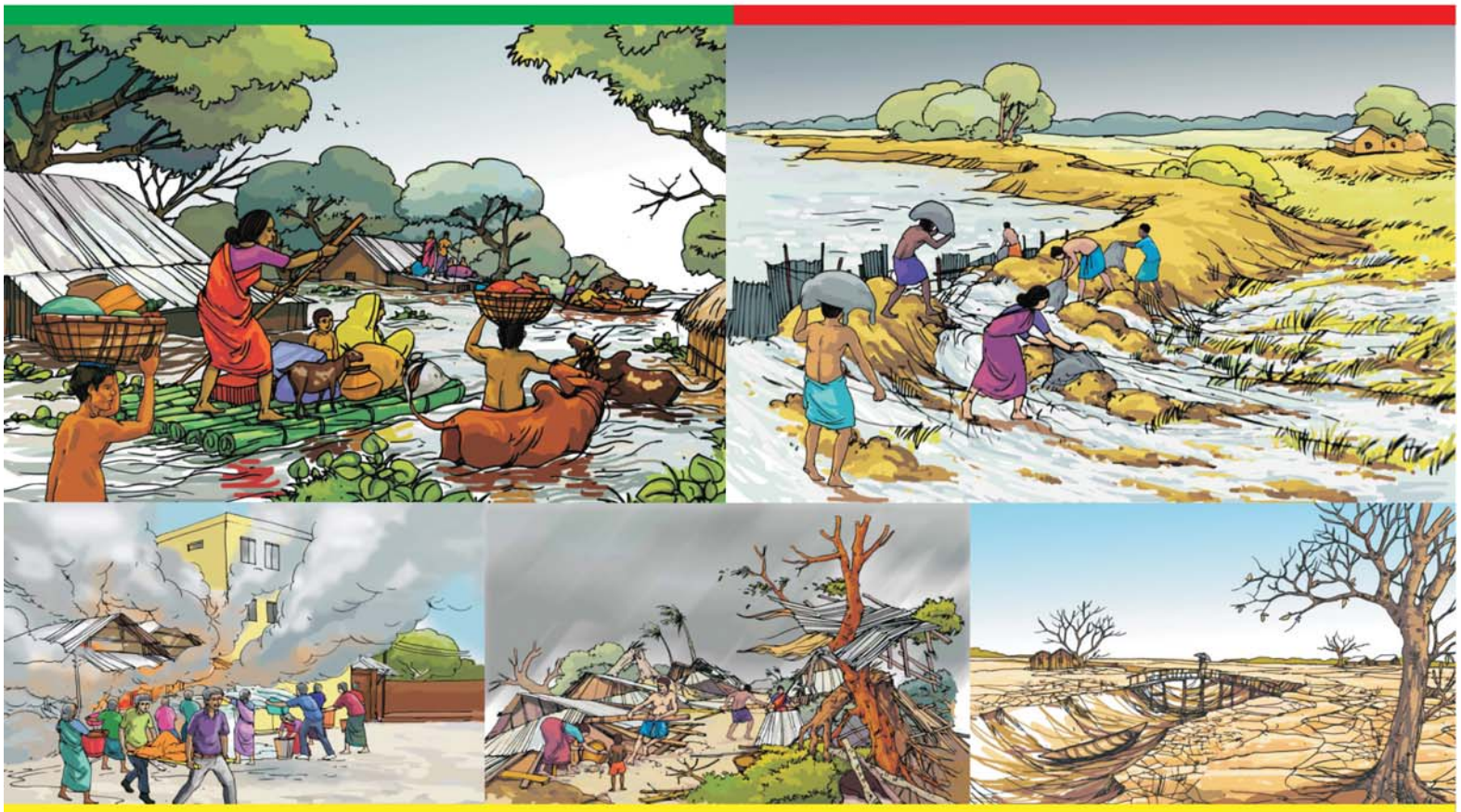
Bangladesh

National Progress Report on the Implementation of the Hyogo Framework for Action



Department of Disaster Management
Ministry of Disaster Management and Relief

April 2013

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Abul Hassan Mahmood Ali, MP
Minister
Ministry of Disaster Management and Relief
Government of the People's Republic of Bangladesh

Message

I am delighted to learn that the Ministry of Disaster Management and Relief has finalized the Bangladesh Hyogo Framework for Action (HFA) Monitoring and Review Report 2011-2013 with overall coordination by the Department of Disaster Management (DDM) alongwith support from the Comprehensive Disaster Management Programme (CDMP II) and the National Alliance for Risk Reduction Initiatives (NARRI) and is now launching its formal publication.

Bangladesh is immensely vulnerable to natural hazards and extreme events like flood, cyclone, storm-surge, landslide, drought, salinity etc. Climate change has increased the intensity and frequency of the disaster events. Millions of lives and livelihood of our citizens are in threat due to these natural, environmental and human induced hazards. Adding to this, our highly dense population in the urban centers is most vulnerable to the risks associated with earthquakes. Nonetheless, we strive to build our resilience and we have already achieved notable progress in reducing the disaster related loss of lives and livelihoods. Today the whole world has acknowledged our efforts to become a disaster resilient country by transforming our relief oriented disaster management system to a comprehensive disaster risk reduction approach. Still, we have to try to fill the gaps that have been identified through current HFA monitoring and review.

I am glad that the HFA Progress Monitoring Report 2011-2013 has been based on a number of consultations with the wider stakeholders that adequately reflects various concerns of disaster management from national to grass root level. The achievement highlights the enforcement of Disaster Management Act 2012, Bangladesh's participation and leadership in different events at the regional and international fora which ultimately reflect country's leadership and efforts towards mainstreaming disaster risk reduction approach into the national development process.

The report reveals that Bangladesh has taken a holistic approach towards disaster management. Emphasis has been given to establish partnership with all stakeholders, government agencies, NGOs, academic and technical institutions, the private sector and the development partners. Alongwith changing policies and practices, we have invested government's own funds from in community resilience. Our efforts are continuing in the assessment of risk and hazards, development of contingency planning, piloting and scaling up of innovative initiatives and raising awareness of all strata of our society.

The Government of Bangladesh is committed to the implementation of its global and regional commitment for establishing risk reduction framework while the efforts of the HFA monitoring and reporting will strengthen our efforts in finding gaps and exploring new areas of implementation for building resilient nation and community. While our achievements are commendable, our challenges are also numerous. I would ask my fellow countrymen, government stakeholders, development partners, the civil society, NGOs and the private sector to join hands in government's efforts for ensuring national disaster resilience.

I would like to congratulate the MoDMR, DDM officials as well as CDMP and NARRI professionals and other stakeholders involved in the review and preparation of the HFA Progress Monitoring Report 2011-2013. I encourage not only the government organizations but all concerned citizens and organizations including practitioners and academia to study and make use of the key assertive actions needed to be taken on the basis of this report to find the gaps and redefine our disaster discourse for a safer community.

Joy Bangla, Joy Bangabandhu

(Abul Hassan Mahmood Ali, MP**)**

Mesbah ul Alam
Secretary
Ministry of Disaster Management and Relief
Government of the People's Republic of Bangladesh

Message

With the guidance received from the Disaster Management and Relief Ministry the Department of Disaster Management (DDM) with support from Comprehensive Disaster Management Programme (CDMP II) and National Alliance for Risk Reduction Initiatives (NARRI) has prepared the Bangladesh Hyogo Framework for Action (HFA) Monitoring and Review Report 2011-2013. Since the adoption of HFA, the three strategic goals and five priority areas contained in the HFA have become common points of reference for Bangladesh to systematically track progress in all her disaster risk reduction efforts. The current synthesis report attempts to provide an insight into HFA implementing progress in country context, with particular focus on the 2011-2013 periods that seeks to capture certain milestone achievements like enactment of Disaster Management Act, 2012 and inclusion of disaster management section in the 6th Five Year Plan (2011-2015) of the Government of Bangladesh. The objective of this process has been to gather continuous feedback from different levels and assist them in assessing progress, gaps and challenges in disaster risk reduction.

The Bangladesh Hyogo Framework for Action (HFA) Monitoring and Review 2011-2013 Report is an outcome of the national and international commitments of the Government for addressing the disaster risks comprehensively. This review has been done on the basis of HFA implementation status, assessment of the constraints, as well as future focus for reducing the risks from disaster and climate change. To achieve this review the policy and other related documents and multi-stakeholder's consultation including government ministries & agencies, academicians, researchers, NGOs, civil society and local governments have been covered out. The consultation process took place from local to national level that reflected opinion of all stakeholders and community people including public representatives.

Bangladesh has taken a holistic approach towards disaster management, where emphasis has been given to build strategic, scientific and implementation partnership with all relevant government departments and agencies, other key non-government players including NGOs, academic and technical institutions, private sectors and development partners. In this regards the report highlights the need for systematic accounting of disaster losses and impacts, and comprehensive assessments of disaster risks. These are critical transformative steps that allow government and key stakeholders to visualize and plan appropriately to address the socio-economic trade-offs.

The HFA Progress Monitoring Report 2011-2013 reveals that National focus has been set to implement all post disaster recovery and reconstruction programmes integrating Disaster Risk Reduction and Climate Change Adaptation giving emphasis on 'build back better' for systematic incorporation of risk reduction approaches into design and implementation of emergency preparedness, response and recovery programmes. Considerable emphasis has been placed on reviewing the progress made at various stages against the HFA indicator.

The report captured the Bangladesh position in HFA implementation towards the national and international commitment for disaster risk reduction which is very imperative and informative enough and can be used as reference and future analysis.

I sincerely convey my thanks to everybody involved in the process of finalization of this report. I look forward for a meaningful utilization of this report with renewed commitments to making our communities and the nation ready for disaster resilience.

(Mesbah ul Alam)

Mohammad Abdul Wazed
Director General
Department of Disaster Management

Foreword

The National Progress Report on Implementation of Hyogo Framework for Action (HFA) 2011-2013 has been prepared and made possible through a series of multi-stakeholders consultations involving government officials from various ministries/departments, local governments, international development partners, NGO's and civil society representatives. This report is a resource of understanding and analyzing the country status in the context of overall disaster management as well addressing the future challenges ahead. Drawing on various data, forthcoming challenges and lessons learned the report explores the current trends and pace of disaster management scenario with different socio-economic aspects leading to bringing together the disaster risk reduction and climate change adaptation into the broader sustainable development agenda.

The Department of Disaster Management (DDM) with the guidance of the Ministry of Disaster Management and Relief (MoDMR) has been working to strengthen the national capacity to reduce risks and to improve response and recovery mechanism from the impacts of disaster and climate change through coordination and partnership with wider groups. It is a matter of great pride that before the introduction of the Hyogo Framework for Action, Millennium Development Goals and the United Nations Framework Convention on Climate Change, Bangladesh has introduced its own Comprehensive Disaster Management Programme for mainstreaming disaster management in development plans and programmes. Nevertheless, Bangladesh recognizes the HFA as a key driver for documenting the achievement, progress, knowledge and practices those are being implemented towards reducing disaster risks and building community resilience.

The major highlights in this HFA report included the enactment of Disaster Management Act 2012 and also the various parallel policy instruments that have been adopted by the Bangladesh government within the reporting period. These include the National Perspective Plan (2012-2021), the 6th Five-Year Plan, National Water Management Plan, Water Policy, Draft National Energy Policy, Actionable Policy Briefs on Agriculture, Revised Standing Orders on Disasters (SOD), National Plan for Disaster Management (NPDM), National ICT Policy, and Vision 2021 to mention a few. For the first time initiative was taken to adequately reflect gender concerns and progress in the HFA report from disaster perspectives.

Natural hazards have been a part of geographical and indeed historical realities of Bangladesh. The HFA progress monitoring report reflects that the complex and multi-dimensional vulnerabilities of Bangladesh are well documented. However, the progress towards achieving HFA key priority area is mixed in terms of achievement and constraints. Building on the experiences and combination of indigenous and modern disaster management practices the country has dramatically reduced impacts of extreme events or rapid onset disasters such as cyclone and floods. These hazards are exacerbated by the effects of climate change and thus increase their frequency and intensity. As poverty continues to be a major challenge, the consequences of rapid, unplanned growing cities also increase the vulnerability. These need to be addressed within the current effort of the HFA implementation and also beyond 2015.

I would like to acknowledge the guidance and suggestion from the Secretary of the MoDMR in review of the whole HFA documentation. I would like to express my sincere gratitude to my colleagues of DDM, CDMP II and NARRI Consortium who have been instrumental in capturing various perspectives and feedback of consultations.

(Mohammad Abdul Wazed)

Acknowledgements

This Progress Report (2011-2013) on the implementation of the Hyogo Framework for Action in Bangladesh during the period of January 2011 to December 2012 is a collective effort involving government officials from the various ministries/departments and local administration, international development partners and the United Nations system, members of civil society, and local communities.

Compilation of this Report was initiated through the formation of a National Task Group under the leadership of the Department of Disaster Management with the support of the Comprehensive Disaster Management Programme (CDMP) and the National Alliance for Risk Reduction Initiative (NARRI) Consortium and other participating agencies. It commenced with a national stakeholders' workshop to determine the scope of the inquiry, the data collection methodology, and identification of the substantive content of the report. The initial draft was consulted to the local stakeholders' workshops being facilitated jointly by the government and NGOs in four districts of the different hazard prone areas. This was followed through with focused group discussions at the Sub-District level in the targeted areas and in each location also focused group discussions were held in four vulnerable Unions. Online consultation has also done through SolEx. Following the aggregation of the information, a National Validation Workshop was held to consolidate the results. Finally, the draft report was presented to the plenary of the National Platform for DRR for deliberations and, eventually, endorsement. Other concurrent sectoral discussions such as the Institute of Disaster Management and Vulnerability Studies (IDMVS) of the University of Dhaka organized several sessions of roundtables to provide their perspectives to the report.

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ABBREVIATIONS

ADB	Asian Development Bank
AFD	Armed Forces Division
BCCSAP	Bangladesh Climate Change Strategic Action Plan
BCS	Bangladesh Civil Service
BDKN	Bangladesh Disaster Knowledge Network
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BPATC	Bangladesh Public Administration Training Centre
BTRC	Bangladesh Telecommunication Regulatory Commission
BWDB	Bangladesh Water Development Board
CBACC	Community Based Adaptation to Climate Change
CBDRR	Community Based Disaster Risk Reduction
CBO	Community-Based Organization
CBS	Cell Broadcasting System
CCA	Climate Change Adaptation
CCKN	Climate Change Knowledge Network
CDMP	Comprehensive Disaster Management Programme
CDRR	Climate and Disaster Risk Reduction Community
CEGIS	Centre for Environmental and Geographic Information Services
CPP	Cyclone Preparedness Programme
CRA	Community Risk Assessment
DAP	Detailed Area Plan
DDM	Department of Disaster Management
DDMC	District Disaster Management Committee
DEM	Digital Elevation Model
DER	Disaster Emergency Response
DIPECHO	Disaster Preparedness ECHO
DM	Disaster Management
DMC	Disaster Management Committee
DMIC	Disaster Management Information Centre
DNA	Damage and Need Assessment
DPE	Directorate of Primary Education
DREE	Disaster Response Exerciseand Exchange
DRF	Disaster Response Fund
DRR	Disaster Risk Reduction
DRTMC	Disaster Research Training and Management Centre
DWA	Department of Women Affairs
ECB	Emergency Capacity Building
ECHO	European Community Humanitarian Office
ECRRP	Emergency 2007 Cyclone Recovery and Restoration Project
EGPP	Employment Generation Program for the Poorest
EIA	Environmental Impact Assessment
EPAC	Earthquake Preparedness & Awareness Committee
ERF	Emergency Response Facility
ERM	Emergency Response Management
EWS	Early Warning System
FFWC	Flood Forecastand Warning Centre
FFW	Foodfor Works
FS&CD	FireService & Civil Defense
GBM	Ganges-Brahmaputra-Meghna
GOB	Government of Bangladesh
GOs	Government Organizations
GR	Gratuitous Relief
GSB	Geological Survey of Bangladesh
HBRI	House Building Research Institutes
IDDR	International Day for Disaster Reduction
IMDMCC	Inter-Ministerial Disaster Management Coordination Committee
INGO	International Non-Governmental Organization
IOC	Intergovernmental Oceanographic Commission
IVR	Interactive Voice Response
IWM	Institute of Water Modeling
JICA	JapanInternational Cooperation Agency
JNA	Joint Needs Assessment
LDRRF	Local Disaster Risk Reduction Fund
LGED	Local Government Engineering Department
MoDMR	Ministry of Disaster Management& Relief
MoEdu	Ministry of Education
MRVA	Multi-hazard Risk Vulnerability Assessment
NDMAC	National Disaster Management Advisory Committee

ABBREVIATIONS

NDMC	National Disaster Management Council
NDPD	National Disaster Preparedness Day
NGO	Non-Governmental Organisation
NILG	National Institute of Local Government
NPDM	National Planfor Disaster Management
NPDRR	National Platformon Disaster Risk Reduction
NSAPR	National Strategy for Accelerated Poverty Reduction
NSDS	National Sustainable Development Strategy
PSTU	Patuakhali Science & Technology University
PWD	Persons With Disabilities/ Public Works Department
RRAP	Risk Reduction Action Plan
SAARC	South Asian Association for Regional Cooperation
SADKN	South Asian Disaster Knowledge Network
SDC	Swiss Development Cooperation
SDMC	SAARC Disaster Management Center
SMRC	SAARC Meteorological Research Centre
SMS	Short Message Services
SOD	Standing Orderson Disaster
SolEX	Solution Exchange
SPA	Strategic Priority Areas
SPARRSO	Space Research and Remote Sensing Organization
SREDA	Sustainable & Renewable Energy Development Authority
TR	Test Relief
UDMC	Union Disaster Management Committee
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UP	Union Parishad
UzDMC	Upazila Disaster Management Committee
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding

SECTION 1
OUTCOMES

Strategic outcome for Goal 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.

The priorities of the National Plan for Disaster Management (NPDM) 2010-2015 endorsed by the National Disaster Management Council in 2010 have been embedded in all the government high level policy and operation documents. The GoB'Vision 2021' sets 'Effective Disaster Management' as one of the sub-goals and puts emphasis on seasonal flood and drought mitigation, establishing of an effective early warning and evacuation mechanism, and development of a natural disaster insurance scheme to compensate the physical and property damage. The Bangladesh Perspective Plan 2010-2021, Sixth Five Year Plan 2011-2015 and National Sustainable Development Strategy (NSDS) have provisions and emphasis to implementNPDM.

The local level (Upazilla) development planning proforma is being revised by the Local Government Division of the LGRD & C Ministry where inputs provided by Ministry of Disaster Management & Relief (MoDMR) to make it DRR & CCA inclusive and thereby ensuring disaster proof development interventions at local level. During the reporting period country mobilized a substantial amount of internal and external resources to pilot and implement DRR & CCA projects and thereby reducing the underlying risks and vulnerabilities of communities at risk. MoDMR through Comprehensive Disaster Management Programme (CDMP) is piloting joint projects with 13 departments of 12 sectoral ministries and a range of technical institutions to support and facilitate DRR & CCA inclusion in sectoral policies, planning and programming. As part of the HFA priority-3,number of researches, studies and pilot programmes on CCA implemented at local level to scaling up at national level. MoDMR, with the assistance of NGOs, redrafted the National Disaster Management Policy, which made provision to mainstream DRR into public-private partnership. The policy has made references to relevant sectoral policies, operational guidelines and procedures.In 2012, Prime Minster reaffirmed her government's commitment to enhance the disaster response capacity at highest level.

Strategic outcome for Goal 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;

Revised Standing Orders on Disaster (SOD) expanded and strengthened the disaster management institutional framework. MoDMR and other ministries organized training & awareness programmes on DM at National and local levels. National Institute of Local Government (NILG) integrated DRR & CCA in their training module for the elected representatives in 2011 and oriented members of 4486 Union Parishad (UP) in 2011, on the DRR & CCA. Director General of Health Services (DGHS) established an Institute of Disaster Management to introduce certificate course on disaster induced heath crisis management for medical staffs. Two public universities launched DM graduation courses while 5 others offering Master's. Public training institutes maintained DRR & CCA inclusiveness in all their ongoing training programmes using updated DRR & CCA module. The Climate and Disaster Risk Reduction Community (CDRR) launched by UNDP. More than 470 individual became member of the online network including the Parliamentarians, Academicians, Government Officials and DRR and CCA practitioners.

Disaster Management reference corners established in 22 universities and training institutes. Bangladesh Disaster Knowledge Network (BDKN) established by MoDMR involving 30 partner organizations including Government Offices (GOs), NGOs, CBOs, Scientific & Research Organizations and Universities. New 6,540 CPP volunteers been trained and total pool becomes 49365 (of them 16455 are female). Fire Service & Civil Defense personnel trained 16,000 urban volunteers on search and rescue in 2011-2012 with

School earthquake safety drill

support from CDMP-II under MoDMR. 20,000 NGO staffs trained on disaster management, 65,000 staffs of Livestock office and 400 Journalists trained on Bird Flu. National Institute of Mass Communication and SAARC DM Center (SDMC) organized training on DRR for Media personnel. A project is launched to build the capacity of Engineers of Public Works Department (PWD) on disaster-resistant techniques of construction and retrofitting for public buildings supported by JICA. A Regional training programme on River Bank Erosion & Embankment Safety Management in South Asia is organized by University of Dhaka & SDMC with experts from SAARC countries.

Strategic outcome for Goal 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.

National focus has been set to implement all post disaster recovery and reconstruction programmes integrating DRR and CCA with emphasize on 'build back better'. MoDMR and Early Recovery Facility of UNDP piloted disaster resilient habitats in Aila affected areas. SDC also supported community owned cyclone shelter construction at Sidr and Aila affected areas.

The cyclone shelter construction, maintenance and management policy 2011 adopted by GoB to set a benchmark in design & construction, community based management and effective use of the multi-purpose shelters. MoDMR as coordinating agency is mandated to maintain cyclone shelter related information and provide necessary advice for any changes in the guidelines. DRR element is embedded in all social safety nets and rehabilitation programmes of MoDMR and other ministries. NCTB with the support of MoDMR, incorporated earthquake awareness and preparedness drills within primary & secondary school curricula. GoB has expanded the Cyclone Preparedness Programme (CPP) to cover all coastal districts.

The Disaster Emergency Response (DER) coordination mechanism for government and development partners is institutionalized within MoDMR functions. A Joint Needs Assessment (JNA) methodology developedand pilot tested in July-August 2012 after the flash flood and land slide occurrence in Chittagong, Bandarban and Cox's bazaar districts in 2012. Community based hazard alert system has been strengthened by MoDMR through Interactive Voice Response (IVR) with all mobile phone network providers to support demand basis cyclone and flooding early warning for fishermen, and weather forecast information to users. 35 Pole Fitted Megaphone Siren has been installed by DDM through ECRRP project at 35 Upazillas of 12 coastal districts. MoDMR is implementing US$8.0 million ECRRP project with World Bank support for enhancing the risk and vulnerability assessment capacities and for improved response preparedness.

SECTION 2
STRATEGIC GOALS

Strategic Goal 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.

Bangladesh is committed to mainstream DRR and CCA into strategies, policies,planning, and development programmes at all levels by 2021 as a part of paradigm shifts in disaster management. The Sixth Five year Plan (2011-2015) and National Sustainable Development Strategy (NSDS) integrated DRR as strategic key priority area. To address risks posed by natural hazards and climate change for the vulnerable population, the Sixth Plan aims at significantly strengthening the social protection programmes. This plan focused on DRR in order to reduce the sufferings of the community people in case of any disaster.

The NSDS has identified four Strategic Priority Areas (SPAs) along with three cross-cutting areas to facilitate long-term sustainability issue of critical areas. SPAs are: Sustained Economic Growth, Agriculture and Rural Development, Social Security and Protection, and Environment and Natural Resource Management with focus on DRR in the country. Such integration will include all social development programmes funded by national budget as well as multilateral and bilateral cooperation; and donor assisted NGO projects. This will become an important stepping stone to ensure that development project and programme outcomes are disaster resilient, and they do not increase or/and add any new risks to the communities.

To manage the paradigm shift in disaster management, a disaster management regulatory framework is established and in which work of Ministries, Departments, NGOs and civil society are undertaken. The regulatory framework provides the relevant legislative, policy and best practice framework under which the activity of Disaster Risk Reduction (DRR) and Emergency Response Management (ERM) in Bangladesh is managed and implemented.

The framework is comprised of:

- Disaster Management Act 2012
- Draft National Disaster Management Policy
- National Plan for Disaster Management
- Standing Orders on Disaster
- Cyclone Shelter Construction, Maintenance and Management Policy 2011
- Guidelines for Government at all Levels (Best Practice Models).

Strategic Goal 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.

Bangladesh acknowledges that knowledge, education and innovations need to be used to promote a culture of 'build back better' and adoption of interventions that enhance community resilience, including strengthened capacity for effective response and recovery from disasters at local and national levels. From 2012, IDDR day is recognized as a key public awareness raising day by GoB which is enlisted to category B of the events means Prime Minister will be actively involved in the day observance thus raise the importance to the higher level.

The national Disaster Preparedness Day (NDPD) has also marked as a category C by GoB, making it a nation-wide celebration through national funding. GoB has taken an initiative to organize at least two mock drills in each school a year on observance of IDDR and NDPD and make it mandatory. To achieve a strong local culture for DRR, investment and proactive measures will be commenced to support local development structures for a DRR oriented disaster response. Efforts will be expanded to strengthen the private-public partnership to build the culture of resilience at all level. GoB through MoDMR will revisit the structure of the NPDRR to include wider civil society groups, women organizations and private sector. The revised NPDRR will comprise of representatives from all five committees - National Disaster Management Council (NDMC), Inter-Ministerial Disaster Management Coordination Committee (IMDMCC),

Vegetation in Disaster resilient habitat

National Disaster Management Advisory Committee (NDMAC), Earthquake Preparedness and Awareness Committee (EPAC) and National Disaster Response Coordination Group (NDRCG) and representation of all stakeholders. An executive committee will be formed from representation of all five committees which will sit regularly to review and advice on all DRR and Emergency Response issues. Community Based Organizations and peoples groups should be strengthened as the vehicle for increasing people's resilience through scaling up of CBDRR in all vulnerable locations.

Strategic Goal 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.

Bangladesh commits that an effective system and procedure will be in place to identify, assess and monitor national and cross border risks, leading to an effective community based early warning system. It will adopt tools and mechanisms to incorporate disaster risk reduction and climate change adaptation in all preparedness, response and recovery programmes. MoDMRis facilitating the sector specific risk assessment guidelines and mapping for earthquake of major cities, medium and small urban areas and for tsunami in 13 coastal districts.

MoDMR established a Multi-hazard Risk Vulnerability Assessment (MRVA) Modeling and Mapping Cell with a financial support of World Bank. River bank erosion prediction model and community based prediction dissemination system has been used in two river basin areas - Padma and Jamuna. Risk assessment of drought has been tested and mapping of drought prone areas continued. Key examples of risk assessment for the reporting period:

- Inundation Risk Map using existing data on available Digital Elevation Model prepared for the entire coastal region of Bangladesh
- Seismic Microzonation of Dhaka city
- Risk assessment of flash flood in Haor area
- Salinity Impact Assessment by Soil Research Institute
- Fresh water source mapping in the coastal belt by DPHE
- SAARC MOU to strengthen rapid need assessment in any major disaster at regional level.

Bangladesh will emphasize on importance of developing essential skills and knowledge to integrate DRR to all citizens and institutions so that they become motivated to participate in risk reduction activities. Although numbers of good practices on DRR exist, there is still a disconnection between national and local level capacities. Updating the contingency plans remains a critical challenge at local and national level. Preparedness for early warning, identification of immediate needs and responding accordingly to hazards such as tornado, land slide, flash flood remain challenging.

SECTION 3
PRIORITY FOR ACTION 1

PRIORITY FOR ACTION 1: DEFINITION AND SIGNIFICANCE

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

Countries that develop policy, legislative and institutional frameworks for disaster risk reduction and that are able to develop and track progress through specific and measurable indicators have greater capacity to manage risks and to achieve widespread consensus for, engagement in and compliance with disaster risk reduction measures across all sectors of society.

a. Core Indicator 1

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

A country's constitution, laws and governmental system provide the basis to develop plans and institutional arrangements for all areas of disaster risk reduction. Assessing such elements can reveal gaps in resources and capacities that were previously underutilised or untapped. A comprehensive disaster risk reduction policy framework can also guide a government in its disaster risk reduction policies and strategies.

Description

Bangladesh has initiated a long term development plan 'Bangladesh Perspective Plan (2010-2021)' which is termed as Vision-2021. It is the stepping stone and guideline for all sectoral and yearly development and public investment plans. Vision 2021, in Chap-viii, has clearly stated the need for integration of DRR and CCA in all development plans. As a part of Vision 2021, the Sixth Five Year Plan (2011-2015) has been developed which makes specific recommendation to consider disaster risks in sectoral plans and investments.

National Plan for Disaster Management (2010-2015) also calls for addressing the disaster risks in public investment and planning decisions. In the reporting period, MoDMRhas made Standing Orders on Disaster (SOD) 2010 functional and takeninitiatives to finalize the National Disaster Management Policy. MoDMR has also played a leading role to incorporate disaster risk issues in a number of sectoral plans, for example, Agriculture, Health, Environment, Livestock etc. and integration of, DRR and CCA for Department of Women affairs (DWA). Disaster Management Act 2012 is effective and enforced.

Other national strategy, policies and plans and UN plan those integrated DRR-CCA are as follows:

- Agenda 21
- National Strategy for Accelerated Poverty Reduction (NSAPR) -II, 2009-2011
- National Agriculture Policy (Draft), 2010
- National Food Policy Plan of Action , 2008-2015
- Revised Renewable Energy Policy (Draft), 2011
- Industrial Policy, 2010
- Draft Bangladesh Economic Zones Regulations, 2011
- Sustainable and Renewable Energy Development Authority (SREDA)Act (draft), 2012
- Land Zoning Act (Draft), 2012
- Brick Production Act (draft), 2012
- Haor Master Plan, 2012-2032
- Energy Conservation Act, 2010
- The Gas Act, 2010
- National Child Policy, 2011
- National Women Development Policy, 2011
- National Health Policy, 2011
- Balu Mohal and Soil Management Rules 2011
- Bangladesh Climate Change Resilience Fund, 2011
- Forest Transit Rule, 2011
- Draft National River Conservation Act, 2011
- Bangladesh Wildlife Conservation and Security Act , 2012
- Draft Tree Conservation Act, 2012
- Disaster Management Act, 2012
- Forest (Amendment) Act, 2012

- Bangladesh REDD+ Readiness Roadmap, 2012 (under preparation)
- Coastal Zone policy 2012
- Health Policy 2011
- Environment Policy 2011
- Draft Agricultural Master Plan for coastal Zone 2012
- Bangladesh Water Act -2012
- National Sustainable Development Strategy (NSDS) 2011
- Cyclone Shelter Construction Maintenance and Management Policy 2011
- UNDAF(2011-2016).

Context and Constraints

Integration of disaster and climate risk reduction has remained as a long term process due to the existing culture and practices of 'Emergency Response focused management''. Mainstreaming of DRR and CCA requires acceleration of common understanding and regular follow up which is not progressing as fast as expected. On the other hand, priority for Policy formulation and revision in this sector has to be done more rigorously and timely.

b. Core Indicator 2

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

Dedicated resources refer to funds that are allocated specifically for disaster risk reduction actions within public investment inter alia. Resource allocation that embeds disaster risk reduction into an institution's day-to-day business is necessary. When risk is considered in development investment decisions and in the design of projects, the cost of disaster risk reduction is lower.

Description

GoB has continued its commitment to dedicate and allocate funding for DRR and CCA in the annual budget of 2011-2012 and also 2012-2013 from its revenue and development budget.

During the fiscal year 2011-2012, BDT 1399, 97,28, 000.00 (USD 170,728,000.00 approx.) allocated for relief and BDT 1355, 49,97,000.00 (USD 165,305,000 approx.) allocated for VGF to the ultra poor families to cope with shocks and disasters from Ministry of Finance only through MoDMR.

GOB and it's development partners have continued to increase the funding for preparedness and CCA as well. Following are some key examples:

- Climate Change Trust Fundhas been created in 2009 for implementing BCCSAP and govt. allocated 400 million US$ approximately per year. In BCCSAP Disaster Risk Reduction is one of the major area for climate change adaptation
- CDMP II funding started from 2010 with an initial budget of US$ 51.5 million that increased to US$ 78.0 million in the reporting period.
- Multi Donor funded Bangladesh Climate Change Resilience Fund 2010 of 170 million USD
- Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP)of DDM, LGED, BWDB and the Ministry of Planning
- Employment Generation Programme for the Poorest (EGPP) of MoDMR is introducing with an amount of US$ 150.00 million
- European Community Humanitarian Office-Disaster Preparedness ECHO (ECHO-DIPECHO) funding (approximately EURO 3.5 million) for community based disaster preparedness and risk reduction through NGOs at local level in 2011-2012
- Funds through Water Development Board to reconstruct and maintain coastal and river embankments
- Funds through LGED and MoDMR to reconstruct and repair rural communications
- Funds through Ministry of Education to construct schools in the coastal zone as multi-purpose shelters during emergency period.

Context and Constraints

Allocated resources are not adequate enough for the highly populous country with multiple hazards affecting the communities round the year. Often, limited efforts in coordinating funding allocation (between government and non-government agencies) reduce optimisation of available resources. Other major constraints are as follows:

- Lack of awareness on emerging risks of natural, biological and nuclear hazards

- Media's involvement still more focused on emergency rather than DRR and CCA Following suggestions would be considered to overcome these constraints in coming days by GoB:
- Stock taking of budget allocation for emergency response and risk reduction separately following an agreed Methodology.
- Formulize a process to avoid duplication of resource allocation at institutional level.
- The potential to utilise various resources allocated under different various ministries and departments needs to be explored.
- GoB allocation from revenue and development budget need to be compiled to analyze impact against the financial investments both in quantitative and qualitative terms.

c. Core Indicator 3

Community participation and decentralization are ensured through the delegation of authority and resources to local levels

Such action calls for the promotion of community participation in disaster risk reduction through the adoption of policies relevant to the local level, promotion of knowledge networks, strategic management of volunteer resources, attribution of roles and responsibilities, and the delegation and provision of the authority and resources at local levels.

Description

Bangladesh continues its effort to enhance capacity of the vulnerable people, especially women and persons with disabilities through their active participation. More than 800 Unions' risk profile and Local Disaster Risk Reduction Action Plans (LDRRAP) have been developed through Community Risk Assessment (CRAs) tools. More than 60,000risk reduction small scale interventions have been implemented through Local Govt, Union Disaster Management Committees (UDMCs), local NGOs and INGOs. MoDMR through CDMP's Local Disaster Risk Reduction Fund (LDRRF) has been channeling resources to local disaster management committees for different risk reduction initiatives.

Training to local government, journalists, academicians, students, civil society groups of DRR sector resulted in engagement of multi-stakeholders in the disaster risk reduction and supplemented efforts of the government machineries at local level. It also helped in developing various action plans led by the GoB and NGOs at community level. There are initiatives to strengthen local government system especially at upazilla and union level, with support from development partners for undertaking DRR initiatives at the local level. A guideline for formation of disaster management committees finalized and all committees reactivated after changes of local elected government in 2011 at various levels asper guideline of revised SOD.

City Mayors at "My city is Getting Ready" Campaign

Context and Constraints

Elected local government representatives at union and Upazilla levels are key actors for all field level DRR activities where resources are allocated from the national level through district administration. However, key challenges remain on decentralized decision making process, ensuring participation of vulnerable communities and resource allocation on DRR interventions at local level. At the same time, volume of allocated resources is not always sufficient to support the initiatives of the communities and local government representatives on DRR and CCA. Practiced rule of allocation of resources is that all areas will receive equal resources although vulnerability of the communities and locations differ. In all unions, there is a change in the leadership and a newly elected members taking over. They have limited or no orientation on DRR and emergency response management. Local Government's legal responsibility and authority to keep budget allocation for DRR is also available in a very limited scale.

To overcome the constraints, an overall effort is needed to strengthen decentralized planning and decision making process and the allocation of resource as per vulnerability status requires further acceleration. On the other hand, the capacity of the local government bodies especially newly elected Upazilla Chairmen,Vice Chairmen and Union Council chairmen need to be enhanced through a continuous training and orientation programmes at all levelon inclusive DRM. Though CRA guideline tried to include issues of persons with disabilities but more attention is needed and expertise is required toensureparticipation of PWDs in DRM. More emphasis need to be given to include persons with disabilities in different DRM committees and include sessions on vulnerabilities of person with disabilities in all DRM training /workshops.

d. Core Indicator 4

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

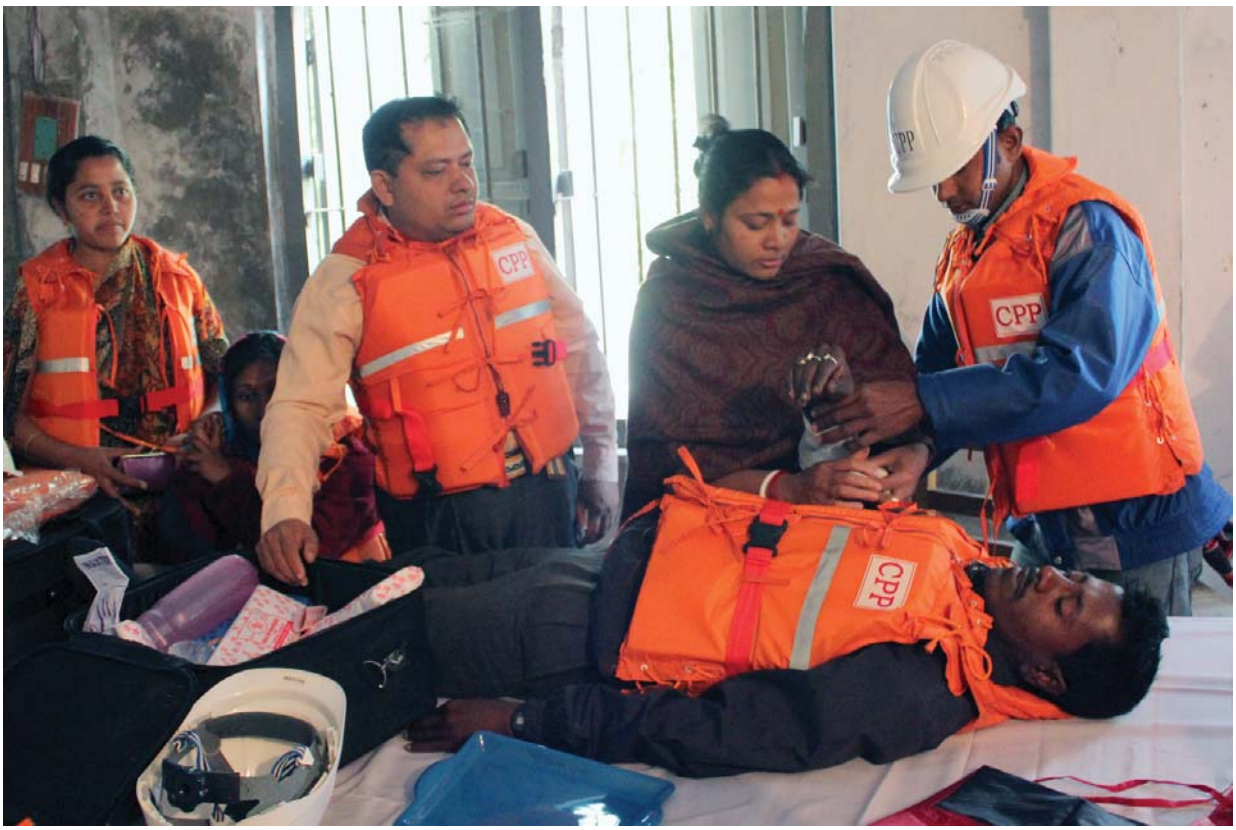
A multi-sectoral platform for disaster risk reduction can be defined as a nationally owned and led mechanism - adopting the structure of a forum or committee that facilitates the interaction of key development players around the national disaster risk reduction agenda and serves as an advocate for adopting disaster risk reduction measures at all levels. Such a platform may include or complement existing mechanisms for disaster management (that exist primarily for emergency relief and recovery).

Description

At present, a multi-sectoral national platform on DRR (NPDRR) has brought together different public, private and civil society groups. It has also enhanced the tradition to work together by multi-stakeholders and it is enforced by the revised SOD 2010. Now, the NPDRR has 39 members. Five other key committees are actively contributing to the policy guidance and multi-stakeholder coordination. The committees are: National Disaster Management Council (NDMC), Inter-Ministerial Disaster Management Coordination Committee (IMDMCC), National Disaster Management Advisory Committee (NDMAC), Earthquake Preparedness and Awareness Committee (EPAC), and National Disaster Response Coordination Group (NDRCG).

At the apex level, NDMC headed by Prime Minister is established to provide policy guidance towards disaster risk reduction and emergency response management in Bangladesh. The Council is multi-sectoral and inter-disciplinary in nature. It has 41 members from ministries, departments and armed force divisions. The IMDMCC is established at the national level to facilitate policy making, planning, programming and implementing measures relating to disaster risk reduction and emergency response management in Bangladesh. It has 33 members from all key ministries and Bangladesh Red Crescent Society (BDRCS).

The NDMAC was formed in 19 November 2009 with 47 members from 8 members of parliament, government departments, universities, experts, business groups, insurance company, financial organizations, research institutes and Fire Service and Civil Defense (FS&CD). Following the verdict of High Court Division of Supreme Court, dated 29 July 2009, in order to prepare the nation for earthquake risk management, EPAC is formed. It also has 39 members from government departments, Armed Forces Division (AFD), academicians, research institutes, FS&CD, NGOs. NDRCG is formed with 13 members for the high incidence of natural disaster and effective coordination. The group will be activated as and when required to manage and coordinate support for disaster stricken communities.



CPP Voluntarism Development

Context and Constraints

The NPDRR initiative taken to fulfill the commitment of HFA by GoB, However, The roles and functions of the national platform has not been outlined though the committee organized regular meetings under coordination of MoDMR. The NPDRR also established as a standalone platform without necessary coordinating mechanism with other four national committees as well as stakeholders in DRR and CCA. The NPDRR structure also lacks representation of women organizations and private sector though representatives of private sector are key member of other national committees.

Now, GoB through MoDMR will revisit the structure of the NPDRR to include wider civil society groups, women organizations and private sector. The revised NPDRR will comprise of representatives from all five committees- National Disaster Management Council (NDMC), Inter-Ministerial Disaster Management Coordination Committee (IMDMCC), National Disaster Management Advisory Committee (NDMAC), Earthquake Preparedness and Awareness Committee (EPAC) and National Disaster Response Coordination Group (NDRCG), and representation of all stakeholders. An executive committee will be formed from representation of all five committees which will sit regularly to review and advice on all DRR and Emergency Response issues. Members of all five committees will sit together at least once a year as a larger community on DRR.

SECTION 4
PRIORITY FOR ACTION 2

PRIORITY FOR ACTION 2: DEFINITION AND SIGNIFICANCE

Identify, assess and monitor disaster risks and enhance early warning

The starting point for reducing disaster risk and for promoting a culture of disaster resilience lies in the knowledge of the hazards and the physical, social, economic and environmental vulnerabilities to disasters that most societies face, and of the ways in which hazards and vulnerabilities are changing in the short and long term, followed by action taken on the basis of that knowledge.

a. Core Indicator 1

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

National risk assessments allow decision-makers and communities to understand the country's exposure to various hazards and its social, economic, environmental and physical vulnerabilities. National risk assessments allow communities to take effective action to reduce disaster and environmental risks.

Description

MoDMR has been facilitating sector specific risk assessment guidelines and mapping for earthquake for major cities, Dhaka, Chittagong, Sylhet and for medium and small urban areas like Rangpur, Bogra, Mymensingh, Rajshahi, Sirajganj, Tangail, Narayanganj, etc. and tsunami in 13 coastal districts, i.e., Cox's Bazar, Chittagong, Noakhali, Barguna, Patuakhali, Khulna etc. MoDMR has established a Multi-hazard Risk Vulnerability Assessment (MRVA) Modeling and Mapping Cell with a financial support of World Bank and engaged an international consulting firm for the job in the country. River bank erosion prediction model and community based prediction dissemination system has been used in two river basin areas - Padma and Jamuna.

Risk assessment of Drought and it's early warning system are designed. Risk assessment of drought has been tested and mapping of drought prone areas continued. Key examples of risk assessment for the reporting period:

- Inundation Risk Map : Using existing data on available digital elevation models useable tsunami and storm surge inundation risk maps have been prepared for the entire coastal region of Bangladesh. The risk maps have been developed based on the simulation results of tsunamis and storm surges and the updated Digital Elevation Model
- Seismic Microzonation : Seismic microzanation of Dhaka city is composed of the probabilistic calculation of peak ground acceleration levels, and the estimation of predominant period of local amplification for microtremor and amplification factor of each geomorphological type
- Ministry of Primary & Mass Education facilitated earthquake risk assessment of Schools andDirectorate General of Health Services facilitated earthquake risk assessment of hospitals in major urban areas. (20% of schools and hospitals in three major cities: Dhaka, Chittagong and Sylhet)
- Civil society (including the NGOs) owned CRA as common risk assessment format and applied at the local level
- Risk assessment of flash flood in Haor area by CEGIS
- Climate Change Induced drought risk assessment by CDMP and CEGIS
- Salinity Impact Assessment by Soil Research Institute
- Fresh water source mapping in the coastal belt by DPHE.

Context and Constraint

Unavailability of Geo-spatial data remained as the key challenges remained More than 12000 schools and hospitals are not safe from earthquake in three major urban areas/cities and from flood and cyclone in rural and coastal areas (including private and pre-schools). Unavailability of accurate data for Digital Elevation Model (DEM) constrained production of accurate inundation information for flood and storm surges which can be disseminate to communities for better preparedness.

There is a need to develop standardized reporting process of risk assessments and mapping and data compilation methodology.

Mobile phone based early warning system

Risk assessment of lifeline sectors, i.e., health, water and sanitation, energy, agriculture, livestock need to be prioritized at national and local level. Other key points are:

- Investment is needed to produce necessary scientific data with support of space technology
- Gender perspective need to be integrated in all Multi Hazard Risk assessment
- Disability and aging inclusive perspective also need to be integrated in the CRA and Hazard Risk Assessments
- Flood, cyclone and all climate related probable risk scenario need to be developed with scientific data and use of appropriate technology
- Vulnerable communities' livelihood risks need to be assessed and mitigaiton plans to be developed.

b. Core Indicator 2

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

Data collection and dissemination processes allow decision-makers and the public to understand the country's exposure to various hazards and its social, economic, environmental and physical vulnerabilities. Such information, disseminated in an appropriate and timely manner, allows communities to take effective action to reduce risk.

Description

Disaster Management Information Centre (DMIC) of DDM, anchored at Disaster Management and Relief Bhaban which are connected with 64 districts and more than 410 upazilla (sub-district) level offices. A National Disaster Response Coordination Centre (NDRCC) has been setup at Ministry of Disaster Management and Relief for effective and coordinated response to any disastrous emergency. CPP also is expanded in 3 new districts and 5 new upazillasat west coast with support from CDMP and covered to a total 13 Districts and 37 Upazilla with 49,365 volunteers. CPP established digital 156 HF and VHF wireless stations in isolated islands and chars in 37 costal Upazilla with support from American Red Cross.

An ongoing project led by BBS/World Bank/WFP is updating poverty maps, which would be used as oneinput for risk assessment at pre-crisis situation. During the reporting period, significantamount of research-based information generated on vulnerability of number of high riskdistricts by GoB and NGOs, which is used as a basis for a systematic

monitoring of vulnerability assessment. Early warning information generation and dissemination has considerably beenimproved and further attention is required for wider dissemination at community level.Geological Survey of Bangladesh (GSB) has taken initiative with support from Governmentof Norway to strengthen its capacity for geo-hazard identification and mitigation.

Context and Constraints

Vulnerability analysis as an integrated element in disaster management is increasingly been recognized for practices in recent time in Bangladesh. A national system remains underdeveloped to monitor vulnerabilities to different hazards especially the social, economic and environmental vulnerabilities which are linked to disaster impacts. However, much of the information needed for monitoring exist with different agencies often on different websites. There are current efforts by MoDMR to create a web portal through the DMIC to centralize this information focused on hazards and disasters. Substantial progress has been made for DDM's DMIC in compiling and delivering information. It is easily accessible through the internet; there must also be a system for the local level planners (DMCs) to access that information base who do not have internet facilities. A System is also to be devised to monitor and consolidate the works being done by NGOs. Limited access to territorial data and absence of a monitoring system for salinity ingress and flash flood also remained as a challenge.

A hub need to be initiated within MoDMR to consolidate and archive different works done by the government agencies and NGOs/INGOS on DRR/DRM and CCA while a consistent monitoring system for hazards like salinity, tornado, flush flood, discrete rain, dense fog and cold wave etc. need to be developed and institutionalized at local and national level.

c. Core Indicator 3

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

Assessing capacity of the four elements of early warning (risk knowledge, monitoring and warning services, dissemination and communication, and response capabilities) is essential to empowering individuals and communities threatened by hazards to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life, damage to property and the environment, and loss of livelihoods.

Description

Early warning information generation, community message preparation and message dissemination to at-risk communities Bangladesh has well developed for cyclone in coastal areas and flooding in the river basins. In each year, disaster risk reduction awareness campaign is progressed through observing the National Disaster Preparedness Day (NDPD), and International Day for Disaster Reduction (IDDR) in March and October, respectively. Besides, hazard specific awareness campaign and warning is placed by concerned organizations like FFWC of Bangladesh Water Development Board (BWDB) for Flood, Bangladesh Meteorological Department (BMD) for cyclone and Department of Agriculture Extension (DAE) for drought. Space Research and Remote Sensing Organization (SPARRSO), Centre for Environmental and Geographic Information Services (CEGIS), Institute of Water Modeling (IWM), Geological Survey of Bangladesh (GSB), are engaged in strengthening disaster early warning system.

Decentralized organizations, research organizations and universities are linked with disasterwarning information generation and disseminations along with SAARC Meteorological Research Centre (SMRC) established at Dhaka. Union DMCs have been linked with mobile phone network and Upazilla DMCs are with internet and mobile phone.

Tsunami early warning centre has been established at BMD in collaboration with Intergovernmental Oceanographic Commission (IOC). MoDMR are in process to design a Tsunami EWS in the country. In addition to existing one, new three seismic observatories have been established at Dhaka, Sylhet and Rangpur. Drought warning message dissemination is done by DAE. Early Warning Dissemination through Cell Broadcasting System (CBS) tested pilot in cyclone prone Cox's Bazar and flood prone Sirajgonj and planned to expand 14 coastal districts by MoDMR with a support from BMD, FFWC and mobile phone operators (Teletalk and Grameen Phone).

Other key achievements are:

- Interactive Voice Response (IVR) through all Mobile Phone Operators in the countryisachieved by DDM in 2012 to disseminate daily weather bulletin and early warning generated by BMD and FFWC
- MoDMR also initiated a process to establish poll-fitted megaphone siren to disseminate

early warning on hazards to the vulnerable communities in 35 upazilla of 12 districts in the coastal belt which were badly affected by cyclone SIDR. This system will be controlled from a district headquarters (Deputy Commissioners' Office)

- Establishment of local early warning mechanism through Community Radio
- Regular River bank Erosion prediction and community based early warning dissemination (for major river-basin, i.e., Ganges, Jamuna, Padma, Meghna.)
- SMS based Warning Dissemination system piloted for Tsunami and cyclone warning
- 14 Community Radio on DRR and CCA are being broadcasting. FM Radio also broadcasts Disaster Management issues
- Bird flu information for livestock is disseminating through SMS.

Context and Constraints

Bangladesh Government faces multiple challenges to provide effective early warning to flood and flash flood that devastate life and livelihood of the poor people of the country regularly. The main reason is the absence of an agreed regional cooperation framework on rainfall and water flow data sharing among three neighboring countries of SAARC in the Ganges-Brahmaputra-Meghna (GBM) basin. Bangladesh flood and flash flood warning information will not be at desired level without establishment of regional data sharing and cooperation framework. On the other hand, a national Tornado forecasting system along with forecasts for nor'wester and landslides, which have been causing significant damage to lives and property in recent times, is needed where BMD and SPARRSO may play a significant role.

The other challenge is early warning messages to reach the people at risk, in remote areas for different hazards except cyclone and storm surge. Community volunteer groups have to be developed in the CPP fashion for the remote flood prone areas for disseminating flood warning. Media workers also need to be trained properly on early warning messages and system so that they can transmit the warnings to public appropriately. The Urban Volunteers have potential to be involved in the early warning dissemination on urban hazards thus increasing the awareness of the mass people.

d. Core Indicator 4

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

This action refers to the need to cooperate regionally and internationally to assess and monitor regional and transboundary risks, exchange information and provide early warnings through appropriate arrangements. This would imply having standardised and accessible information and data on regional disaster risks, impacts and losses.

Description

Institutional arrangements exist between FFWC and neighboring countries (India Central Water Commission) upstream to limited exchange of hydro meteorological data.Arrangements are in place to facilitate information sharing regarding Avian influenza outbreaks near borders with Bangladesh. SAARC Disaster Management Centre has been established and activated. Adoption of SAARC Comprehensive Framework on Disaster Management created opportunity for exchange of information and more regional cooperation in risk assessment at regional scale. SAARC Agreement on Rapid Response to Natural Disasters has been signed by Foreign Ministers in presence of Heads of Member States during the 17th SAARC Summit held in November 2011 at Maldives. UN-SPIDER Technical Advisory Mission (TAM) invited by MoDMR in 2011 explored the scope and needs for space based information for DRR.

Context and Constraints

Although regional cooperation framework is in place and intergovernmental meetings held regularly, the system for sharing information related to hazards and disaster management has not been fully established and functional among SAARC countries. Application of research and studies for all hazards is limited at regional level. Non-availability of real time data on water level and rainfall in the upstream as well as lack of access to the satellites for direct data collection on precipitation remained major challenges.

SDMC may facilitate the regional cooperation for sharing information and knowledge on DRR and overall Disaster management on regular basis, especially during the hazard season. Information exchange process need to be strengthened especially for cross boundary hazards. Uses of space technology and information in DRR need to be considered and incorporate in the national disaster management policy.

SECTION 5
PRIORITY FOR ACTION 3

PRIORITY FOR ACTION 3: DEFINITION AND SIGNIFICANCE

Use knoweldge, innovation and education to build a culture of safety and resilience at all levels

Disasters can be substantially reduced if people are well informed and motivated towards a culture of disaster prevention and resilience, which in turn requires the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities, actual losses and capacities.

a. 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)

Information on disaster risks and protection options, especially to citizens and local authorities in high risk areas, should be easily available and understandable to enable for them to take actions to reduce risk, and build resilience.

Description

There have been functional networks and forums exist on DRR at various levels that include civil society, NGOs, CBOs and other development partners. Increased use of information technology further strengthened the process. For example, key government ministries, research institutions and civil society organizations have established websites. DMIC of DDM is providing information services, which isconnected with 64 districts and 410 upazila headquarters (HQs) by the year 2012 and planned to be expanded to remaining 73 upazila HQs in shortly.

The early warning information, particularly flood and cyclone warning information is available through email and websites, reaching across agencies and key stakeholders. MoDMR, BMD, CPP and FFWC have been contributing significantly in dissemination of early warning and disaster messages. Websites of NGOs (i.e., NARRI, NIRAPAD, Disaster Forum etc.) also disseminate disaster management related messages and early warning information.

Bangladesh Telecommunication Regulatory Commission (BTRC) through its mobile network, Bangladesh Betar (Radio Bangladesh) has also been taking part in disaster information sharing. In early warning dissemination Bangladesh television also provide information. Print and electronic media are also taking part in disaster knowledge sharingand contribute in preparedness through information dissemination in the communities and abroad. MoDMR has taken initiative to disseminate daily weather bulletin, early warning and disaster information through IVR and Cell Broadcasting System (CBS)for cyclone and flood in all over Bangladesh with support of mobile companies, BMD and FFWC. The Bangladesh Disaster Knowledge Network (BDKN) has been established by MoDMR involving 30 partner organizations including GOs, NGOs, CBOs, Scientific & Research Organizations and Universities under the umbrella of South Asian Disaster Knowledge Network (SADKN).

- Strengthen and Expansion of Cyclone Preparedness Programme (CPP) to new five upazillas of three Districts in southwestern part of Bangladesh
- Cyclone warning coverage of cycle increased to 5 km radius
- Community Radio initiated dissemination of disaster information and knowledge including public awareness programmes
- Climate and Disaster Risk Reduction (CDRR) community of Solution Exchange-A2I programmes to foster the information and knowledge management process on DRR and CCA
- DRR Network Expanded - National Alliance for Risk Reduction Initiatives (NARRI), River Basin forum (Regional), South Asia Disaster Knowledge network (SADKN)
- Department of Environment has been established Climate Change Knowledge Network (CCKN)

- Dissemination of Disaster Information and Knowledge through Folk Media is also practicing in the country
- The initiative of the Government to establish Union Information System where information related to disaster issues will also be available
- Establishment of online Disaster Management Knowledge Center to be hosted in DDM
- CDMP has signed an MOU with 14 community radio operators to disseminate awareness raising programme on DRR and emergency preparedness as well as early warning messages in local language.

Context and Constraints

As DMIC of DDM has been established some years back, it is already tested for local level information sharing on warning and disaster information. DMICs are also playing a key role in linking national to local and local to national information sharing process on disasters. Using e-communication and internet has been useful to enhanceaccess to information at the local level. Continuous power supply to the DMICs has been disrupted most of the time. There is hardly any robust alternative like solar power or other energy to ensure round the clock services from the DMICs. So, accessibility to and availability of regular support remained a major constrain for the professionals and agencies working outside capital and other major urban areas due to lack of high speed internet services and continuous electricity supply at the DMICs. There is also lack of effective coordination to create reliable information at various levels. The major area of challenge remains with availability of earthquake related information.

There is a need to increase more accessibility to and effectiveness of information dissemination from local to national as well as national to local level. Most vulnerable groups like persons with disabilities, aged, children need to be incorporated in the dissemination process.

Recently launched Community Radios (currently 14, mostly in disaster prone areas) is an expected vehicle to disseminate DRR/ DRM/ early warning messages in local languages among grassroots people in the remotest vulnerable areas and among marginal and at risk population.

b. Core Indicator 2

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

Incorporating disaster risk-related issues into existing education curricula contributes to continuous learning and reinforces knowledge for disaster risk reduction. Training activities also provide the opportunity to consider indigenous knowledge and traditional practices for risk reduction and mitigation.

Description

MoDMR has taken initiatives to harmonize the disaster risk management related training curricula for various key Stakeholders. Disaster risk management issues have been included in the school curricula of Class III to XII under the supervision of Ministry of Education (MoEdu), NCTB and NAEM, MoDMR and in the foundation training courses and professional degree programmes of 29 Bangladesh Civil Service (BCS) Cadres and Armed Forces Division (AFD). Specialized courses on disaster risk management for various civil service people, public representatives and local government bodies continued in RDA, NAEM and other institutes are also included DM and DRM issues. Some of the key achievements from the reporting periods are as follows:

- Disaster Risk Management (DRM) incorporated in the conventional course curriculum of Bangladesh Civil service , Bangladesh Public Administration Training Centre (BPATC), Teachers' Training Colleges, Technical Training Institutes, NAEM, Primary Teacher's Training Institute, and NILG
- DRM Issues incorporated in Class III to VIII and designed for class IX-XII
- 28 Training Institutions and Universities Incorporated DRM in academic curricula in Undergraduate and Post-graduate courses.
- Mass casualty Management has been incorporated in Medical (MBBS) and Nursing Curriculum
- House Building Research Institutes (HBRI) organized training on disaster resilient housing for the technical experts on house construction. and integrated DRR in their course curriculum and trainings
- DRTMC has organized a training programme collaborate with SAARC Disaster Management Centre (SDMC) on "River Bank Erosion and Embankment Safety Management in Asia Region" involving 40 experts from SAARC countries

- Emergency Capacity Building (ECB) Bangladesh organized two staff development Programmes for two different groups working in the DRM sector: management and leadership skill development for senior managers of organizations and Core Skill Development for new & support functions of the organization. These are nine-month long Programmes including two training workshops, simulation, coaching, mentoring and regular follow up communications from the secretariat of ECB
- Different NGOs organized training courses on disaster preparedness, emergency response and DRR for their staffs, community leaders, CBOs and vulnerable groups in urban and rural areas
- The Disaster Research Training and Management Centre (DRTMC) published a journal name
- Durjogbarta" based on disaster issue of Bangladesh and World
- A Social Protection Management Information Centre (SPMIC) established at national level to consolidate and coordinate all local level information
- Farmers' Resource Information Centres (FRIC) established at union level to disseminate scientific and updated information on technology to the farmers
- Upazilla Resource Centre has been established to disseminate DRR information
- Access to Information (A2I) Project established 4500 Information Centers at union level.

Context and Constraints

A large number of children, women, aged and disabled people who are not registered in the educational institutes or schools could not be reached by the structured curriculum and trainings. On the other hand, issues related to recovery and rehabilitation has not been incorporated in the curricula or professional development courses. Few organizations are providing disability inclusive DRM training to the stakeholders which need to be scaled up at national level. Gender and DRR perspective needs to be adequately addressed in all curricula and training modules of government and non-government agencies.

c. Core Indicator 3

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

Authorities at national and regional level have a key role to play in strenghtening the technical and scientific capacities to develop and apply methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments.

Description

DDM has established a Multi-hazard Risk Vulnerability Assessment (MRVA) Modeling and Mapping Cell with a financial support of World Bank and engaged an international consulting firm for MRVA modeling and mapping in the country.Community Risk Assessment (CRA) tool has been revised in a simplified manner with robust inclusion of CCA and gender issues and accepted by the NGOs working in Bangladesh as a common assessment tool in DRM. CRA has been used by more than 20 NGOs to study the risk and vulnerabilities of the communities living at risk. Other notable research during the reporting period are as follows:

- River Erosion Prediction study by DRTN, Dhaka University, and CEGIS
- Union Fact sheet and Union Map on risk assessment produced by CDMP
- Non-Farm Livelihood Study conducted by CDMP and CNRS in the Haor region
- Micro-Zonation Map of risk prone areas up-dated by CDMP in 2011
- Survey of Bangladesh is in the process of preparation of Digital Elevation Map (DEM)
- Soil Research Development Institute (SRDI) has been prepared Agro-ecological Zoning (AEZ) Map
- Storm Surge Inundation Map is prepared by CDMP and CEGIS
- Bangladesh Climate Public Expenditure and institutional Review by Planning Commission, GED
- Study on comprehensive earthquake mitigation by NARRI consortium of NGOs
- Study on impact and cost benefit analysis of various DRR interventions in Bangladesh by NARRI consortium of NGOs.

Context and Constraints

Bangladesh has generated knowledge on disaster risk management and climate risk management. Although, number of trainings, studies, and researches has been conducted on DRR and CCA, there is no established follow up mechanism. Past experience showed that it might be relatively easier to organize or conduct a research programme or study or training but difficult to scale it up for the public use whereas sharing of information of various studies and researches is also not regular.

A process need to be established for researches and studies on DRR and CCA investment at local and national level. For example, a cost effectiveness analysis or social return analysis of DRM investment can be useful to portrait the national efforts in building resilience of communities. The major constraint is the 'limited' capacity of DDM to play the role of a 'knowledge hub' that need to be enhanced through collaborative action and long-term plan. There is also a dire need to establish an agreed monitoring system after the end of a research projects and trainings to document the impacts and gaps. Initiatives need to be taken to create an inventory of all the research works (past, ongoing & proposed for the future).

One other challenge is to ensure an active and sustainable link between the researchers and academics with the practitioners at the field. An initiative of CDRR SolEx platform to facilitate a process to bring together all three types: practitioners, policy makers and researchers in one fold can be a good step towards eradicate the disconnection.

d. Core Indicator 4

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

A countrywide public awareness strategy is a national, long-term plan of action with specific goals that organizes how the general population is informed about disaster risk and the ways they can act to reduce their exposure to hazards. Public awareness actions are important tools to help integrate disaster risk reduction into every-daylife.

Description

Raising public awareness by government, NGOs and civil society on different hazards, especially earthquake, cyclone, flood, tsunami etc. has continued in the reporting period.From 2012, IDDR day is recognized as a key public awareness raising day by GoB which is enlisted to category B of the events means Prime Minister will be actively involved in the day observance as a chief guest thus raise the importance of the to a higher level. The national Disaster Preparedness Day (NDPD) has also marked as a category C by GoB, making it a nation-wide celebration through national funding. GoB has taken an initiative through government order to organize at least two mock drills in each school a year on observance of IDDR and NDPD.

In 2012, more than 400 schools organized drill on earthquake and fire hazards in Dhaka city. More schools are prepared to conduct the drills on the day of IDDR 2012 together. Number of schools conducted awareness session on hazards like flood, fire, earthquake, cyclone etc. Mock drills on cyclone, flood, earthquake etc. were organized by DDM at national, upazilla and union levels.

National Disaster Management Plan (2010-2015) called for extensive public awareness programme on DRM. Print and electronic media played the supporting role in public awareness building process. Day observances (i.e., NDPD, Environment day and IDDR by the GoB and NGOs) incorporated the public awareness as a key activity. NCTB has revised the primary and secondary school curricula to include DRR, while MoDMR through CDMP has supported several universities, e.g., Patuakhali Science and Technology University (PSTU), IUBAT, BRAC University and University of Dhaka to initiate graduation and post-graduation studies in DRM.

Context and Constraints

Although number of events continued to raise the public awareness on DRM, a robust strategy for raising awareness among public remained a major gap in the DRM sector. Lack of resources and efforts to increase the effectiveness of the mass awareness on DRR and emergency preparedness remained as other key challenges. Investment from private sector and their proactive involvement is also absence in the mass awareness programmes on DRR.

A strategy for public awareness programme need to be developed and commenced to create more significant impact of the mass awareness programmes of GoB and NGOs on DRR and CCA. Hazard wise common guideline for public awareness raising campaign could be developed. At the same time, investment and effort need to be increased to raise the awareness of mass people through GoB' development budget and private sector's funding.

SECTION 6
PRIORITY FOR ACTION 4

PRIORITY FOR ACTION 4: DEFINITION AND SIGNIFICANCE

Reduce the underlying risk factors

Disaster risks related to changing social, economic, environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change, are addressed in sector development planning and programmes as well as in post-disaster situations.

a. 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

Scope of environment risk management policies can have major impacts on disaster risk reduction, and should explicitly incorporate risk reduction goals and strategies. When environmental and natural resource policies specifically incorporate disaster risk reduction elements, they can help reduce underlying risk factors.

Description

Ecosystem Conservation and Sustainable Development issues are articulated in the Constitution of The People's Republic of Bangladesh under article 18A and 15 respectively. In this reporting period, some of the key ministries of Bangladesh government have initiated mechanism and regulatory system to protect and restore the ecosystem services and rehabilitation of wetland, forest areas and natural mangrove generation. The following are some of the examples:

- Introduction of Wild Conservation and Preservation Act and forest transit Root 2011
- Development of Ecologically Critical Areas (ECA) Management Guideline
- Revision of the Fish Protection Act 2011
- Establishment of Modhupur Rehabilitation Project (Incentives) Endowment fund for ECA, Management of Modhupur Forests 2011
- Development of EIA Guidelines for 5 Sectors
- Piloting the Community Based Adaptation to Climate Change (CBACC) through Coastal afforestation in the coastal areas of 4 districts
- Land use planning initiated by the Ministry of Land, started in the coastal districts
- Ministry of Environment and Forest identified 12 Ecologically Critical Areas for protection.

Context and Constraints

Although Government and NGOs have introduced small scale piloting on community based adaptation as a means to DRM, an institutional framework and flow of financing is absent to promote and/or scale up the initiatives. On the other hand, natural resource management has not been integrated to strengthen the DRM initiatives at local and national level by the institutions and civil society groups.

Lot of inputs are needed to build Institutional Capacities (including Technology, Human resource and Finance) through a collaborative mechanism among the departments and relevant ministries. The Disaster Impact & Risk Assessment(DIRA) guideline needs to be developed, followed and be made mandatory for all national and local development programmes.

b. Core Indicator 2

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

The existence and implementation of policies for social welfare and the provision of basic services, for example to address issues of food security, public health, risk sharing mechanisms, protection of critical public infrastrucute etc. will address underlying risk factors and reduce the vulnerability of impoverished groups.

Description

25% of national budget through 99 types of social protection programmes for the poor, vulnerable people are implemented by 29 ministries to reduce poverty and ensure social development of the poorest section of the nation. Social development and compensation for loss by hazards like compensation for Birds Flue loss, Food Support for the fisherman during of 'Fish protection Season', VGD, VGF,TR,GR Programmes, Employment Support for Nursery Development Programme, input through Finance for the Farmer, Old Allowances, Benefit Sharing in Plantation programme under social forestry continued by GoB. Employment Generation

Building community resilience

Programme for the Poorest (EGPP) has been launched throughout the country by MoDMR in 2010. NGOs' are implementing Micro Finance Programme for poor families which also increased the coping capacity of the poor families to disasters and mitigate some risks. In the cyclone affected and water-logging affected areas, NGOs have implemented a 100 crore (12 million USD approx.) 'cash transfer programme' with the support of donors to restore the livelihood of the affected families.

Context and Constraints

Poor people are the most affected section by any hazards due to their exposure to the disasters through economic and socio-political reasons. GoB's social development policies enabled more than 10 million people to cope with the regular shocks and small scale disasters at the local level.However, There are overlapping, targeting error, problem of leakage and lack of coordination among the 29 ministries implementing social development programmes for poor people.

On the other hand, there is an absence of a comprehensive policy and social development programme to protect coastal vulnerable population which is more exposed to increased number of hydrological hazards and disasters. Safety net programme for the urban poor are not adequate to cope with the fast rising urban population, especially floating poor and slum dwellers.

The initiatives need to be scaled up to manifold to cover other vulnerable groups living at different hazard prone areas, especially frequently hit by climate change induced disasters. Safety net programme for the persons with disabilities (PWDs) need to be made more significant in the plan of GoB to enhance the coping capacity of the most vulnerable groups. Target areas for these programmes need to be considered not only by population size, but also as per vulnerability to hazards.

There is also a need to develop a robust data base of the poor people and social development programmes of the ministries in order to improve the coordination. It will also foster the integration of DRR in all social protection programmes through MoDMR.

c. Core Indicator 3

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

Focusing on the protection of a state's most vulnerable economic activities and productive sectors is an efficient strategy to help reduce the overall impacts of disasters.

Description

During the reporting period, major progress has been seen in the sectors like agriculture, livestock, and forestry. Some of the key examples are as follows:

- Disaster and Climate Resilient Crops (BR 43, 47, 51, 52, BINA 5, 8 etc.) have been introduced in the AILA affected coastal saline prone zone for assisting farmers to recover from disaster losses

- Cross breeding of fish, goat and cattle have been developed by the fisheries and livestock department to ensure economic safety to poor families against the disaster risks
- Sundarban Environmental Security Project has been implemented as a part of 'Forestry Protection Plan and Policy'
- Initiatives have been taken to ensure recovery of Wet lands and Biodiversity Conservation
- Ongoing Coastal Green Belt and Char Development Projects are aiming to protect public investment in livelihood and transfer asset to the poor communities
- Directorate of Agriculture Extension (DAE) provided cold-wave resistant rice seedling production technology to the farmers.

Context and Constraints

Absence of risk financing and non-existence of risk transfer remained key challenges for the country. Although mainstreaming objectives are promoted by MoDMR, it has not been fully incorporated among different ministries and department except ministry of agriculture, environment, and education.

GoB, development partners and private sector need to develop a mechanism to come up with the process of risk transfer for the at risk population. A study has been proposed by MoDMR on 'Risk Transfer' to ADB in 2012. Planning Commission has taken up an initiative to develop tools and mechanism to analyze cost effectiveness of climate financing in different sectors which covered some of the DRM issues. However, a specific and harmonized plan to develop a cost effective analysis of DRM investment is absent till date at national level.

d. Core Indicator 4

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

Including disaster risk reduction elements in land-use plans is an important strategy for reducing the vulnerability of communities to hazards. Land use planning that is carefully designed and rigorously implemented is a useful approach to managing expanding human settlements and minimizing associated risks.

Description

Bangladesh National Building Code is being reviewed by a National committee to update the code to present context. RAJUK (Capital City Development Authority) has developed and being implementing the Detailed Area Plan (DAP) for Dhaka City to facilitate safe urban settlement and micro land zoning and protect wetland. Forest Department has started a programme on Slope Plantation to protect the erosion of land in the hilly areas. MoDMR through CDMP and NGOs have conducted training for the masons on Building Code and Safe construction against hazards, especially cyclone and earthquake. GoB through the Water Development Board (WDB) channelized financial support to restore the drainage infrastructure in the water-logging areas and through City Corporation in the major cities like Dhaka and Chittagong. Disaster Resilient Housing is introduced by MoDMR through CDMP.

Context and Constraints

Lack of mechanism to enforce the Building Code remained the major challenge in the country. Although the Building codes is implemented in all urban areas including all major cities, lack of skilled human resource to monitor and authority to enforce the code by the relevant departments has remained the main constraint and challenge. Universal design of hazard-safety needs to be incorporated in the national building code.

e. Core Indicator 5

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

Saline free safe water dispenser

It is essential to consider disaster risk reduction principles when designing post disaster recovery and rehabilitation processes in order to 'build back better' and not recreate risk. There is an identified need for the national and local implementation of international post-disaster recovery and reconstruction norms and standards.

Description

In this reporting period, government and NGOs have taken initiative to integrate DRR in the post-disaster programmes, especially in the recovery stage. NGOs working in the affected areas of AILA cyclone and Water-logging have invested at least ten percent of the total fund for promoting risk reduction initiatives. For example, the community place and communication restoration activities ensured earthen roads above the flood level. More emphasis has been given to restore and re-excavate water channels in the water-logging areas to prevent future water loggings. In those programmes, the target beneficiaries were mainly women, which is more than 70% of the total beneficiaries. Women have been prioritized for all kind of cash for work, cash for training, public awareness and advocacy programmes in all AILA and Water Logging recovery and reconstruction projects in affected areas by GoB and NGOs.

UNDP has implemented a disaster resilient habitat programme as recovery initiative in Aila affected areas. DRR has been critically integrated in the on-going ECRRP of MoDMR for the cyclone affected communities. Water development Board has taken DRR as a key component in its entire ongoing coastal and river bank embankment reconstruction works after the cyclones and floods. Roads and high ways department reconstructing all the affected highways above the flood level with necessary water-channels to remove water-logging risks. LGED's ongoing reconstruction works in the Aila affected areas and water-logging areas considered DRR as integrated component to make local communication more disaster resilient. DPHE's effort to repair and construct drinking water schemes for the saline prone zone and cyclone affected communities considered all cyclone-resilient features. Ministry of Agriculture extended its expertise and technology to support cyclone affected farmers to use saline-resilient varieties to reduce future disaster risks to food security.

Context and Constraints

Key challenges are as follows:

- Emphasis on the humanitarian assistance by government and development partners
- Less emphasis on recovery and reconstruction phase which needs more finance and time
- Lack of assistance from development partners for recovery and reconstruction works
- Limited time given in project design of the recovery phase thus DRR issue missed out
- Concept of 'extended support' in the recovery phase reduces potential for DRR integration as resource is not adequate to cover all affected families
- One of the major constraints of integrating DRR in post-disaster activities and recovery programme is the absence of an agreed guideline of integration at national level

Absence of appropriate and tailor made tools, techniques and methodologies are also the key challenges.

f. Core Indicator 6

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

It is crucial to institutionalise procedures to integrate disaster risk reduction measures into national sustainable development strategies, plans and programmes in key areas such as poverty reduction, housing, water, sanitation, energy, health, agriculture, infrastructure and environment to ensure that development does not create further disasters.

Description

Disaster risk and Environmental Impact Assessment (EIA) methodologies have been developed and introduced in Revised DPP format that the EIA information, disaster risk information and its mitigation options has to be placed while submitting any development project to Planning Commission for approval by the government. This is applicable to all ministries, agencies, departments for all sectors. Mainstreaming disaster risk reduction out of the MoDMR remains a key national challenge. MoDMR in association with MoEF has just embarked upon cyclone resilient housing porgramme in the coastal areas targetingaround 700 families.

Context and Constraints

Although there is an agreement to common methodology of need assessment, adherence to agreement is absence. One of the main challenges to raise the focus of the different sectors on DRR, scales up the existing good practices and to introduce a robust process to work with ministries and departments. Existing efforts for mainstreaming DRR require joint and collaborative efforts of all actors, stakeholders and agencies including civil society groups. A risk management plan for various key institutions like schools and hospitals need to be developed and make operational in all major cities and urban areas as well as the hazard prone vulnerable locations.

SECTION 7
PRIORITY FOR ACTION 5

PRIORITY FOR ACTION 5: DEFINITION AND SIGNIFICANCE

Strengthen disaster preparedness for effective response at all levels

a. Core Indicator 1

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

An investment of time and resources in systematically evaluating and subsequently improving disaster preparedness capacities and mechanisms provides states with a substantial increase in readiness for managing disaster impacts, and improves response measures.

Description

During this reporting period, substantial progress has been made to put DRR in policies, plans and activities of government and NGOs. Following are some of the key examples from different sectors:

- SOD has been revised to include all hazards and approved for implementation at all level
- SOD has been translated in local language to ensure its effectiveness
- Disaster Management Act 2012 is enacted and enforced
- National EQ Contingency Plan has been finalized by anticipating future earthquake risks
- Ministry and Sectors' Contingency Plan are in place anticipating future risks of multi-hazards
- Local Level Contingency Plan at district-Upazilla-unions has been developed by CDMP and NGOs
- Coverage of CPP has been extended to the AILA affected coastal districts like Khulna, Satkhira, Bagerhat, etc
- FSCD has started Urban Community Volunteer Development Programme with support from MoDMR through CDMP and NGOs in major cities like Dhaka, Chittagong and Sylhet
- Private Sector (Garments Industry) engagement in EQ Preparedness increased
- Multi-Purpose Cyclone Shelter cum School construction started in the coastal and storm surge prone areas. About 3000 Cyclone Shelter and 100 Flood Shelter has been built in the cyclone prone and flood prone areas
- Training on earthquake and fire preparedness and Mock drill conducted at 30 Schools and 10 Hospitals at Dhaka and Sylhet city
- UNICEF is working with Directorate of Primary Education (DPE) to incorporate DRR in school level and upazila level education planning.A module has been designed on Disaster Management and Child protection and provided training to Ministry of Women and Children Affairs, Social Welfare, DRROs and all cluster partners. Improving socio economic resilience of family through cash transfer conditional to school enrollment, health and nutrition and prevention of child labor and child marriage
- The safe swimming initiative of UNICEF trained 541 adolescents (308 girls and 233 boys) as Community Swimming Coaches (CSIs) have coached 79,213 children on survival swimming skills
- Rain water harvesting initiative for the safe drinking water around child friendly spaces where at least 1500 families have access to safe water. New initiative like imaginative play ground is coming to develop children's confidence, creativity and cognitive development during disaster and enhance access to recreational activities during and post disaster situation to bring normalcy in life.

Context and Constraints

While the country has developed sound policies and frameworks, it lacks adequate capacity to implement all aspects of those policy and frameworks. Especially at local levels following the SOD, or the contingency plans are inadequate. The main reasons are inadequate capacity, in terms of not having adequate trained staffs, financial and technical resources such as space based technology. Often GoB institutions and departments do not have modern technical skills and logistical resources.

Urban Volunteer Development

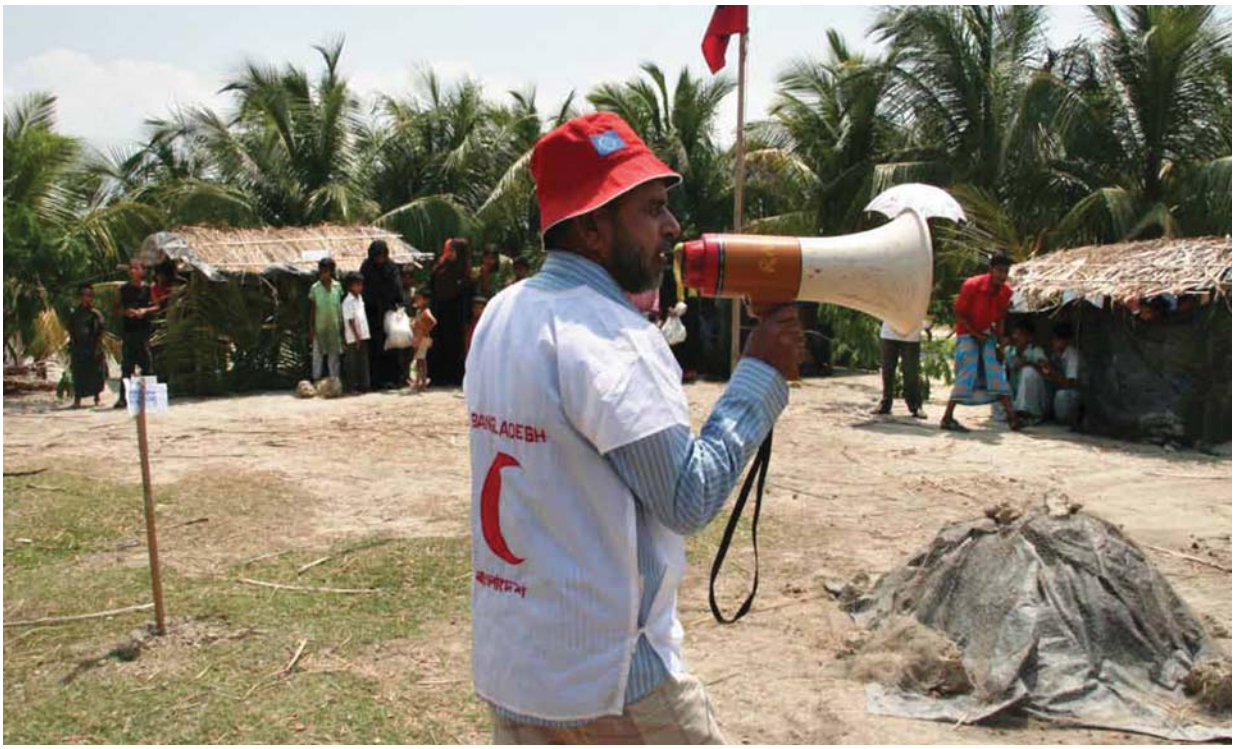
b. Core Indicator 2

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

Disaster preparedness and response planning for recovery and rehabilitation efforts should be informed by the lessons learned from previous disasters as well as knowledge of risk reduction measures in order to avoid missing the underlying causes of risk. Disaster risk reduction actions should be required in the design and implementation of both types of planning.

Description

- AFD held a joint exercise with US Armed Forces on Earthquake Search and Rescue [Disaster Response exercise and exchange]
- UNICEF developed operational guideline for WASH in Emergency by WASH cluster; At Bangladesh country office UNICEF has an emergency preparedness and response plan. UNICEF has renewed Long Term arrangement with Local NGOs for immediate emergency response operation
- UNDP has carried out, under Emergency Response Facility (ERF) project, the exercise of pre-qualifying NGOs throughout country so that they can be quickly engaged in emergency operation
- The UNICEF Education in Emergencies project (2007-2011) has incorporated several DRR activities (participatory vulnerability assessments, inclusion of DRR/ climate change in education materials and training and awareness raising activities among students, teachers and parents on DRR/climate change). This project is being implemented in 10 hazard prone districts of Bangladesh involving 400 schools and 64000 children.Provided training to District and Upazilla response team on outbreak investigation, clinical management and risk communication (H1N1)
- UNICEF organized and facilitated Nutrition in Emergency training for Govt and NGOs. Local health and family planning workers are trained on emergency nutrition response at AILA affected areas. Training provided at sub national level on alternative technologies i.e. pond sand filter, rain water harvesting in saline affected area. Mobilized nearly 105000 char people at 200 remote islands of Jamuna River to adopt safe and healthy behavior



CPP Drill Early warning for Cyclone

- AFD organized mockdrills on earthquake and urban disasters in collaboration with US army at National Level
- Number of CPP Volunteer including one third Women has increased to 49365. Number of Urban Volunteer also increased to 18,000 in Dhaka, Chittagong and Sylhet City
- DMICs have been established at Upazila level
- Search and Rescue Team at Cyclone under CPP and as well as at urban under FSCD are exist
- Stockpiles are in Place at local level as well as national level for emergency response
- Cyclone shelter construction, maintenance and management policy developed by MoDMR in 2011
- SAARC Agreement on Rapid Response to Natural Disasters in the region.

Context and Constraints

Inadequate contingency plans and lack of drills are remained as key challenges along with the awareness and allocation of resources by the stakeholders. Although MoDMR has been communicating with relevant departments and institutions to develop respective contingencyplans, it has been taken up by very few departments. Absence of a follow up mechanism and lack of adequate technical support to different departments and ministries are responsible for relatively slow progress. Major cause of this inadequacy and lack of follow up is linked to inadequate logistics and human resources at MoDMR. On the other hand, spontaneous changes of human resource at local administrative and local government level slowed down the scale up of local disaster Management plan and capacity building of DMCs.

c. Core Indicator 3

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

It is important for governments to commit resources for early recovery programmes, including quick assessment of damage, needs and capacities, restoration of critical infrastructure and livelihood, following major disaster events to support the resilience of affected communities, until long term reconstruction of assets takes place.

Description

National budget continues as key contingency funding mechanism for response to disasters at national level. National policy makers have started a process on creating National Climate Fund for Future Disaster Risk under the ministry of Environment. Disaster Response Fund (DRF) with an amount of USD 300 million for sudden onset disaster together with a catastrophe risk financing mechanism for rare disaster events. Contingency stock of rice and non-food items (NFI), e.g. blankets, house building materials etc. are in place.

In addition GoB has allotted an amount of USD 42 million from its revenue budget for addressing climate risk in Bangladesh. Ministry of Finance provided block grants of 1 billion BDT (11.9 million USD) to MoDMR response to any major disaster and the amount can be increased if needed by allocation from other development programmes during major catastrophe.

All the District Commissioner's office has allocation of cash, housing materials, blanket and rice to response to any local disasters while MoDMR has stock pile of cash, housing materials, rice and blankets as per SOD. Another window of humanitarian assistance is the Prime Minsiter's Relief fund which is mainly a funding mechanism through voluntary support of all stakeholders during major disasters in Bangladesh.

UNICEF hasStock of pre-positioned emergency supplies at WFP warehouses in Khulna and Gaibandha district. The items are as follows; Family kits, Education Kits, Recreation kits,Plastic Sheet, NRG-5 Biscuit. Also UNICEF prepositioned WASH materials in 64 DPHE warehouses which are maintained by DPHE. BDRCS also have stockpile in all districts and upazillas of the hazard prone areas as well as at the national level.

Context and Constraints

Major challenges are the inadequate funding for recovery and reconstruction works. Problems of risk financing and non-existence of risk transfers remained other key challenges. The contingency fund is adequate to meet medium-scale disasters. To cope with large-scale disasters, Government always need to mobilize adequate resources from development partners to meet the need of the affected people in medium and large scale disasters.Contingency planning needs to be gender and disability inclusive as well.

d. Core Indicator 4

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

Emergency preparedness and response as well as planning for recovery and rehabilitation efforts should be informed by the lessons learned from previous disasters. Disaster risk reduction actions should be included in the design and implementation of all types of planning.

Description

DDM has established a Damage and Need Assessment (DNA) Cell and going to establish a Multi-hazard Risk Vulnerability Assessment Modeling and Mapping (MRVA) Cell with support from World Bank through Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP). A guidebook to ensure gender equity and inclusion of socially disadvantaged groupsin disaster management business has been developed and published. Stakeholders have been identified for DNA and training for them has been planned by DDM. The relevant way to exchange information during disasters is more conventional, i.e. through phone, mobiles, internet and megaphones and through volunteer network.

However, a volunteer network currently only exists for cyclones covering only 12 out of 16 cyclone prone district with 49,365 volunteers (approx.60 % of the cyclone prone areas nationwide).Local Consultative Group- Disaster Emergency Response (DER) group has developed a common format for DNA which could be used by all parties: GO, NGO, Development partners ensuring a standard practice and common approach. MoDMR hosted post-disaster need assessment training jointly with World bank, SDMC and GFDRR.

Context and Constraints

DNA cell establishment and their agency focal points training can serve for the time being. However, in each sectoral agency Disaster Management cell need to be established, which is also planned in 15 agencies of 12 ministries through CDMP of MoDMR. The focal points and a specialist group in each agency have to be formed for ensuring expert in the DNA team.

SECTION 8
DRIVERS of PROGRESS

Rural risk reduction intervention

a. Multi-hazard integrated approach to disaster risk reduction and development

A multi-hazard approach can improve effectiveness. A community is usually exposed to risks from a variety of hazards, which can be either natural or human induced in origin, and can stem from hydrometeorological, geological, technological or environmental forces. The resulting cumulative risk cannot be tackled effectively if actors plan merely for selective hazardous events. A multi-hazard approach involves translating and linking knowledge of the full range of hazards into risk management approaches, strategies, assessments and analysis, leading to greater effectiveness and cost efficiency.

Description

Sectoral plans of GoB have adopted the multi-hazard approach in their development plans. Fisheries, agriculture, education, health, WATSAN, public works and other sectors have developed DRR integrated plan. The following are some key examples:

- The Sixth Five Year Plan (2011-2015) integrated policy document for poverty reduction programmes, has incorporated the DRR and CCA
- Revised SOD 2010 ensured robust institutional arrangement and coordination mechanism
- All the organization including GOs, NGOs, development partners are well coordinated in DRR issues
- Different committees formed and worked smoothly under the provision of revised SOD
- Disaster Management Act 2012 is enacted and enforced.

However, global framework and approach of development partners to finance DRR and CCA remain a separate funding mechanism which poses a key challenge to emphasize the integration of DRR and CCA with development at national level.

b. Gender perspectives on risk reduction and recovery adopted and institutionalized

Gender is a core factor to be considered in the implementation of disaster risk reduction measures. Gender is a central organizing principle in all societies, and therefore the risks that women and men are exposed to in disasters differ. Gender shapes the capacities and resources of individuals to build resilience, adapt to hazards and to respond to disasters. It is thus necessary to identify and use gender differentiated information, to ensure that risk reduction strategies are correctly targeted at the most vulnerable groups and are effectively implemented through the roles of both women and men.

Description

The role of women in coping with disasters and take preparedness for risk reduction at the household level is acknowledged as significant in Bangladesh. They play a vital role in different phases of disaster. A gender sensitive risk reduction approach has been developed by the CDMP. Women participation has been increased in different Committees at local and national level. The DMCs and other standing committees on response and DRR initiatives have women representation. One third of the CPP volunteers are also women. Women are also well represented in the urban volunteer group of 16000.

However, there much still remains to be done in this area. Gender disaggregated data are not available yet; several sporadic studies have shown that women are worst sufferers in any disasters. Tools have to be developed to gather gender disaggregated data. DER group would work on this issue. Gender responsive disaster response mechanism has to be devised. Women's participation and leadership in the local and central government institutions have increased but not enough in DRR field. So, women's role in the DMCs and other committees at different levels needs to be up-scaled. Various DRR/DRM training modules of government and NGOs need to incorporate gender and DRR issues, while the curriculum of graduation and post graduation courses on DRM in different Universities in the countries would have be adequately address this issue.

c. Capacities for risk reduction and recovery identified and strengthened

Capacity development is a central strategy for reducing disaster risk. Capacity development is needed to build and maintain the ability of people, organizations and societies to manage their risks successfully. This requires not only training and specialized technical assistance, but also the strengthening of the capacities of communities and individuals to recognize and reduce risks in their localities. It includes sustainable technology transfer, information exchange, network development, management skills, professional linkages and other resources. Capacity development needs to be sustained through institutions that support capacity development and capacity maintenance as dedicated, ongoing objectives.

Description

Comprehensive efforts have been given to identify and strengthen the capacity for risk reduction at national and local level. MoDMR and DDM through CDMP, ECRRP, ERF and other programmes are continuing the capacity building process. Key examples are as follows:

- Nearly 2000 MoFDM, AFD, FSCD staffs have been trained in DRR issues.
- More than 6000 NGO staffs are well trained in DRR issues.
- IT networking established from central to local levels. Necessary technologies have been installed with access to website and internet for quick information sharing at 64 Districts and 410 Upazilas level.
- A number of contingency plans of different government departments and NGOs have been developed.
- Different Ministries have taken initiative to train their own staffs on DM through self initiative.
- Coordination both at national and local levels has been strengthened.
- DER group is developing tools and standards for disaster response in slow onset disasters like water logging
- ERF have pre-qualified 60 NGOs so that early recovery initiatives can be launched soon after disasters strike.
- Development of 16000 urban volunteers and planned for 62000 in the CDMP phase II.

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

One of the key challenges in disaster risk management is to ensure that the most vulnerable are protected from existing and emerging environmental risks, and that those most affected are reached through disaster response and recovery programmes. Often, the most vulnerable belong to socio-economic and geographic 'minority' groups. Focused attention to meeting the special needs of the socio-economically vulnerable and/ or geographically secluded groups needs to be ensured through risk reduction and recovery plans and programmes.

Human security is the core concept of all development and DRR efforts of GoB. The present government aims at reducing the poverty from current 31.5% to 25% and 15% by 2015 and 2021 respectively and is committed to eliminate extreme poverty through and integrated and comprehensive social safety net programme which will be sustainable. Government has allocated 15% of the total national budget against social protection programme which is 2.5% of GDP in 2011-12. For ensuring social security of the vulnerable poor and their empowerment the government is implementing numerous social protection programmes which includes-

- Provision of special food transfer programmes for different vulnerable groups and the disadvantaged sections, so that they can face the incidence of poverty
- Provisions for cash transfer programme by generating employment as well as giving access to the market to for the absolute poor
- Food security programme for managing disaster and ensuring food security.

To achieving the targets the government is using the different effective poverty reduction tools, such as vulnerable group feeding (VGF), Vulnerable Group Development (VGD), Food for Works (FFW), Test Relief (TR), Gratuitous Relief (GR) and Employment generation programme for the Poorest (EGPP). Bangladesh Government has an elaborate system of social safety nets operated by 29 different ministries. Some NGOs are covering various target groups. GoB has also taken an initiative to bring all the safety net programmes under one umbrella for better coordination and follow-up upgradation. Though the existing safety net programmes have moved away from the relief approach to disaster risk reduction approach, there is still scope for enhancing the development impact of SSNP and needs to be clarified the linkage between DRR and SSNPs. The programme should also include capacity building at various levels to improve the management of these safety net programmes.

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

Effective disaster risk reduction requires effective community participation. Participatory approaches can more effectively capitalize on existing coping mechanisms and are effective at strengthening community knowledge and capacities. Equally, public-private partnerships are an important tool for disaster risk reduction. Such voluntary associations may involve public organizations such as government agencies, professional and/or academic institutions and NGOs, together with business organizations such as companies, industry associations and private foundations. Public-private partnerships can offer opportunities to combine resources and expertise to act jointly to reduce risks and potential losses.

Description

Bangladesh has successful experience of working with community based organizations in disaster management. GoB has taken initiative to revise the national Platform which calls for partnership with CSOs, private sector, and different non-governmental actors in DRR. Government has made budgetary provision and taken initiative to enhance the Public-Private partnership in integrated development programmes where DRR is identified as a key focus. MoDMR is providing technical support to roll out the cluster approach for early recovery in post disaster situation as a chair of cluster coordination body involving government agencies, UN, non-government organizations, private sector and the civil society organizations.Private sector regularly contributing to PM's Relief fund. Commercial banks provide blankets to MoDMR for emergency response. MoDMR has developed a cooperation agreement with DHL and Civil Aviation Authority to enhance the Airport Preparedness for any major catastrophe.

Community's indigenous knowledge however is yet to be integrated systematically into the national DRR plans and activities. All the necessary elements are there: DER group, NGO platforms like NARRI, Disaster Forum, NIRAPAD, NC4, online Community of Practitioners: Climate and Disaster Risk Reduction (CDRR) of Solution Exchange Bangladesh, DDM's NGO network; who can work together to put up a robust mechanism to systematically capture and integrate community's knowledge into the national DRR plans, policies and strategies.

Contextual Drivers of Progress

Possible instances of contextual drivers could include: resources and institutional capacities, political champions for disaster risk reduction, structural safety of schools, hospitals and critical public infrastructure, sound recovery strategies, institutionalization of mechanisms to mainstream disaster risk reduction in national development policy and programmes, etc.

Bangladesh Climate Change Strategy and Action Plan, 2009 and National Plan for Disaster Management (2010-2015) promote planning process by addressing the vulnerabilities, risk reduction through climate change adaptation related to climate changes in all sectors and ministries.

SECTION 9
FUTURE OUTLOOK

School cum cyclone shelter

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

DescriptionLimited resource, both financial and non-financial, is a key constraint for integrating DRR in sustainable development process. Considering the exposure to various types of disaster risk and their regular occurrence; Bangladesh requires substantial financial resources to protect life and livelihoods of the most vulnerable population through both structural and non-structural mitigation. At the same time, participation of vulnerable groups in the decision making processes related to disaster risk reduction planning and programmes is essential. However, key focus need to be given to the structural mitigation of the risks of hazards to increase the human security of the poor people.

Future Outlook Statement

- Ensure investment in structural risk reduction measures at the most vulnerable areas
- Ensure more investment for community based risk reduction initiatives to prevent and mitigate disaster risks at local level
- Increase capacity of the vulnerable communities to take better preparedness at community and household level through access to financial and natural resources in a sustainable process
- Strengthen monitoring mechanism of the implementation of DRR process
- Strengthen the mechanism for participation of vulnerable groups in the formulation of disaster management policies and implementation plans
- Increase the involvement of local governments in the formulation of disaster management policies, plans and implementations
- Use of Equity and justice based approach in DRR and CCA
- Enforcement of policies and planning related to disaster prevention, mitigation and vulnerability reduction.

DRH Construction in progress

Future Outlook 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

Sustaining the community efforts for their contribution to risk reduction is the key challenge. Communities are coping with disaster risks for a long time and they have built their own coping strategy. However, absence of a systematic approach to capture communities' practices for DRR and scaling up of those approaches across the country remained gap area.

Future Outlook Statement

- Establish asystematic approach to study and research on DRR effectiveness for sustainable development and document communities' practices for DRR for replicating/scaling up across the country and to share the information on changed scenario/predictions of future disasters due to climate change
- Engagement and partnership with private sector, CSO and Community groups for strengthening the community based DRR approaches.

Future Outlook 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

Bangladesh has already strengthened risk reduction approaches into the designs and implementation of recovery and reconstruction programmes at affected communities. However, replication and scaling up of the DRR and CCA approach at the local and community level still remains a key challenge. More emphasis needs to be given to raise awareness on DRR and CCA issues among the planners and the implementers of infrastructural schemes/ interventions for systematic incorporation of DRR. Also there is need for adequate budget allocation for systematic incorporation of DRR and CCA at all levels.

Future Outlook Statement

- All the technical Departments will increase the integration of DRR in partnership with the development partners to ensure natural protection against cyclone, tidal surge and Tsunami threats in coastal districts
- The government of Bangladesh with the financial assistance from different development partners (JICA, WB, DFID, SDC, etc) has already constructed 1000 new cyclone shelters with the provision of school cum community center in the cyclone affected districts. Another 2000 community based shelters are under construction
- Develop a community based Disaster Resilient Habitat Programme incorporating DRR and livelihood protection issues for the disaster affected areas.

Future Outlook Area 4

The United Nations General Assembly Resolution 66/199, requested the development of a post-2015 framework for disaster risk reduction. A first outline of a post-2015 framework will be developed for the next Global Platform in 2013, and a draft should be finalized towards the end of 2014 to be ready for consideration and adoption at the World Conference on Disaster Reduction in 2015.

- Focus on addressing underlying causes of disasters and regional approach for DRR and CCA

  or
- Redefining "Resilience' that encompasses both disaster and Climate Change

  or
- Pursue the implementation at the Local level.

SECTION 10
STAKEHOLDERS

Name of organization	Type of organization	Focal point details
Department of Disaster Management	Government Department	Nepur Ahmed/ Netai Dey Sarker
Institute of Disaster Management and Vulnerability Studies, University of Dhaka	Academic and Research	Dr. Mahbuba Nasreen
Centre for Environmental and Geographic Information Services (CEGIS)	Research	Bushra Monwar
Emergency Capacity Building (ECB) - Bangladesh	Consortium	Md. Harun Or Rashid
National Alliance for Risk Reduction Initiatives (NARRI)	Consortium	Shakeb Nabi/ Ashoke Adhikary
Space Research and Remote Sensing Organization (SPARRSO)	Government	Md. Shah Alam
Handicap International	NGO	Mustafizur Rahman
Department of Forestry	Government organization	Asma Parveen
Fire Service and Civil Defense Department	Government organization	Major Matiur Rahman
Bangladesh Armed Forces Division (AFD)	Government	Ahamed Amin Abdullah, (G), psc, BN
Local Government Engineering Department (LGED)	Government	A.F.M. Munibur Rahman
Directorate of Education (DoEdu)	Government	
Department of Public Health Engineering (DPHE)	Government	Md. Munnaf
Department of Fisheries	Government	Krisnendu Saha
Department of Environment	Government	Md. Abul Kalam Azad
Department of Agricultural Extension	Government	Dr. Abu Wali Ragib Ahsan
Christian Aid	NGO	S. M. Sajid/ Dolon Gomeg
Action-Aid Bangladesh	NGO	Aminul Kawser Dipu/ Ekhlakur Rahman
Dhaka Ahsania Mission	NGO	Khan Md. MujahidIbne Habib
Community Managed Disaster Risk Reduction (CMDRR)	Academic and Research	Khan Md. MujahidIbne Habib
Disaster Research Training and Management Centre (DRTMC), DU	Research & Academic	Umme Habiba

Name of organization	Type of organization	Focal point details
Flood Forecasting and Warning Centre (FFWC)	Government	Md. Amirul Hossain
Save the Children	NGO	Syed Matiul Ahsan
VARD	NGO	Md. Fazlul Hoque
Bangladesh Betar	Government	Md. Sohel Rana
Water Recourse Planning Organization (WARPO)	Government	Aminul Haque
Department of Women Affairs (DWA)	Government	Shamima Haque, Addl. Director
Bangladesh Metrological Department (BMD)	Government	Md. Azizur Rahman/ Md. Shameem Hasan Bhuiyan
Department of Secondary and Higher Secondary Education (DSHE)	Government	Professor Taslima Begum
World Food Programme (WFP)	UN	Malik K. Kabir
Manab Mukti Shangstha	NGO	Md. Habibullah Bahar
Dwip Unnayan Sangstha (DUS)	NGO	Md. Rafiqul Alam
Solution Exchange	Online Network	Dilruba Haider
Swiss Agency for Development and Cooperation (SDC)	Development Partner	Farid Ahmed and Matthias Anderegg
Shushilan	NGO	Abdul Quader Khan
BRAC	NGO	AHM Rezaul Kabir
Shangkalpa Trust	NGO	Mirza Shahidul Islam
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UNICEF Bangladesh	UN	Anwar Hossain
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