

# Bangladesh

# National progress report on the implementation of the Hyogo Framework for Action (2011-2013) -

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# **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.

#### Strategic Goal Statement:

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 Order 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.

#### Strategic Goal Statement:

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), 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.

#### Strategic Goal Statement:

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. MoDMR facilitating sector specific risk assessment guidelines and mapping for earthquake for 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**

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

# **Priority for action 1: Core indicator 1**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Is disaster risk taken into account in public investment and planning decisions? Yes

National development plan	Yes
Sector strategies and plans	Yes
Climate change policy and strategy	Yes
Poverty reduction strategy papers	No
CCA/ UNDAF (Common Country Assessment/ UN Development Assistance Framework)	Yes
Civil defence policy, strategy and contingency planning	Yes

Have legislative and/or regulatory provisions been made for managing disaster risk? Yes

#### 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, MoDMR has made Standing Orders on Disaster (SOD) 2010 functional and taken initiatives 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), 2011
- 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 & 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.

# **Priority for action 1: Core indicator 2**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

What is the ratio of the budget allocation to risk reduction versus disaster relief and reconstruction?

	Risk reduction / prevention (%)	Relief and reconstruction (%)
National budget	N/A	N/A
Decentralised / sub-national budget	N/A	N/A

USD allocated to hazard proofing	N/A
sectoral development investments (e.g	
transport, agriculture, infrastructure)	

#### 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 Fund has 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 multipurpose shelters during emergency period.

#### Context & 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.

# **Priority for action 1: Core indicator 3**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Do local governments have legal responsibility and regular / systematic budget allocations for DRR? Yes

Legislation (Is there a specific legislation for local governments with a mandate for DRR?)	No
Regular budget allocations for DRR to local government	Yes
Estimated % of local budget allocation assigned to DRR	N/A

#### 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 60,000 risk 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 Upazila 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 as per guideline of revised SOD.

#### Context & Constraints:

Elected local government representatives at union and Upazila 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 Upazila Chairmen, Vice Chairmen and Union Council chairmen need to be enhanced through a continuous training and orientation programmes at all level on inclusive DRM. Though CRA guideline tried to include issues of persons with disabilities but more attention is needed and expertise is required to ensure participation 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.

# **Priority for action 1: Core indicator 4**

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

#### Level of Progress achieved: 4

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

### **Key Questions and Means of Verification**

Are civil society organizations, national finance and planning institutions, key economic and development sector organizations represented in the national platform? Yes

Civil society members (specify absolute number)	11
National finanace and planning institutions (specify absolute number)	2
Sectoral organisations (specify absolute number)	12

Private sector (specify absolute number)	0
Science and academic institutions (specify absolute number)	4
Women's organisations participating in national platform (specify absolute number)	0
Other (please specify)	10

Where is the coordinating lead institution for disaster risk reduction located?

In the Prime Minister's/President's Office	No
In a central planning and/or coordinating unit	No
In a civil protection department	No
In an environmental planning ministry	No
In the Ministry of Finance	No
Other (Please specify)	Ministry of Disaster Management and Relief

#### 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. 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.

#### Context & 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**

Identify, assess and monitor disaster risks and enhance early warning

# **Priority for action 2: Core indicator 1**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Is there a national multi-hazard risk assessment with a common methodology available to inform planning and development decisions? Yes

Multi-hazard risk assessment	No
% of schools and hospitals assessed	Not yet Calculated
Schools not safe from disasters (specify absolute number)	Not Yet Calculated
Gender disaggregated vulnerability and capacity assessments	No
Agreed national standards for multi hazard risk assessments	No
Risk assessment held by a central repository (lead institution)	Yes
Common format for risk assessment	Yes
Risk assessment format customised by user	Yes
Is future/probable risk assessed?	No
Please list the sectors that have already used disaster risk assessment as a precondition for sectoral development planning and programming.	Agriculture, Livestock, Energy, Water Development, Communication etc.

#### 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, Sirajgani, Tangail, Narayangani, 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 & Dass Education facilitated earthquake risk assessment of Schools and Directorate 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 & Constraints:

Unavailability of Geo-spatial data remained as the key challenges. 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. 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

# **Priority for action 2: Core indicator 2**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Are disaster losses and hazards systematically reported, monitored and analyzed? Yes

Disaster loss databases exist and are regularly updated	Yes
Reports generated and used in planning by finance, planning and sectoral line ministries (from the disaster databases/information systems)	Yes
Hazards are consistently monitored across localities and territorial boundaries	Yes

#### 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 Upazila (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 Upazilas at west coast with support from CDMP and covered to a total 13 Districts and 37 Upazila with 49,365 volunteers. CPP established digital 156 HF and VHF wireless stations in isolated islands and chars in 37 costal Upazila with support from American Red Cross. An ongoing project led by BBS/World Bank/WFP is updating poverty maps, which would be used as one input for risk assessment at pre-crisis situation. During the reporting period, significant amount of research-based information generated on vulnerability of number of high risk districts 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 been improved and further attention is required for wider dissemination at community level. Geological Survey of Bangladesh (GSB) has taken initiative with support from Government of Norway to strengthen its capacity for geo-hazard identification and mitigation.

#### Context & 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. System 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.

# **Priority for action 2: Core indicator 3**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Do risk prone communities receive timely and understandable warnings of impending hazard events? Yes

Early warnings acted on effectively	Yes
Local level preparedness	Yes
Communication systems and protocols used and applied	Yes
Active involvement of media in early warning dissemination	Yes

#### 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 disaster warning information generation and disseminations along with SAARC Meteorological Research Centre (SMRC) established at Dhaka. Union DMCs have been linked with mobile phone network and Upazila 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 Sirajgoni 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

- Interactive Voice Response (IVR) through all Mobile Phone Operators in the country is achieved 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 Upazila 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 live stock is disseminating through SMS.

#### Context & 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.

# **Priority for action 2: Core indicator 4**

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

#### Level of Progress achieved: 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Key Questions and Means of Verification**

Does your country participate in regional or sub-regional actions to reduce disaster risk? Yes

Establishing and maintaining regional hazard monitoring	No
Regional or sub-regional risk assessment	No
Regional or sub-regional early warning	Yes
Establishing and implementing protocols for transboundary information sharing	No
Establishing and resourcing regional and sub-regional strategies and frameworks	Yes

#### 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 & 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**

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

# **Priority for action 3: Core indicator 1**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Is there a national disaster information system publicly available? Yes

Information is proactively disseminated	Yes
Established mechanisms for access / dissemination (internet, public information broadcasts - radio, TV, )	Yes
Information is provided with proactive guidance to manage disaster risk	Yes

#### 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 is connected 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 Tele-communication Regulatory Council (BTRC) through its mobile network, Bangladesh Betar 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 sharing and 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 and 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 Upazilas 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 Centre 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 & 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 enhance access 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.

# **Priority for action 3: Core indicator 2**

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

#### Level of Progress achieved: 4

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

### **Key Questions and Means of Verification**

Is DRR included in the national educational curriculum? Yes

Primary school curriculum	Yes
Secondary school curriculum	Yes
University curriculum	Yes
Professional DRR education programmes	Yes

#### 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 & long programme 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
- Upazila Resource Centre has been established to disseminate DRR information
- Access to Information (A2I) Project established 4500 Information Centres at union level.

#### Context & 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.

# **Priority for action 3: Core indicator 3**

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

### Level of Progress achieved: 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial

### **Key Questions and Means of Verification**

Is DRR included in the national scientific applied-research agenda/budget? Yes

Research programmes and projects	Yes
Research outputs, products or studies are applied / used by public and private institutions	No
Studies on the economic costs and benefits	Yes

of DRR

#### 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 & 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 & mp; 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.

# **Priority for action 3: Core indicator 4**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Do public education campaigns for risk-prone communities and local authorities include disaster risk? Yes

Public education campaigns for enhanced awareness of risk.	Yes
Training of local government	Yes
Disaster management (preparedness and emergency response)	Yes
Preventative risk management (risk and vulnerability)	Yes
Guidance for risk reduction	No
Availability of information on DRR practices at the community level	No

#### 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 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 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, Upazila 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 & 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**

Reduce the underlying risk factors

# **Priority for action 4: Core indicator 1**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Is there a mechanism in place to protect and restore regulatory ecosystem services? (associated with wet lands, mangroves, forests etc) Yes

Protected areas legislation	Yes
Payment for ecosystem services (PES)	No
Integrated planning (for example coastal zone management)	Yes
Environmental impacts assessments (EIAs)	Yes
Climate change adaptation projects and programmes	Yes

#### 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 & 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 and Risk Assessment (DIRA) guideline needs to be developed, followed and be made mandatory for all national and local development programmes.

# **Priority for action 4: Core indicator 2**

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

#### Level of Progress achieved: 4

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

### **Key Questions and Means of Verification**

Do social safety nets exist to increase the resilience of risk prone households and communities? Yes

Crop and property insurance	No
Temporary employment guarantee schemes	Yes
Conditional and unconditional cash transfers	Yes
Micro finance (savings, loans, etc.)	Yes
Micro insurance	Yes

#### 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 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 & 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.

# **Priority for action 4: Core indicator 3**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Are the costs and benefits of DRR incorporated into the planning of public investment? Yes

National and sectoral public investment systems incorporating DRR.	Yes
Please provide specific examples: e.g. public infrastructure, transport and communication, economic and productive assets	Forestry, Transportaiton, Communication
Investments in retrofitting infrastructures including schools and hospitals	No

#### 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 & 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.

# **Priority for action 4: Core indicator 4**

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

#### Level of Progress achieved: 2

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

#### **Key Questions and Means of Verification**

Is there investment to reduce the risk of vulnerable urban settlements? Yes

Investment in drainage infrastructure in flood prone areas	Yes
Slope stabilisation in landslide prone areas	No
Training of masons on safe construction technology	Yes
Provision of safe land and housing for low income households and communities	No
Risk sensitive regulation in land zoning and private real estate development	No
Regulated provision of land titling	No

#### 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 & Constraints:

Lack of mechanism to enforce the Building Code remained the major challenge in the country. Although the Building code 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 need to be incorporated in the national building code.

# **Priority for action 4: Core indicator 5**

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

#### Level of Progress achieved: 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Key Questions and Means of Verification**

Do post-disaster programmes explicitly incorporate and budget for DRR for resilient recovery? Yes

% of recovery and reconstruction funds assigned to DRR	N/A
DRR capacities of local authorities for response and recovery strengthened	Yes
Risk assessment undertaken in pre- and post-disaster recovery and reconstruction planning	No
Measures taken to address gender based issues in recovery	Yes

#### 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 cycloneresilient 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 & 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.

# **Priority for action 4: Core indicator 6**

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

#### Level of Progress achieved: 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial

# **Key Questions and Means of Verification**

Are the impacts of disaster risk that are created by major development projects assessed? Yes

Are cost/benefits of disaster risk taken into account in the design and operation of major development projects? Yes

Impacts of disaster risk taken account in Environment Impact Assessment (EIA)	No
By national and sub-national authorities and institutions	Yes
By international development actors	No

#### 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 targeting around 700 families.

#### Context & 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, scale 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**

Strengthen disaster preparedness for effective response at all levels

# **Priority for action 5: Core indicator 1**

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

#### Level of Progress achieved: 4

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

#### **Key Questions and Means of Verification**

Are there national programmes or policies for disaster preparedness, contingency planning and response? Yes

DRR incorporated in these programmes and policies	Yes
The institutional mechanisms exist for the rapid mobilisation of resources in a disaster, utilising civil society and the private sector; in addition to public sector support.	Yes

Are there national programmes or policies to make schools and health facilities safe in emergencies? Yes

Policies and programmes for school and hospital safety	No
Training and mock drills in school and hospitals for emergency preparedness	Yes

Are future disaster risks anticipated through scenario development and aligned preparedness planning? Yes

Potential risk scenarios are developed taking into account climate change projections	No
Preparedness plans are regularly updated based on future risk scenarios	Yes

### 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 multihazards
- Local Level Contingency Plan at district-upazila-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 & 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.

# **Priority for action 5: Core indicator 2**

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

## Level of Progress achieved: 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial

# **Key Questions and Means of Verification**

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

Plans and programmes are developed with gender sensitivities	No
Risk management/contingency plans for continued basic service delivery	Yes
Operations and communications centre	Yes
Search and rescue teams	Yes
Stockpiles of relief supplies	Yes
Shelters	Yes
Secure medical facilities	No
Dedicated provision for disabled and elderly in relief, shelter and emergency medical facilities	Yes
Businesses are a proactive partner in planning and delivery of response	No

# 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 Upazila 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.
- AFD organized mock drills 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 & 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 contingency plans, 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.

# **Priority for action 5: Core indicator 3**

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

# Level of Progress achieved: 4

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

# **Key Questions and Means of Verification**

Are financial arrangements in place to deal with major disaster? Yes

National contingency and calamity funds	Yes
The reduction of future risk is considered in the use of calamity funds	No
Insurance and reinsurance facilities	No
Catastrophe bonds and other capital market mechanisms	No

### 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 has Stock 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 Upazilas of the hazard prone areas as well as at the national level.

#### Context & 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.

# **Priority for action 5: Core indicator 4**

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

# Level of Progress achieved: 4

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

# **Key Questions and Means of Verification**

Has an agreed method and procedure been adopted to assess damage, loss and needs when disasters occur? Yes

Damage and loss assessment methodologies and capacities available	No
Post-disaster need assessment methodologies	Yes
Post-disaster needs assessment methodologies include guidance on gender aspects	Yes
Identified and trained human resources	Yes

### 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 groups in 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 & 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**

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

#### Levels of Reliance:

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

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?: No

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

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 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

### Levels of Reliance:

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

Is gender disaggregated data available and being applied to decisionmaking for risk reduction and recovery activities?: No Do gender concerns inform policy and programme conceptualisation and implementation in a meaningful and appropriate way?: Yes

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

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

### Levels of Reliance:

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

Do responsible designated agencies, institutions and offices at the local level have capacities for the enforcement of risk reduction regulations?: No

Are local institutions, village committees, communities, volunteers or urban resident welfare associations properly trained for response?: No

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

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

#### Levels of Reliance:

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

Do programmes take account of socio-environmental risks to the most vulnerable and marginalised groups?: No

Are appropriate social protection measures / safety nets that safeguard against their specific socioeconomic and political vulnerabilities being adequately implemented?: Yes

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

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 nongovernmental actors; civil society, private sector, amongst others, have been fostered at all levels

### Levels of Reliance:

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

Are there identified means and sources to convey local and community experience or traditional knowledge in disaster risk reduction?: Yes

If so, are they being integrated within local, sub-national and national disaster risk reduction plans and activities in a meaningful way?: No

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

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**

### Levels of Reliance:

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

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

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**

# **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:

Limited 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.

# **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 a systematic 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 Centre 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 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.

### Overall Challenges:

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

Or

'How to define Resilience' that encompasses both disaster and Climate Change.

Or

Challenges remained at the Local level.

# **Section 10: Stakeholders**

Organizations, departments, and institutions that have contributed to the report

Organization	Туре	Focal Point
Bangladesh Armed Forces Division (AFD)	Gov	Ahamed Amin Abdullah, (G), psc, BN
Bangladesh Betar	Gov	Md. Sohel Rana
Bangladesh Metrological Department (BMD)	Gov	Md. Azizur Rahman/ Md.Shameem Hasan Bhuiyan
Comprehensive Disaster Management Programme (CDMP)	Gov	Dr. Shantana Rani Halder
Department of Agriculture Extension	Gov	Dr. Abu Wali Ragib Ahsan
Department of Disaster Management (DDM)	Gov	Nepur Ahmed/ Netai Dey Sarker
Department of Environment	Gov	Md. Abul Kalam Azad
Department of Fisheries	Gov	Krisnendu Saha
Department of Forestry	Gov	Asma Parveen
Department of Live Stock (DLS)	Gov	Dr. Rafiqul Islam
Department of Public Health Engineering (DPHE)	Gov	Md. Munnaf
Department of Secondary and Higher Secondary Education (DSHE)	Gov	Proffessor Taslima Begum
Department of Women Affairs (DWA)	Gov	Shamima Haque
Directorate of Education (DoEdu)	Gov	
Dwip Unnayan Sangstha (DUS)	Gov	Md. Rafiqul Alam
Fire Service and Civil Defense	Gov	Major Matiur Rahman

Department		
Flood Forecasting and Warning Center (FFWC)	Gov	Md. Amirul Hossain
Local Government Engineering Department (LGED)	Gov	A.F. M. Munibur Rahman
Space Research and Remote Sensing Organizations (SPARRSO)	Gov	Md. Shah Alam
Water Recourse Planning Organization (WARPO)	Gov	Aminul Haque
Centre fof Environmental and Geographic Information Services (CEGIS)	Acad & Research	Motaleb Hossain Sarker/ Bushra Monwar
Disaster Research Training and Management Center (DRTMC), DU	Acad & Research	Umme Habiba
Institute of Disaster Management and Vulnerability Studies, University of Dhaka	Acad & Research	Dr. Mahbuba Nasreen
Actionaid Bangladesh	NGO	Aminul Kawser Dipu/ Ekhlakur Rahman
BRAC	NGO	AHM Rezaul Kabir
Christian Aid	NGO	S. M. Sajid/ Dolon Gomeg
Dhaka Ahsania Mission	NGO	Khan Md. Mujahid Ibne Habib
Handicap Internaitonal	NGO	Mustafizur Rahman
Manab Mukti Shangstha	NGO	Md. Habibullah Bahar
Save the Children	NGO	Syed Matiul Ahsan
Shangkalpa Trust	NGO	Mirza Shahidul Islam
Shushilan	NGO	Abdul Quader Khan
Swiss Agency for Development and Cooperation (SDC)	NGO	Farid Ahmed/ Matthias Anderegg

VARD	NGO	Md. Fazlul Hoque
UNICEF	UN & Intl	Anwar Hossain
World Food Programme (WFP)	UN & Intl	Malik K. Kabir
Community Managed Disaster Risk Reduction (CMDRR)	Networks & Others	Khan Md. Mujahid Ibne Habib
Emergency Capacity Building (ECB) - Bangladesh	Networks & Others	Md. Harun Or Rashid
National Alliance for Risk Reduction Initiatives (NARRI)	Networks & Others	Shakeb Nabi/ Ashoke Adhikary
Solution Exchange	Networks & Others	Dilruba Haider