

Chapter 4

Disaster Preparedness Planning at National Level

Prior to the 1990s, the main activity of the Ministry of Relief was post-disaster relief and rehabilitation, whereas preparedness, a pre-disaster activity, was carried out by affected (potential victim) communities on their own.

Although its largest flood disaster occurred in 1998, Bangladesh had already begun to discuss approaches to flood preparedness as early as 1988, and both structural and non-structural approaches were discussed. The interventions proposed included structural ‘once-and-for-all’, massive engineering solutions, and also non-structural solutions, e.g., ‘living with the floods’. The debate ended by the setting of eleven principles to guide future studies; and directives from senior levels of government to address unresolved issues. As a result, a compromise in the form of a five-year plan emerged from this debate, and it is popularly known as the Flood Action Plan (FAP). The FAP consisted of regional planning studies, project preparation studies, and pilot projects.

One study arising from the Flood Action Plan (FAP) was on disaster preparedness (FAP-11), the first of its kind. The study was carried out by UNDP consultants in association with staff members from the Ministry of Relief. In fact, this was the beginning of an official introduction to ‘disaster preparedness’ as an effective instrument for reducing losses in a disaster. Earlier, the Ministry of Relief had compiled a guidebook entitled ‘Standing Orders on Cyclones, 1985’ that dealt mostly with post-disaster activities in relief and rehabilitation.

The study began in the aftermath of flooding, but a powerful cyclone hit the country in April 1991 and forced the study to expand its scope to incorporate cyclones as well. As the study progressed, significant institutional changes were brought about in 1992 and 1993. The Ministry of Relief was renamed the Ministry of Disaster Management and Relief. Previously, there was one Directorate of Relief and Rehabilitation under the Ministry. In 1992, another institution, the Disaster Management Bureau, was established.

The introduction of the FAP study on disaster preparedness (FAP-11) gave a new lease of life to the hitherto marginalised Ministry of Relief not only in an organisational sense, but also in terms of attitudinal change on the part of the government. At last, policy-makers realised that pre-disaster preparedness was a much more effective instrument in damage mitigation and would also make post-disaster restoration simpler and cheaper than was hitherto the case. The importance accorded by the government to disaster preparedness is manifest in the reorganisation of the ministry and the very constitution and composition of the national council, inter-ministerial committee, and advisory committee. As part of the organisational revamping, Disaster Management Committees (DMCs) were set up at district, 'thana', and union levels.

National disaster preparedness instruments

The Plan for Disaster Preparedness is an outcome of various instruments that provide guidance and directions as well as a legal basis for developing plans. This section discusses the key disaster preparedness instruments and directives crucial to planning for disaster management.

The key national instruments for disaster risk reduction in Bangladesh include the following.

- Policy statement: GoB Vision, Mission and Objectives for Disaster Management
- Poverty Reduction Strategy
- Standing Orders on Disaster
- Draft National Disaster Management Policy
- Draft National Plan for Disaster Management
- Draft Disaster Management Act
- Bangladesh Disaster Management Model
- Corporate Plan: Framework for Action 2005-2009
- National Workshops on Options for Flood Risks and Damage Reduction in Bangladesh
- Mainstreaming the Risk Reduction Framework
- Guidelines and Tools for Disaster Preparedness and Risk Reduction

Some of the instruments are in the draft stage and under consultation and others are already implemented and in operation. Most of the instruments have been developed recently, and it is too early to comment on their operational status, apart from the Standing Orders on Disaster (SOD). The SOD are addressed to the major stakeholders and to government agencies, but are neither followed properly, nor monitored and assessed by implementing agencies. Most of the duty bearers are not aware of their roles in disaster management as outlined by the SOD. The Disaster Management Bureau has not made significant efforts to activate, operationalise, and monitor the performance of different agencies, personnel, and committees as given by the SOD.

Policy statements (vision, mission, and objectives) on disaster management

Vision – The vision of the Government of Bangladesh is to reduce the risk to people, especially the poor and disadvantaged, from the effects of natural, environmental, and human-induced hazards and bring them to a manageable and acceptable humanitarian level by having in place efficient emergency response systems capable of handling large-scale disasters.

Mission – In realising the whole of the GoB's vision for disaster management, the mission of the Ministry of Food and Disaster Management (MoFDM) is to bring about a paradigm shift in disaster management from conventional response and relief to a more comprehensive risk reduction culture and to promote food security as an important factor in ensuring the resilience of communities to hazards.

Objective – The overall objective of the MoFDM is to strengthen the capacity of the national disaster management system to reduce unacceptable risks and improve response and recovery management at all levels and to integrate and manage the food security system effectively.

Poverty reduction strategy

The poverty-disaster interface in Bangladesh is quite perplexing. Disasters have had adverse long-term impacts on the economic and social activities of the poor. Moreover, the costs of coping with disaster are disproportionately higher for the poor than for others.

The Poverty Reduction Strategy Paper (PRSP) is a policy and strategy document prepared by the World Bank and the International Monetary Fund (IMF) member countries in broad consultation with stakeholders and development partners. It is to be updated every three years with annual progress reports. It describes the country's macroeconomic, structural, and social policies and programmes for growth and poverty reduction, as well as associated external financing needs and major sources of financing.

Considering the direct poverty disaster linkages, the PRSP included one separate policy matrix (Number 07) on comprehensive disaster management for poverty reduction and growth.

Policy Matrix 07 envisages the following.

- Mainstreaming disaster management and risk reduction into national policies, institutions, and development processes
- Introducing disaster impact and risk assessment (DIRA)

- Strengthening disaster management and risk reduction capacities
- Ensuring knowledge management (acquiring, storing, sharing, and applying) for disaster risk reduction
- Enhancing community-level capacities for disaster risk reduction (community-level preparedness, response, recovery, and rehabilitation)
- Ensuring social protection of women, children, the elderly, the disabled, and other vulnerable groups against vulnerability and risk

Disaster management is included as a cross-cutting issue in three other policy matrices as follows.

- a. Policy matrix 08: Food security
- b. Policy matrix 12: Promoting use of information and communication technology in disaster management
- c. Policy matrix 15: Ensuring social protection for women against vulnerability and risks

The progress in implementing the Poverty Reduction Strategy is regularly monitored by the government and therefore disaster management plans have a direct relationship to the PRSP to comply with the policy matrix. Policy matrix 07 is the direct responsibility of the Ministry of Food and Disaster Management, and thus the PRSP provides a strong directive for preparing plans for disaster management.

Standing Orders on Disaster (SOD)

The Government of Bangladesh formulated Standing Orders on Disaster in 1997, and they provide one of the main guides for emergency operations in Bangladesh. These orders clearly instruct every relevant agency and responsible person about their roles during normal and emergency periods. The roles and responsibilities of national and local-level disaster management committees are also described in the SOD. The SOD are based on disasters caused by floods and cyclones and predominantly focus on preparedness and response. At present they are being revised and a draft has been developed which includes approaches to all hazards and provides a balance of the aspects of prevention or mitigation, preparedness, response and recovery in disaster management (<http://www.dmb.gov.bd/standingorderpublication.html>).

National Disaster Management Policy (draft)

A National Disaster Management Policy (NDMP) has been drafted to define the national perspective on disaster risk reduction and emergency management and to describe the strategic framework and national principles of disaster management. It is strategic in nature and will describe the broad national objectives and strategies in disaster management. The draft policy was developed by the Disaster Management Bureau (DMB) and is under consultation at present (Annex 6).

Disaster Management Act (draft)

A Disaster Management Act has been drafted by the Ministry of Food and Disaster Management (Annex 7) and is awaiting the endorsement and approval of Parliament. The Act has been formulated with a view to creating a legislative tool under which disaster risk and emergency management will be undertaken in Bangladesh, and the legal basis on which activities and actions will be managed. It will also establish mandatory obligations and responsibilities for ministries, committees, and appointments. The Act is to provide a legal basis for communities to mitigate the potential adverse effects of hazardous events, prepare for managing the effects of disasters, respond effectively to and recover from a disaster or an emergency situation, and adapt to the adverse effects of climate change.

Bangladesh disaster management model

The Government of Bangladesh (Ministry of Food and Disaster Management through its Comprehensive Disaster Management Programme [CDMP]) has developed a working model to guide disaster management approaches (Figure 2). This model emphasises understanding the risk environment and redefining it through new experiences and risk contexts beforehand (climate change impacts, new predictions and trends, lessons from disasters, and other change factors; viz., globalisation, trade policy, and legal changes), developing a management strategy (prevention, mitigation, and preparedness) of the risk environment, and activating the actual response and recovery operations in emergencies.

MoFDM's corporate plan: framework for action 2005-2009

The Corporate Plan (Framework for Action, 2005-2009) was formulated to serve as a key management tool to guide the efforts of the Ministry of Food and Disaster Management in achieving the above commitments (Figure 2). The plan provides directions on the ministry's priorities for the next four years. It aims to develop policies and programmes that recognise the impacts of climate change and also to expand preparedness, response, and mitigation strategies to cover a broad range of hazards by widening the scope to accommodate earthquakes, tsunamis, urban floods, and river bank erosion in addition to floods and cyclones. The corporate plan also provides directives for the Directorate of Relief and Rehabilitation (DRR), Disaster Management Bureau (DMB), and Director General of Food (DGoF) for developing strategic and annual plans for line agencies.

Recommendations for options in flood risk and damage reduction

It was in the aftermath to the devastating flood of 2004 that the Prime Minister directed her office to hold a National Workshop on Floods in order to develop and design context-



Figure 2: Bangladesh disaster management model (CDMP 2006)

based policy recommendations for flood management and evaluate the experiences of flooding and flood management initiatives and lessons learned from different kinds of interventions in the flood plains. The workshop was also used to explore the socio-economic aspects of the problem. The workshop was held in Dhaka from 7-9 September, 2004, and there were over 900 participants. The workshop concluded with a set of recommendations on options for flood risk and damage reduction in Bangladesh. These recommendations were considered during preparation of the corporate plan for the Ministry of Food and Disaster Management. The recommendations for flood preparedness are given under the headings 'General', 'Structural', and 'non-structural' measures in Annex 8, pages 13-14 and 18-20.

The Comprehensive Disaster Management Programme (CDMP) has identified result areas in line with the flood recommendations. The Ministry of Food and Disaster Management also took the recommendations into consideration during preparation of the National Plan for Disaster Management.

Mainstreaming the risk reduction framework

The GoB has developed a bottom up and top-down mainstreaming framework to integrate risk reduction issues into the core business of different government and non-government agencies. This framework has been integrated into the National Plan for Disaster Management (NPDM) also to guide the mainstreaming issues (Figure 3).

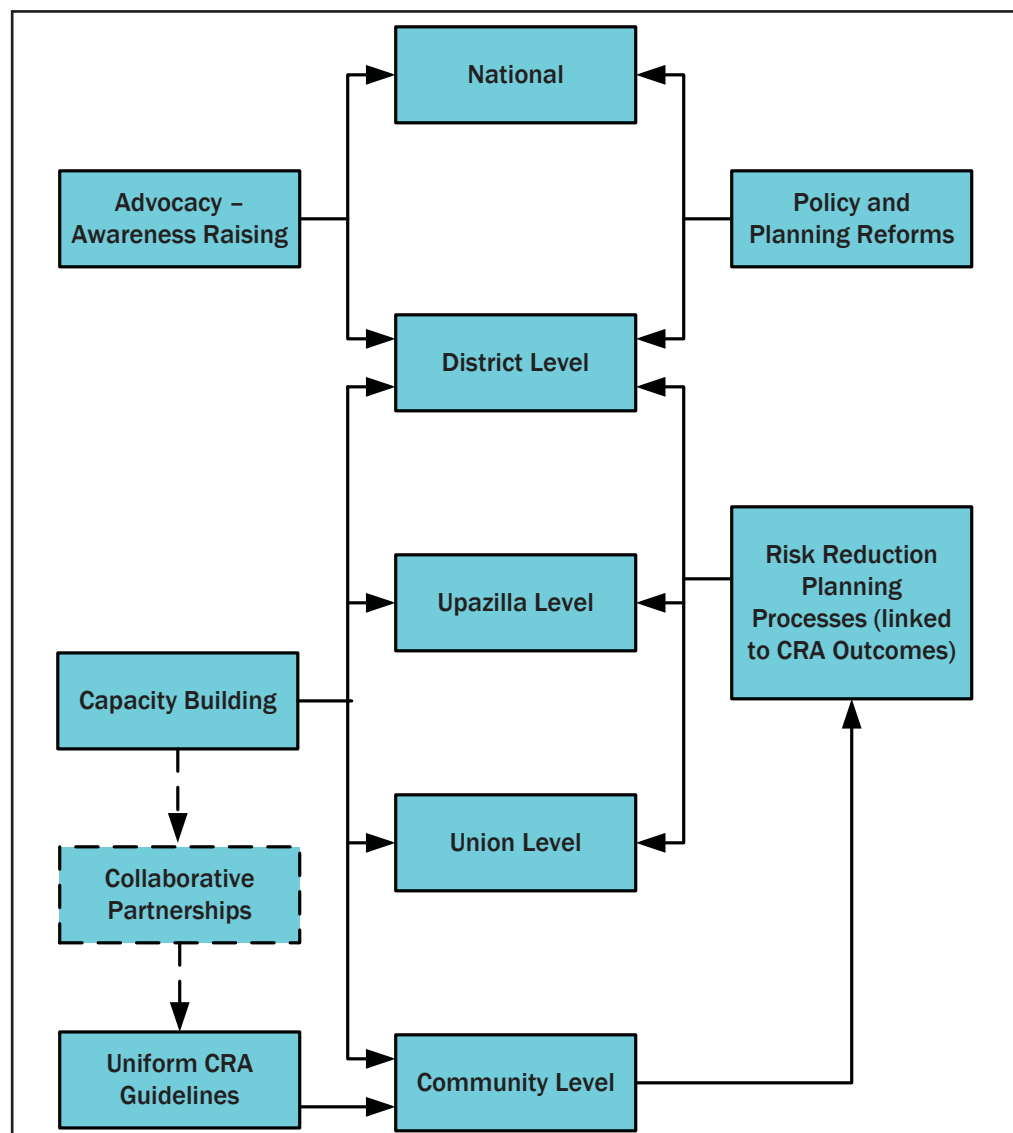


Figure 3: Mainstreaming framework (CDMP 2006)

Guidelines and tools for risk reduction

Guidelines have been formulated to support the development of disaster management plans and mainstream risk reduction. Some are already complete and others are being prepared by the MoFDM. The purpose of the guidelines is to support the government, non-government, and private sectors in risk reduction strategies. The following guidelines have been prepared by the MoFDM to support the disaster management and planning process.

- Disaster Impact and Risk Screening Tools for Development Projects
- Local Disaster Risk Reduction Fund Management Guidelines
- Emergency Fund Management Guidelines
- Guidelines for Community Risk Assessment (CRA) and Development of Risk Reduction Action Plans
- Damage and Needs' Assessment Methodology
- Hazard Specific Risk Assessment Guidelines
- Emergency Response and Information Management Guidelines
- Contingency Planning Template
- Sectoral Disaster Risk Reduction Planning Template
- Monitoring and Evaluation Guidelines for Implementation of the Plan
- Guidelines for International Assistance in Disaster Emergencies

Among guidelines planned, at present only two are complete: (1) Guidelines for Community Risk Assessment and Development of Risk Reduction Action Plans and (2) Local Disaster Risk Reduction Fund Management Guidelines. The community risk assessment guidelines are being implemented in all the unions of seven pilot districts of the CDMP (Satkhira, Coxes Bazaar, Faridpur, Sunamganj, Sirajganj, Rajshahi, and Lalmonirhat). These guidelines facilitate formulation of local-level (union and 'pourashava' level) risk reduction action plans by the DMCs.

Disaster preparedness planning framework

The GoB (Ministry of Food and Disaster Management) has developed a Disaster Management Planning Framework (DMPF) that will provide different planning directives to committees, agencies, and sectors at different levels. The planning framework is shown in the figure below (Figure 4).

The planning framework guides the development of disaster management plans at different levels. This framework guides the development of area-specific, hazard-specific, and sector-specific disaster management plans.

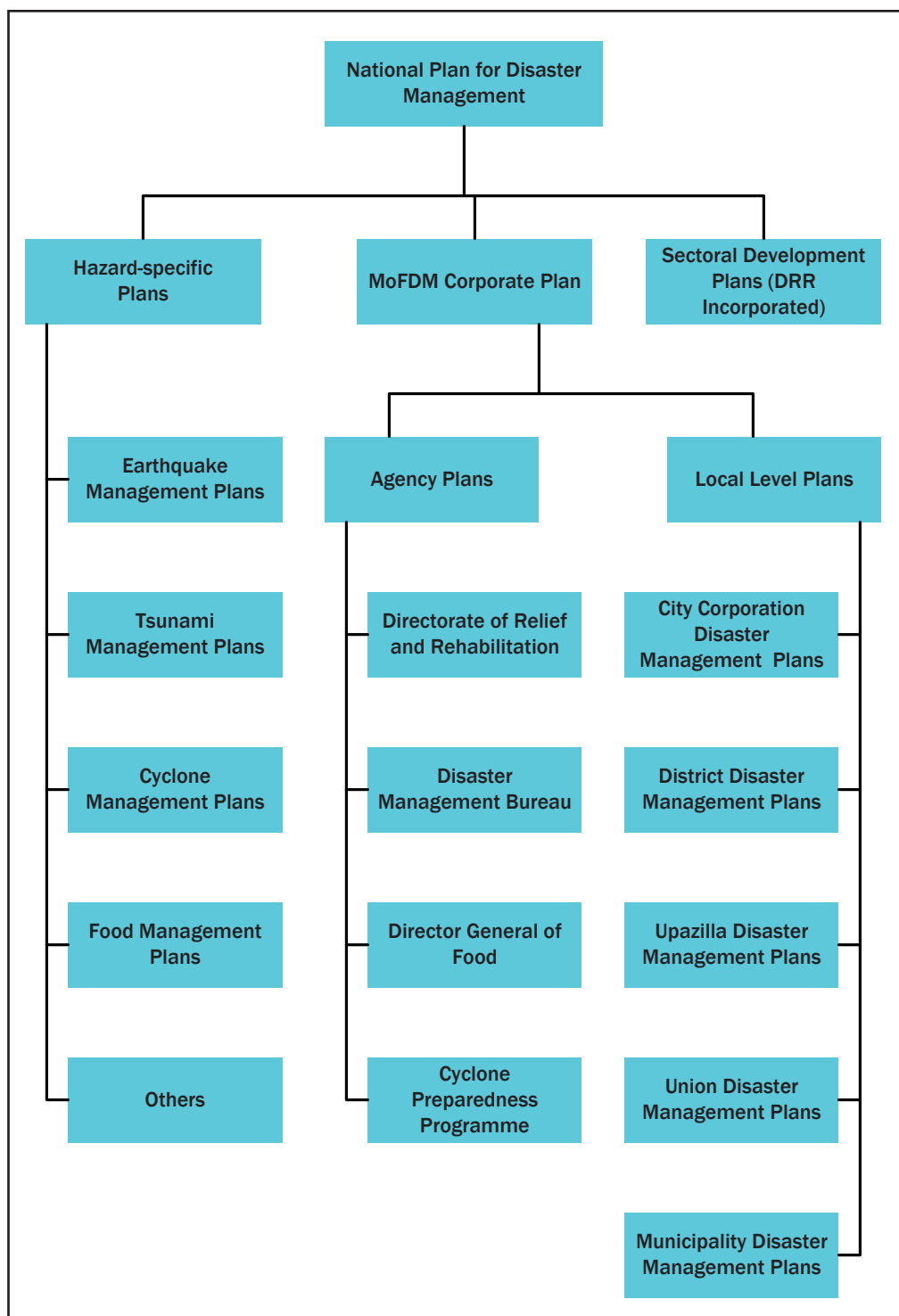


Figure 4: National disaster management planning framework

National disaster management plan

The Bangladesh National Plan for Disaster Management is a strategic document which has been endorsed (MoFDM 2005) by the Inter-Ministerial Disaster Management Coordination Committee (IMDMCC) and is waiting for the approval of the Cabinet. This plan is effective for a certain period of time. It is an umbrella plan that provides overall guidelines for relevant sectors and disaster management committees at all levels to prepare and implement specific plans. The Ministry of Food and Disaster Management (MoFDM), as the focal ministry for disaster risk reduction and emergency management, plays a leading role in disaster risk reduction and emergency management planning. Additionally, there will be a number of management plans specific to hazards such as a flood management, cyclone and storm surge and tsunami management, earthquake management, drought management, and river erosion management plans.

In addition, there will be a detailed disaster management plan for each district, 'upazilla', union, and 'pourashava' and city corporation in the country under its umbrella. A district disaster management plan will consist of a compilation of the plans for 'upazilla' in the districts. Similarly, the disaster management plan for 'upazilla' will consist of a compilation of union disaster management plans prepared by Union District Management Committees (DMCs). DMCs at union and 'pourashava' levels will be responsible mainly for carrying out risk assessments and preparing ground-level plans. Once developed, these will be sent to the DMCs on the next higher level - 'upazilla' DMCs - whose role will be to verify and compile the union plans and identify the resources required for the 'upazilla'.

The matrix of the plan is given on page 63 in Annex 6. This is the first national plan to be developed, although the National Water Management Plan (NWMP) also included disaster preparedness issues.

National adaptation programme of action

The Department of Environment (DoE) under the Ministry of Environment and Forests has developed a National Adaptation Programme of Action (NAPA) in response to the commitment of the United Nations' Framework for Climate Change Convention (UNFCCC). As climate change is highly likely to impact the population of Bangladesh by increasing the frequency and intensity of floods, droughts, salinity, storms, and other climatic hazards, disaster management measures are integrated into the NAPA consultation process. The NAPA identified a set of concrete plans for adaptation to climate change. The Climate Change Cell (CCC), which has a mandate to continue the NAPA process and facilitate implementation of NAPA, suggests carrying out the pilot projects and tests proposed by NAPA and then providing feedback to the relevant implementing agencies and potential donors. The following are the broad areas of investigation proposed.

- Adaptation to coastal crop agriculture and crops prone to flash floods
- Coastal fisheries and fisheries in areas subject to prolonged flooding
- Capacity building of the water management organisations
- Coastal afforestation
- Safe drinking water for coastal communities
- Insurance for hazard-affected areas
- Research on crops with tolerance to droughts, floods, and salt

The NAPA proposes that gender issues be cross-cutting and also emphasises awareness and policy advocacy. Bangladesh, as a signatory to all these national and international declarations, has committed to carry out the proposals. The outcomes of these proposals are related directly to national risk management.

Sectoral development plans incorporating disaster risk reduction

Every ministry/division of the government prepares its own sectoral development plans. As per the new National Plan for Disaster Management, the MoFDM, with the participation of sectoral experts, will prepare general guidelines to incorporate a disaster risk reduction agenda for different sectors. The MoFDM will be responsible also for overall monitoring of and follow-up to the process to ensure that the disaster risk reduction agenda is mainstreamed into sectoral policies, plans, and programmes.

The new sectoral development plans should address the following.

- a) Defining and redefining the risk environment through hazard analysis, vulnerability assessment, risk evaluation, risk treatment options, and risk treatments
- b) Managing the risk environment by developing programmes and strategies that eliminate or reduce the level of risk

(Traditionally mitigation programmes were viewed as engineering solutions to eliminate risk, but it is now accepted that all activities undertaken to eliminate or reduce risk are ‘mitigation’ strategies [e.g., community education and awareness, planning activities, and development of warning systems]. This includes activities described previously as the PPRR model, i.e., prevention, preparedness, response, and recovery.)

- c) Regularly reviewing and updating the plan
- d) Submitting a copy of the plan and any amendment thereto to the appropriate authority, including the MoFDM
- e) Submitting a copy of the sectoral disaster management plan and of any amendment thereto to the authority concerned

The provision for development of sectoral risk reduction plans is a very new proposal by the government body as a whole. However, at present, two sectoral plans address risk reduction elements in their development plans: the agricultural sector developed a plan with the assistance of the Food and Agriculture Organization (FAO) in 2006 and the water sector developed a plan in 2004.

Agricultural sector

The Department of Agricultural Extension (DAE) developed a sectoral risk reduction plan in 2006 with the assistance of FAO. The risk reduction plan for the agricultural sector proposes a number of result areas.

- An institutional set up for disaster risk management (DRM) within the DAE
- Policy frameworks from DRM in agriculture
- Capacity building and raising awareness
- Instruments and methodologies to address DRM in agriculture
- Technical options for DRM in agriculture, livestock, and fisheries at community level
- Collaboration and coordination
- Sustained applications for early warning systems

Water sector

A comprehensive water management plan for the entire country taking into consideration all sources of water, such as groundwater, surface water, rivers, and estuaries, was finalised in 2004. The Water Resources' Planning Organisation under the Ministry of Water Resources (MoWR) prepared this systematic and integrated management plan for water resources. Following the NWMP, a national water policy was prepared and declared. In addition, a draft development strategy was developed. The national water management plan divides the country into eight regions and has 84 programmes. The National Water Management Plan (NWMP) has identified the following disaster management activities and agencies for implementing them (Figure 5).

The Integrated Coastal Zone Management Plan (ICZMP) also integrated disaster management into the integrated plan for coastal zones. Cyclones, tsunami, earthquakes, salinity, and tidal floods are the specific hazards considered during planning. The plans also include adaptation to climate change and risk reduction options for coastal areas.

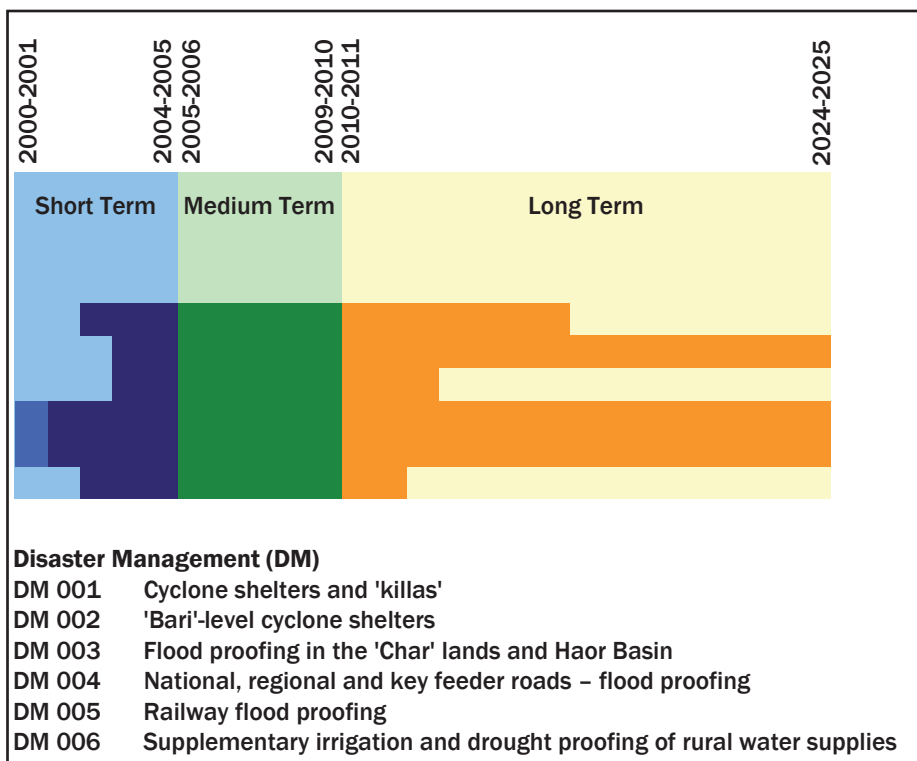


Figure 5: Disaster management activities projected in the NWMP of Bangladesh (GoB 2001)

Hazard-specific, multi-sectoral disaster management plans

In addition to area-specific disaster management plans and sector-specific disaster risk reduction plans, it is envisaged that there will be a number of hazard-specific management plans, e.g., earthquake management plans. This type of plan will be multi-sectoral and will be divided into two components - risk reduction and emergency response - and will address the specifics for dealing with a particular hazard.

The flood action and tsunami risk reduction plans are the only two hazard-specific plans extant. However, the FAP addresses plans across sectors inadequately to some extent, and the tsunami action plan is integrated into the national disaster management plan.

Flood-related plans and recommendations

In Bangladesh, two significant planning efforts are observed for flood preparedness. Under FAP-11, there was a comprehensive set of plans for disaster mitigation and preparedness. The Flood Forecasting Warning Centre (FFWC) is an outcome of the plan

and is presently operating under the Water Development Board. It issues technical information to disaster management stakeholders (district DMC or MoFDM Disaster Management Information Centre [DMIC] or Emergency Operation Centre [EOC]) and after these are interpreted, the information is given to the media for effective dissemination.

Earthquake-related plans and recommendations

The Disaster Management Bureau, with the technical assistance of the CDMP, has developed a draft Earthquake Response Plan which is currently under consultation. In addition, the DMB developed draft Standing Orders for Earthquakes to be incorporated into the existing SOD. However, an Earthquake Risk Reduction Plan will also be developed with the technical assistance of the CDMP. The Government of Bangladesh has developed a new building code that takes earthquake risks into consideration.

Tsunami-related plans and recommendations

The Ministry of Food and Disaster Management, through the Directorate of Relief and Rehabilitation, has developed a Tsunami Risk Reduction Plan of Action (TRRPA). This plan of action is being implemented by the CDMP earthquake and tsunami component with the financial assistance of the European Commission.

A list of the ministries and organisations involved in disaster management can be found in Annex 9, and gives organisations covered in this and the following chapter.