

# Bangladesh

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

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## Outcomes for 2007-2009

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### Area 1

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

#### **Outcomes:**

Establishment of a standard disaster management system has been initiated with the revised Allocation of Business (AOB) of the newly created Disaster Management and Relief Division (DMRD) under the Ministry of Food and Disaster Management (MoFDM). During the reporting period (2009-2011), revised Standing Orders on Disaster (SOD) has been approved by the National Disaster Management Council (NDMC), which outlined disaster and climate risk reduction tasks for the ministries, agencies, committees, civil society organizations, non-government organizations and citizens. National Plan for Disaster Management (2010-2015) approved in 2010 also approved Bangladesh Climate Change Strategy and Action Plan (BCCSAP 2009). Disaster and climate risk reduction fund and climate change adaptation fund also allocated during the last two years national budget. Comprehensive Disaster Management Programme (CDMP) of DMRD supported by a number of development partners working with 12 ministries to incorporate disaster and climate risk in the respective ministries and organizations policy and plans. Cyclone early warning signal has been updated in 2009. Disaster Management Committee's (DMC) capacity strengthening programmes have been expanded during the reporting period and the DMCs have made effective linkages with the public and private organizations engaged in early warning information generations and dissemination in coordination with DMB. Thus institutionalization of early warning information dissemination has been expanded to community level.

### Area 2

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

#### **Outcomes:**

During the reporting period National Platform for Disaster Risk Reduction (NPDRR) has been established and made functional under DMRD. The platform consisted of representatives from government, non-government, civil society organizations, humanitarian organizations and professionals from academic and training institutes, which is acting as national forum for guiding disaster risk reduction business in Bangladesh. Besides, an expert committee named National Disaster Management Advisory Committee (NDMAC) has been formed which also outlined in SOD. A separate committee on Earthquake Preparedness and Awareness Committee (EPAC) has also been formed and made functional during the reporting period. Thus institutionalization of earthquake awareness has been raised at national and local level through mass campaign by print and electronic media. A number of networks/forum have been established and functioning i.e. Bangladesh Disaster Management Education Research and Training Network (BDMERT), NIRAPAD, Disaster Forum. The BDMERT consisted of 244 experts from different public and private universities, training and research institutes. Besides, NIRAPAD and Disaster Forum, the two networks consisted of mostly with representatives of the INGO and NGOs. These networks are working together and ensure bridging with the experts and practitioners on disaster management. They also make linkages with community level organizations working at union and upazila (sub-district) level to national level organizations. Directorate General of Health Services (DGHS) and Department of Agricultural Extension (DAE) have commenced their capacity development programme on disaster risk reduction since 2010 and expanded those to grass-root level through their training institutes, and extension/training units. DMRD also expanded disaster risk reduction programme to 15

departments under 12 development ministries including Ministry of Education, Ministry of Water Resources, Ministry of Women Affairs, Ministry of Defense, Ministry of Fisheries and Livestock, Ministry of Energy and Mineral Resources along with the previous partners like Ministry of Environment and Forest, Ministry of Agriculture. Through these, various stakeholders from national to field level staffs and community people were engaged in disaster and climate risk management business services.

### Area 3

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

#### **Outcomes:**

During the reporting period cyclone early warning signals has been revised through the initiatives from DMB. Activities of Flood Forecasting and Warning Centre (FFWC), BWDB and Bangladesh Meteorological Department (BMD) have been expanded for disaster early warning and forecasting for a long lead time. Micro-climatic weather stations have been established at 5 district by Bangladesh Rural Advancement Committee (BRAC). DMRD through DAE planned to establish 20 micro-climatic weather stations at the disaster risk communities. Cyclone Preparedness Programme (CPP) volunteers has been increased and 5 new sub-districts has been brought under CPP network as new operational areas. Development of 66,000 urban volunteers has been planned for 10 cities. Contingency Plan' format has been developed and engagement of various nation building organizations was assigned to develop their own Contingency Plan anticipating major disasters. Similarly 'District Contingency Plan' and 'Upazila Contingency Plan' are being developed through CDMP Programme of DMRD. Different armed forces services like Bangladesh Army, Bangladesh Navy, Bangladesh Air Forces, Border Guard Bangladesh, Bangladesh Ansar and Village Defense Party (Ansar & VDP), Bangladesh Police are being training to be active as first responding force to disaster. Training on civil military relations, search and rescue, first aid, developing disaster volunteers are being imparted with armed forced, DMB and Directorate of Relief and Rehabilitation (DoRR) to strengthen the coordination during emergency response.

## Strategic goals

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### 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:**

Over the years, GoB with support from its development partners has made significant progress in shifting the focus from relief centric approach to DRR. Much has been learnt during last three years, which created the basis for following current key focuses under HFA strategic goal 1:

- Incorporate DRR into all national policies, planning and programmes at all ministries and all levels.
- Establish and sustain budgetary allocation and dedicated funds on climate change adaptation (CCA), climate change mitigation (CCM) and DRR.
- Research and development in pilot appropriate approaches for DRR and CCA and scaling them up at national level.
- Encourage local actions and community based organizations to strengthen disaster risk reduction.
- Enact and Implement the National Disaster Management Act and National Disaster Management Plan.
- Enhancing regional, sub-regional and bi-lateral cooperation including early warning, dissemination,

networking and sharing of good practices. Contributing global efforts on disaster risk reduction by sharing its knowledge, experience and effective practices through periodic monitoring of HFA implementation.

## **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:**

Current organizational structure and roles within the MoFDM and other ministries are based on previous interpretations of disaster management functions. There is a need to address organizational issues as the basis for the current national focus.

- Strengthening the institutional mechanism to mainstream DRR, CCA, CCM
- Institutionalize a national training, educational curriculum and research facilities on Disaster Management.
- Scaling up effective DRR approaches to all hazard-prone locations in the country.
- Establishing and expanding information network on DRR at all levels.
- Implement revised allocation of business of the MoFDM to incorporate DRR.
- Develop capacities at community level through awareness, education and training; and strengthening the local level disaster management committees.
- Promote multi-stakeholder coordination through the mechanism of national platform.

## **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:**

Based on the experience in responding flood and cyclone 2007, current national focus is to develop approaches and principles for 'build back better' in post disaster recovery and reconstruction including DRR:

- Foster practice of DRR in the planning and implementation of social safety net programme.
- Roll out recently simplified cyclone early warning signal system; and initiate a public awareness campaign on the use of 'disaster messages (outlining likely cyclone impact and a message on preparedness)' introduced in 2008.
- Explore effective community alerting system involving various mass media and strengthen existing early warning mechanism including cell broadcast system, institutions and network.

## **Priority for action 1**

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

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### **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

### **Is DRR included in development plans and strategies?**

Yes

#### **Means of verification:**

\* Yes: National development plan

\* Yes: Sector strategies and plans

\* Yes: Climate change policy and strategy

\* Yes: Poverty reduction strategy papers

\* Yes: Common Country Assessments (CCA)/ UN Development Assistance Framework (UNDAF)

#### **Description:**

The mandate of the Ministry of Food and Disaster Management (MoFDM) and its agencies is widened with the revision of its Allocation of Business considering the current national, regional and global disaster management priorities that has already been approved by the Secretarial Committee for Administrative Management. During the reporting period, under the MoFDM, a new division has been established to deal disaster management business and services exclusively name Disaster Management and Relief Division (DMRD). Existing national policy and regulatory framework were revised in the context of current trend and nature of disaster and in the light of national priorities, through multi-stakeholder consultations at local and national levels. National Disaster Management Policy has been drafted and a final draft of the National Disaster Management Act has already been submitted for approval process, National Disaster Management Plan (2010-2015) has been approved in April 2010 which is in line with a perspective plan for the period up to 2021 (Vision 2021) and a 5-year plan for the period covering 2010-15. Revised Standing Orders on Disaster (SOD) has also been approved which explicitly outlined the disaster and climate risk reduction business for the government machineries, NGOs, public representatives and citizens. It has been used as the key administrative guidebook as roles and responsibilities of various government functionaries at local to national level has been outlined, also being updated incorporating DRR elements focusing multi-hazards, all geographical settings and context. As a first step, DMRD has taken initiatives to incorporate disaster and environmental risk issues in a number of sectoral plans (agriculture, water management, education, livestock, fisheries, water and sanitation, health, and small cottage industries i.e. handloom etc) and among these, integration of disaster and climate risk elements in the sectoral plan for Agriculture and Education has been incorporated. Meanwhile GoB has prepared the National Renewable Energy Policy.

#### **Context & Constraints:**

Introducing disaster and climate risk reduction culture and practices takes time to replace age-old relief culture. Although organizations have been tasked but revision of existing legal framework and changing the practice requires acceleration of common understanding and shifting mindset.

### **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

**Is there a specific allocation of budget for DRR in the national budget?**

-- not complete --

**Means of verification:**

- \* 4.5 % allocated from national budget
- \* Not estimated USD allocated from overseas development assistance fund
- \* 1.5 billion USD allocated to hazard proofing sectoral development investments (e.g transport, agriculture, infrastructure)
- \* Not estimated USD allocated to stand alone DRR investments (e.g. DRR institutions, risk assessments, early warning systems)
- \* Not estimated USD allocated to disaster proofing post disaster reconstruction

**Description:**

There is an increasing trend of revenue allocation and expenditure in the area of disaster management, which continued throughout the reporting period. Natural Disaster Risk Reduction Fund established in 2004 from government revenue budget continued in the same period, which reached to an average annual allocation of USD 12 million. GoB also established specific programme to reduce seasonal unemployment in specific 12 food insecure districts. In mid 2008, GoB has launched a new national-scale 100 days employment generation programme for employment scarcity period with a total portfolio of around USD 129 million, this has been increased to USD 143 million. In total DRR budget has been now about 4.5% of National budget. For combating climate change impact, GoB has declared climate change fund with a total annual allocation of round USD 100 million per year since 2009-2010 and the same has been kept for the year 2010-2011. Under the CDMP initiative of the MoFDM, USD 3.2 million were spent to implement small scale community level risk reduction projects involving NGOs and local level disaster management committees which has been increased up to 14 million USD for the years 2011-2014. A good number of DRR projects were also implemented in this reporting period by the NGOs with external support. Government has set up Sustainable Energy Development Agency (SEDA). Allocation has been given to DMRD Tk. 100 million for Capacity Building in Disaster Management and the Bangladesh Climate Change Resilience Fund (BCCRF) has been created with an amount of US\$ 110 million. In order to coordinate national safety net programme government have formed three committees, a central monitoring committee chaired by cabinet secretary, district monitoring committee chaired by deputy commissioner and upazila implementation committee chaired by UNO.

Furthermore resource allocation for disaster and climate risk reduction has been increased to line ministries and agencies toward vulnerability reduction of the communities and nation. These are,

- To introduce salinity resistant rice variety Bri-47 in 50 percent of salinity affected areas (1million hectares of land).
- Allocation of USD. 42.5 million in expansion of irrigation and removal of water from water-logging areas.
- Agriculture Insurance Scheme' of 1.07 billion USD to provide the small and medium farmers.
- Allocation for construction of 20 cyclone shelters were given.
- To ensure supply of pure and safe drinking water for all by 2011, allocation given to construct 200,000 water-sources during FY 2010-11.
- Government has already approved the National Education Policy 2010. Education up to Class VIII has been made free and compulsory. National Curriculum Coordination Committee (NCCC) has approved to

incorporate disaster and climate risk reduction issues from Class II to XII classes textbooks.

- Widen the beneficiary coverage to 24,75,000 persons and allocate 127 million USD to support Old Age Allowance.
- Increase in the number of beneficiaries to 286,000 and allocate USD 14.5 million for allowances for the Insolvent Disabled Persons (IDP).
- Allocated USD 4.2 million for allowances for lactating mothers of low income working group in urban areas.
- Allocation of USD. 47 million given to Widow, Divorced, and Distressed Women Allowances Scheme.
- Allocated USD 10 million for programmes for the welfare of street children and orphans.
- Allocated USD 4.7 million for Endowment Fund for Disabled Service and Assistance Centers.
- Allocated USD 818 million for Food Security programmes such as Open Market Sale (OMS) of food at low prices, food for work, VGF, VGD, TR (food), GR (food) and food assistance for Chittagong Hill Tracts.
- Allocated USD 142 million for Employment Generation Programme for the Hard Core Poor 2.16 million man months of employment during lean period.

There has been an increasing commitment for resources from various development partners i.e. DFID, DANIDA, EC, SIDA, Government of Norway, Australian Government, Government of Japan, the World Bank and UN agencies to support national DRR initiatives. At the same time, more numbers of development partners are increasing their engagement and allocations on disaster and climate risk reduction.

#### **Context & Constraints:**

Allocated resources though increased but are far from required to reduce the disaster impact to vulnerable communities as Bangladesh is one of the highly populous countries with multiple hazards. The potential to utilize various resources allocated under different various ministries and departments needs to be explored with effective management. Often, limited coordination in funding allocation (by different government and non-government sources) limits optimization of available resources. Coordinated and concerted 'Social Safety-Net Programme' is required.

#### **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

#### **Do local governments have legal responsibility and budget allocations for DRR?**

Yes

#### **Means of verification:**

\* Yes: Legislation

\* Yes: Budget allocations for DRR to local government

#### **Description:**

Country has made good progress in mobilizing capacity of the vulnerable people including women and persons with disabilities in DRR through their active participation. Around 644 Unions risk profile and Local Disaster Risk Reduction Action Plans (LDRRAP) have been developed through participatory Community Risk Assessment (CRAs) tools, About 60,000 risk reduction small scale interventions have

been implemented through, INGOs, local NGOs and local level Union Disaster Management Committee (UDMC) members. Training on Comprehensive Disaster Management (CDM) approaches were imparted to 800 UDMCs, 100 journalists, 150 university teachers, 150 trainers working for public and private training institutes, academies and resource centers. A large number of civil society members also trained. This resulted in engagement of various group of representatives in the disaster risk reduction businesses and services besides the government machineries. It also helped in developing various action plans led by the GoB and NGOs at community level. However, key challenges remain on decentralized decision making process and resource allocation on disaster risk reduction interventions. The revised SOD outlined the tasks and their roles and responsibilities but implementation of the tasks is placed as future challenges. There are initiatives to strengthen local government system especially at upazila and union level, with support from development partners and World Bank. Presently disaster and climate risk issues are conversant with the local government bodies by incorporating disaster risk into development planning process is not yet achieved and proposed to be as pilot tested initiated by DMRD through CDMP programme. Disaster management issues have been incorporated in the Union Information Resource Centre (UIC) managed by Prime Minister's Office's Access to Information (A2I) project.

#### **Context & Constraints:**

Overall efforts to strengthening decentralized planning over a historical centralized planning and decision making required further acceleration. Upazila Chairmen have been elected to be the leader to a decentralized governing and development effort at the Sub-district level. The capacity of the local government bodies especially newly elected Upazila Chairmen, Vice Chairmen and Union Council chairmen is a great challenge.

#### **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

#### **Are civil society organisations , national planning institutions, key economic and development sector organisations represented in the national platform?**

Yes

#### **Means of verification:**

- \* 4 civil society members (specify absolute number)
- \* 12 sectoral organisations (specify absolute number)
- \* 2 women's organisations participating in national platform (specify absolute number)

#### **Description:**

A multi-sectoral National Platform for Disaster Risk Reduction (NPDRR) has been established and regular meeting of the NPDRR is being convened under the leadership of DMRD Secretary. The country has a long tradition to work in multi-sectoral and multi-stakeholders environment and culture, which has been reflected in the SOD through its total 12 national level committees and similar committees at the local level (District, Sub-district (Upaziila), Union and Paurashava). National Disaster Management Advisory Committee (NDMAC) is also a national multi-sectoral platform for DRR besides some committee of experts also constituted and placed in the revised SOD.

**Context & Constraints:**

The roles and functions of the said committees in relation to have been clearly outlined but regular meetings and implementation of the decision, their monitoring need to be emphasized.

**Priority for action 2**

*Identify, assess and monitor disaster risks and enhance early warning*

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

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

**Level of Progress achieved:**

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

**Is there a national multi-hazard risk assessment available to inform planning and development decisions?**

Yes

**Means of verification:**

- \* Yes: Multi-hazard risk assessment
- \* 0 % of schools and hospitals assessed
- \* 0 schools not safe from disasters (specify absolute number)
- \* Yes: Gender disaggregated vulnerability and capacity assessments
- \* No: Agreed national standards for multi hazard risk assessments

**Description:**

National risk assessment methods and tools for flood and cyclone exists. Updating of the risk assessment guidelines along with 12 guidelines as outlined in revised SOD are being developed. Besides, sector specific disaster risk reduction guidelines are being developed through DMRD's programmes which will address the changing environment, topography, population and demography context. DMRD, MoFDM has developed detailed risk assessment mapping for earthquake and tsunami for three major cities, Dhaka, Chittagong and Sylhet and planned for new eight cities, i.e. Rangpur, Bogra, Mymensingh, Tangail, Rajshai, Coxsbazar and Sirajgonj The local level risk assessment is done in most high-risk areas, by the GoB and various humanitarian actors using participatory tools. River bank erosion prediction model has been developed. Drought prone areas have been identified and adaptation options to droughts have been identified and pilot tested. Cyclone prone areas are identified and much scale afforestation programme is on-going. Action-oriented researches are underway to generate more knowledge on the impact of climate change and climate variability's at local and national levels. Progress has been made in assessing disaster and climate risk in agriculture. Some activities also initiated to assess risk in selected hospital, schools and cyclone shelters by various stakeholders led by government organizations. Awareness on air pollution and sound pollution are being taken care off by concerned agencies.

**Context & Constraints:**

Community Risk Assessment (CRA) tools has been standardized by Directorate of Relief and Rehabilitation (DoRR), DMRD and promoted the CRA as risk identification and RRAP development tool. However, some international NGOs led activities used various methodologies in local risk assessment ie VCA, PVCA etc, and encouraged to carry out by various public and private organizations. Still there has been a perceived need to standardize methodology for risk assessment and mapping. Risk assessment of critical sectors such as health, water and sanitation, shelter, agriculture, livestock and food security is urgent priority. A digital elevation model (DEM) needs to be developed with updated contour data for better inundation information with depth during flood and storm surges which has been a planned activity under CDMP phase II of DMRD.

## **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:**

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

### **Are disaster losses systematically reported, monitored and analysed?**

Yes

### **Means of verification:**

\* Yes: Disaster loss database

\* Yes: Reports generated and used in planning

### **Description:**

Disaster Management Information Centre (DMIC) has been established and anchored at Disaster Management and Relief Bhaban which are connected with district and sub-district level offices. Systems have progressively evolved to monitor, archive and disseminate key hazards information including cold wave, fog, nor'wester and high temperature by BMD and Bangladesh Space Research and Remote Sensing Organization (SPARRSO). BRAC has established 5 micro-climatic weather stations to support BMD. Early warning for flash flood & key location specific flood warning is underway supported by CDMP of DMRD. CPP also expanded 5 new upazilas in west coast with support from CDMP & covered to a total 37 upazilas. CPP modify 130 HF & VHF wireless stations in isolated islands & chars in 37 costal upazilas with support from American Red Cross. Limited progress has been made in designing indicators, data collection and analyses of vulnerabilities, though specific aspect exists such as flood related vulnerability and poverty monitoring, including location, specification on base line poverty for better understanding the coping capacity. 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. Early warning information generation 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 as an important 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 DMB to create a web portal through the DMIC to centralize this information focused on hazards and disasters. Substantial progress has been made for DMB's DMIC in 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.

### **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

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

Yes

#### **Means of verification:**

- \* Yes: Early warnings acted on effectively
- \* Yes: Local level preparedness
- \* Yes: Communication systems and protocols
- \* Yes: Active involvement of media in early warning dissemination

#### **Description:**

Early warning information generation, community message preparation and message dissemination to at-risk communities Bangladesh has well developed early warning and dissemination system for cyclone and flooding. However, based on recent experience, with the leadership of DMB the cyclone early warning system is revised in 2008 and a campaign for cyclone preparedness is ongoing. 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 DAE for drought. Accident Research Centre (ARC) at Bangladesh University of Engineering and Technology (BUET), along with Space Research and Remote Sensing Organization (SPARRSO), Centre for Geographic and Environmental Information Services (CEGIS), Institute of Water Modeling (IWM), Department of Environmental Science and Disaster Management (DESDM) of Patuakhali Science and Technology University (PSTU), Geological Survey of Bangladesh (GSB), University of Dhaka (DU) are engaged in 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. CPP also expanded to west coast and covering a total 37 upazilas (cyclone prone) for disaster warning information disseminations. Number of studies initiated and pilot tested during the reporting period by FFWC, BWDB to pilot people centered dissemination of flood warning and forecasting. Country has piloted 10 days predication of flood, which has created a significant opportunity for country to strengthen its multi-hazard warning. A river erosion prediction modeling has also been developed as a pilot. Tsunami early warning centre has been established at

BMD in collaboration with Intergovernmental Oceanographic Commission (IOC). 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 Coxsbazar and flood prone Sirajgonj and planned to expand 14 coastal districts by DMB with a support from Teletalk and Grameen Phone.

**Context & Constraints:**

Bangladesh is located in a delta of a three major river system, overflow of which is one of the reasons for flooding. Space based technologies are being explored. SAARC framework has created an opportunity in regional cooperation. Bangladesh flood warning information cannot be improved without establishment of regional data sharing and cooperation, considering flooding (and other hazards) as common hazard in the Ganges, Brahmaputra and Meghna basins. Simple early warning dissemination of outreach to local communities is also being tested. Tornado forecasting model need to be more enhanced and coordination is needed between BMD and SPARRSO as tornado generates in the land and provides minimum time for early warning and forecasting.

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

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

**Level of Progress achieved:**

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

**Does your country participate in regional or sub-regional DRR programmes or projects?**

Yes

**Means of verification:**

- \* Yes: Programmes and projects addressing trans-boundary issues
- \* Yes: Regional and sub-regional strategies and frameworks
- \* Yes: Regional or sub-regional monitoring and reporting mechanisms
- \* Yes: Action plans addressing trans-boundary issues

**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.

**Context & Constraints:**

Information exchanges regarding avian influenza other trans-boundary disasters needs to be strengthened. Application of research and findings on hazards is limited. Establishment of SAARC Disaster Management Centre and adoption of SAARC Comprehensive Framework on Disaster Management created opportunity for more regional cooperation in risk assessment at regional scale and exchange of information.

**Priority for action 3**

### **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:**

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

#### **Is there a national disaster information system publicly available?**

Yes

#### **Means of verification:**

\* Yes: Web page of national disaster information system

\* Yes: Established mechanisms for accessing DRR information

#### **Description:**

A network of experts named Bangladesh Disaster Management Education Research and Training (BDMERT) has been established and made functional..The country has a culture of sharing of disaster related knowledge and lessons through various means, including print and electronic media and public discussion. 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 DMB providing information services, which has established network with 64 districts and 235 upazila headquarters (HQs) and planned to expand to remaining 248 upazila HQs by the year 2012. The early warning information, particularly flood and cyclone warning information is available through email and websites, reaching across agencies and stakeholders. DMB, BMD, CPP and FFWC have been contributing significantly in dissemination of early warning and disaster messages. Bangladesh Telephone Regulatory Council (BTRC) through its mobile network, Bangladesh Betar (Radio Bangladesh) has also been taking part disaster information sharing. In early warning dissemination Bangladesh television also provide information. Print and electronic medias are also taking part in disaster knowledge sharing. And prepare community preparedness through information in the community and country and abroad throughout.

#### **Context & Constraints:**

Though DMIC is established some years back, it was tested and found effective in cyclone and flood in 2007. Using internet has been very useful in enhancing access to information. Accessibility and availability still constrained for the professionals and agencies outside Dhaka by physical location and infrastructural facilities such as access to internet. There is also lack of effective coordination in created reliable information at various levels. The major area of challenge remains with availability of earthquake related information. There is prerequisite to develop regional cooperation in terms of information dissemination regarding the weather forecast within SAARC countries and other forum. At the same time, local level awareness and warning mechanism need to be enhanced at an optimum level.

### **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:**

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

**Is DRR included in the national educational curriculum?**

Yes

**Means of verification:**

- \* Yes: Primary school curriculum
- \* Yes: Secondary school curriculum
- \* Yes: University curriculum
- \* Yes: Professional DRR education programmes

**Description:**

Disaster and climate risk information are included in text books from elementary to secondary level (from Class III-XII) besides supplementary learning materials. Degree programme at tertiary level education has been introduced in a number of public and private Universities i.e Patuakhali Science and Technology University, University of Dhaka, BUET, Chittagong University of Engineering and Technology, Shahjalal University of Science and Technology, BRAC University and planned to introduce in Begum Rokeya University, Rangpur, Bangladesh University of Professionals, Dhaka. Following GoB decision in 1997, initiatives have been taken to introduce of DRR in various training institutions, universities, research institutions and public services training centres. The draft Disaster Management Act also included a plan to establish an independent institute for DM training and research. Disaster management sessions have been included in all 29 Bangladesh Civil Service Cadres (BCS) and Armed Forces Division (AFD), all their foundation training courses and professional degree programmes. Bangladesh Public Administration Training Centre (BPATC), National Academy for Educational Management (NAEM), Bangladesh Academy for Rural Development (BARD), Rural Development Academy (RDA) and BCS Administration Academy has introduced specialized course on disaster management for various civil service people, public representatives and local government bodies. Pilot initiatives were ongoing throughout the reporting period by a number of NGOs to make schooling safer. Also IEC materials developed for the planners in education to continue education during and after disaster. Ministry of Primary and Mass Education (MoPME) and Ministry of Education (MoE) of GoB decided to make a large number of school-cum-flood shelters in the flood-prone areas. MoPME and MOE included the disaster and climate change related training and developed IEC materials with support from UNICEF and other development partners. Based on climate and hazards variation school building are being redesigned and new building are being constructed using GIS mapping under the MoE.

**Context & Constraints:**

While disaster and climate related issues are introduced in the school curriculum, limitations exist in availability of material on disaster and climate risk for training of the teachers. Though initiatives have been taken by DMB and CDMP to develop resource materials and train some of teachers, but considering the sector size, the resources are inadequate. Sharing of indigenous and local survival coping mechanism need to be institutionalize in education system both formal and non-formal ways to address the disaster risks and hazards. Adolescents, early married women and people with disability who never entered in formal education system or dropped out early from schooling should be reached through different forms of IEC system, to be given specialized education on disaster risks reduction, survival and safety measures.

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

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

**Level of Progress achieved:**

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

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

Yes

\* Yes: Research outputs, products or studies

\* Yes: Research programmes and projects

\* No: Studies on the economic costs and benefits of DRR

**Description:**

Community Risk Assessment (CRA) tools have been developed and practicing in Bangladesh before the reporting period. Risk assessment mechanism is also being practicing by different development organizations in their respective working areas based on their own research methodology. During the reporting period, similar research methodology and tools are under developed for earthquake and tsunami risk assessment. An awareness raising orientation and training programme is going on for the teachers and students in the selected schools of Dhaka, Sylhet and Chittagong city (through MoE). Sector specific risk assessment and risk reduction guidelines are being developed under CDMP Programme of DMRD. Under the MoPME, DRR issues have been incorporated in the sub cluster training modules for primary teachers. A guideline for constructing disaster resilient educational institutes is being developed during the reporting period.

**Context & Constraints:**

While the country has generated substantial knowledge on disaster management by promoting diversity in use of research methods and tools, there is absence of central knowledge hub to preserve the findings. DMRD has planned to establish a Library at Disaster Management and Relief Bhaban. The continuity of research initiatives is also a big challenge because most of the researches are done under various projects. There has been increasing recognition to have uniform methodology in assessing common risks. Proposed institute on disaster Management Research and Training is expected to address some of these challenges. Research methods and tools that have been developed in assessing risks need to be applied in a coordinated way and comprehensive training is needed for conducting action research on risks. A central Data Bank also needs to be developed for sharing the available information and mapping for DRR inclusive sustainable development mechanism in all sectors.

**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

**Do public education campaigns on DRR reach risk-prone communities?**

Yes

**Means of verification:**

\* Yes: Public education campaigns.

\* Yes: Training of local government

\* No: Availability of information on DRR practices at the community level

**Description:**

National Disaster Management Plan (2010-2015) included an element of public awareness on different hazards. Print and electronic media have been identified as key drivers in public awareness. DMB, GoB has established Annual Media Award provision to encourage media personnel in disaster related reporting. Considering high earthquake risk, substantial investment has been made on public awareness through developing IEC materials by GoB and NGOs. Annual calendar of DMB included disaster messages that continued throughout the reporting period. National debate on disaster issues has been organized each year in the television channels. Following cyclone in 2007 (Sidr) and 2009 (Aila) and a number of earthquakes with lower magnitude, media has been producing significant number of discussion, talk shows on earthquake, climate change risk and risk resilient infrastructure issues. Bangladesh Television has introduced a regular programme since April 2008 on Disaster Risk Reduction. Observation of NDPD and IDDR by the GoB and NGOs continued in the reporting period. Sectoral initiatives by the different GoB departments such DAE, DoE, DGHS expanded to community level.

**Context & Constraints:**

Often awareness raising initiatives assume their audience as homogeneous group, thus do not lead to action by the users. Wide acknowledgement exists to place more systematic knowledge investment in developing and updating key disaster messages for various agro-ecological and settlement context. Improvement on systematic process to understand impact of and need for public awareness on various risks needs to be given more attention. Many community led initiatives introduced by the NGOs are limited in scale. A national public awareness strategy is seen as a potential means to create synergy and accelerate dynamic public awareness activities which should consider social groups such as in terms of class, gender, age, sex, caste, religion, ethnic minority, old age population, people with disability and hard core poor so that heterogeneous groups can be able to grasp the knowledge and severity of risks.

**Priority for action 4**

*Reduce the underlying risk factors*

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**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

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

Yes

**Means of verification:**

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

**Description:**

The issue of climate change and variability has received greater attention in past years in Bangladesh. Bangladesh has prepared the National Adaptation Programme of Action (NAPA) and Bangladesh Climate Change Strategy and Action Plan (BCCSAP, 2009). During the reporting period, GoB has established Climate Change Fund (CCF) and in last consecutive year (reporting period) government has allocated USD 100 million each year. Bi-lateral and multi-lateral donors are also exploring the possibility of creating a multi-donor trust fund to accelerate financing for research and adaptation in Bangladesh. For institutionalizing climate change issues, Climate Change Cell has been established, expanded climate change issues through establishing focal point in almost all major department and ministries which are also linked with Disaster Management Bureau. The Climate Change Cell (CCC) and DMB carrying out some of its functions and activities will be relocated within government to contribute to the broader GoB effort in addressing climate change. Ministry of Environment and Forests in partnership with relevant stakeholders finalized and adopted the National Capacity Self Assessment for Environment and Natural Resource Management which addresses risk reduction issues in the policies and plans. This project identified the policy and planning gaps and in consensus recommended the road map for actions and development of capacity building plans and programmes. Government has approved Sustainable Land Management Programme which is intended to cover land related risk reduction issues including mining. Ministry of Land is implementing Coastal Land Zoning Project. Ministry of Agriculture and its technical agencies are engaged and in continuous process to develop climate resilient crop varieties in the context of salinity intrusion, drought and submergence. A project is launched in early 2008 by FFWC and Action-Aid with support from DANIDA to understand effectiveness of expandable DRR approaches into climate change context in three agro-ecological zones.

**Context & Constraints:**

Research and piloting of climate change adaptation at the community level is necessary to inform various areas of intervention on CCA. Key constraints includes (i) small scale and isolated pilot initiatives which needs to be scaled up and mainstreamed; (ii) much more investment needed for large scale research and development investment and its dissemination; (iii) Short term, medium term and long term human resource development policies and plans are needed in order to make all risk reduction efforts sustainable. On top of that exact institutional frameworks and financing mechanisms for a national level climate change initiative have yet to be fully finalized and made effective.

**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

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

Yes

### **Means of verification:**

- \* No: Crop and property insurance
- \* Yes: Employment guarantee schemes
- \* Yes: Conditional cash transfers
- \* Yes: DRR aligned poverty reduction, welfare policy and programmes
- \* Yes: Microfinance
- \* No: Micro insurance

### **Description:**

Country has established a number of social safety net programmes, which has been diversified and extended in recent times. During the reporting period, DRR has been included in the manual of some most important safety-net schemes, e.g. food and cash for work, Vulnerable Group Feeding (VGF), Food for Work (FFW), Test Relief (TR) and Gratuitous Relief (GR). GoB also introduced policy guidelines for Employment Generation Programme for the Poorest (EGPP) largest cash based programme, which supports vulnerable people to ensure food security and avoid migration during lean period. Some other safety net programmes are also in place, e.g. Old Age Allowance, Allowances for the Widow Deserted and Destitute Women, Allowances for the Financially Insolvent Disabled, Allowances for Distressed Cultural Personalities/Activities, Housing Support Programme, Agricultural Rehabilitation Programme, Fund for Climate Change, Special Programme for Irrigation and Water Logging, and Char Livelihood Programme. NGOs in Bangladesh working in various risk-prone areas also invested in social development issues and emergency response in reducing the vulnerability of the population. Few examples are: i) Cash for Work Programme in cyclone Aila affected areas ii) HNPSP (Health, Nutrition & Population Sectoral Programme) of Ministry of Health and Family Welfare and Ministry of Social Welfare contributing a lot in reducing vulnerabilities for the community iii) Food Assistance for Poverty Reduction – a project of department of fisheries of GOB for fisher group in the coastal areas during the banned period for fishing small size (zatka) fishes.

### **Context & Constraints:**

As a country is high concentration of poor people caused by layers of historical problems, it is an imperative to accelerate social investment and undertake innovative sustainable social protection schemes that reduces vulnerability. Safety net programme in urban areas are insignificant. Particularly social development policies and plans from the perspective of potential earthquake are yet to take into active consideration but process towards initiating relevant programme and plans is underway.

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

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

### **Level of Progress achieved:**

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

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

Yes

**Means of verification:**

\* Yes: National and sectoral public investment systems incorporating DRR.

\* No: Investments in retrofitting infrastructures including schools and hospitals

**Description:**

Agriculture is the major sector that employ majority of the rural population in Bangladesh. As a result, new studies initiated to understand approaches to make agricultural more resilient to disaster in the context of climate change and variability in flood, saline prone and drought-prone areas. DAE introduced new crop varieties. Coastal and wetland biodiversity project of the government is implementing in partnership with the community and civil society for sustainable management of four ecologically critical areas the coastal and wetland sites. This is a pilot demonstration which is intended to incorporate in the policy and legislation for replication in other ecological critical areas. Following the flood and cyclone in 2007, major economic recovery initiatives incorporated DRR as one of the key element. Support to small scale enterprise affected by the disasters is an example, practiced by all development and humanitarian partners of the government. DoF with assistance from development partners is executing programme targeting to Cyclone sidr affected fisher groups.

**Context & Constraints:**

Economic and productive sectoral policies are implemented by various ministries and line departments at local level. Mainstreaming objectives are yet to be achieved beyond MoFDM and ministry of agriculture. Inadequate harmonization of policies and planning and coordination among the sectoral Ministries as well as its enforcement are among the key constraints.

**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

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

Yes

**Means of verification:**

\* Yes: Investment in drainage infrastructure in flood prone areas

\* No: Slope stabilisation in landslide prone areas

\* Yes: Training of masons on safe construction technology

\* No: Provision of safe land for low income households and communities

**Description:**

A National Committee has been formed to review and update the National Building Code. Ministry of Land is preparing for National Land Zoning and National Land Use Planning which is supposed to identify safe settlement zones. Apart from this, RAJUK (Capital City Development Authority) has already

finalized Detailed Area Plan (DAP) aimed at facilitating proper urbanization through City corporation. Adaptation to Climate Change through coastal afforestation project of the Ministry of Environment and Forest in collaboration with the Ministry of Land and Ministry of Water Resources are planning to identify vulnerable coastal zone and protection of coastal settlement from potential natural hazards. Building codes are introduced in urban areas. Rural and urban land use planning is under active consideration of the Government. Government prepared a plan to resettle the vulnerable people in the Chittagong Hill Tract to safer places. Building Code document includes a guideline on planning settlement. GoB hosted a regional workshop to develop a guideline on community based risk reduction and BUET also hosted a workshop on developing disaster risk resilient infrastructures.

**Context & Constraints:**

Building codes are in place, updating is in progress but enforcing the updated/existing building codes to all sectors and all cities is challenging task. Besides appropriate authority to monitor the building code enforcement are having shortage of human and technical resources.

**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

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

Yes

**Means of verification:**

\* 0 % of recovery and reconstruction funds assigned to DRR

\* Yes: Measures taken to address gender based issues in recovery

**Description:**

In the revised SOD, disaster and climate risk information has been placed in the Damage, Loss and Needs assessment forms and formats. DRR incorporation in post disaster rehabilitation and recovery process is initiated. Following flood and cyclone in 2007 (Sidr) and 2009 (Aila), government developed a minimum standard for housing reconstruction with specific standard for disaster resistance. Number of national consultations held to develop a design for cyclone resistant housing. Joint need assessment process, following cyclone Sidr in 2007, incorporated need for DRR in the assessment procures. Early recovery action plan of the GoB, supported by its development partners, included DRR as an important element. Post-disaster response and recovery projects implemented by NGOs incorporated DRR in the areas under of health, water and sanitation, shelter and livelihood sectors.

**Context & Constraints:**

Tools and methodologies for integrating DRR post-disaster reconstruction is a new area in Bangladesh. Many cases, disaster managers prioritize implementation of highly time-bound projects, rather investing on innovation in DRR. The additional time and resource allocation to integrate DRR is an urgent priority in post disasters recovery plan and policy.

**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

**Are the impacts of major development projects on disaster risk assessed?**

Yes

**Means of verification:**

\* Yes: Assessments of impact of projects such as dams, irrigation schemes, highways, mining, tourist developments etc on disaster risk

\* Yes: Impacts of disaster risk taken account in Environment Impact Assessment (EIA)

**Description:**

Disaster risk and Environmental Impact Assessment (EIA) methodologies have been developed and it was decided that the EIA information, disaster risk information and its mitigation options has to be placed while submitting any project to Executive Committee of National Economic Council (ECNEC) for approval by the government. This is applicable to all ministries, agencies, department for all sectors. Mainstreaming disaster risk reduction out of the MoFDM remains a key national challenge. DoRR of DMRD in association with MoEF has just embarked upon cyclone resilient housing programme in the costal areas targeting around 700 families. Local government engineering department (LGED) and BWDB have already commenced rehabilitation works for the damaged embankments following cyclone Sidr and Aila.

**Context & Constraints:**

However, developing new ways of working with a greater range of GoB ministries and departments is now the challenge, in order to raise the focus of risk reduction across a government wide dimension, and to have impact at scale. There is no formal focus for DRR mainstreaming within the current organization charts of DMRD, MoFDM and SOD. Current efforts for mainstreaming require further acceleration to reach all actors in development planning and implementation.

## Priority for action 5

*Strengthen disaster preparedness for effective response at all levels*

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### 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

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

Yes

**Means of verification:**

\* Yes: Policies and programmes for school and hospital safety

\* Yes: Training and mock drills in school and hospitals for emergency preparedness

**Description:**

GoB has prepared a final draft of National Disaster Management Act. National Disaster Management Plan (2010-2015) has been approved. Revised Standing Orders on Disaster (SOD) has been updated and incorporated tsunami and earthquake hazards and tasked for all safety preparedness, school safety and contingency plan. Guidelines for making disaster resilient schools and hospitals have been introduced. For the existing structure, retrofitting techniques are being introduced through Public Works Department (PWD) and BUET. Mock Drill guidelines for schools and hospitals safety have been developed and pilot tested. This is being institutionalized through DMRD in partnership with Ministry of Education and Ministry of Health and Family Welfare. Twenty two (22) fully equipped fire stations have been established at local levels during the reporting period (2009-2011). Mock drill guideline have been developed and tested by Fire Service and Civil Defense (FSCD) and planned to practice in future.

**Context & Constraints:**

While the country has developed sound policy and framework, it lacks adequate capacity to implement all aspects of those policy and framework. The inadequate capacity include, adequate staffing, financial and technical resources such as space based technology. Often GoB institutions and departments with adequate staff do not have 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

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

Yes

**Means of verification:**

\* Yes: Contingency plans with gender sensitivities

\* Yes: Operations and communications centre

\* Yes: Search and rescue teams

\* Yes: Stockpiles of relief supplies

\* Yes: Shelters

\* No: Secure medical facilities

\* No: Dedicated provision for women in relief, shelter and emergency medical facilities

**Description:**

Preparation of contingency plans with regard to earthquake hazard at national, city and agency levels have been developed in three cities Dhaka, Chittagong and Sylhet. 66,000 (male and female) urban volunteers are being developed. Emergency Operation Centre (EOC) in DMRD and all the line agencies,

ministries are being established and connected with national Emergency Operation Centre (EOC) in DMRD. An EOC also planned to establish for earthquake at DMB. Various pilot initiatives on preparedness in school, hospitals and garments industries are underway during the reporting period. Developed facilitator's guidebook and Trainees handbook on Earthquake Preparedness for Religious Leaders, construction workers and for the staff of Fire Service and Civil Defense. Agency level Earthquake Contingency Plans have been developed for AFD, FSCD, DGHS and DoRR. A total of 30,000 members of local Disaster Management Committees (DMCs) across the country imparted training on "Comprehensive Disaster Management". As part of implementation processes of Contingency Planning, Command Post Exercise on Disaster Management special focuses on Earthquake in collaboration with US Marine Force. Recently scenario based simulation exercise workshops have been conducted in three cities for assessing the effectiveness of the contingency plans. To accelerate capacity building activities both at national and city levels, training workshops on Incident command system for disaster management and formulation guideline for contingency planning regarding utilities lifeline service providers have been conducted. Orientation training on DM for 15,000 Ansar and VDP members at village level and 4526 union platoon have been conducted. Bangladesh Scouts has developed a team of 2000 members for disaster response team. FASCO have purchased rescue equipments costing USD 18 million and equipment for about 23 Million are on the pipe line. FSCD received various types of research and rescue equipments from DMB and CDMP. Evacuation and simulation drill have been conducted in 67 organisation/industries/factories/ high raise building and 46797 persons from different schools, college and other local associations have been trained on fire fighting, rescue and First Aid by FASCO and different development agencies. Earthquake contingency plan has been developed for Bangladesh Ansar and VDP.

**Context & Constraints:**

DMB has been encouraging relevant departments and institutions to develop respective contingency plans. Some agencies have developed the same. However, sustaining this effort requires regular follow-up and support. This is an area where MoFDM needs logistical and human resource support. DRR mainstreaming has taken place in limited sectors. While Local Disaster Plans are being formulated in some areas at local level DMCs, such plan is not in place at all administrative levels. Hazard specific contingency plans have been acknowledged as priority and accordingly Earthquake Contingency Plan is being prepared. Directorate General of Health Services and Armed Forces Division has preparedness plan for Dhaka City only. Training is small scale and drills and rehearsals only occasional. The process initiated by different stakeholders at local level/small area has not been scaled up at the national level as a result of inadequate resources.

**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

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

Yes

**Means of verification:**

\* Yes: National contingency funds

\* No: Catastrophe insurance facilities

\* No: Catastrophe bonds

**Description:**

National relief fund continues as key contingency funding mechanism for sudden disasters. Draft disaster management act requires GoB to establish a contingency fund. On top of that discussion has been taking place to establish a 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 taka USD 42 million from its revenue budget for addressing climate risk in Bangladesh.

**Context & Constraints:**

The contingency fund is adequate to meet medium-scale disasters. In cope of large-scale disasters, Government always mobilize adequate resource.

**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

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

Yes

**Means of verification:**

\* Yes: Damage and loss assessment methodologies and capacities available

\* Yes: Post disaster need assessment methodologies

\* Yes: Post disaster needs assessment methodologies include guidance on gender aspects

\* Yes: Identified and trained human resources

**Description:**

DMB has been established a Damage and Need Assessment (DNA) Cell and going to established 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 group disaster management business has been developed and published. Stakeholders have been identified for DNA and training for them has been planned by DMB. 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 11 out of 16 cyclone prone district with 45 000 volunteers (approx.60 % of the cyclone prone areas nationwide). A lesson learned workshop done for 2007 floods.

**Context & Constraints:**

DNA cell establishment and their agency focal points training can serve for 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 DMRD. The focal points and a specialist group in each agency has to be formed for ensuring expert in the DNA team.

## Drivers of Progress

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

#### **Levels of Reliance:**

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

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

Yes

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

Yes

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

Most parts of Bangladesh face multiple hazards although the intensity varies. Thus the draft Disaster Management Act and National Plan for Disaster Management (2010-2015) significantly incorporates a multi-hazard context. The government has a network of well developed disaster management committees throughout the country at all levels. However, these committees are more active during a disaster rather than in normal phase. Activation of these committees in normal time is a priority. This concept is well factored in the community level vulnerability analysis, though in selected geographical areas. Scaling up of such approach also remains key priority. The vibrant NGO sectors are engaged in managing risk in different environments, however they do generally focus on single hazards rather than a comprehensive approach and their effectiveness is proven in only disaster response period. Development partners and multilateral organizations support government to incorporate a multi-hazard perspective at a national level, although more needs to be done at the local level. PRSP 2 document has incorporated the DRR.

### **b) Gender perspectives on risk reduction and recovery adopted and institutionalized**

#### **Levels of Reliance:**

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

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

Again, Bangladesh has a long tradition in incorporating gender aspects and promoting women leadership in DRR at local and national level through policy directions (such as designating a seat). However, true gender mainstreaming in DRR is limited. As part of the cyclone and flood response plans gender issues were incorporated and the national disaster management planning does priorities violence against women as a key priority to protect women interests in disaster management. Revised SOD has outline the role of women and accordingly in all committees representation from women is placed, but much work remains to be done to ensure that the gender perspective is undertaken. Creative and innovative culturally appropriate actions need to be developed to meet these challenges. Many studies specifically focused on women issues have been conducted by various actors in disaster management.

For example, GoB has commissioned a study to understand the impact of climate change on women.

### **c) Capacities for risk reduction and recovery identified and strengthened**

#### **Levels of Reliance:**

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

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

While investment is being made in the capacity building of MoFDM staff at national and local level, as well as various disaster management committees, it remains limited for the case of various other line ministries vital for DRR. This is albeit an ambitious objective. New training institutions are proposed, MoU signed with research, training and educational institutions. While people in Bangladesh are highly resilient to disaster events, more work needs to be done in building communities general capacity to manage and prepare for hazards other than floods and cyclones. The challenge of mainstreaming DRR and sensitizing people to a multi-hazard approach remains partially fulfilled Key achievements

- Most of the DMB, DoRR, CPP and DMRD, MoFDM staffs are well conversant with DRR and climate risk issues.
- NGO staffs are also well trained in DRR and climate risks.
- IT networking established from central to Local levels for DM information dissemination and sharing. Necessary computers have been installed with broadband at District and Upazila levels.
- Contingency plans of partner NGOs have been developed.
- Other different Ministries have trained their own staffs on basic DM issues.
- Coordination both at national and local levels has been strengthened.

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

#### **Levels of Reliance:**

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

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

Human security as a concept has embodied in the national DRR plans and activities. Some aspects of human security are already incorporated, e.g. number of shelters (for cyclone and flood) has been increased in high risk zones and design of shelters has been revised. Huge social protection programme (2.5% of total GDP) are there targeting the poor and the vulnerable. All DRR and preparedness programmes are targeting to save human life at all spheres. The result is the coming down of human casualties to 190 in last cyclone 'Aila' (2009) comparing to 300,000 of 1970 and 140,000 of 1991 cyclones. Concerned GoB agencies, e.g. Fire Service and Civil Defence, Coast Guard, Armed Forces Division, Cyclone Preparedness Programme, etc. are provided with equipment for search and rescue and trainings. Projects have taken to construct more than 500 multi purpose cyclone shelters with gender facilities (specially for women) and RAMP facilities for disabled and elderly people and for livestock. There will be other facilities like, rain water harvesting, solar panel and sanitation in these shelters. Project has also been under-taken to upgrade 250 existing cyclone shelters.

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

#### **Levels of Reliance:**

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

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

Bangladesh has a long tradition of working with CSO in disaster management. The newly adopted DM Plan and action plan call for CSO partnership in all disaster management committees. CSOs and public sector are part of recently introduced cluster approach, often taken lead role in number of sub-clusters. The DER group has been further strengthened by shifting its leadership to DMB. Development partners and multilateral organisations are partnering with the government on various programmes. However, a true partnership as an approach requires further investment and attention to make it broad-base. DMRD has partnership with major training and academic institution and strategic partnership with INGOs. Between various stakeholders GoB, Donors and NGOs including CSOs, CBOs have good relation and networks in working on DRR.

**f) Contextual Drivers of Progress****Levels of Reliance:**

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

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

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

**Future outlook**

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**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:**

Compare to country's exposure to various types of risk and their regular occurrence; require substantial financial resources to protect life and livelihood of the most vulnerable population through both structural and non-structural mitigation. To strengthen participation of vulnerable groups in the (decision making processes) related to Disaster Risk Reduction. Establish accountability mechanisms in DRR process. Lacking is in national common understanding of DRR and inadequate financial and human resources for DRR.

**Future Outlook Statement:**

- The long waiting National Disaster Management Act will be approved and enacted.
- Implementation of role and responsibilities outline in revised SOD and accordingly DMRD organizations reforms will be made.
- Strengthen monitoring mechanism of the implementation of DRR process and social safety-net activities.
- Establish mechanism for real participation of vulnerable groups in the formulation of disaster management and implementation policies.
- Increase the involvement of local governments in the formulation of disaster management policies and plans and link with national level programming and planning.
- Building synergy among various initiatives under common objectives.
- Use of equity and justice based approach in DRR.

## 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:**

Limited systematic approach to capture communities' practices for DRR for replicating/scaling up across the country. Two important challenges are here: a) availability of funding and sustaining its inflow for strengthening DRR at community level and b) strengthening the local DMCs with adequate authority and resources to plan and implement DRR.

### **Future Outlook Statement:**

Develop a culture and establish a systematic approach to capture communities' practices for DRR for replicating/scaling up across the country and ensuring disaster management services to international standard.

## 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 as a disaster-prone country where disaster poses such a huge challenge, where post-disaster reconstruction generally focuses on the immediate needs, that makes it difficult to incorporate longer terms concerns of DRR. At the same time there is a need to enhance understanding of DRR and related tools. The national capacity in disaster response has been developed based on the assumption that the country may face one national-scale disaster a year. But Bangladesh has faced two national scale disasters in 2007 and 2009, lesson of which required further validation of the underlying assumption, particularly in the context of climate change.

### **Future Outlook Statement:**

- Acquire adequate equipments, logistical resources and trained human resources to face sudden onset disasters.
- Development of national policy and guidelines for incorporation of DRR in emergency preparedness, response and recovery programmes in the reconstruction of affected communities.
- Establish appropriate institutional mechanism to promote DRR into disaster response, preparedness and recovery.
- Develop a training programme to build the capacity to implement the DRR guidelines.

## Stakeholders

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### **Departments/organizations that have contributed to the report**

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