legislation. The new Act is being revise to give Local Auhtorities more legislative authority.

There is a revised building code (not enshrined in law)

Context & Constraints:

Challenges

- •The Parish structure needs strengthening so that community involvement is effectively employed to support the DRR Planning and Response at the Municipal Level thereby strengthening the governance process for DRR at the Local Authorities.
- •Resource constraints exist which sometimes affects resources deployed at the community level.
- •There is still scope for greater involvement of the communities in Disaster risk management.
- •Lack of incentives to promote the programme in an effort to receive wide scale acceptance.
- •Socio-economic conditions of some communities act as a barrier to acceptance of DRR

Some of the existing laws available to Local Authorities are archaic dating to as far back as 1908.

The process of preparing development orders are driven at national level rather than at local level.

Priority for action 1: Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Are civil society organisations, national planning institutions, key economic and development sector organisations represented in the national platform? Yes
- * 0 civil society members (specify absolute number)
- * 0 sectoral organisations (specify absolute number)
- * 0 women's organisations participating in national platform (specify absolute number)

Description:

The National Disaster Committee is the key decision making entity within the disaster framework. This is chaired by the Prime Minister and facilitates the interaction of key development players towards progress of the risk reduction agenda.

The national disaster plan sets out a comprehensive framework for participation of several government agencies, private sector and NGO's. Interaction among partners is established in all critical aspects of disaster management including Risk Reduction.

At least one of the six national sub-committees has responsibility for the area of risk reduction. This sub-committee consists of a very wide cross section of all critical sectors.

The platform will be strengthened by the new legislation which is currently in draft - to include a National Disaster Council in place of the existing National Disaster Committee. The Country Work programme will provide a comprehensive strategic framework which integrates all sectors.

Womens organization in DRR has been strengthened through the identification of a gender focal point.

Within an existing community resilience project there has been a move towards gender specific activities which target women.

Context & Constraints:

Participation by some agencies has not been mainstreamed and is more aligned with a person rather than a post. This affects the quality and continuity of participation.

- •Staff attrition also affects the process as roles have to be reassigned and the requisite training to re-introduce core principles have to be executed.
- •Resources of some agencies are limited and affect their level of participation.
- •Capacity Assessment of the national and parish mechanism and reporting to the National Disaster Committee is necessary.

Priority for action 2

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 2: Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Is there a national multi-hazard risk assessment available to inform planning and development decisions? No
- * No: Multi-hazard risk assessment
- * 0 % of schools and hospitals assessed
- * 0 schools not safe from disasters (specify absolute number)
- * Yes: Gender disaggregated vulnerability and capacity assessments
- * Yes: Agreed national standards for multi hazard risk assessments

Description:

There is a deliberate effort at collecting and making hazard and vulnerability data available. This is usually through damage assessment reports, a national disaster catalogue and annual incident reports and hazard maps prepared by the respective technical agencies. These reports are available to the general public to inform their projects. This information has also guided our intervention in communities and has been used in the preparation of hazard inventory maps and hazard maps. Hazard data has also been used in the development of a methodology to rank vulnerable communities. Academia has also been instrumental in researching some of this data.

So far, no risk assessments have been undertaken for key sectors but efforts are currently underway to achieve this in the agriculture and tourism sectors. The housing sector will be focused on towards the end of the 2008-2011 Planning Cycle.

Caribbean Risk Atlas / National Risk being developed by UWI with ODPEM support.

National Spatial Plan Project 90% complete re. data sourcing.

Discrete hazard maps exist for landslide, earthquake.

School Safety Programme underway (USAID).

PAHO conducting Safe Hospitals Programme.

Context & Constraints:

- •Resources to undertake sectoral risk assessments are limited.
- •Priorities for the national disaster office and sectors sometimes differ and so getting the support and buy-in at the time of implementation is sometimes difficult.
- •Little ownership of Disaster Management Responsibility at the sector levels.

Priority for action 2: Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Are disaster losses systematically reported, monitored and analysed? Yes
- * Yes: Disaster loss database
- * Yes: Reports generated and used in planning

Description:

Data is collected at the national disaster office by way of damage assessment reports in post disaster events and incident logs. The damage assessment data includes data from other sectors and specialized agencies that monitor flood gauges, flood data and landslide data and inventories.

Pre impact data is also available through hazard maps prepared by water resources authority, Mines and Geology, and the Earthquake Unit. Some of this work has been achieved through project funding.

GIS is being used more extensively for the before, during and after impact to generate pre-impact scenarios, archive and monitor data on impacts from hazards. Hazard data is also shared with otheragencies using GIS.

Data on hazards and vulnerability are also disseminated from a documentation centre operated from a national level coupled with communication strategies, which are used to disseminate information on hazard vulnerability in an effort to place risk reduction issues on the national agenda.

ECLAC methodology for disaster loss assessment embedded in PIOJ - no database but data exists. Process used extensively by sectors and academia.

National Water Authority developing flood and landslide hazard mapping.

Vulnerability ranking methodology used as an analytical tool for making decisions.

LICJ collaborating with agencies to capture geospatial data.

Context & Constraints:

- •The GIS is used to store several pieces of information. However, data is not stored in a database format which allows for easier access and analysis.
- •The reports are sometimes not as comprehensive as they ought to be because of the failure of some entities to submit detailed damage assessment information.
- •The documentation centre needs to function as a complete repository of hazard vulnerability data but is affected by space constraints and financial incapacity to improve current technologies.
- •Limited pre-impact baseline data exists.

Priority for action 2: Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Do risk prone communities receive timely and understandable warnings of impending hazard events? Yes
- * Yes: Early warnings acted on effectively
- * Yes: Local level preparedness
- * Yes: Communication systems and protocols
- * Yes: Active involvement of media in early warning dissemination

Description:

Extensive work has been accomplished in the establishment of Flood Early Warning Systems. Agency identified with dedicated responsibility in terms of data collection through rain, river and stream gauges complemented by community -based flood early warning systems. Community-based Flood Early warning teams have been established along major river basins and waterways and have been given the capacity to communicate within a network to relay information both at the local and national level.

Good progress has been made in terms of Early Warning Systems in place for Hurricanes & Floods. Doppler Radar Technology is utilized and complimented by satellite imagery. Telemetric Flood Warning Systems and Community Flood Gauges are also in place to enhance the early warning capabilities for floods. Three communities were also trained to interpret radar data via internet as a means of enhancing early warning.

For Earthquakes, a National Seismograph Network is in place to generate data following an earthquake to quickly inform decision- makers in taking the necessary steps to curtail infrastructural damage to affected communities and provide the necessary alerting mechanism for the probability of aftershocks. The country is now a signatory to a Regional Tsunami Warning System established with mechanisms established to expedite functions under this responsibility.

Data available in terms of earthquake and landslide susceptibility maps and research is continually being undertaken in tandem with universities, and continuing through country - based academia with partnerships with local and external universities and government agencies.

A major EWS system is now in place for the vulnerable Bog Walk area. Doppler satellite imagery is available via streaming link from Met Services. Landslide hazard map completed for St Catherine and St Thomas. Portmore now has multi-hazard map.

Context & Constraints:

•Earthquake susceptibility maps available for two geographic regions(sections of St Thomas and ST Catherine).

Good progress made with landslide susceptibility maps which are also available at the local level.

However these projects are

largely implemented with international donor funding. As such there is the absence of an overarching programme with progress achieved annually.

- •Several manual gauges are to upgraded to telemetric; more data gathering sensors need to be implemented.
- •The national documentation centre needs to function as a complete repository of hazard vulnerability data. Restricted by financial incapacity to improve current technologies.

Priority for action 2: Core indicator 4

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Does your country participate in regional or sub-regional DRR programmes or projects? Yes
- * Yes: Programmes and projects addressing trans-boundary issues
- * Yes: Regional and sub-regional strategies and frameworks
- * Yes: Regional or sub-regional monitoring and reporting mechanisms
- * No: Action plans addressing trans-boundary issues

Description:

Jamaica is one of sixteen participating states that form the Caribbean Disaster and Emergency Management Agency (CDEMA) which was established by the Caribbean Community (CARICOM) initiative.

Regional cooperation has been achieved through CDERA initiatives such as the Comprehensive Disaster Management (CDM) Strategy. Jamaica's function as a regional focal point for neighbouring states has also led to the sharing of data with a view to measuring transboundary risks especially for the Turks and Caicos Islands, the Bahamas and Belize.

Regional Tsunami Warning system established with Jamaica as a signatory.

The country is also part of the UN System-led regional focal grouping to expedite more effective emergency response for the northern section of the Caribbean. This had led to further information sharing and has led to greater regional cooperation in responding to emergencies. The National Disaster Office has forged a relationship with the General Council of Martinique where mutual areas of good practice have been identified and strategies and approaches identified for the transfer of the skills and knowledge.

Context & Constraints:

Absence of Caribbean economic integration which would serve as a catalyst for greater work in Disaster Risk Reduction at the regional level.

•Lack of commitment by national leaders to finalize issues such as the revamping of a uniform building

code that can be made applicable across the Caribbean.

•Improvements in mechanisms to enable Caribbean countries to communicate speedily and share data effectively.

Priority for action 3

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 3: Core indicator 1

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Is there a national disaster information system publicly available? Yes
- * Yes: Web page of national disaster information system
- * Yes: Established mechanisms for accessing DRR information

Description:

The ODPEM continues to use all available medium to disseminate information at various levels to the wider population. The Organization's website and sub-site serve as a major source of information gathering for thousands of individuals and institutions. The use of the local media is an avenue that is frequently explored and taken advantage of get the message of Disaster preparedness out with maximum reach.

Cognizant of the fact that there are individuals with varying disabilities, effort is made to have information available in various format. The use of the internet and text messaging services have also aided the organization to reach numerous persons.

The ODPEM is currently engaging with private sector interests with the aim of disseminating information through various media (print/electronic) Over the last few years a number of independent initiatives were undertaken by the private sector to independently communicate preparedness and awareness-building information.

NWA now on board with Public education. IWCAM public education programme for watershed management at the community level.

JPS informing persons on prevention methods.

ADRA targetting religious groups through its health education programmes to inform about disasters.

Context & Constraints:

Financial limitations remain the greatest challenge to the organization's ability to tap into as many markets as possible. Ongoing dialogue is maintained with media houses, special interest groups and donor agencies for partnership to make the goal more achievable.

Recommendations

The organization is making recommendation for some of these services to be available free of cost or sponsored largely by the Corporate entities. The ODPEM envisions being able to carry information to the visually impaired, the hearing impaired and other special population without being restricted by

budgetary constraints.

Priority for action 3: Core indicator 2

School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Is DRR included in the national educational curriculum? Yes

* Yes: Primary school curriculum

* Yes: Secondary school curriculum

* Yes: University curriculum

* Yes: Professional DRR education programmes

Description:

Substantial achievement has been attained in the area dissemination of Disaster Preparedness information to a wide cross section of the Jamaican population. Numerous programmes have either been undertaken or are currently on stream to sensitize the nation to disaster preparedness. The School's curricular at the Early Childhood, Primary and Secondary levels have embraced the concept of Disaster Preparedness as an important topic area. There has been a significant increase in the number of learning institutions provided with training in Disaster Preparedness annually. Official inclusion into the school curriculum has been advanced and further advances are planned by the Ministry of Education.

Major stakeholders such as the Ministry of Education and school administration have been actively involved in promulgating the message thus increasing awareness. A recently concluded workshop has seen more than Three Hundred Principals, Teachers and Caregivers from approximately One Hundred (100) schools and Child Care Institutions trained in building Schools' Resilience to Disasters. Arising from this Disaster Plans have been developed by these participating institutions and a channel of communication established between the ODPEM and the respective schools.

Schools Safety Programme.

Joint programmes with international universities established.

Context & Constraints:

A major challenge that Jamaica as a nation and the ODPEM as an organization face with regards to maximum reach of the message of Disaster Preparedness is a lack of financial resources. Considerably more could be realized if funds were available. Several of our educational facilities do not have the educational facilities to effect the necessary activities to make their institutions more resistant to the likely impact of disasters.

Mainstreaming DRR is slow in many instances simply because it is dependent on personalities and not legislation.

Priority for action 3: Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Is DRR included in the national scientific applied-research agenda/budget? Yes
- * Yes: Research outputs, products or studies
- * Yes: Research programmes and projects
- * Yes: Studies on the economic costs and benefits of DRR

Description:

Agencies with authority have been identified at the national level with the necessary expertise to carry out multi-risk assessments. Accepted scientific methodologies have been used to carry out these assessments with the aid of GIS technology. GIS also facilitates project assessments. At present data is shared between key agencies such as the Meteorological Service, Earthquake Unit, Mines and Geology, Water Resources Authority and the National Disaster Organisation, ODPEM.

ECLAC and USAID/OFDA methodologies have been used to assess the impact of hazards. Vulnerability assessment methodologies have also been established and models developed for hazard impact analysis. CDERA, as the regional response agency has developed reporting strategies and benchmarking tools for participating states. These tools are used for evaluation and monitoring at the regional level.

Agricultural research - hazard resistant crops and livestock.

Climate change centre established at UWI.

Infratstructure (road devpt) - materials to strengthen road base.

Scientifi approach applied to community research development.

Context & Constraints:

There is a need for strengthening the capacity of human resources at the National Disaster Organisation to do meaningful work in this area. The additional human resources on implementation would also act as a national coordinator for harnessing the necessary information from the agencies who have done research to bring a more holistic approach to research conducted.

No effort made to integrate Cost Benefit Analysis as compared to Latin American counterparts. Absence of the data formulated at the national level translated to the community based level to effect action.

Priority for action 3: Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Do public education campaigns on DRR reach risk-prone communities? Yes
- * Yes: Public education campaigns.
- * Yes: Training of local government
- * Yes: Availability of information on DRR practices at the community level

Description:

Achievement level upgraded to 4 from 3 since 2009 report.

Through the National Disaster Management Structure, state agencies, Non Government Organization's and Community Based Organization the National Disaster Office has been able to effectively reach urban and rural communities. Information and knowledge is shared and capacity built. Vulnerable communities and institutions are identified regularly and training sessions scheduled to equip persons with the requisite knowledge and skills to build community resilience.

Community-based programmes are encouraged and promoted at the local level as a means of gaining participation of grass-roots populations. The concept of participatory action and monitoring is also adopted. Joint programmes are conducted with the assistance of major partner agencies such as the Jamaica Fire Brigade and First Aid Service providers with a view to improving skills sets for community-based response until external assistance can be provided.

Active involvement of NGOs in public education.

Recent partner-funded project to build resilience in vulnerable communities.

Commemorative events at community level (hurricane preparedness month) help embed hazard awareness.

Context & Constraints:

A general lack of resources to address capacity building in all vulnerable communities that exists. Sustaining Community Disaster Management groups.

Establishing ownership of community disaster management programs at the municipal authorities so as to enhance the government and democratic process in relation to Disaster Risk Reduction. Information provided is generally not translated into action

Priority for action 4

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 4: Core indicator 1

Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Is there a mechanism in place to protect and restore regulatory ecosystem services? (associated with wet lands, mangroves, forests etc) Yes
- * Yes: Protected areas legislation
- * No: Payment for ecosystem services (PES)
- * Yes: Integrated planning (for example coastal zone management)
- * Yes: Environmental impacts assessments (EIAs)
- * Yes: Climate change adaptation projects and programmes

Description:

Jamaica has made significant strides in Environmental Management with the establishment of the National Resource Conservation Act (1991) and the formulation of a single agency (national Environment and Planning Agency) in 2001 with sole responsibility for addressing environmental issues. Projects such as the "Ridge to Reef" looks specifically at land use and natural resource management of targeted watershed areas and its effects on marine environment.

The country has also examined the whole conceptual framework for the Adaptation to Climate change which was initially addressed under preparation of the first National Communication and has been updated under preparation of the second national communication.

Jamaica is Party to the United Nations framework Convention on Climate Change and the Kyoto Protocol. The Meteorological Service is the National focal point to the UNFCCC.

The mainstreaming Disaster Risk Management into development planning has been an integral component of the work programme of the National Disaster Office. Notwithstanding greater buy in is necessary by the various sectors, in working towards this effort.

EIAs being reviewed to be a more established requirement for approval.

SEA to be developed and included as part of the D.O.

Regarding PES, project is underway to cost value ecosystems.

Sugnatory to RAMSAR Convention and Designation of RMSAR sites.

Establishment of Devt. Assistance Centre - "One-Stop Shop".

Context & Constraints:

While the link has been made in terms of Disasters and Environmental Protection there needs to be

greater collaboration among agencies especially as it relates to monitoring and enforcement, sharing of data and public education strategies.

Priority for action 4: Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Do social safety nets exist to increase the resilience of risk prone households and communities? Yes
- * Yes: Crop and property insurance
- * No: Employment guarantee schemes
- * Yes: Conditional cash transfers
- * Yes: DRR aligned poverty reduction, welfare policy and programmes
- * Yes: Microfinance
- * Yes: Micro insurance

Description:

A framework has been developed to minimize risk to vulnerable populations impacted by disasters. This forms part of the national development plan, Vision 2030 spearheaded by the Planning Institute of Jamaica (PIOJ). The Government of Jamaica through the Ministry of Labour and Social Security (MLSS) has implemented several programmes to address the needs of vulnerable populations who are affected by disasters: ie the Programme for Advancement through Health and Education (PATH); Rehabilitation Programmes which includes compassionate grants and rehabilitation grants. There are other programmes that are operated by NGOs such as the Red Cross, Food for the Poor, Salvation Army and ADRA that provide assistance to vulnerable persons (housing, skills training, healthcare, food assistance and clothing).

The passage of Hurricane Dean in 2007 saw the distribution of rehabilitation grants with the MLSS taking a lead approach. Of important note was that rehabilitation grants to assist with rebuilding were not issued to families living in very high risk areas until they could provide evidence of the ability to relocate to safer locations. This was supported by No Build Orders by the local authority and Public Education drives spearheaded through community-based organisations.

There is also the existence of a National Shelter and Welfare Action Plan developed by the National Disaster Office in conjunction with the National Shelter and Welfare Committee, which clearly outlines the roles and responsibilities of the welfare agencies in responding to emergencies along a three tiered response strategy.

A squatter management unit has also been implemented with the mandate of coordinating the national response to existing informal settlements as well as those which are emerging.

A draft Homeless Policy (conceptual framework to become Green Paper) has also been developed. MLSS and Min of Agriculture grants.

Crop and property insurance - PC Banks, Co-operatives, partner schemes

Context & Constraints:

Absence of dedicated budget for the lead agency/ministry to reduce the vulnerability of populations most at risk. Budgetary allocations lean more towards addressing poverty alleviation strategies through the Government's Public assistance programme rather than adopting a socio-cultural approach to reducing risk.

At present there is a Relief Policy, Emergency Relief Clearance Policy and a Shelter and Welfare Action Plan that needs to be revised to reflect the current realities.

Priority for action 4: Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Are the costs and benefits of DRR incorporated into the planning of public investment? Yes
- * Yes: National and sectoral public investment systems incorporating DRR.
- * Yes: Investments in retrofitting infrastructures including schools and hospitals

Description:

Agriculture and Tourism sectors mainstreaming Disaster Risk Reduction.

Toursim faclities retrofitted.

Public infrastructure agencies(JPS, NWA, NWC, etc) incorporating DRR in upgrading systems.

Context & Constraints:

Little or no mainstreaming of Disaster Risk Reduction principles into the National Macro-Economic Planning Policy inspite of inclusion in National Planning document, Vision 2030.

Cost constraints may influence implementation of policies. Some procedures are short-cut.

Priority for action 4: Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Is there investment to reduce the risk of vulnerable urban settlements? Yes
- * Yes: Investment in drainage infrastructure in flood prone areas

- * Yes: Slope stabilisation in landslide prone areas
- * Yes: Training of masons on safe construction technology
- * No: Provision of safe land for low income households and communities

Description:

The achievements to date have been in the form of policy and legislation mainly as listed below.

Building codes

Town & Country Planning Act

Local improvements Act

Parish Council's Act

NRCA Act

Development Approval process

The country's frequent experience with hazards prompted the decision for Environmental Impact Assessment to be a requirement for medium to large scale projects or those that are undertaken in environmentally sensitive areas. The National Disaster Office is also required to conduct vulnerability assessments for some types of developments.

Amendments being made to the existing Building Code.

Improvement in attitude towards change.

World Ban project for Slope Stabilization.

Safe Roof and Safe Building training.

Guidelines and Draft Policy for hillside development.

Context & Constraints:

There are limitations towards comprehensive management of human settlements due to the outmoded nature of numerous development orders and the deficiency in the institutional capacity of monitoring agencies to enforce existing legislation

Priority for action 4: Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Do post-disaster recovery programmes explicitly incorporate and budget for DRR? No
- * 0 % of recovery and reconstruction funds assigned to DRR
- * No: Measures taken to address gender based issues in recovery

Description:

The Post Disaster Recovery process is informed by the Planning Institute of Jamaica (the government economic planning arm) and the National Disaster Office.

While the concept of "building back better" is widely accepted by most agencies that function in the recovery phase, greater work is needed in this area. There is the absence of a Comprehensive

Recovery Plan and a Policy for post disaster replacement housing.

No Build Orders in affected communities have in instances been carried out by some Local Authority to ensure that areas such as wetlands remain uninhabited.

Relocation of vulnerable populations was achieved post-Hurricane Ivan in 2004 where most of the over 350 affected families have been relocated.

Since Hurricane Dean in 2007, five coastal communities have been identified where their most vulnerable populations will be relocated in an effort to ensure that persons do not return to reside in the affected areas.

Some NGOs and the National Disaster Office have included basic risk reduction measures in the rebuilding of homes and have trained community level personnel in safer building practices.

Context & Constraints:

There is inconsistency in the incorporation of risk reduction measures in infrastructure works.

No comprehensive recovery programme is in existence.

Too many formal settlements exist in vulnerable areas.

Gender issues: how to get males involved?

Current recovery mechanisms are not streamlined.

Funds are not allocated for reconstruction - there is no consistent relationship to DRR.

Priority for action 4: Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Are the impacts of major development projects on disaster risk assessed? Yes
- * Yes: Assessments of impact of projects such as dams, irrigation schemes, highways, mining, tourist developments etc on disaster risk
- * Yes: Impacts of disaster risk taken account in Environment Impact Assessment (EIA)

Description:

The permit and license regulations under the NRCA act requires that such categories of development be submitted to the National Environment and Planning Agency for review. Hazard and vulnerability assessments are conducted for these applications and recommendations made for mitigating hazards. All large scale projects are required to submit Environmental Impact Assessments for review, these include infrastructure development projects.

The organization is also pushing to have Hazard Impact Assessments conducted for large projects as a policy.

There is now a more rigorous review of hazard risk assessments in the development approval process and for issuing of permits and licences.

NCA Act.

Context & Constraints:

There are challenges with the timeframe of the approval process (90 days).

Assessing development applications is not a core function of the ODPEM. Although the skills exist, the human resources are not always available to adequately undertake such assessments. The volume of applications to be assessed nationally is quite large and beyond the capacity of the organization. Data to assess risk is not captured in a systematized process.

Priority for action 5

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 5: Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Are there national programmes or policies to make schools and health facilities safe in emergencies? Yes
- * Yes: Policies and programmes for school and hospital safety
- * Yes: Training and mock drills in school and hospitals for emergency preparedness

Description:

A National Disaster Plan exists and is functioning, this plan is comprised of various sub-plans:

National Earthquake Response Plan

National Fire management Plan

National Flood Plan

National Hurricane Plan

National Oil Spill Plan

HazMat Plan

National Civil Unrest Plan

National Pandemic Plan

Context & Constraints:

Parish Disaster Coordinators are employed to Parish Councils and as such are not obligated in any way to report to the National Disaster Office.

The Local Authorities lack the adequate capacity to administer its Disaster Management Responsibility.

Priority for action 5: Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Are the contingency plans, procedures and resources in place to deal with a major disaster? Yes

- * Yes: Contingency plans with gender sensitivities
- * Yes: Operations and communications centre
- * Yes: Search and rescue teams
- * Yes: Stockpiles of relief supplies
- * Yes: Shelters
- * Yes: Secure medical facilities
- * Yes: Dedicated provision for women in relief, shelter and emergency medical facilities

Description:

National plans and sub plans are in place which guide management, response and coordination of hazards. Contingency plans are a component of the approval process for large scale developments. Agencies, institutions private sector area are all encouraged to develop contingency plans. Training and drills are also carried out within these institutions. The National Disaster Office provides guidance in the preparation of Emergency Response Plans for businesses and institutions.

In some instances, the National Environment Planning Agency (NEPA) makes request for Disaster Plans to ODPEM as a pre-requisite for approval.

Context & Constraints:

Not enough drills and simulation exercises are conducted across all administrative levels.

Contingency plans in place - but not gender sensitive.

Contingency Plans are not in place in all agencies.

Priority for action 5: Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Are financial arrangements in place to deal with major disaster? Yes
- * Yes: National contingency funds
- * Yes: Catastrophe insurance facilities
- * No: Catastrophe bonds

Description:

There is a National Disaster Fund, but extremely limited in its capacity to mount a credible response to events of a significant nature. Budgetary diversions and the sourcing of loans grants are sometimes

used to respond to large scale events. Notwithstanding Jamaica is a subscriber to the Caribbean Catastrophic Risk Insurance Facility (CCRIF), which provides emergency cover in the event of a catastrophic event.

Contingency mechanisms also exist with regional and international partners.

Context & Constraints:

The Government has been unable to access the CCRIF despite experiencing over US \$ 1.5 Billion in losses over the last four years due mainly to rain and floods. The CCRIF is accessible only following catastrophic wind driven or earthquake events and is not triggered by all parameters.

Economic constraints serve as a hindrance to keeping the National Disaster Fund adequately resourced.

No Sub-National Risk Transfer Fund in place outside of the poorly-resourced National Disaster Fund.

Priority for action 5: Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Means of verification:

- * Has an agreed method and procedure been adopted to assess damage, loss and needs when disasters occur? Yes
- * Yes: Damage and loss assessment methodologies and capacities available
- * Yes: Post disaster need assessment methodologies
- * Yes: Post disaster needs assessment methodologies include guidance on gender aspects
- * Yes: Identified and trained human resources

Description:

A comprehensive response mechanism is in place and is used at every disaster event. This includes standard operation procedures for every hazard and the execution of components of the disaster programme through the synergies and work of the national sub committees and the sector committees (tourism and agriculture). Information and lessons learned are shared through national After Event reviews. The information produced is communicated through reports from all sectors after a disaster event. The

ECLAC methodology is also a tool used in reporting losses. AARs conducted.

Context & Constraints:

Lack of coordination among agencies on collection of data in post-disaster situations at national and parish levels. However there is effective use of the Damage and Loss Assessment (DALA) Methodology and reporting process hence comprehensive reporting is carried out despite lack of coordination in field work.

Baseline information (pre-impact data) required for all sectors

Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?: Yes

If yes, are these being applied to development planning/ informing policy?:

Description (Please provide evidence of where, how and who):

The Hazard Mitigation Policy drives the multihazard approach which is also taken in the approval process. Hazard maps are prepared for some of the major rivers and upland areas (slopes and mountainous areas) in Jamaica, and vulnerability assessment and mapping of coastal towns to storm surge and flooding also underway

b) Gender perspectives on risk reduction and recovery adopted and institutionalized Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Some issues relating to gender have been documented from projects carried out, and resulted in skills training to target resilience. There is still a need to take into account gender perspectives in vulnerability assessment methodology and in the revision of the various disaster management sub plans.

c) Capacities for risk reduction and recovery identified and strengthened Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

A Review of the National Disaster Management Framework and the Organization Structure and Capacities of the National Disaster Office has been completed. Further hazard mapping to be conducted for all hazards. There is a multi-sector approach to disaster management. Early warning systems continue to be implemented in vulnerable communities. Collection of technical data, its management, use and dissemination continue to improve.

d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not

achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Vulnerable communities are a major focus of the National Programme, and ongoing projects are in part designed to reduce vulnerability. This includes training programmes for all population types, particularly for the disabled and children. Casualties resulting from events have been reduced

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

The national disaster programme continues to make significant improvements in linkages and networks developed to support the national programme at all levels - from the major NGOs (Red Cross, Salvation Army, ADRA etc) and private sector and civil society in general.

In vestment by the private sector in the National Programme continues to improve significantly

f) Contextual Drivers of Progress

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Focus Communities Sectors Land and water management Water, sanitation and pollution control Health and environment Food security Managing emerging and complex hazards

Future outlook

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Overall Challenges:

Although disaster management in Jamaica is over 28 years in existence, government policy on economic and spatial development still do not reflect strongly full understanding of the issues nor does it reflect a clear connection between economic development and disaster risk reduction. There is a continuing need for clear guidelines for the integration of DRR in sustainable development, policies and plans especially in key economic sectors. Integration of DRR into Project development is also an area of focus as it relates to national development.

Future Outlook Statement:

Over the next 3 years there should be policies, plans and guidelines developed to facilitate the integration of DRR into sustainable development. This will be supported by ongoing awareness and advocacy among institutions and strategic international partners and the wider public.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Overall Challenges:

At the institutional level, capacity remains the broad area of challenge.

However some other areas of challenge include proper identification of hazards and elements at risk. With this accomplished, a more comprehensive approach can be administered to address mitigation (both structural and non structural) and risk transfer. This will also support the strengthening of national and local preparedness programmes and early warning systems.

Future Outlook Statement:

Identify critical priorities for capacity building through some critical areas such as legislation, hazard identification, areas not mapped. It is also envisaged that there will be a sustained capacity building programme in the area of DRR for all local planning authorities, institutions and communities.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Overall Challenges:

The capacity of Local Governance systems to support and sustain the existing efforts in this area. To institutionalize the inclusion of the use of Hazard Information into the planning process and improving the

disaster or emergency event registry.

Future Outlook Statement:

Over the next 3 years, mechanisms for harnessing skills at all levels more importantly at the community

level will be improved. A comprehensive response and recovery policy is to be drafted for adoption mandating all response and recovery operations to incorporate DRR strategies.

The National Disaster office will also be expanding its programme of building community resilience a strengthening its volunteer programme and partnerships between state and non state actors towards building national resilience and establishing a culture of safety.

Stakeholders

Departments/organizations that have contributed to the report

- * Water Resources Authority (Gov) Andreas Haiduk, Chief Hydrologis
- * UNDP (UN & Intl) Alan Ross, DRM
- * East Jamaica Conference (NGO) Carl Cunningham, Pastor
- * Ministry of Labour and Social Security (Gov) Dexter Phillips, Social worker
- * Jamaica Met Service (Gov) Evan Thompson, Weather Branch Head
- * National Works Agency (Gov) Richard McHaugh, Senior Project Manager
- * Mines and Geology Division (Gov) Norman Harris, Director Research and Mapping
- * ODPEM (Gov) Leiska Powell, Planning Analyst
- * ODPEM (Gov) Anna Tucker, Research Analyst
- * Naional Environmental Planning Agency (Gov) Marc Rammelaere, Director Special Projects
- * NEPA (Gov) Noulette Douglas, Special Projects Manager
- * ODPEM (Regl Inter-gov) Karema Aikens Mitchell. Mitigation Programme Off
- * ODPEM (Gov) Michelle Edwards, Senior Director, Mitigation, Pla
- * Horace Glaze (Gov) Senior Director
- * Jamaica Public Service Company (Private) Desomd Jones