On-Going Disaster Mitigation Practices in Bangladesh

In recent years, the Government of Bangladesh (GoB) has been placing increased emphasis on reduction of the human, economic and environmental costs of disasters, through enhancing the national capacity for disaster mitigation. The programs on disaster management in Bangladesh focus equally on structural and non-structural practices intended for disaster mitigation:

**Structural Mitigation:** GoB has so far constructed 1,841 cyclone shelters and 200 flood shelters. During the last four decades 482 water and flood control projects have been implemented, through which flood protection embankments totalling about 8,200 km, drainage channels of total length 3,400 km and 9,000 sluice gates and regulators on different rivers and canals have been constructed as safety measures against inundation by tidal waves, storm-surges and flooding.

**Non-Structural Mitigation:** Non-structural mitigation practices pursued by the GoB focus on (1) preparedness and possibilities for action to reduce risks and losses, and (2) better coordination mechanisms between all actors involved (GoB, NGO and community people at the grass-roots level) during all phases of disaster. Such practical measures under the recently completed project: "Support for Disaster Management" involve the following.

i) **Legislation, Policy and Planning**
   The Disaster Management Legislation (Act) and the Clear and Comprehensive National Policy on Disaster Management and National Disaster Management Plan have already been drafted and are now under consideration of the GoB.

ii) **Training and Public Awareness**
   The Disaster Management Bureau (DMB) has conducted 447 training courses, workshops and seminars attended by government and semi-government officials of different levels, as well as various stakeholders. In addition, the DMB has developed Disaster Management training modules and has supported the arrangement of disaster management training workshops.

iii) **Institutional Arrangements**
   The GoB has taken a number of significant steps for building up institutional arrangements from national to union levels for effective and systematic disaster management.
   1. Naming of the Ministry of Relief and Rehabilitation as the Ministry of Disaster Management & Relief (MDMR)
   2. Establishment of Disaster Management Bureau (DMB) in 1993
   3. Establishment of Council and Committees at the national, district, upazilla and union levels
   4. Establishment of Emergency Operations Centre (EOC)

iv) **Warning Systems**
   In Bangladesh there are two warning systems: flood warning and cyclone warning.

   **Flood Warning System:**
   Flood warning has been in a state of continuous development since 1972. There was a significant improvement in the Flood Forecasting and Warning system (FFWS) with the introduction of the hydrodynamic super model MIKE 11 and an increase in the number of real-time monitoring stations to 30. With such modernization, FFWS yielded a successful result during the devastating flood of 1998.

   **Cyclone Warning System:** The existing cyclone warning has two signal numbers inherited from British India. In line with growing need, the warning signals were simplified and made specific and easily understandable in June 2002. The modified system is now under consideration by the GoB.
v) Local Disaster Action Plans
   The Disaster Management Bureau (DMB) drafted a model action plan at local levels. It was modified after discussion at a workshop attended by eminent experts involved in disaster-related activities. Based on that, the DMB has been able to finalize the Local Disaster Action Plan (LDAP) with the help of national consultants. The main purpose of the LDAP is to mobilize local communities in the most disaster-prone areas to increase their own capacities to cope with and recover from a disaster.

Coordination Mechanisms:
The high-powered National Disaster Management Council (NDMC) and Inter-Ministerial Disaster Management Coordination Committee (IMDMCC) meet twice and four times a year respectively. While the NDMC formulates and reviews disaster management policies and issues directives to all concerned, the IMDMCC plays the key role in implementing the directives maintaining inter-ministerial coordination, supervising the services of the Armed Forces as well as NGOs working in the field of disaster management.

CDMP: A Vision for the future
In mid 1999 the GoB, together with UNDP and other development partners, agreed to address the issue of risk reduction in a more comprehensive programmatic approach. As agreed, the Comprehensive Disaster Management Program (CDMP) is being formulated and nearly in its final stage.

- Background
   The achievement of villagers' collaboration and participation
   Bangladesh is one of the world’s most disaster-prone countries, suffering frequently from natural disasters such as cyclones and associated storm-surges, floods, droughts, tornadoes, river-bank erosions and earthquakes. These disasters continue to have a major impact on society.

- Objective
   To prepare ourselves for major growth and development in Asia with minimal risk from disasters, and to make our communities and our nationals safer than ever before.

- Term/Time Frame
   After the war of liberation in 1971.

- Activities Undertaken

  Structural Mitigation:
  Constructed shelters, flood protection embankments, drainage channels, sluice gates and regulators on rivers.

  Non-Structural Mitigation
  i) Legislation, Policy and Planning
  ii) Training and Public Awareness
  iii) Institutional Arrangements
  iv) Warning Systems
  v) Local Disaster Action Plans

   Formulated a set of mechanisms for Council and Committees from national down to grass-root levels.

- Contact Details
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