

Assistance to Ministry of Relief  
in coordination of Cyclone Rehabilitation  
UNDP Project No. BGD/91/021

(9)

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21.11.93  
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Date : 3 November 1993

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*FAR-11*

Dear Ms. Islam

**BGD/92/002 : PROGRAMME SUPPORT DOCUMENT**

As discussed we forward herewith 7 copies of the latest version of the above, dated 2nd November 1993.

We have also sent copies to:

DG, DMB	-	2 copies
UNICEF	-	2 copies
US-AID	-	1 copies
BHC/AMO	-	1 copies



Yours sincerely,

*[Signature]*  
M P Gillham  
Team Leader



Programme of Government of  
the People's Republic of Bangladesh

Programme Support Document

Title and UNDP number : Support to Comprehensive Disaster Management  
BGD/92/002/A/01/99

Duration : 3 Years

Location : The most flood and cyclone prone districts and Dhaka.

ACC/UNDP sector & subsector : Humanitarian Aid and Relief (13)  
Disaster Relief, Preparedness and Prevention (1320)

Government sector & subsector : Socio Economic Infrastructure

Government counterpart agency : Ministry of Relief

Executing Agent : Disaster Management Bureau

UN Implementing Agent : OPS

Estimated Starting Date : January 1994

Government Input (local currency) : (in kind) Tk. 40.37 million

(in cash) Nil

UNDP & Cost Sharing Financing

UNDP

IPF \$ \_\_\_\_\_

Other \$ \_\_\_\_\_

Cost-sharing

Third party \$ \_\_\_\_\_

UNDP & cost-sharing

Sub-Total: \$ 2 629 930

UNICEF Sub-Total: \$ 1 500 000

Total: \$ 4 129 930

Administrative & operational services

UNDP

IPF subline \$ 116 930

Other \$ \_\_\_\_\_

Brief description

The Programme Intervention aims to support the recently created Disaster Management Bureau (DMB) of the Ministry of Relief. The DMB would become the focal point for GOB disaster management activities in both normal times and at time of emergency, prior to and following a disaster. The Programme Intervention will encourage and facilitate coordination and cooperation between the various Ministries, agencies and organisations involved in disaster management activities.

On behalf of:	Signature	Date	Name/title
The Government	_____	_____	_____
Executing Agent	_____	_____	_____
UNICEF	_____	_____	_____
UNDP	_____	_____	_____

UN Official exchange rate at the last signature of project document:  
US\$ 1.00 = Tk. 39.50

(Revised: 2nd November 1993)



**PROGRAMME SUPPORT DOCUMENT**  
**SUPPORT TO COMPREHENSIVE DISASTER MANAGEMENT**

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## LIST OF ACRONYMS AND ABBREVIATIONS

ADAB	Association of Development Agencies in Bangladesh
ADB	Asian Development Bank
ADP	Annual Development Program
ADPC	Asian Disaster Preparedness Centre, Bangkok
AFCSC	Armed Forces Command and Staff College
AFD	Armed Forces Division
APR	Annual Programme Review
BBS	Bangladesh Bureau of Statistics
BDPC	Bangladesh Disaster Preparedness Centre
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BPATC	Bangladesh Public Administration Training Centre (Savar)
BPDB	Bangladesh Power Development Board
BRDB	Bangladesh Rural Development Board
BWDB	Bangladesh Water Development Board
CDP	Community Development Programme (of BDRCS)
CDPC	Cranfield Disaster Preparedness Centre, Shrivenham, UK
CPP	Cyclone Preparedness Programme (of MoR/BDRCS)
CPPII	Cyclone Protection Project II
DAE	Department of Agricultural Extension
DC	Deputy Commissioner
DCMU	Disaster Coordination and Monitoring Unit (now superseded by the DMB)
DHA	Department of Humanitarian Affairs of UN
DM	Disaster Management
DMTATF	Disaster Management Training and Awareness Task Force
DPHE	Department of Public Health Engineering
DPP	Disaster Preparedness Programme (of BDRCS)
DRR	Directorate of Relief and Rehabilitation
EC	European Community
EOC	Emergency Operations Centre
ERD	Economic Relations Division
ESO	Emergency Standing Orders
FAO	Food and Agriculture Organization of the United Nations
FAP	Flood Action Plan
FFW	Food-for-Work
FPCO	Flood Plan Coordination Organization
FFWC	Flood Forecasting and Warning Centre (of BWDB)
GB	Grameen Bank
GoB	Government of Bangladesh
GR	Gratuitous Relief
IDNDR	International Decade for Natural Disaster Reduction
IFRC	International Federation of Red Cross and Red Crescent Societies (formerly the League, LRCS)
IMDMCC	Inter-ministerial Disaster Management Coordination Committee
LGED	Local Government Engineering Department
MFL	Ministry of Fisheries and Livestock

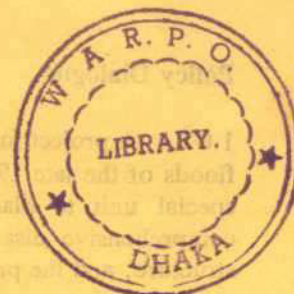


MDMR	Ministry of Disaster Management and Rehabilitation
MIWDFC	Ministry of Irrigation, Water Development and Flood Control
MoC	Ministry of Communication
MoF	Ministry of Food
MoH	Ministry of Health
MoR	Ministry of Relief
MoS	Ministry of Shipping
NDMC	National Disaster Management Council
NGO	Non-government organisation (now termed Private Voluntary Development Organisations)
NPD	National Programme Director
ODA	Overseas Development Administration (U.K.)
PC	Planning Commission
PIO	Project Implementation Officer
PSD	Programme Support Document
PVDO	Private Voluntary Development Organisations (formerly NGOs)
SDC	Swiss Development Co-operation
SIDA	Swedish International Development Authority
SPARRSO	Space Research & Remote Sensing Organization
SWC	Storm Warning Centre (of BMD)
TAO	Thana Agricultural Officer
Tk	Taka (Bangladesh currency unit)
TNO	Thana Nirbahi Officer
TOR	Terms of Reference
TR	Test Relief
T&T	Telegraph and Telephone Department
UN-DMT	United Nations Disaster Management Team
UNDP	United Nations Development Programme
UNDRO	Former Office of the UN Disaster Relief Co-ordinator now subsumed into DHA
UNICEF	United Nations Childrens Fund
UP	Union Parishad (council)
USAID	United States Agency for International Development
VGD	Vulnerable Group Development (Programme)
VHSS	Voluntary Health Services Society
WFP	World Food Programme
WHO	World Health Organization
WMO	World Meteorological Organisation
ZDP	Zonal Disaster Preparedness Specialist
ZRC	Zonal Relief Coordinator



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# SUPPORT TO COMPREHENSIVE DISASTER MANAGEMENT PROGRAMME



## EXECUTIVE SUMMARY

### 1. PREPARATORY PROCESS

#### Concept of Comprehensive Disaster Management

1.01 Disaster Management includes all aspects of planning for and responding to disasters. It involves the management of both risks and consequences of disasters and includes prevention/mitigation, protocols, emergency response and post disaster reconstruction and rehabilitation. This broad concept is relatively new, especially in Bangladesh, where 'disaster management' has generally been understood to mean management after a disaster has occurred.

1.02 Bangladesh has fairly well developed procedures for managing the consequences of natural disasters. It has made considerable efforts in organizing disaster relief operations within the limits of the resources available. However, much has been done on an 'ad hoc' basis and few people have received any relevant training and practical guidelines.

#### Evaluation of Past Performance

1.03 There have been few formal evaluations of the government's disaster management activities. Various recommendations for improvement have however been made and those have focused on the need at all levels:

- for more attention to be given to preparedness and to possibilities for action to reduce risks and losses; and
- for training and better co-ordination of activities between line ministries/departments/agencies, and between the civil authorities, the Armed Forces, PVDOs, voluntary organizations, and professional associations.

#### Needs Assessment

1.04 The studies made during the course of BGD/91/021 confirmed previous recommendations that the following need to be accomplished:

- establishing national-level policies, plans and guidelines;
- strengthening existing institutions and co-ordination mechanisms in the field;
- organizing extensive public education and community mobilization activities;
- promoting a number of specific, practical measures to develop and test 'proofing' techniques;
- improvement of warning systems;
- establishing improved arrangements for the assessment of damage and needs;
- developing specific expertise and management systems for the overall management and co-ordination of emergency response operations;
- integrating the capabilities of the civil administration, the Armed Forces, the PVDOs, professional and other organizations; and
- promoting wider knowledge of disaster risks and the possibilities to mitigate those risks.

1.05 The need was confirmed for high-level co-ordination mechanisms, supported by a specialist disaster management unit, to ensure inter-sectoral co-ordination and overall direction.

1.06 A study, financed by UNICEF complemented the information available concerning the possibilities for increasing awareness at community level and promoting self-help risk reduction measures.



## Policy Dialogue

1.07 A project for Disaster Preparedness was envisaged as part of the Flood Action Plan following the floods of the late 1980s. A central objective and output of the project was to be the establishment of a special unit to plan and co-ordinate disaster-related activities. UNDP supported the principle of comprehensive disaster preparedness, the establishment of a specialist unit within the Government structure, and the preparation of a relevant project proposal.

1.08 A short-term project BGD/91/021 (Assistance to the Ministry of Relief in the Coordination of Cyclone Rehabilitation) was taken up following the cyclone in April 1991. During the course of the Project, the wide variety of tasks involved, and the complex and inter-sectoral nature of the issues, became clearer. These issues were thoroughly discussed, notably with Project Steering Committee, which was chaired by the Member (Programming and SEI) Planning Commission. At its meeting on 28 January 1993, the Committee endorsed the concept of the specialist disaster management unit and in conformity with this decision, Government established the Disaster Management Bureau (DMB), and fully endorsed the proposals contained in this Programme Support Document (PSD).

## Role of Development Partners

1.09 As the lead agency within the UN system, UNDP has a significant role in supporting the International Decade for Natural Disaster Reduction (IDNDR). The fifth UNDP Country Programme (July 1991 - June 1995) highlights the acute vulnerability of Bangladesh to natural disasters and the particularly devastating impact these have on the poor.

1.10 The regular programme of UNICEF also includes many activities that contribute towards preparedness and risk reduction at the community level. UNICEF have been extensively involved in the process of preparing the training strategy that is to be implemented by DMB. The British Government (ODA) has supported and continues to support disaster management training. USAID has funded Flood Action Plan studies concerning flood response and flood proofing (FAP:14 and FAP:23), and Geographical Information Systems (FAP:19). PVDOs are major contributors to relief efforts following disasters, and a number of PVDOs are now taking up programmes for disaster preparedness and mitigation.

## Responsibility for Preparation

1.11 This PSD was prepared by the Disaster Coordination and Monitoring Unit, established in June 1992, and its successor, DMB, supported by technical assistance personnel provided under BGD/91/021. A Professional Panel of senior civil, military, academic and PVDO officers, under the chairmanship of a former Cabinet Secretary, advised and assisted.

1.12 The preparation process commenced in May 1992 and a first draft PSD was issued in November 1992. It was considered at a Programme Appraisal Committee (PAC) meeting on 25 July 1993 in UNDP Field Office, Dhaka. This revised PSD is a result of the modifications requested at that meeting.

## 2. DEVELOPMENT CONTEXT

### Description of the Sub-sector and Problems to be Addressed

2.01 Population density and the number of people 'at risk' is increasing in all parts of the country. The pressure on land is such that newly accreted char land is immediately occupied for agriculture. The coastal area also attracts large numbers of seasonal workers.

2.02 The major natural disasters to which Bangladesh is subjected are cyclones, floods, river bank erosion, tornadoes, droughts and earthquakes. Experience has demonstrated the effectiveness of coastal embankments and associated afforestation in reducing losses and damage, and the life-saving potential of shelters and any form of pucca building. Studies have shown that people evacuate to safer sites if they are convinced that their lives are in immediate danger, if they assess the risk of death to be greater than the risk of their land and property being stolen in their absence, and if there is time to reach known safe sites.



2.03 Extensive river floods cause great disruption and damage to infrastructure and loss of crops. Floods indirectly contribute to the concentration of land ownership and wealth as small landowners are forced into 'distress selling'. Flash floods cause considerable damage. River bank erosion carries away land and destroys houses and other structures and approximately one million people are affected every year. Drought-induced famines were a major killer, but their effects have been reduced by increased access to irrigation and by the provision of food aid. Tornadoes cause localized devastation and demand an immediate response. Landslides occur in hilly areas. The country is situated in a seismic zone with the consequent risk of an earthquake causing serious damage.

2.04 Increases in population, and population density, and industrialization in urban areas have considerably increased the risks associated with major fires, and industrial and other accidents. Human activities have also increased the vulnerability of many people to natural phenomena, examples include the closure of natural drainage channels and the diversion of the dry season flow of the Ganges.

2.05 The Programme Intervention (PI) described in this PSD is directly relevant to all six UNDP priority themes for capacity building poverty alleviation; grass-roots participation; the environment; management development; technical cooperation among developing countries; transfer of technology; and women in development issues. UNICEF's priorities focus on the well-being, survival and development, of children and their mothers, and these include helping to reduce their vulnerability to disasters.

### Government Objectives, Strategy and Programme

2.6 The objective of the Government can be summarised as being to strengthen national capability at all levels to respond effectively to disasters. Although a Comprehensive Disaster Management Programme (CDMP) has yet to be formulated many relevant activities are already being undertaken or are planned.

2.07 Several national seminars resulted in broad consensus concerning the need for all efforts to be integrated into a comprehensive disaster management strategy. It is recognized that it would take fifteen to twenty years to complete the major works that are being considered and that, in the mean time, there will be a continued dependence upon the successful implementation of smaller scale 'proofing' and non-structural preparedness measures.

2.08 The support to be provided under PI will assist DMB in its activities during the first three years of its existence and contribute directly to the development of the national policy and an overall CDMP.

### Institutional Framework and Capacity Constraints

2.9 Specific disaster-related responsibilities of many bodies are specified in 1984/85 the Standing Orders for Cyclone and for Flood. However, few officials are aware of their responsibilities and there has not yet been any systematic follow up. The review carried out under BGD/91/021 identified many areas where refinements to the original texts were required.

2.10 Following the studies and discussions new institutional arrangements are being established. Table S.1 summarises the functions of the National Disaster Management Committee (NDMC), Inter-Ministerial Disaster Management Coordination Committee, and National Disaster Management Advisory Committee (NDMAC) as well as the related functions of the MoR, DMB and others.

2.11 The new arrangements at national level, illustrated in Figure S.1, meet the requirements for overall direction from a high-level inter-ministerial body, provide for effective inter-ministerial co-operation and co-ordination at the national level, recognize and capitalize on the key role of the Cabinet Secretary in inter-ministerial co-ordination and in supervising the district administration<sup>1</sup>, incorporate the role of the MoR as the responsible line ministry, provide for the integration of the Armed Forces and reflect the crucial role of the DCs/district administration.

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<sup>1</sup> The Cabinet Secretary (in the name of the PM and the Cabinet) ensures the essential co-operation between the civilian and military authorities.



**TABLE S.1**  
**Summary Outline of the Main Disaster**  
**Management Functions of Key Bodies**

<b>National Disaster Management Council (NDMC)</b>	
□	Establishing policies and providing overall direction for all aspects of disaster management. Defining priorities and criteria for the allocation of resources.
<b>National Disaster Management Advisory Committee (NDMAC)</b>	
□	Providing advice to the NDMC, and directly to MDMR and DMB, on specific technical, management and socio-economic aspects of disaster management, including vulnerability analysis and disaster-development links.
<b>Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC)</b>	
□	Implementation of NDMC policies and decisions on an inter-ministerial basis.
□	Co-ordination of action by all government agencies and overall direction of the activities of the DMB.
□	Responsibility for major operational decisions during an emergency.
□	Decisions on allocations of relief resources through its sub-committee, the <b>Executive Emergency Relief Management Committee</b> .
<b>Ministry of Disaster Management and Relief (MDMR)</b>	
□	Ministerial responsibility for disaster management, including the convening of the IMDMCC.
□	Assuring the establishment, resourcing (budget), and satisfactory functioning of the DMB.
□	Supervision of the DRR.
<b>Disaster Management Bureau (DMB) -- a part of MDMR</b>	
□	Provision of expert staff services to the NDMC and IMDMCC.
□	Promotion of disaster prevention/mitigation and preparedness within all agencies and levels of government.
□	Providing guidelines, organizing training, and promoting the preparation of disaster plans.
□	Operation of the national Emergency Operations Centre (control room) at time of disaster.
<b>Directorate-General of Relief and Rehabilitation (DRR)</b>	
□	As at present with respect to: VGD; FFW; GR and TR; the management and delivery of relief supplies, and the provision of related services.
<b>DRROs and PIOs</b>	
□	As at present under the general direction of DRR and the operational supervision of DC and TNO. Increased attention by DRROs in particular to disaster preparedness under the guidance of the DMB (this compensating for some reduction in FFW workload).

2.12: Figure S.2 shows the overall framework for arrangements at district, thana and unions levels. Disaster management committees are being formed as standing bodies at each level to replace existing Relief Committees.

#### **New Institutional Arrangements for Disaster Management**

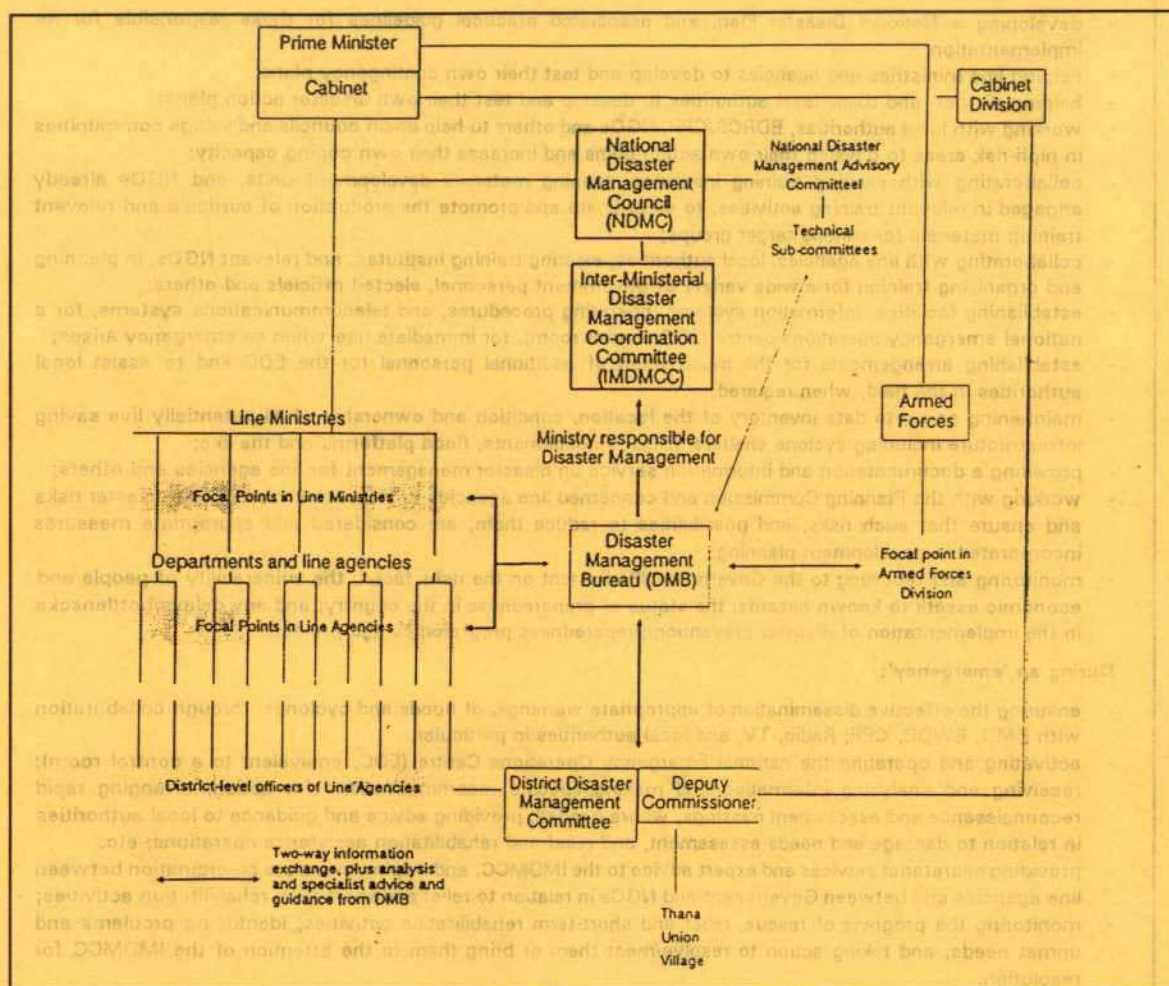
2.13 DMB is a shall dynamic professional unit at national level to perform specialist functions, working in close collaboration with the district- and thana-level authorities, and the concerned line ministries, under the overall authority of a high-level inter-ministerial committee. Specific tasks of the DMB are detailed on Table S.2 and its organisation is shown on Figure S.3.

2.14 DMB will be a catalyst for planning and self-help arrangements at local level, for arranging public education campaigns, and for organizing the systematic training of large numbers of government officers and other personnel from national down to the union/community level. At times of emergency, DMB will serve as the national Emergency Operations Centre (EoC)

2.16 DMB will support existing structures and government agencies. It will not have a field structure but work with and through the DCs and DRROs at district level, and the TNOs and PIOs at thana level, in training and supporting the disaster management teams. Six Zonal Disaster Preparedness Specialists (ZDPs) to reinforce the outreach work of the DMB will be provided during the initial three years.



Figure S.1  
Functional role and relationships of the Disaster Management Bureau



2.17 The success of DMB, and of the PI itself, will depend on DMB staff. The best available candidates should be appointed, with the maximum of staff on non-rotational assignments. Appointments should normally be for a period of 3-5 years. At least one appointee, to the posts of Director or Deputy Director, should be a woman.

2.18 DMB will have suitable premises for both its routine functions and when it serves as the EOC, with appropriate communications facilities, management information systems, internal operating procedures, and clearly understood relationships and communication channels with government bodies and other concerned agencies. To ensure inter-sectoral co-ordination and collaboration a **Focal Points Operational Co-ordination Group (FPOCG)** will be created. This would include the disaster management focal points of all concerned line ministries, the Armed Forces, line agencies, and the Planning Commission PVDs should be co-operated.

2.19 Major, long-term mitigation and post-disaster reconstruction need to be planned in the context of up-dated development plans and programmes. DMB will collaborate closely with the Disaster Mitigation and Reconstruction Cell within the Planning Commission. DMB, as EOC, will work closely with the special, temporary cell established within the Armed Forces Division to co-ordinate and direct the operational support provided by the Armed Forces.



**TABLE S.2**  
**Duties of DMB**

**During 'normal time':**

- developing a National Disaster Plan, and associated practical guidelines for those responsible for its implementation;
- helping line ministries and agencies to develop and test their own contingency plans;
- helping district- and thana-level authorities to develop and test their own disaster action plans;
- working with local authorities, BDRCS/CPP, NGOs and others to help union councils and village communities in high-risk areas to develop their own action plans and increase their own coping capacity;
- collaborating with existing training institutes, training materials development units, and NGOs already engaged in relevant training activities, to co-ordinate and promote the production of curricula and relevant training materials for various target groups;
- collaborating with line agencies, local authorities, existing training institutes, and relevant NGOs, in planning and organizing training for a wide variety of government personnel, elected officials and others;
- establishing facilities, information systems, operating procedures, and telecommunications systems, for a national emergency operations centre (EOC/control room), for immediate use when an emergency arises;
- establishing arrangements for the mobilization of additional personnel for the EOC and to assist local authorities in the field, when required;
- maintaining an up to date inventory of the location, condition and ownership of all potentially live saving infrastructure including cyclone shelters, killas, embankments, flood platforms and the like;
- providing a documentation and information service on disaster management for line agencies and others;
- working with the Planning Commission and concerned line agencies to increase awareness of disaster risks and ensure that such risks, and possibilities to reduce them, are considered and appropriate measures incorporated in development planning;
- monitoring and reporting to the Government/Parliament on the risks faced; the vulnerability of people and economic assets to known hazards; the status of preparedness in the country; and any delays/bottlenecks in the implementation of disaster prevention/preparedness programmes and projects.

**During an 'emergency':**

- ensuring the effective dissemination of appropriate warnings, of floods and cyclones, through collaboration with BMD, BWDB, CPP, Radio, TV, and local authorities in particular;
- activating and operating the national Emergency Operations Centre (EOC, equivalent to a control room); receiving and analysing information and making specific recommendations for action; arranging rapid reconnaissance and assessment missions, where needed; providing advice and guidance to local authorities in relation to damage and needs assessment, and relief and rehabilitation assistance operations; etc.
- providing secretariat services and expert advice to the IMDMCC, and helping to ensure co-ordination between line agencies and between Government and NGOs in relation to relief and short-term rehabilitation activities;
- monitoring the progress of rescue, relief and short-term rehabilitation activities, identifying problems and unmet needs, and taking action to resolve/meet them or bring them to the attention of the IMDMCC for resolution;
- providing information to and liaising with ERD concerning requirements for international assistance, and with MoInfo.

**During post-disaster 'recovery':**

- co-operating with the Planning Commission and line agencies, as required, in compiling data on reconstruction requirements and in co-ordinating the preparation of an integrated reconstruction programme;
- ensuring that risk reduction measures are built into all reconstruction programmes as much as possible;
- undertaking a final evaluation, or at least a "post mortem", on the emergency operation, drawing lessons and feeding them back to the IMDMCC and into training activities and up-dated guidelines.

## **Role of External Cooperation**

2.20 International assistance is provided to Bangladesh following each major disaster in response to GoB requests for relief, rehabilitation and reconstruction. Such assistance has been provided by UN agencies, inter-governmental and bilateral development partners.

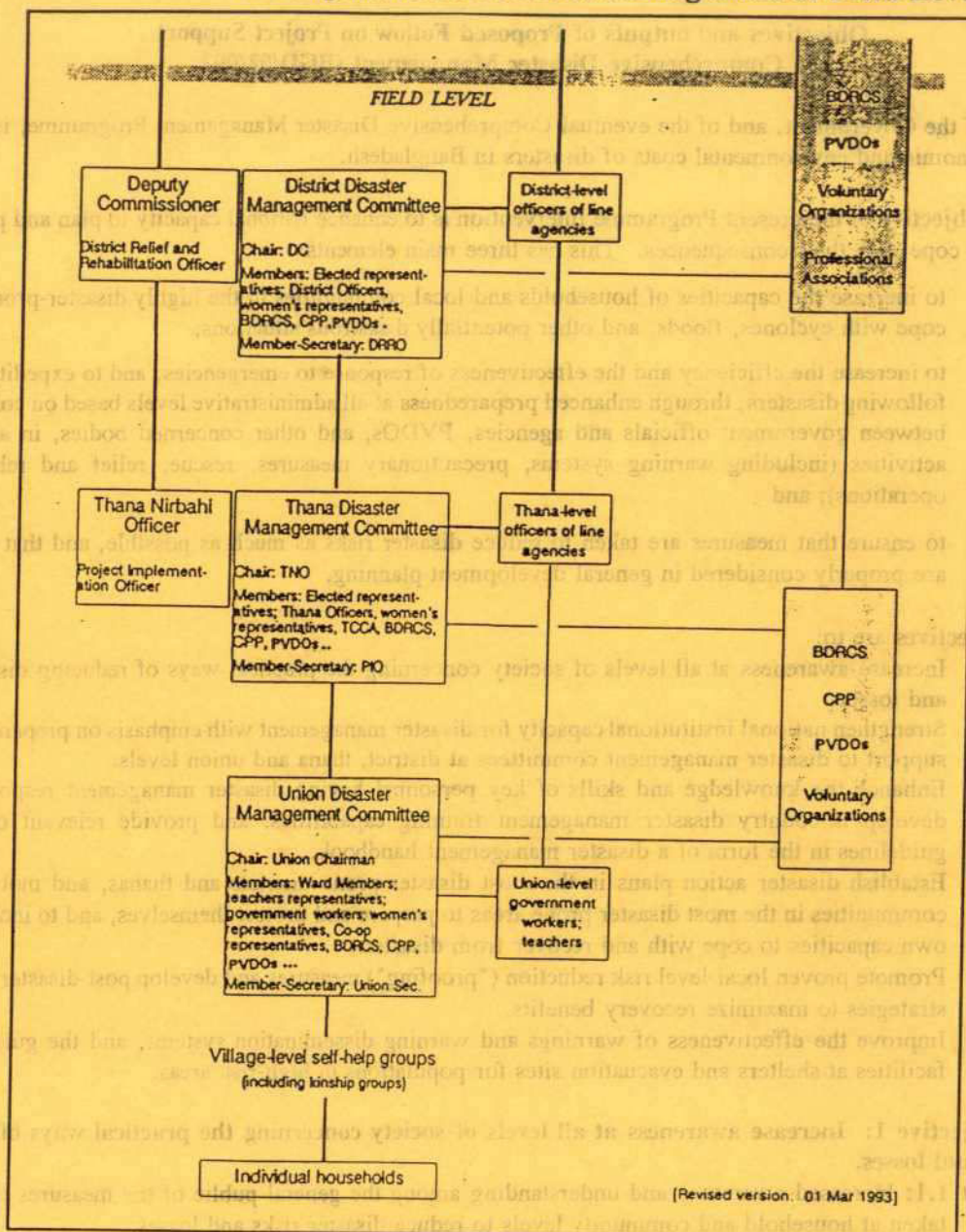
2.21 The development partners are providing assistance to the various aspects of the Flood Action Plan, which will reduce the risks of severe flooding and the enhance the technical capacity of the BMD Storm Warning Centre. Assistance from the International Federation of Red Cross/Crescent Societies has helped to sustain the Cyclone Preparedness Programme in relation to the dissemination of cyclone warnings.

2.22 UNICEF is supporting a pilot community mobilization project. Disaster related activities have been initiated by the Ministry of Health with support from the Italian Government and WHO under the Emergency Preparedness and Response (EPR) Project. Some PVDOs have started training and local-level preparedness activities.



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**Figure S.2**  
**Arrangements for Disaster Management at Field Level**



2.23 The PI would complement all the above activities in particular the support being given to the Flood Action Plan.

### 3. PROGRAMME SUPPORT ELEMENTS

#### Development Objectives

3.1 The overall goal of the Government, and of the proposed Comprehensive Disaster Management Programme, is to reduce the human, economic and environmental costs of disasters in Bangladesh. The development objective of the PI is to enhance national capacity to plan and prepare for disasters and to cope with their consequences.

#### Immediate Objectives

3.2 The immediate objectives of the PI and related outputs are shown on Table S.3.

3.3 PI activities will take place at various levels simultaneously, work will be initiated in three districts and be extended progressively to some 15 with 50/60 thanas, and 350-400 unions, having a total population of some 10 million people. Priority areas will be those having the highest Indices on the Hazard Indices Map prepared by Project BGD/91/021.



TABLE S.3

**Objectives and outputs of Proposed Follow on Project Support  
to Comprehensive Disaster Management (BGD/92/002)**

**Overall goal of the Government, and of the eventual Comprehensive Disaster Management Programme, is to reduce the human, economic and environmental costs of disasters in Bangladesh.**

**Development objective of the present Programme Intervention is to enhance national capacity to plan and prepare for disasters and to cope with their consequences. This has three main elements:**

- (i) to increase the capacities of households and local communities in the highly disaster-prone areas to cope with cyclones, floods, and other potentially disastrous situations;
- (ii) to increase the efficiency and the effectiveness of response to emergencies, and to expedite recovery following disasters, through enhanced preparedness at all administrative levels based on collaboration between government officials and agencies, PVDOs, and other concerned bodies, in all relevant activities (including warning systems, precautionary measures, rescue, relief and rehabilitation operations); and
- (iii) to ensure that measures are taken to reduce disaster risks as much as possible, and that such risks are properly considered in general development planning.

**Immediate objectives are to:**

1. Increase awareness at all levels of society concerning the practical ways of reducing disaster risks and losses.
2. Strengthen national institutional capacity for disaster management with emphasis on preparedness and support to disaster management committees at district, thana and union levels.
3. Enhance the knowledge and skills of key personnel having disaster management responsibilities, develop in-country disaster management training capabilities, and provide relevant operational guidelines in the form of a disaster management handbook.
4. Establish disaster action plans in the most disaster prone districts and thanas, and mobilize local communities in the most disaster prone areas to prepare and protect themselves, and to increase their own capacities to cope with and recover from disasters.
5. Promote proven local-level risk reduction ("proofing") measures and develop post-disaster assistance strategies to maximize recovery benefits.
6. Improve the effectiveness of warnings and warning dissemination systems, and the guidelines for facilities at shelters and evacuation sites for populations in high-risk areas.

**Immediate Objective 1: Increase awareness at all levels of society concerning the practical ways of reducing disaster risks and losses.**

- Output 1.1:** Increased awareness and understanding among the general public of the measures that can be taken at household and community levels to reduce disaster risks and losses.
- Output 1.2:** Increased understanding of the status and possibilities for disaster preparedness and proofing in Bangladesh among Members of Parliament, senior officials, and other influential groups.
- Output 1.3:** Basic information concerning disaster risks, preparedness arrangements, and proofing possibilities, included in school curricula and teacher training.

**Immediate Objective 2: Strengthen national institutional capacity for disaster management with emphasis on preparedness and support to disaster management committees at district, thana and union levels.**

- Output 2.1:** DMB serving as an effective national co-ordination unit for disaster management -- promoting prevention/mitigation and preparedness measures at all levels, and serving as a national Emergency Operations Centre (EOC) during emergencies -- with necessary expertise (trained staff), facilities, documentation, information and communication systems.
- Output 2.2:** A national policy statement and overall strategy for disaster management proposed to the Government for approval. Recommendations for other elements of a comprehensive disaster management programme required to complement the activities of the present programme.
- Output 2.3:** A National Disaster Plan approved and published, incorporating, amongst other things, refined Standing Orders (definitions of responsibilities, co-ordinating mechanisms, lines of communication), and arrangements for necessary logistic support services.
- Output 2.4:** Up-dated and up-graded internal contingency (disaster action) plans in key line agencies and other relevant bodies.



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- Output 2.5:** A core group of individuals experienced in managing emergency and post-disaster operations on call at short-notice.
  - Output 2.6:** Improved arrangements to ensure the rapid availability, following disasters, of supplies necessary to ensure survival and meet basic needs, and to expedite recovery.
  - Output 2.7:** Improved telecommunications for disaster-related purposes. This includes: adequate telecommunications within the DMB; standing arrangements for collaboration during emergencies between organisations operating telecommunication systems; and improved access to telecommunications by operational assistance agencies.

**Immediate Objective 3:** Enhance the knowledge and skills of key personnel having disaster management responsibilities, develop in-country disaster management training capabilities, and provide relevant operational guidelines in the form of a Disaster Management Handbook.

- Output 3.1:** Senior staff of the DMB and key personnel in selected training institutes and other organizations trained in disaster management, and exposed to experiences and arrangements in some other countries in the region.
- Output 3.2:** A range of education and training resources (trainers and materials) available, and the materials widely distributed, to promote and support disaster management training for various target audiences and at different levels.
- Output 3.3:** Increased capacity of in-country organizations providing disaster management training.
- Output 3.4:** All DCs, ADCs and DRROs, and TNOs and PIOs from the selected (most disaster prone) thanas, trained in basic disaster management and their specific responsibilities.
- Output 3.5:** Disaster management modules introduced into the basic and refresher training of a wide range of government personnel (including BCS officers, police, field staff of line agencies, etc) and others, including religious leaders.
- Output 3.6:** A Disaster Management Handbook (for government personnel and others) covering, in the first instance, general aspects of disaster preparedness, proofing, and response, and specific aspects relating to cyclones and floods.

**Immediate Objective 4:** Establish disaster action plans in the most disaster prone districts and thanas, and mobilize local communities in the most disaster prone areas to prepare and protect themselves, and to increase their own capacities to cope with and recover from disasters.

- Output 4.1:** Model disaster action plans for use at district, thana and union levels, and guidelines on preparing such plans including hazard mapping and vulnerability analyses.
- Output 4.2:** Disaster action plans, including hazard maps and disaster profiles, prepared by the Disaster Management Committees in the selected (most disaster prone) districts and thanas, and in unions within those thanas.
- Output 4.3:** Enhanced public awareness in the selected, most disaster-prone thanas, of actions that can be taken at household and community levels to reduce losses due to the the particular hazards they face, and to cope with and recover from disasters that do occur.

**Immediate Objective 5:** Promote proven local-level risk reduction ("proofing") measures and develop post-disaster assistance strategies to maximize recovery benefits.

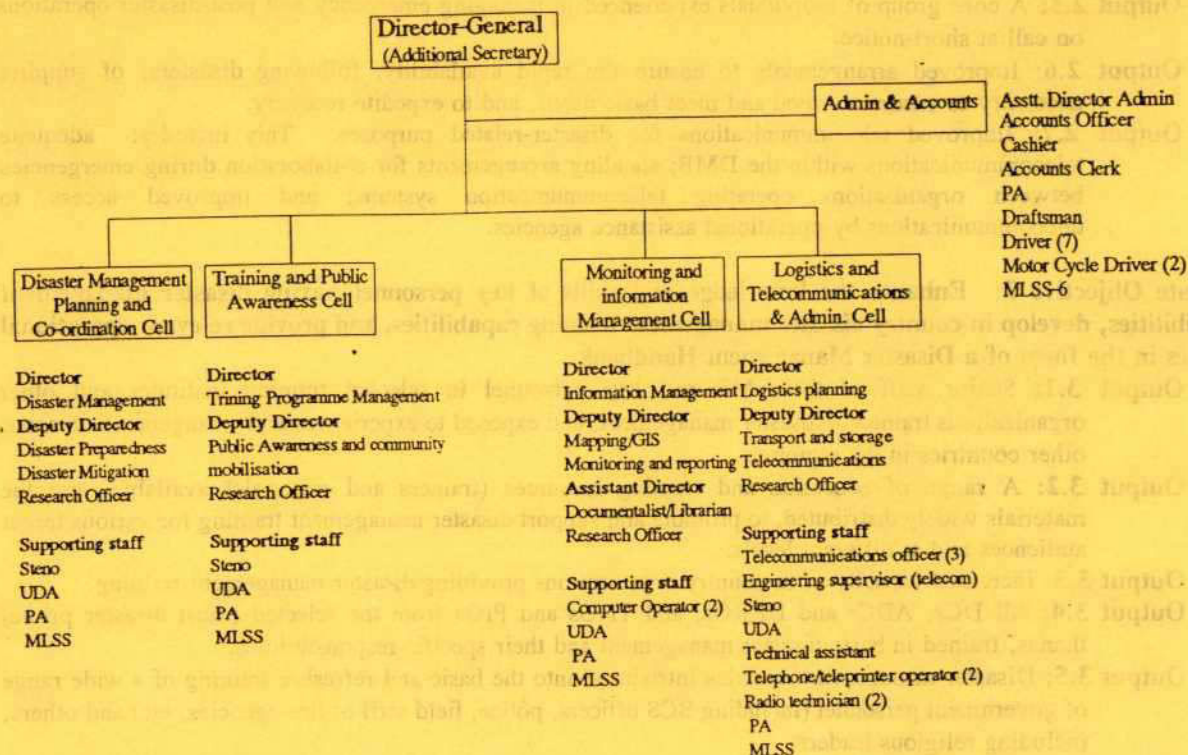
- Output 5.1:** Tried and tested, low-cost techniques for 'proofing' (risk reduction) measures to reduce damage and losses at household and community level in rural and urban areas.
- Output 5.2:** Recommendations concerning the viability of insurance against flood and cyclone damage for particular population groups, and/or mutual savings schemes.
- Output 5.3:** Recommendations for improved strategies for assistance to disaster-affected populations to promote rapid and sustainable recovery, and the ways in which these assistance strategies could be tested and progressively introduced.

**Immediate Objective 6:** Improve the effectiveness of warnings and warning dissemination systems, and the guidelines for facilities at shelters and evacuation sites for populations in high-risk areas.

- Output 6.1:** Improved cyclone warnings providing more specific information to threatened populations.
- Output 6.2:** Improved local-level flood warning dissemination systems.
- Output 6.3:** Improved guidelines for facilities at shelters and other safe (evacuation) sites in the high-risk cyclone and flood-prone areas, and their management.



Figure S.3  
Core Structure for the Disaster Management Bureau  
(Operational structure during normal times)



3.4 DMB activities during the first three years will focus particularly on cyclone and flood risks. Community education and mobilization, training workshops, and the development of local-level Disaster Action Plans, will focus on the particular hazards to which particular localities are prone.

3.5 The technical assistance and related inputs will help DMB at national level and in disaster prone areas. At the end of the PI period, DMB itself and training and other activities will be sufficiently well-established for the work to be continued by the regular staff of the DMB without further external support.

#### Annual Work Plan

3.6 Annual work plans will be defined and approved each year by the Inter-Ministerial Disaster Management Coordination Committee (IMDMCC) in meetings attended by UNDP, UNICEF and other development partners.

#### Inputs

3.7 The Government will provide inputs in kind, the regular staff of the DMB, including normal allowances, and local costs for the provision and maintenance of office premises; all utilities and taxes.

3.8 UNDP and other development partners will provide technical assistance, vehicles, and essential office supplies, computing and other equipment as listed in Table S.4, overseas training fellowships and study tours, and funds for field research and for the production of the Disaster Management Handbook, other guidelines and plans. Figure S.4 shows the technical assistance inputs on a bar chart.

3.11 UNICEF will support community mobilization and in-country training activities including: needs assessments and related research; the development and production of materials for sensitization, training and community mobilization; direct operating costs associated with the training and community mobilization activities. UNICEF field staff are expected to provide advice and assistance to district and thana level officers in the actual organization of field activities.



TABLE S.4  
Inputs

Description		(nr)	Length of input (months)	Total input (months)
<b>1. GOB</b>				
Staff				
Director General, DMB		1	36	36
Senior Specialists (Director)		4	36	144
Specialists (Deputy Directors) and other officers		18	36	648
Supporting staff		41	36	1476
Office rent, Utilities and Operating costs and CDVAT		—	—	—
<b>2. Technical Assistance and Related Inputs of UNDP and Co-financing Donors</b>				
International consultants—Details on Figure 6		2	—	33
Visiting international consultants		—	—	16
National consultants		4	12-24	75
Visiting national consultants		—	—	20
Zonal Disaster Preparedness Specialists (national)		6	30	180
Supporting Staff		11	36	396
Overseas Fellowships and Study Tours		—	—	—
Production of plans, handbooks etc. (incl. translation)		—	—	—
Field research studies		—	—	—
Expendable equipment (Stationaries, software etc.)		—	—	—
Non-expendable equipment		—	—	—
Vehicles (6 x 4WD, 1 x Saloon)		7	—	—
Miscellaneous Support Cost		—	—	—
Vehicle Operations and Maintenance		—	—	—
<b>3. Input of UNICEF</b>				
In-country training and local level planning		—	—	—
Public Awareness and Community Mobilisation		—	—	—
<b>4. Evaluation:</b>				
UNDP		—	—	—
UNICEF		—	—	—

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#### 4. RISKS

The major risks inherent in this PI are loss of interest by Government, failure of Government to take the necessary administrative steps to ensure success and failure to reach the most vulnerable groups and achieve effective community mobilization.

#### 5. PRIOR OBLIGATIONS AND PREREQUISITES

##### Prior Obligations

5.1 The Government will establish the NDMC and IMDMCC as standing bodies, establish the DMB, appoint a suitable Director-General and designate and prepare suitable premises for DMB.

##### Prerequisites

5.3 Within three months of signature and before any UNDP funds are committed for operational purposes, Government will appoint suitable individuals to all DMB posts and ensure the provision of necessary facilities for DMB.



Figure S.4  
Technical Assistance Inputs  
Staffing Chart

Post	Year 1	Year 2	Year 3	Total MM
<b>International Specialists</b>				
1. Programme Management Adviser	■	■	■	16 (1)
2. Disaster Management Specialist	■	■	■	17
3. Visiting Specialists				3
Training				2
Telecommunications				2
Logistics				3
MIS/GIS				6
4. Unallocated				
			Sub total	49
<b>National Experts</b>				
<b>Dhaka based Specialists</b>				
1. Disaster Preparedness	■	■	■	24
2. Training	■	■	■	24
3. Sociologist/Social Anthropology	■	■	■	12
4. Management Information	■	■	■	15
5. Visiting Specialists (2)				20
Local level planning; local level warning dissemination systems; training materials development; mass communications; folk media; data base management; library science/documentation systems; community mobilization; water transport systems; storage and commodity management etc				
			Sub total	95
<b>Field based Specialists</b>				
Zonal Disaster Preparedness				
1	■	■	■	30
2	■	■	■	30
3	■	■	■	30
4	■	■	■	30
5	■	■	■	30
6	■	■	■	30
			Sub total	180
			Total	324

- (1) The input of the Programme Management Adviser will be provided on an intermittent basis through a separate international contract with OPS.
- (2) Precise requirements to be specified during implementation and be agreed between the Government (NDP) and UNDP.

5.4 During implementation, Government will ensure that the DMB is transferred from the GoB Development Budget to the Revenue Budget and also ensure the rapid consideration of all drafts and proposals prepared by DMB.

5.5 The PSD will be signed by GoB, UNDP and UNICEF. UNDP assistance will be provided subject to UNDP satisfying itself that the prior obligations have been met and that the pre-requisites are likely to be fulfilled.

## 6. EXECUTION AND IMPLEMENTATION ARRANGEMENTS

6.1 Execution responsibility rests with Government which has designated the Ministry of Relief (MoR) as its focal point for all disaster related activities. Within MoR, DMB will be the Executing Agent.

6.2 The Director-General, DMB, will be the National Programme Director (NPD) and be fully responsible for the overall management and accountable for production of the outputs achievement of objectives, and the use of the resources.

6.3 Implementation will be overseen by IMDMCC. UNDP, UNICEF and other development partners will be invited to attend meetings convened to review the progress of the programme.



6.4 Consultants will be selected and appointed following the standard procedures agreed between Government and UNDP. Unless otherwise agreed:

- OPS will serve as Implementing Agent for the appointment of the international Programme Management Adviser (PMA) on an individual basis and for other international consultants through a sub-contract;
- national experts and consultants will be recruited on an individual basis;
- local procurement and contracts for studies, the production of materials, implementation of overseas training and study tours funded by UNDP will be undertaken by DMB;
- funds for other in-country activities, financed by UNDP, will be advanced by UNDP to the DMB; and
- all procurement for studies and the production of materials funded by UNICEF will be undertaken by UNICEF, in consultation with the NPD; and
- UNICEF will finance various in country training workshops and related activities.

## 7. MANAGEMENT AND COORDINATION ARRANGEMENTS

7.1 NPD, advised by PMA will be responsible for the management of the PI.

7.2 IMDMCC will meet at least every three months to:

- consider the proposed annual work plans;
- monitor the implementation of the PI, provide guidance to NPD, and make recommendations for action;
- review and take account of recommendations by independent assessors and by UNDP evaluations;
- ensure co-ordination with other ministries and agencies; and
- act as an effective link between and among the various operational bodies,

7.3 A meeting of IMDMCC will take place within three months of the start of the PI to approve the work plan for the first year and agree complementary actions. The meetings after 9 and 21 months will consider the work plans for the second and third years. NPD will submit a brief report to each IMDMCC meeting.

7.4 The Focal Points Operational Co-ordination Group (FPOCG) will provide the forum for regular inter-sectoral consultations and co-ordination in relation to all disaster management activities.

7.5 A broad-based standing Disaster Management Training and Awareness Task Force (DMTATF) will serve as a consultative and advisory committee in relation to the planning, implementation and monitoring of the training, communications and community mobilization activities. Membership of DMTATF will be decided by mutual agreement between the NPD, UNICEF and UNDP, and approved by IMDMCC.

## 8. MONITORING, REPORTING AND EVALUATION

8.1 Progress will be subject to joint review by Government, UNDP and UNICEF, at least once every 12 months through a process of Annual Programme Reviews (APRs). NPD shall prepare and submit a Programme Progress and Evaluation Report to each APR.

8.2 Regular progress reports will be prepared by the NPD, assisted by the technical assistance personnel, at the end of month 3 and thereafter at six-monthly intervals. Report, will be submitted within one month of the end of the period concerned. The report prepared at the end of Month 33 will be the Draft Terminal Report and it will be reviewed at the Terminal Review meeting.



8.4 The Programme Intervention will be subject to two evaluations one after 12 months and a final one after completion of the PI. UNDP will establish the terms of reference for and organize the evaluations.

## 9. BUDGETS

9.1 Table S.5 shows the consolidated budget contributions of UNDP and its co-financing donors and GoB over the three year PI period.

## 10. LEGAL CONTEXT

10.1 The PSD is the instrument referred to as such in Article 1 of the Standard Basic Agreement between the GoB and UNDP signed on 25 November 1986. The host country Implementing Agency shall, for the purpose of the Standard Basic Agreement, refer to the government Cooperating Agency described in that Agreement.

**TABLE S.5**  
**Support to Comprehensive Disaster Management**  
**Cost Estimates for Three Years (1993/96)**

Description	Total Cost (US\$ 000)
<b>Government of Bangladesh</b>	
Establishment Costs	412
Office rent	76
Utilities	197
CDVAT	177
Travelling and other allowances	91
Office Operation and Maintenance	68
<b>Sub-Total for GoB</b>	<b>1021</b>
<b>Technical Assistance and Related Inputs from UNDP and other Development Partners</b>	
10. Personnel	
10.51 Programme Management Adviser	272
15. Duty Travel	50
16. Evaluations	120
17. National experts	465
<b>Component 19 Total</b>	<b>907</b>
20. Sub-Contract	
21.10 International consultants, support staff, vehicle O/M	791
22.01 Local field studies	160
<b>Component 29 Total</b>	<b>951</b>
30. Training	
31. Fellowships	96
32. Group Training (Study Tours)	72
33. In-service Training	195
<b>Component 39 Total</b>	<b>363</b>
40. Equipment	
45. Local Procurement	52
46. International Procurement	220
<b>Component 49 Total</b>	<b>272</b>
50. Miscellaneous	
52. Reporting Costs	5
53. Sundry	15
<b>Component 49 Total</b>	<b>20</b>
<b>Sub-Total for UNDP etc.</b>	<b>3534</b>
<b>Assistance from UNICEF</b>	
Research	252
Training	459
Development and Production of Materials	420
Advocacy/Promotion	300
Operational Cost	69
<b>Sub-Total for UNICEF</b>	<b>1500</b>
<b>Total</b>	<b>5034</b>



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**SUPPORT TO  
COMPREHENSIVE DISASTER MANAGEMENT**



**A. PREPARATORY PROCESS**

**A.1 Concept of Comprehensive Disaster Management**

'Disaster Management' includes all aspects of planning for and responding to disasters. It refers to the management of both the risks and the consequences of disasters, and includes:

- (i) the incorporation of preventive/mitigation measures into overall development plans and activities at all levels in disaster-prone areas: this may include structural and non-structural measures to reduce the risks of disaster occurring and the consequences of those that cannot be prevented;
- (ii) preparedness plans and related measures in disaster-prone areas to warn people of imminent threats and organize appropriate emergency responses, when necessary: this includes forecasting, warning dissemination systems, and standing arrangements for evacuation and the organization of rescue, relief and short-term rehabilitation activities;
- (iii) emergency response to disasters when they occur, including rescue, relief, short-term rehabilitation (including repairs); and
- (iv) post-disaster reconstruction/long-term rehabilitation.

This broad concept is relatively new to Bangladesh where many people have understood 'disaster management' to mean only the management of an actual disaster situation, i.e. to be concerned only with the response to disasters. The prevention/mitigation of and preparedness for disasters have been considered separately, if at all.

The first serious attempt within the Government to consider disaster management in its wider context, including preventive measures and preparedness as well as response, has been made in the context of the UNDP-assisted project BGD/91/021 (Assistance to Ministry of Relief). Under this project a list of basic concepts and definitions has been drawn up including Bangla equivalents. This is reproduced in **Annex I**. The various component activities included in comprehensive disaster management are shown diagrammatically in **Figure 1**.

Although a large number of relevant measures have been taken, or are planned, the Government has yet to integrate all the necessary measures into an overall Comprehensive Disaster Management Programme (CDMP). It is expected that this will be done in the context of the present Programme Intervention (see **B.2** below).



## A.2 Evaluation of Past Experience

There have been few formal evaluations of the government's disaster management activities, but many review meetings and reports, by government and non-government personnel, have identified perceived weaknesses and made recommendations for improvements.

The Flood Policy Study, supported by UNDP, and the subsequent Flood Action Plan, prepared by the World Bank, identified a number of both structural and non-structural measures, including disaster preparedness, that, subject to further analysis, should be envisaged to reduce losses due to floods. Under the UNDP-assisted Project BGD/91/021, a review has been made of a large number of available reports, and discussions have been held with knowledgeable people from a wide variety of backgrounds both individually and in the context of small workshop sessions. This has led to a broad, if informal, consensus concerning the main weaknesses and the priority measures that need to be taken to improve disaster management in general in Bangladesh, with particular attention to risks associated with cyclones and floods.

Many practical measures have been suggested requiring action at various levels. The main, general lessons are:

- the need, at all levels (national to household), for more adequate attention to be given to preparedness and to possibilities for action to reduce risks and losses through 'proofing' and small-scale protection measures; and
- the need, at all administrative levels, for relevant training and better co-ordination of activities between line ministries/departments/agencies, and between the civil authorities, the Armed Forces, PVDs, voluntary organizations, and professional associations, in relation to preparedness, 'proofing', and disaster response.

Bangladesh has, in fact, fairly well developed procedures for managing the consequences of natural disasters: it has made considerable efforts and been fairly successful in organizing disaster relief operations within the limits of the resources available. Until now, however, much has been done on an 'ad hoc' basis rather than on the basis of advance planning and few people have received any relevant training and practical guidelines.

Although the Standing Orders for Cyclone issued in 1985 and Emergency Standing Orders for Flood issued in 1984 list pre-disaster responsibilities for many ministries and agencies, and assign specific preparedness responsibilities to Ministry of Relief (MoR), DCs, thana and union-level authorities, little has been done in practice in relation to preparedness, at least within the civil administration and line ministries/agencies.

No specific mechanisms or programmes have yet been established to promote preparedness or local-level proofing activities. Although the need for high-level inter-sectoral co-ordination committees to give attention to these aspects is recognized in the standing orders, such committees have not, apparently, met in this connection. In practice, little has been done to date to realize the objective of improved disaster preparedness.



# Main Phases and Activities in Disaster Management

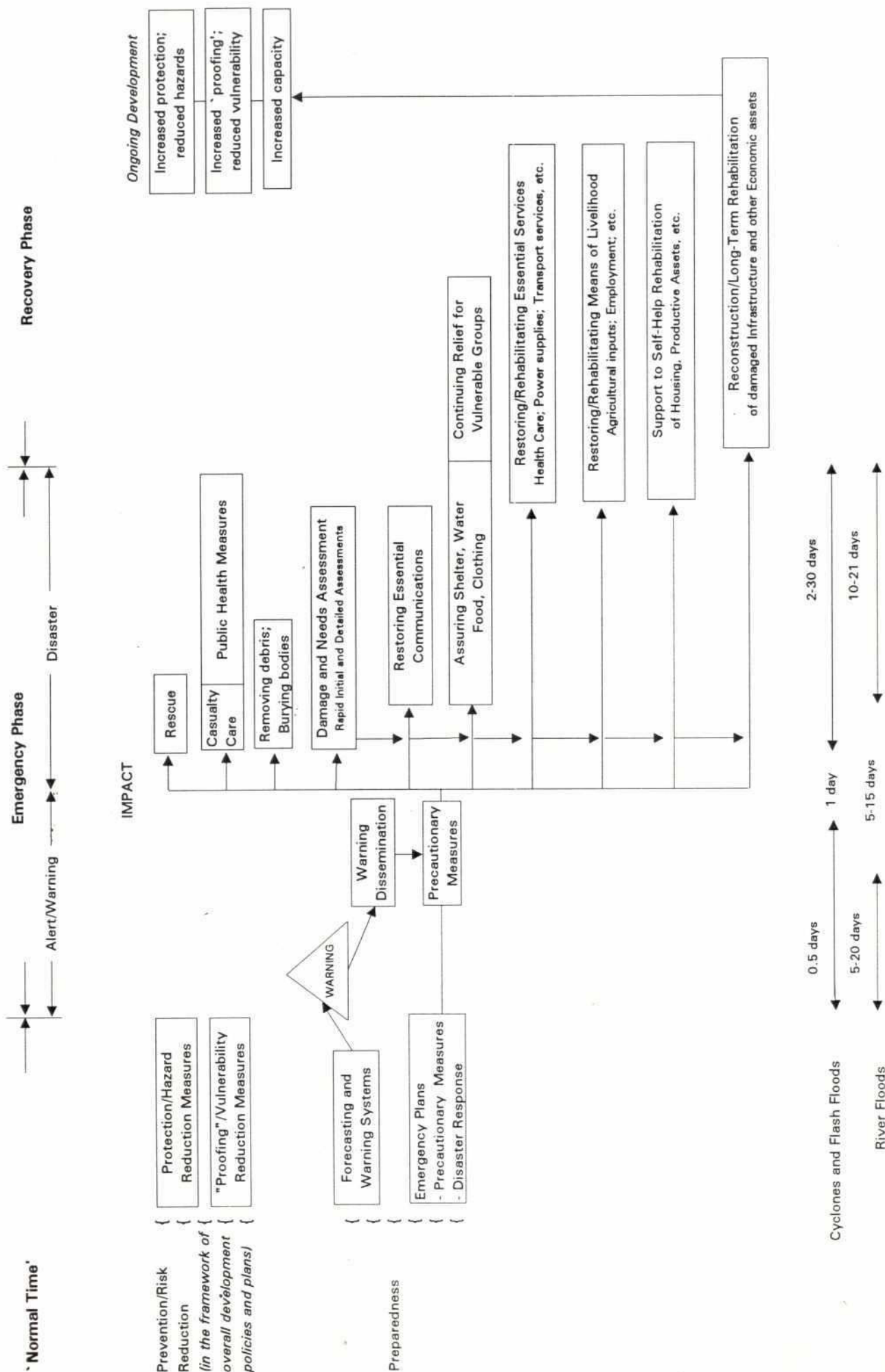


Figure 1



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National-level forecasting arrangements exist for cyclones and floods, managed by the BMD and BWDB respectively.<sup>1</sup> The main 'preparedness' programme is that of the CPP, established by the Red Crescent (following the 1970 cyclone) and administered jointly by the MoR and the BDRCS. This has established an impressive mechanism for the dissemination of warnings with a view to ensuring timely evacuation of people from threatened coastal areas in the face of an imminent cyclone threat. Apart from this, little has been achieved by way of helping local communities or the civil administration to prepare for and cope with cyclones, floods, or other potentially disastrous events. And there is also a need to improve the content of cyclone warning messages.

Apart from the Armed Forces, which have Standard Operating Procedures (SOPs), only the Ministry of Agriculture (Department of Agricultural Extension) has issued detailed departmental instructions and guidelines, and even these have not been followed up with any related training. The Ministry of Health is now developing an emergency preparedness and response programme, with assistance from the Italian Government and WHO.

The need for new arrangements to give proper attention to disaster management has been widely recognized, and was specifically referred to by the President of Bangladesh in his address on the occasion of IDNDR Day, 14 October 1992, when he spoke of the need for 'A separate organization' to take care of these important tasks.

### A.3 Needs Assessment

The costs of disasters are high. They are described in **Section B**, below. Those resulting from the unprecedented floods in 1987 and 1988, and the devastating cyclone of 1991, were particularly high. The indirect costs are also high in terms of the resources that have to be diverted from other, development-oriented activities. The need is to reduce the adverse effects of similar events in the future.

The studies made during the course of BGD/91/021 have confirmed the findings and recommendations of previous studies and reports, notably the need for improved institutional arrangements and enhanced management and operational capacity. A range of tasks/activities have been identified that need to be accomplished.<sup>2</sup> They relate to:

- i) Establishing national-level policies, plans and guidelines; improving inter-sectoral (inter-ministerial/agency) co-ordination; arranging training; and providing specialist disaster management services (advice and practical support) to all concerned agencies and, most importantly to the civil administration and the disaster management committees at district level and below.
- ii) Strengthening existing institutions and co-ordination mechanisms in the field, at district, thana and union levels, and putting emphasis on preparedness and 'proofing'; providing guidelines, training, and back-stopping support to improve preparedness at all levels.

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<sup>1</sup> BMD operates the Storm Warning Centre, and BWDB the Flood Forecasting and Warning Centre / Information Centre.

<sup>2</sup> See BGD/91/021 - Final Report : Volume III.



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- iii) Organizing extensive public education and community mobilization activities at community (village) level to promote greater awareness of what can be done at that level in relation to preparedness, 'proofing' and response, and to encourage and help communities to take appropriate action.
  - iv) Promoting a number of specific, practical measures to develop and test 'proofing' techniques; improve warning systems; establish mechanisms to mobilize resources (human and material) to support preparedness, 'proofing' and response operations.

Related functions that are vital but have not been undertaken by, or even been the formal responsibility of, any existing government entity to date include:

- i) Establishing improved arrangements for the assessment of damage and needs following a disaster, including formats, methodologies, and related training, and arrangements for rapid reconnaissance by experienced personnel;
- ii) Developing specific expertise and management systems for the overall management and co-ordination of emergency response operations, and providing expert staff support to the high-level decision-making bodies;
- iii) Integrating the capabilities of the civil administration, the Armed Forces, the PVDs, professional and other organizations, in relation to all disaster-related activities;
- iv) Promoting wider knowledge of disaster risks and the possibilities to mitigate those risks, and the systematic inclusion of disaster risk considerations in all development planning.

The need has been confirmed for active, high-level co-ordination mechanisms, supported by a specialist disaster management unit, to ensure inter-sectoral co-ordination and overall direction of disaster mitigation and preparedness activities, and post-disaster rehabilitation, not just disaster relief as has been the case in the past.

The basic requirements identified for an effective disaster management programme and associated specialist unit are:

- i) A respected leader and the right staff: energetic, motivated individuals with broad knowledge and practical experience in relevant specializations including disaster preparedness, emergency management, logistics, communications, field surveys and assessment, data analysis, monitoring and evaluation, training and public information/education, community mobilization.
- ii) Sustained high-level direction and support, enabling the specialist unit to:
  - perform an effective co-ordination role in the name of a high-level inter-sectoral/inter-ministerial authority; and



- assure effective co-operation and co-ordination between the civil and military authorities (ensuring appropriate support from the Armed Forces to the civil power).
- iii) Strong administrative, as well as political, backing to ensure the allocation of needed resources the assignment of appropriate staff, by a combination of direct recruitment and secondments from other ministries, agencies, or the Armed Forces, and to take care of associated administrative aspects.
- iv) The right location for the specialist unit: suitable premises which are readily accessible to all concerned and interested parties, including personnel from ministries, line agencies, the Armed Forces, technical institutions, PVDOs, and donors.
- v) The necessary facilities: good telecommunications, computers, stand-by generators, a suitable operations/conference room, up-to-date large-scale maps, adequate parking for officials and other important contact persons visiting during an emergency, etc.

A study financed by UNICEF, undertaken in Hatiya in 1992/3 has complemented the information available from earlier research concerning the possibilities and most effective mechanisms for increasing awareness at community level and promoting self-help risk reduction measures.

#### **A.4 Policy Dialogue**

Following the floods of 1987 and 1988, a project for Disaster Preparedness was envisaged as part of the Flood Action Plan (as Flood Action Plan Project 11 - FAP:11, see **Annex IV**). A central objective and output of the project was to be the establishment of a special disaster preparedness/management unit to plan and co-ordinate disaster-related activities. In early 1989 it was proposed, and agreed by the Government, UNDP, and other potential donors, that the special unit would be established in the President's Secretariat. Later, it was indicated by the Government that the unit should be in the MoR.

UNDP has supported the principle of comprehensive disaster preparedness, the establishment of a specialist unit within the Government structure, and the preparation of a relevant project proposal. The process started in 1989 with what was intended to be BGD/88/056, 'Comprehensive Disaster Preparedness' (FAP:11). A number of drafts were prepared and discussed during the period 1989/91 (drafts dated 1.2.89; 4.3.89; 27.5.89 and 24.1.90) with inputs from several international consultants and the involvement of UNDRO in arranging a 'Brain Storming' session in December 1989. However, it proved difficult to define and achieve the necessary consensus on a number of important institutional aspects.

Following the cyclone in April 1991, a short-term project BGD/91/021 was taken up. This aimed at providing assistance in relation to certain aspects of the post-cyclone rehabilitation programme. It also included a number of the activities originally envisaged for the first phase of the intended comprehensive preparedness project as well as the preparation of final proposals and documentation for that longer-term project, which has now been renumbered and become the present Programme Intervention. The objectives and outputs of project BGD/91/021 are summarized in **Annex III**.



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During the course of Project BGD/91/021, the wide variety of tasks involved, and the complex and inter-sectoral nature of the issues, have become clearer. They have been thoroughly discussed, notably with the Professional Panel and Steering Committee of BDG/91/021, with FPCO and other concerned bodies.

UNICEF has contributed substantially to the broad-based consultations related to the training and awareness/community mobilization aspects.

The Steering Committee is chaired by the Member (Programming and SEI) Planning Commission and includes Secretaries from the Ministries of: Relief; Agriculture; Environment/Forests; Irrigation, Water Development and Flood Control; Health; Defense; Establishment; Education; Finance; and Local Government, together with Additional Secretary, Cabinet Division. It is responsible for considering and approving on behalf of the Government all reports and recommendations prepared by BGD/91/021. At its meeting on 28 January 1993, the Committee endorsed the concept of the specialist disaster management unit to undertake the duties described in Section B.4.

The Government has now taken steps to establish the specialist unit, the Disaster Management Bureau (DMB), and has fully endorsed the proposals described in this Programme Support Document.

#### **A.5 Role of UNDP, UNICEF and Other Development Partners**

As the lead agency within the UN system, UNDP has a significant role in supporting the International Decade for Natural Disaster Reduction (IDNDR) which was proclaimed under UN General Assembly resolution 44/236 of 1989. The UNDP Resident Representative, in his capacity as the UN Resident Coordinator, also acts as the 'de facto' coordinator of the international community in the event of a major disaster in Bangladesh.

UNDP has been to the forefront of development partners in actively supporting GoB's efforts to reduce the social, economic and environmental effects (costs) of the natural disasters that frequently affect Bangladesh. The fifth UNDP Country Programme (July 1991 - June 1995) highlights the acute vulnerability of Bangladesh to natural disasters and the particularly devastating impact these have on the poor. It stresses the need to develop more effective disaster preparedness and management programmes.

Since the unprecedented floods of 1987 and 1988, UNDP has supported the Flood Policy Study and the development of the Flood Action Plan (FAP). UNDP has provided assistance to the FAP Co-ordination Organization (FPCO) and funding for the post of FAP Resident Coordinator (appointed by the World Bank), and has participated directly in the planning, and implementation of a number of related projects. UNDP-assisted projects in this connection and following the major cyclone of April 1991 include:

BGD/86/037	South East Regional Water Resources Study (FAP:5)
BGD/88/038	South West Area Water Resources Management Project (FAP:4)
BGD/88/060	Flood Policy Studies, including a Flood Disaster Preparedness report by F.C. Cuny.
BGD/88/013	Improvement of Flood Forecasting and Warning System.
BGD/88/055	Technical Assistance Programme for Flood Protection.
BGD/89/046	Support to Flood Action Plan



BGD/90/004	Support to Flood Action Plan
BGD/91/007	Institutional Study (FAP:26)
BGD/91/021	Assistance to the Ministry of Relief in the Coordination of Cyclone Rehabilitation
BGD/91/025	Multi-Purpose Cyclone Shelter Programme
BGD/92/014	FAP Coordination : Phase II

In addition, UNDP has supported the development of proposals for comprehensive disaster management, as described in Section A.4 above.

UNICEF has supported a pilot study in relation to community awareness and mobilization in Hatiya (a thana in the high-risk cyclone belt), and has include some funds for disaster management activities, focusing on training and community mobilization, in their country programme 1993-5. UNICEF have been extensively involved in the process of preparing the training strategy that is expected to be implemented by the DMB during the period of the present Programme Intervention, and is expected to provide most of the external funding required to implement the in-country training activities.

The regular programme of UNICEF also includes many activities that contribute towards preparedness and risk reduction at the community level. This includes support to immunization, oral rehydration therapy, rural water supply and public health education.

The British Government (ODA) has supported and continues to support disaster management training through the provision of up to four fellowships each year to enable civil and military officers to attend courses at the Cranfield Disaster Preparedness Centre (CDPC) in UK. The former Director of CDPC, now involved in this training as a consultant, has contributed informally to the review and refinement of important elements of the present Programme Intervention proposals.

USAID has funded the Flood Action Plan studies concerning flood response and possibilities for flood proofing (FAP:14 and FAP:23), and Geographical Information Systems (FAP:19) and will fund the participation of DMB staff in the Disaster Managememnt Training course of the Asian Disaster Preparedness Centre.

PVDOs are major contributors to relief efforts following disasters, and a number of PVDOs are now taking up programmes for disaster preparedness and mitigation. PVDOs are included in the disaster management committees at district, thana and union levels, and will be full partners in the implementation of the present programme intervention.

#### **A.6 Responsibility of Programme Intervention Preparation**

This PSD has been prepared by the MoR Disaster Coordination and Monitoring Unit (DCMU) established in June 1992 and its successor, the Disaster Management Bureau (DMB). Both have been directed by a Joint Secretary of the MoR on a part-time basis and supported by technical assistance personnel provided under BGD/91/021 by international and national consultancy firms. A Professional Panel of senior civil, military, academic and PVDO officers, under the chairmanship of a former Cabinet Secretary, advised and assisted the DCMU in its work.



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The drafting process involved a comprehensive review of previous documents (including the drafts prepared earlier for FAP:11) and detailed discussions with concerned GoB agencies, including: MoR, FPCO, BMD, BWDB Flood Forecasting Centre, Armed Forces Division, Planning Commission, officials of UN agencies, BDRCS, concerned PVDOs, and consultants engaged in related programmes and projects.

The process commenced in May 1992 and a draft programme document was issued in November 1992. The draft was substantially modified and refined through a process of consultation with MoR, FPCO, the Professional Panel of BGD/91/021, UNDP-Dhaka and UNDP New York. Following further review and modification the PI was considered at a Programme Appraisal Committee (PAC) meeting on 25 July 1993 in UNDP Field Office, Dhaka. This document is a result of the modifications requested at that meeting.

Meetings of a broad-based working group on training and community mobilization (including representatives of Government, UNICEF, national training institutions, the Armed Forces, and PVDOs) contributed to the refinement of that important component.



## B. DEVELOPMENT CONTEXT

### B.1 Description of the Subsector and Problems to be Addressed

#### a) Demography and Land Use

Population density is increasing in all parts of the country both rural and urban (where the density is increasing most rapidly). The number of people 'at risk' in each disaster-prone area is therefore increasing. Within the total, the number of very poor people, who are vulnerable to any level of disaster, is increasing.

The pressure on land is such that newly accreted char land is immediately occupied for agricultural use while, at the same time, land in the active floodplain and active coastal areas is continually being eroded, in the natural processes of erosion and accretion. Increasing numbers of poor people have no option but to live and work (farm) in locations that are known to be exposed to considerable risks both along the coast and in flood-prone areas. In some cases, whole families migrate to exposed char areas, often working on land that is owned, or controlled, by landlords who live in safer areas inland. The coastal area also attracts large numbers of transient/seasonal workers for fishing, harvesting, salt and shrimp production. As many of these people are not indigenous to such hazardous areas, traditional coping mechanisms are not always practised.

#### b) Incidence and Impact of Natural Disasters

The major natural disasters to which Bangladesh is subjected are cyclones, floods, river bank erosion, tornadoes, and droughts. The country is also in a seismic zone and there are records of earthquakes that have occurred and caused significant damage. **Table 2** lists major disasters recorded during the last 400 years.

Cyclonic storms are frequent in the Bay of Bengal, but severe cyclones that result in large numbers of casualties and extensive damage are fortunately rare. However, in the last fifty years, such severe cyclones, and their accompanying storm surges, have been responsible for the largest number of disaster-related deaths, as well as considerable losses to agriculture, forests, and damage to infrastructure in the coastal areas.

Experience in 1991 and before has shown the effectiveness of coastal embankments and associated afforestation in reducing losses and damage, and the life-saving potential of shelters and any form of pucca building, *provided* they are sufficiently accessible and people understand the seriousness of the threat in time. Various studies have shown that people evacuate to safer sites if:

- they are convinced that their lives are in immediate danger;
- they assess the risk of death to be greater than the risk of their land and property being stolen in their absence; and
- there is time to reach known safe sites.



TABLE 2  
Bangladesh : Major Natural Disasters

Year	Type of Disaster	Deaths
1644-45	Floods	+
1648	Floods	+
1769-70	Drought	+
1783-84	Drought	+
1797	Cyclone	+
1833	Earthquake	+
1822	Cyclone	40,000
1865-66	Drought in West Bengal, present Bangladesh largely escaped	135,000
1871	Floods (Rajshahi)	+
1873-74	Drought	+
1876	Cyclone	100,000
1885	Floods (Rajshahi/Dinajpur)	
1892	Floods (Rangpur/Dinajpur)	
1896-97	Drought	+
1897	Earthquake	+
1897	Cyclone	+
1898	Cyclone	175,000
1906-7	Floods in East Bengal	+
1901	Cyclone	+
1909	Cyclone (2)	+
1911	Cyclone	+
1917	Cyclone	+
1918	Earthquake	+
1918	Floods	
1919	Cyclone	+
1922	Cyclone	+
1922	Floods	
1923	Cyclone	+
1926	Cyclone	
1936	Cyclone	
1941	Cyclone	+
1942	Cyclone	+
1943-44	Drought, irregular rain, transport dislocation and War, includes West Bengal	3,000,000
1947	Earthquake	
1950	Earthquake	
1954	Earthquake	
1955	Floods	+
1957	Earthquake	
1960	Cyclone (2)	11,149
1961	Cyclone	11,468
1963	Cyclone	11,520
1964	Cyclone	196
1965	Cyclone	19,270
1966	Cyclone (2)	850
1969	Cyclone	75
1969	Tornado	922
1970	Cyclone	300,000
1972	Drought	+
1973	Cyclone (2)	103
1974	Cyclone	20
1974	Floods followed by famine	30,000
1975	Cyclone	5
1975	Floods	+
1977	Cyclone	+
1978/79	Drought	+
1981	Cyclone	2
1982	Drought	+
1983	Cyclone(2)	343
1984	Floods	+
1984	Cyclone	
1985	Cyclone	11,069
1986	Cyclone	14
1987	Floods	1,657
1988	Floods	2,379
1988	Cyclone	5,708
1989	Drought	+
1991	Cyclone	138,868

Source : BBS, 1990; Munir-uz-Zaman, 1990; CDL, 1992a; Kafiluddin, 1991; ADB 1991a; Mahalanobis, 1927; Gp. Capt. Syed Ahmed, 1985.

+ : No data found



Extensive river floods cause great disruption and damage to infrastructure, and the loss of crops and other property can be the 'last straw' for subsistence farmers and others already struggling to survive. However, there is little evidence of any significant negative effects on aggregate annual agricultural production. In fact, major floods are typically followed by bumper harvests, due to increased water retention and the increased efforts of all concerned to increase production from the next crop. The economic costs involved are important, however, and there are also significant social costs. Floods indirectly contribute to the concentration of land ownership and wealth as small landowners, who lack resources to carry them over and cannot obtain credit, are forced into 'distress selling'. Their land is bought up by rich landowners who then profit from the subsequent bumper crop. Storm surges associated with cyclones have similar effects.

Flash floods cause considerable, localized damage to crops, fish ponds, property, and infrastructure, particularly in the north, north-east and east of the country.

BWDB data show a declining trend in the total area flooded each year, but with wide annual variations as illustrated by the exceptional floods in 1987 and 1988.<sup>3</sup> Various factors are assumed to be at work, including river embankment construction in both Bangladesh and India, and the Farakka barrage. In spite of this, and of the fact that cropping patterns have been modified over the years where increased irrigation has reduced reliance on traditional aman and other crops vulnerable to monsoon flooding, floods continue to constitute a significant disaster risk.

River bank erosion along many rivers, both major and minor, carries away land and destroys houses and other structures. It has been estimated that approximately one million people are affected by erosion every year.

Historically, drought-induced famines were a major killer, but the effects of drought have been considerably reduced, for the time being, by increased access to irrigation and by the provision of food aid. Nevertheless, drought remains a threat to the livelihoods of many subsistence farmers and agricultural labourers, particularly in the north-west of the country.

Tornadoes cause localized devastation in widely scattered areas, and demand an immediate response. Landslides occur in hilly areas, triggered by heavy rains.

The country is situated in a seismic zone and the risk of an earthquake causing serious damage to infrastructure, including embankments and other flood control structures, is real. The risk of earthquake is highest above (north) of a line from Rangpur to Comilla.

### c) 'Man-made' Disasters

Increases in population, population density, and industrialization in urban areas have considerably increased the risks associated with major fires, industrial and other accidents. These risks are further increased by the growth of unplanned squatter settlements as increasing landlessness, unemployment, and poverty, forces people to migrate from the rural areas.

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<sup>3</sup> See BGD/91/021 : Final Report Volume II.



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The current Rohingya refugee influx has highlighted the implications of and the need to be able to respond to the considerable demands imposed by population displacements arising from political or other causes.

In addition, human activities are increasing the vulnerability of many people to natural phenomena, and increasing the risks of 'natural' disasters. Examples include the closure of natural drainage channels by unplanned settlements, and the diversion, in India, of dry season flow of the Ganges which significantly reduces fresh water flows and groundwater replenishment in the south west of Bangladesh.

#### **d) Disasters and Development: Priorities for Action**

The various disasters and disaster risks referred to above have caused, and/or have the potential to cause, major setbacks to the process of development, both locally and nationally. Setbacks result from both direct losses of life and economic assets, and the indirect costs associated with the diversion of resources to meet short-term relief and repair/rehabilitation needs. Development is retarded and poverty accentuated.

Attention to and improved performance in disaster management are essential for economic as well as humanitarian reasons. The various aspects of disaster management directly influence, and are themselves affected by, 'development'. They are, and must be considered and planned as, an integral part of the development process, not as separate, peripheral activities.

#### **e) UNDP Thematic Priorities**

The present Programme Intervention is directly relevant to all six UNDP priority themes for capacity building, as specified in UNDP Governing Council decision 90/34: poverty alleviation; grass-roots participation; the environment; management development; technical cooperation among developing countries; transfer of technology; and women in development issues. The degree to which they are likely to be addressed is summarised in **Table 3**.

The poor and disadvantaged groups are almost always the worst affected by disasters, and many are pushed deeper into poverty through the loss of employment and income-earning opportunities as well as of the few resources they possess. The activities that aim to mitigate the effects of disasters, through local-level proofing measures, for example, should help to reduce those losses. The improvement of warning systems and enhancement of preparedness among local communities, and within local and national government structures, should contribute to reducing losses of life and resources. This, together with the refinement of policy guidelines and the provision of training to officials and others, should also serve to ensure that relief and rehabilitation assistance is organized and targeted more effectively on the basis of objective assessments of need. All these measures should benefit the community as a whole. They should be of relatively greater benefit to the poor and reduce the numbers being totally dispossessed and marginalized by disasters.



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**TABLE 3**  
**Thematic Matrix**

Theme	Theme Description	Specific	Integrated	Relevant
1.	1.1 Poverty Alleviation		**	
	1.2 Grass-root Participation	***		
2.	Environment and Natural Resources		**	
3.	Management Development		**	
4.	Technical Cooperation among Developing Countries			*
5.	Transfer of Technology		**	
6.	Women in Development		**	



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A major thrust of the Programme Intervention is to inform and mobilize local communities to initiate relevant preparedness and proofing measures locally, within their own households and collectively at the level of neighbourhoods and villages. Local communities will be encouraged, and helped, to prepare their own plans, to organize the resources available locally to best effect, and to make the best possible use of assistance that is available from outside, through government or PVDO channels. It is also planned to involve people's representatives and PVDOs in the disaster management committees and planning processes at district and thana levels, as well as in national-level forums.

Disaster prevention/mitigation measures are, by definition, designed to protect the natural and man-made environment. The national disaster management policy, and the overall Comprehensive Disaster Management Programme that the present Programme Intervention will help to develop, will eventually contribute to the protection of the environment against risks associated with floods, cyclones, and, eventually, other hazards.

The Programme Intervention is almost entirely aimed at capacity building from community level to the national level. The proposed technical assistance and the specific training components would develop the disaster management capacity, including basic management skills, of the staff of the DMB, a wide range of other government officers, and personnel of associated agencies.

Other countries in the region also suffer from cyclones, floods and other hazards and are in the process of developing, or refining, their capabilities and institutional arrangements for disaster management. A number of study tours are envisaged to promote an exchange of experience with countries such as India, Indonesia, Philippines, and Viet Nam. Some of the planned technical assistance might be mobilized from developing countries whose disaster management capability is rather more advanced than Bangladesh. The proposed UNDP regional project RAS/92/067 is also relevant in this connection and should complement the present Programme Intervention.

Computer-based management information systems and improved telecommunication facilities will be developed to support disaster management activities. The possibility of using GIS techniques to develop planning, management, and training tools in support of disaster management will also be explored. Applications that are found to be both feasible and useful will be implemented/introduced at least on a pilot basis. All would be adapted to the situation in Bangladesh.

Studies indicate that there are proportionately more casualties among women than men during cyclones and floods, and that female-headed households face particular difficulties in coping during the immediate emergency period, in obtaining their share of the assistance that is available, and in recovering after the disaster. Women also face special difficulties in relation to privacy and toileting in congested shelters and other places of refuge. Improved preparedness at local level should help to reduce these practical difficulties. The training and community mobilization activities should result in the special needs of women being considered explicitly both in local preparedness planning and in the provision of assistance during and after an emergency.



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**f) UNICEF priorities**

UNICEF's priorities focus on the well-being, the survival and development, of children and their mothers. This includes helping to reduce their vulnerability to disasters as well as to disease and deprivation.

Many of UNICEF's regular programme activities help to reduce vulnerability and are all the more relevant at times of disaster. At such times, UNICEF's response focuses on intensifying those activities such as immunization, diarrhoeal disease control, handpump sinking and repair. Experience has shown the vital role of communications and social mobilization in enhancing awareness and achieving the changes in behaviour that are necessary for the achievement of the objectives of these different programmes. This experience may now be applied to promoting disaster preparedness at the community (village) level, while seeking to ensure that the special vulnerability and needs of women and children are adequately considered and provided for.

**g) Problems to be addressed**

Cyclones and their associated surges have caused heavy loss of life and damage to infrastructure, and enormous social disruption. Extensive river floods, cyclones and droughts have seriously impaired national development efforts. Flash floods, tornadoes, landslides and river bank erosion have similar effects in localized areas. While these phenomena cannot be prevented, their negative effects can be reduced. The present Programme Intervention aims to address the weaknesses in present institutional arrangements, increase awareness of what can be done, and enhance disaster management capacity at all levels.

**B.2 Government's Objectives, Strategy and Programme**

The objective of the Government of Bangladesh in this sector can be summarised as being to strengthen national capability at all levels to respond effectively to disasters stemming from the impacts of natural hazards including cyclones and storm surges, monsoon and flash floods, earthquakes and droughts, with initial emphasis on cyclones and floods.

Although a Comprehensive Disaster Management Programme (CDMP) is yet to be formulated by the Government, many activities that contribute directly to disaster mitigation are already undertaken, and planned, in various sectoral programmes. A number of these are listed in **Table 4**, which also shows additional elements that could form the core of a CDMP.

The Disaster Management Bureau (DMB) will have, as one of its functions, to formulate a national disaster management policy for consideration and approval by the Government. This would then lead to the formulation, in conjunction with the Planning Commission and other concerned ministries, of an overall CDMP. The technical assistance and related support to be provided to the DMB under the present Programme Intervention, described in this Programme Support Document (PSD), will assist the DMB in its activities during the first three years of its existence and will contribute directly to the development of the national policy and overall CDMP.



**TABLE 4**  
**Elements of overall Comprehensive Disaster Management**

Main Category	Type of activities	Typical interventions	Agencies concerned
Risk analysis	*Hazard mapping *Vulnerability Analysis	– Assessment of physical/economic/functional vulnerabilities	Local Admin LGED, other line agencies
		– Distress/deprivation factors – Nutritional surveillance	Various Ministries, WFP, UNDP, PVDOS MoH, PVDOS
Protective/Preventive (hazard reduction) measures	Planning and construction of embankments and related water-control structures	– FAPs: 2, 3, 4, 5A, 6 – FAPs: 1, 3.1, 7 (CPP-II) 8A, 8B, 9A, 9B, 20, 21, 22	BWDB (FPCO)
Proofing (reduction)	Planning and construction of cyclone proof buildings	– BDRCS, CARITAS and other NGOs – BGD/91/025 Multi Purpose Cyclone Shelter Programme – EEC Schools cum Shelters	Local Admin, LGED, PWD  MoE
	Land use planning	– None in BGD yet (?)	Local Admin
	Development of Building Codes	– Bangladesh Building Code	BRI
	*Local proofing measures	– FAP:23 and flow-up – Houses on raised plinths – Small embankments – Two storey construction.	Local Admin, PVDOS, LGED (BWDB)
Preparedness	*Forecasting/warning dissemination	– BGD/88/013 Support to Flood Forecasting and Warning Unit – FAPs: 10, 25 – JICA Support to BMD – MOR/BDRCS : CPP Programme – WMO Tropical Cyclone Programme	BWDB, BMD, SWMC, BDRCS
	*Contingency planning for response	– Standing Orders, Standard Operating Procedures – Awareness creation and community mobilisation – Formation of action committees – Training and drills – Storage and transport arrangements – Stockpiling and standing arrangements with suppliers	MoR All line agencies, Local Admin, Armed Forces PVDOS
Disaster Relief	Rescue	– Mobilisation and operation of transport (including helicopters, boats) and communications equipment	MoR Armed Forces MoH, MoF, DRR, PVDOS DPHE
	Basic needs (Procurement and distribution of relief)	– Provision and supply of medical care, shelter, food and public health measures etc.	
	*Damage and needs assessment	– Short term needs and assistance requirement – Long term rehabilitation/reconstruction needs and plans.	Local Admin, MoR, PVDOS All line agencies
Reconstruction	Reconstruction/rehabilitation	– Reconstruction/rehabilitation of infrastructure including re-design where necessary	PC, All line agencies concerned

Note: The present Programme Intervention would be most concerned with activities marked '\*'.



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The process of elaborating a comprehensive action plan for flood control and mitigation, which recognises the importance and benefits of flooding as well as the potential harm of severe floods, is already well underway. The Flood Policy Study (1988/89), supported by UNDP, recommended a programme to protect major urban areas and infrastructure, and proposes other embankment and drainage works designed to limit rather than prevent flooding. Drawing on this and other studies, an initial Flood Action Plan was prepared by the World Bank in close co-operation with the Government. The Plan aims at the identification, planning design and construction of high priority projects which are technically, economically, environmentally and socially feasible. It also explicitly includes a component for disaster preparedness. The plan was formally endorsed at a meeting of government and donor representatives in London, in December 1989, and at a subsequent conference in Dhaka in January 1990.

The Government is also in the process of formulating an overall strategy to provide adequate cyclone-proof buildings throughout the high-risk coastal belt. The Ministry of Health has initiated an Emergency Preparedness and Response programme, with assistance from Italy and WHO, to substantially up-grade the capacity of local-level health services in disaster-prone areas.

These current policy initiatives aim at refining and enlarging the existing strategies and procedures for preparing for and responding to floods and cyclones as defined in the 'Standing Orders' (Emergency Standing Orders for Flood, MoR 1984; Standing Orders for Cyclone, MoR 1985), which were developed from earlier Codes. These reflect the concern of successive governments for saving lives and property in the face of imminent threats, and for ensuring the provision of humanitarian assistance to disaster-affected populations. In this connection, a number of key ministries and line agencies have established disaster cells to act as focal points within their sectors for disaster-related activities. At the same time, long-term agricultural development strategies have sought to reduce the vulnerability of agricultural production to irregular monsoon flooding and to droughts.

Several national seminars, as well as the discussions in relation to the present Programme Intervention have resulted in broad consensus between representatives of government and non-government bodies concerning the need for all these efforts to be integrated in a comprehensive disaster management strategy.

Specifically in relation to floods and cyclones, it is recognized that it would take fifteen to twenty years to the complete major works that are being considered and that, in the mean time, there will be a continued, and perhaps increasing, dependence upon the successful implementation of smaller scale proofing measures and non-structural preparedness measures. The need is to live with the risks, to reduce national and local vulnerability to the disasters through improved organisation, infrastructure, communications and delivery systems, and to raise consciousness of what local communities can do to protect themselves and enhance their own coping capabilities.



### B.3 Institutional Framework and Capacity Constraints

The institutional weaknesses in relation to the planning and implementation of preparedness measures have been described in Sections A.2 and A.3.

Specific disaster-related responsibilities of many bodies, including line ministries/agencies and co-ordination committees, were specified in 1984/85 in the Standing Orders for Cyclone and for Flood, but these have not been institutionalized. Few officials are aware of their responsibilities as defined in these Standing Orders, and there has not yet been any systematic follow up in terms of training or attention to 'pre-disaster' (prevention/mitigation and preparedness) measures. The review carried out under BGD/91/021 has identified many areas where refinements to the original texts are required.

Until now, no government entity has been concerned with the overall function of disaster management. Although the Government, in 1991, designated the MoR as 'the focal point for the co-ordination of all disaster-related activities', particularly short-term repair and rehabilitation following the April 1991 cyclone,<sup>4</sup> the MoR and the DRR have until now been almost entirely concerned with 'relief' (including long-term FFW and VGD programmes as well as disaster-related relief activities). The functions of the MoR as defined in official Rules of Business refer almost entirely to the provision of 'relief', with little reference to preparedness.

Responsibility for final distribution of relief has rested with the union level relief committees under the Union Parishads (UPs), which have also been responsible for reporting their assessment of damage and needs to the thana and district administrations. They have been supported by civil administration officers as well as military personnel in extreme cases. Under the Standing Orders, the same UPs have also been responsible for establishing local preparedness plans, but have not until now been given any specific guidelines or help in this connection.

Between the national Government and the UPs, responsibility has rested with the district and thana administrations in particular the DCs and TNOs. Relief co-ordination committees have been constituted on an ad hoc basis at district and thana levels at times of major disaster, the composition being specified differently on different occasions. Similarly, at national level, various forms of 'ad hoc' co-ordination committees have been established, superseding the standing committee arrangements foreseen in the Standing Orders.

Following the studies and discussions undertaken in the context of BGD/91/021 new institutional arrangements are being established. The new arrangements at national level are illustrated in **Figure 2**, which provides a schematic indication of the standing (permanent) national co-ordination arrangements and of the relationships of the new Disaster Management Bureau (DMB). The overall arrangement, at national level, is shown in more detail in **Figure 3**.

This arrangement:

- meets the requirement for overall direction from a high-level inter-ministerial body (the NDMC chaired by the Prime Minister);

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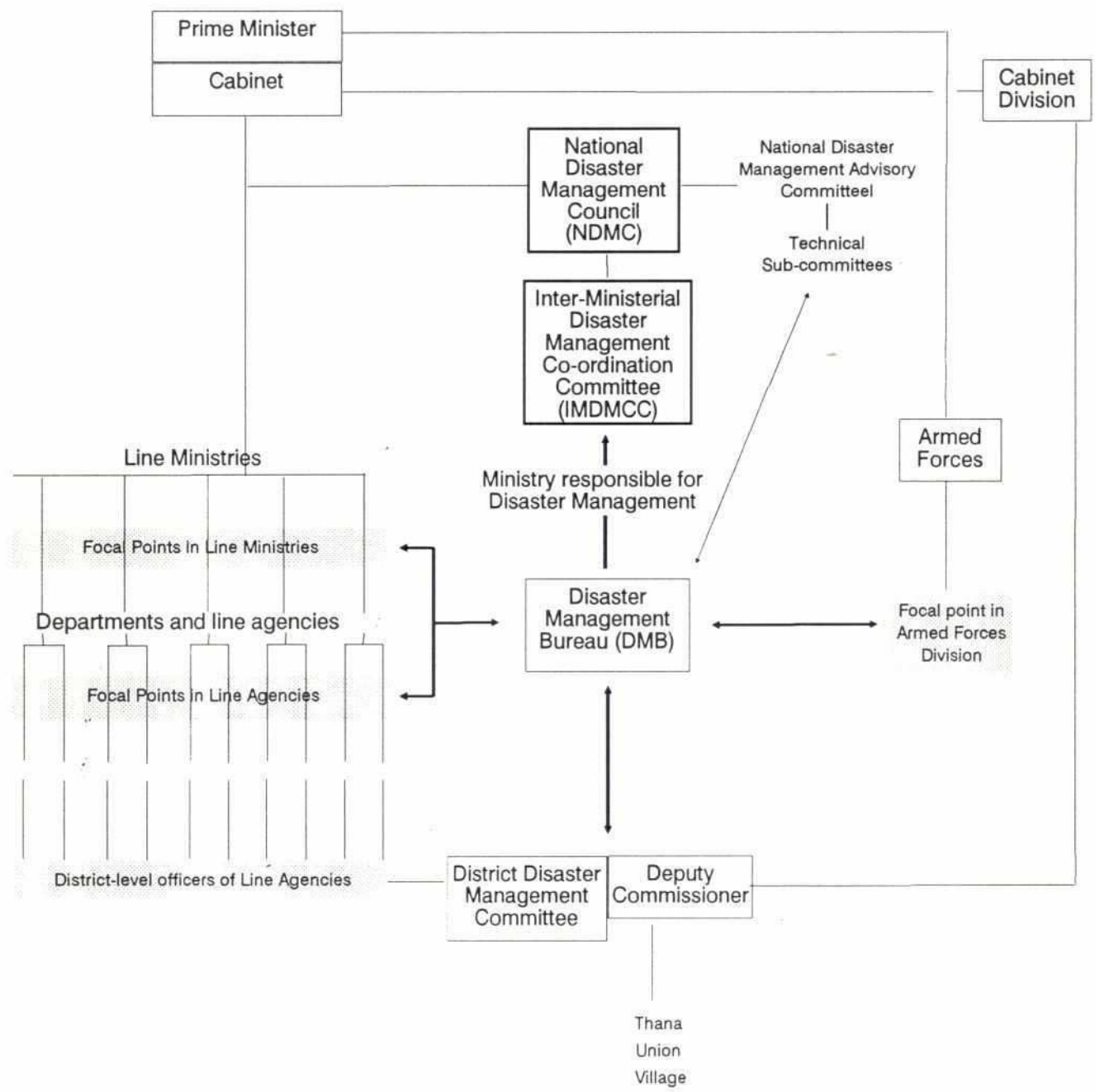
<sup>4</sup> Ref. Project document BGD/91/021



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Figure 2

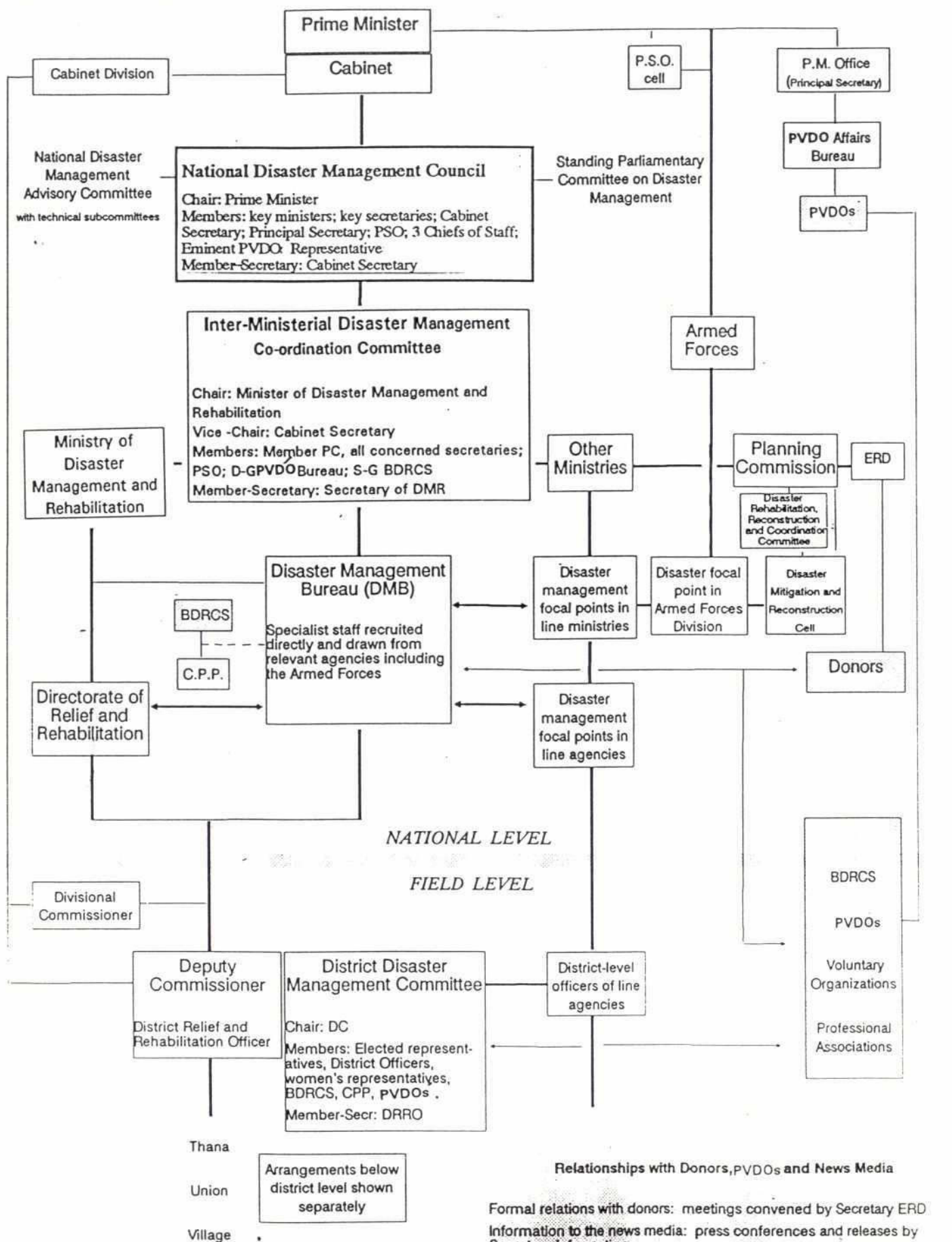
**Schematic representation showing the functional role and relationships of the specialist Disaster Management Bureau**



Two-way information exchange, plus analysis and specialist advice and guidance from DMB



# Proposed Institutional Arrangement for Disaster Management in Bangladesh



- provides for effective inter-ministerial co-operation and co-ordination at the national level, through the IMDMCC;
- recognizes and capitalizes on the key role of the Cabinet Secretary in inter-ministerial co-ordination (as chairman of the Secretary Committee) and in supervising the district administration;<sup>5</sup>
- incorporates the role of the MoR (to be renamed Ministry of Disaster Management and Rehabilitation, MDMR) as the responsible line ministry;
- provides for the integration of the Armed Forces into the overall arrangements; and
- reflects the crucial role of the DCs/district administration, which necessarily have prime responsibility for co-ordinating all aspects of disaster management at the field level.

The DMB is to be a part of the MoR/MDMR, but supervised by and service the IMDMCC, of which the Minister, MoR/MDMR, is Chairman and the Secretary its Member-Secretary.

The Cabinet Secretary has a key role as Vice-Chairman of the IMDMCC, supporting the Minister in the day-to-day management of the committee and the direction of the work of the DMB. This will ensure proper inter-ministerial participation and effective co-ordination at the national level, and reinforce the link to the field through the DCs.

An executive Emergency Relief Management Committee will be established as a sub-committee of the IMDMCC. Chaired by the Minister of Relief, it will include the PSO and the Secretaries of MDMR, Health, Agriculture, and Local Government, as members. It will agree overall allocations and arrangements for the supply, transportation and storage of relief resources.

The National Disaster Prevention Council, established in 1988, has ceased to function and is generally felt to have been too unwieldy. This is to be reconstituted as a National Disaster Management Advisory Committee (NDMAC) with a maximum of 60 members. Technical sub-committees will be established on specific topics, as necessary.

**Table 5** summarises the functions of the NDMC, NDMAC and IMDMCC as well as the related functions of the MoR, DMB and others. The functions of the three co-ordinating bodies/committees are detailed in **Annex II**.

**Figure 4** shows the overall framework for arrangements in the field, at district, thana and unions levels. Disaster management committees are being formed as standing bodies at district, thana and union levels, replacing the earlier relief committees. They are chaired by the DCs, TNOs and Union Chairmen respectively with, as members, some elected (parishad) members, all relevant government officers, and representatives of PVDOs, women's groups, and voluntary organizations (e.g. the teachers' associations) which are, or should be, actively involved in disaster management activities in the locality.

<sup>5</sup> The Cabinet Secretary (in the name of the PM and the Cabinet) ensures the essential co-operation between the civilian and military authorities.





TABLE 5

**Summary Outline of the Main Disaster  
Management Functions of Key Bodies**

**National Disaster Management Council (NDMC)**

- Establishing policies and providing overall direction for all aspects of disaster management. Defining priorities and criteria for the allocation of resources.

**National Disaster Management Advisory Committee (NDMAC)**

- Providing advice to the NDMC, and directly to MDMR and DMB, on specific technical, management and socio-economic aspects of disaster management, including vulnerability analysis and disaster-development links.

**Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC)**

- Implementation of NDMC policies and decisions on an inter-ministerial basis.
- Co-ordination of action by all government agencies and overall direction of the activities of the DMB.
- Responsibility for major operational decisions during an emergency.
- Decisions on allocations of relief resources through its sub-committee, the **Executive Emergency Relief Management Committee**.

**Ministry of Disaster Management and Relief (MDMR)**

- Ministerial responsibility for disaster management, including the convening of the IMDMCC.
- Assuring the establishment, resourcing (budget), and satisfactory functioning of the DMB.
- Supervision of the DRR.

**Disaster Management Bureau (DMB) — a part of MDMR**

- Provision of expert staff services to the NDMC and IMDMCC.
- Promotion of disaster prevention/mitigation and preparedness within all agencies and levels of government.
- Providing guidelines, organizing training, and promoting the preparation of disaster plans.
- Operation of the national Emergency Operations Centre (control room) at time of disaster.

**Directorate-General of Relief and Rehabilitation (DRR)**

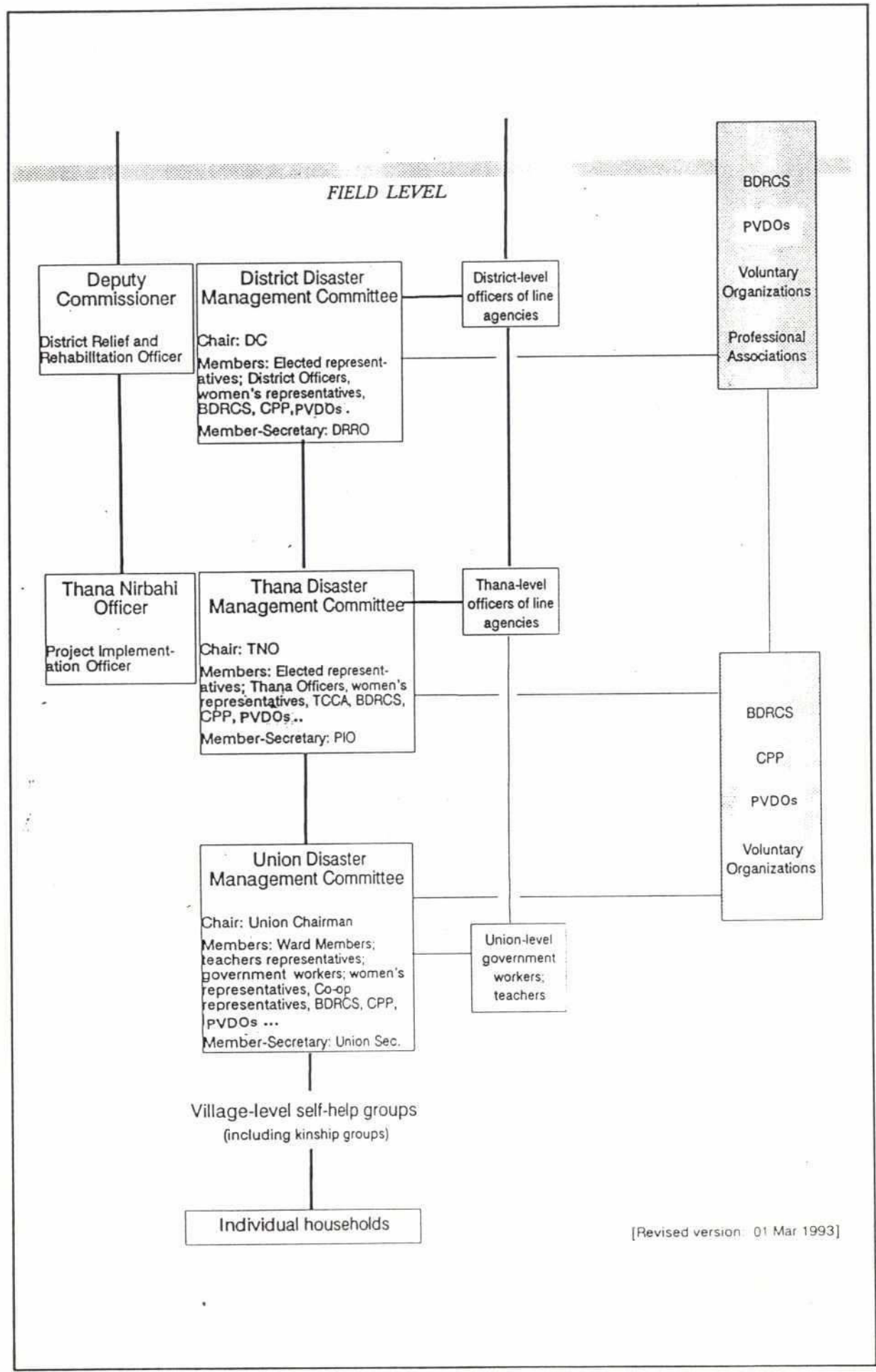
- As at present with respect to: VGD; FFW; GR and TR; the management and delivery of relief supplies, and the provision of related services.

**DRROs and PIOs**

- As at present under the general direction of DRR and the operational supervision of DC and TNO. Increased attention by DRROs in particular to disaster preparedness under the guidance of the DMB (this compensating for some reduction in FFW workload).

Figure 4

**Institutional Arrangements for Disaster Management at Field Level  
(at district level and below)**





## B.4 New Institutional Arrangements for Disaster Management

### a) Role of the DMB

The DMB is to be a dynamic professional unit to perform specialist functions, working in close collaboration with the district- and thana-level authorities, and the concerned line ministries, under the overall authority of a high-level inter-ministerial committee (the IMDMCC).

The DMB will seek to:

- i) strengthen the capacities of households and village communities in the highly disaster-prone areas to cope, individually and collectively, with the both risks and the effects of cyclones, floods, and river bank erosion - to cope before, during, and after, the impact of such events.
- ii) enhance the capacity of the Government and local-level authorities to:
  - warn people of imminent threats of cyclones or floods;
  - organize evacuations and other precautionary measures when necessary and possible;
  - assess damage and needs in the immediate aftermath of a sudden disaster, and during an extensive flood;
  - organize rescue, relief and short-term rehabilitation activities effectively and efficiently, when needed, and to co-ordinate the activities of all involved;
  - plan integrated post-disaster reconstruction programmes.
- iii) ensure that natural hazards and other risks are properly considered during the formulation and implementation of development programmes and projects. To ensure that measures to reduce risks are implemented, whenever possible, and that development projects in all sectors are neither unduly vulnerable to known hazards nor increase the vulnerability of people in the areas concerned.

Specific tasks of the DMB are detailed on **Table 6**.

The DMB tasks are significantly different from those of a normal government department or line agency. They require extensive collaboration with a number of existing ministries and line agencies, and with a variety of training institutions, professional bodies, PVDOs and voluntary organizations at all levels. A non-bureaucratic approach is essential. Particularly in respect of the tasks at union and village levels, the need is to facilitate and act as a catalyst, helping diverse groups to work together, within a mutually agreed framework.

The DMB will be a catalyst for planning and self-help arrangements at local level, for arranging public education campaigns, working through other agencies, and for organizing the systematic training of large numbers of government officers and other personnel from



TABLE 6

Duties of DMB

**During 'normal time':**

- developing a National Disaster Plan, and associated practical guidelines for those responsible for its implementation;
- helping line ministries and agencies to develop and test their own contingency plans;
- helping district- and thana-level authorities to develop and test their own disaster action plans;
- working with local authorities, BDRCS/PPP, PVDOs and others to help union councils and village communities in high-risk areas to develop their own action plans and increase their own coping capacity;
- collaborating with existing training institutes, training materials development units, and PVDOs already engaged in relevant training activities, to co-ordinate and promote the production of curricula and relevant training materials for various target groups;
- collaborating with line agencies, local authorities, existing training institutes, and relevant PVDOs, in planning and organizing training for a wide variety of government personnel, elected officials and others;
- establishing facilities, information systems, operating procedures, and telecommunications systems, for a national emergency operations centre (EOC/control room), for immediate use when an emergency arises;
- establishing arrangements for the mobilization of additional personnel for the EOC and to assist local authorities in the field, when required;
- maintaining an up to date inventory of the location, condition and ownership of all potentially live saving infrastructure including cyclone shelters, killas, embankments, flood platforms and the like;
- providing a documentation and information service on disaster management for line agencies and others;
- working with the Planning Commission and concerned line agencies to increase awareness of disaster risks and ensure that such risks, and possibilities to reduce them, are considered and appropriate measures incorporated in development planning;
- monitoring and reporting to the Government/Parliament on the risks faced; the vulnerability of people and economic assets to known hazards; the status of preparedness in the country; and any delays/bottlenecks in the implementation of disaster prevention/preparedness programmes and projects.

**During an 'emergency':**

- ensuring the effective dissemination of appropriate warnings, of floods and cyclones, through collaboration with BMD, BWDB, CPP, Radio, TV, and local authorities in particular;
- activating and operating the national Emergency Operations Centre (EOC, equivalent to a control room); receiving and analysing information and making specific recommendations for action; arranging rapid reconnaissance and assessment missions, where needed; providing advice and guidance to local authorities in relation to damage and needs assessment, and relief and rehabilitation assistance operations; etc.
- providing secretariat services and expert advice to the IMDMCC, and helping to ensure co-ordination between line agencies and between Government and PVDOs in relation to relief and short-term rehabilitation activities;
- monitoring the progress of rescue, relief and short-term rehabilitation activities, identifying problems and unmet needs, and taking action to resolve/meet them or bring them to the attention of the IMDMCC for resolution;
- providing information to and liaising with ERD concerning requirements for international assistance, and with MoInfo.

**During post-disaster 'recovery':**

- co-operating with the Planning Commission and line agencies, as required, in compiling data on reconstruction requirements and in co-ordinating the preparation of an integrated reconstruction programme;
- ensuring that risk reduction measures are built into all reconstruction programmes as much as possible;
- undertaking a final evaluation, or at least a "post mortem", on the emergency operation, drawing lessons and feeding them back to the IMDMCC and into training activities and up-dated guidelines.



national level down to the union/community level. At times of emergency the DMB will serve as the national Emergency Operations Centre.

#### **b) DMB Staffing**

The DMB itself is intended to be a small, highly skilled, unit at national level (within the MoR/MDMR) and work as a team (**Figure 5**). Each staff member has specific functional responsibilities during normal times and during an emergency. The DMB will catalyse and support existing structures and government agencies. It will not have its own field structure but work with and through the DCs and DRROs at district level, and the TNOs and PIOs at thana level, in training and supporting the disaster management teams at those levels.

The job descriptions for the senior staff of the Bureau are attached in **Annex VIII**. These specify, in each case, the individual's normal functional responsibilities and those that he/she will perform during an emergency (including warning and initial response periods) and during the initial recovery stage following a major disaster.

The success of the Bureau, and of the present Programme Intervention, will depend largely on the individuals appointed to the DMB. The posts of Director General, the Senior Specialists/Directors, and Specialists/Deputy Directors, may be filled either by serving Government Officers or by professionals recruited from outside Government service on Contract Service. The precise modality of the latter will need to be worked out over time. The best available candidates should be appointed, with the maximum of staff on non-rotational assignments. Appointments should normally be for a period of 3-5 years. At least one of the posts of Director, or Deputy Director, should be filled by a woman.

The technical assistance to be provided to the DMB under the present programme intervention includes six Zonal Disaster Preparedness Specialists (ZDPs) to reinforce the outreach work of the DMB during the initial three years when intensive support will be needed to develop disaster action plans and community mobilization activities in the most disaster-prone areas. These field-based national specialists will work directly with the DCs, DRROs, TNOs and PIOs. The evaluations of the present Programme Intervention (see section E below) may review the appropriateness of the staffing structure of the DMB, including whether any field-based staff might be needed in the long-term.

Additional personnel will be seconded to the Bureau for short periods as and when required, particularly during an emergency, from line ministries, line agencies, or the Armed Forces. In some cases, personnel may be seconded from professional associations, PVDOs, or aid organisations. Secondment may be requested/arranged by the Director General directly with the other bodies concerned. Secondment may also be agreed and co-ordinated by the INDMCC. In such cases, the Bureau will bear all travel and other expenses directly related to work on behalf of the Bureau. Salaries and basic allowances will continue to be paid by the regular employer.

#### **c) DMB Location and Facilities**

The DMB will be established in a location that is suitable for both its routine functions and when it is called on to serve as the national Emergency Operations Centre (EOC) during an emergency. One suggestion that has been made, and has considerable merit, is to locate the DMB in the old customs house adjacent to the old airport (or elsewhere in the old airport



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site). This site would be readily accessible to all concerned, including government and non-government personnel, and parking should not be a problem. Its proximity to the Prime Minister's Office and the Cantonment would facilitate high-level co-ordination, particularly during an emergency. Good telecommunications should be easy to assure, and the unit would be well-placed to co-ordinate, and benefit from, helicopter (and other air services) during an emergency.

The DMB will have appropriate communications facilities, management information systems, internal operating procedures, and clearly understood relationships and communication channels with all relevant government bodies and other concerned agencies.

#### **d) Co-ordination**

To ensure full inter-sectoral co-ordination and collaboration in all disaster-related activities (including but not limited to those envisaged under this programme intervention), a Focal Points Operational Co-ordination Group (FPOCG) will be convened by the Director General. This would include:

- the disaster management focal points of all concerned line ministries, the Armed Forces, line agencies and the Planning Commission;
- D-G R&R (and 4 Directors)
- D-G PVDO Affairs Bureau
- S-G BDRCS (and Directors CPP, DPP)
- Senior Specialists/Directors of the DMB (4)
- representatives of ADAB and the UN-DMT

During 'normal time', the Group should normally meet every two months, with additional ad hoc meetings if and when required for specific purposes. During an emergency, the Group should meet once or twice each week.

To deal with specific issues of concern to more than one body or sector, taskforces will be constituted at the initiative of the Director General or agreement within the FPOCG. Taskforces will normally include the focal points (or other representatives) of the concerned line agencies and other bodies, as well as relevant staff of the DMB. They will have specific terms of reference and normally be established with the aim of completing the specified tasks within a predetermined period, which should normally not exceed 4 months. The DMB would provide secretariat services for taskforces unless it is specifically agreed that another member agency should do so in a particular case.

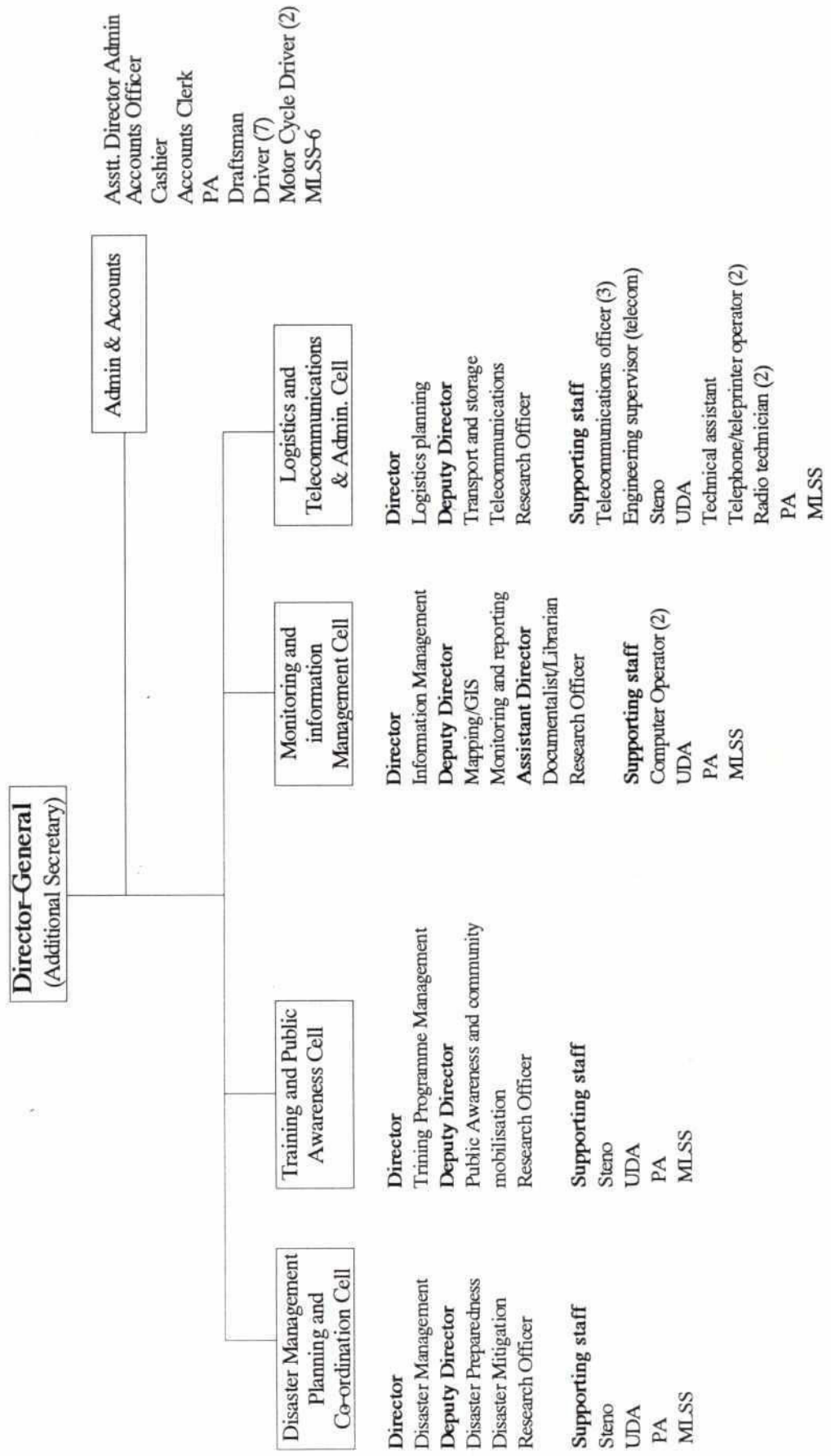
Major, long-term mitigation and post-disaster reconstruction need to be planned in the context of up-dated development plans and programmes. The DMB will collaborate closely with the Disaster Mitigation and Reconstruction Cell which is to be established within the Planning Commission (in the Programme or SEI Division ) to coordinate these efforts, and directly with the planning cells and disaster focal points in the line ministries most directly concerned.

During response to a major disaster, the EOC will work closely with the special, temporary cell established within the Armed Forces Division to co-ordinate and direct the operational support provided by the Armed Forces. In recent emergencies, a cell, called the Disaster Management and Relief Activities Co-ordination and Monitoring Cell (DMRACMC), was formed, which has been popularly referred to as the 'PSO Cell'.



Figure - 5

# **Core Structure for the Disaster Management Bureau** (Operational structure during normal times)



## B.5 Role of External Cooperation

Large amounts of international assistance have been provided to Bangladesh following each major disaster, and in particular after the floods of 1987 and 1988 and the cyclone of 1991 in response to the enormous requirements for relief, rehabilitation and reconstruction. Such assistance has been provided by UN agencies, inter-governmental and bilateral donors, the development banks, and PVDOs. The importance of the contributions of PVDOs has increased significantly in recent years.

The World Bank, ADB, EC and bilateral donors are providing major assistance to the various aspects of the Flood Action Plan which, when it moves from the study phase to that of implementation, should contribute towards reducing the risks of severe flooding.

Bilateral assistance, particularly from Japan, is enhancing the technical capacity of the BMD Storm Warning Centre, while assistance from the International Federation of Red Cross/Crescent Societies (IFRC, formerly the League) has helped to sustain, and is now envisaged to substantially expand and up-grade, the capabilities of the CPP, in relation to the dissemination of cyclone warnings. Meanwhile, bilateral donors, ADB, EC, IFRC and PVDOs are supporting the construction of large numbers of cyclone shelters.

A number of donors have at various times expressed interest in supporting more general disaster preparedness activities, subject to a viable programme being drawn up and necessary initial steps being taken by the Government. No significant international assistance has yet been provided in this connection. Donors that have expressed potential interest include USAID, ODA, SDC, CIDA and EC. In the meantime, a number of PVDOs have started some training and local-level activities in the field, and a few have developed plans to considerably expand those activities. UNICEF is supporting a pilot community mobilization project and is allocating significant funding to support the in-country disaster management training and community mobilization activities of the DMB in co-operation with other relevant organizations.

The assistance provided by UNDP in connection with the Flood Policy Study, the Flood Action Plan, and related projects (including to the Flood Forecasting and Warning Centre of BWDB and the Multi-Purpose Cyclone Shelter Project), has been outlined in A.6 above.

The present Programme Intervention complements the support that is being given to the various components of the Flood Action Plan by a variety of donors (see Annex IV), and the activities recently initiated by the Ministry of Health with support from the Italian Government and WHO under the Emergency Preparedness and Response (EPR) Project.



## C. PROGRAMME SUPPORT ELEMENTS

### C.1 Development Objectives

The **overall goal** of the Government, and of the eventual Comprehensive Disaster Management Programme, is to reduce the human, economic and environmental costs of disasters in Bangladesh.

The **development objective** of the present Programme Intervention is to enhance national capacity to plan and prepare for disasters and to cope with their consequences. This has three main elements:

- (i) to increase the capacities of households and local communities in the highly disaster-prone areas to cope with cyclones, floods, and other potentially disastrous situations;
- (ii) to increase the efficiency and the effectiveness of response to emergencies, and to expedite recovery following disasters, through enhanced preparedness at all administrative levels based on collaboration between government officials and agencies, PVDOs, and other concerned bodies, in all relevant activities (including warning systems, precautionary measures, rescue, relief and rehabilitation operations); and
- (iii) to ensure that measures are taken to reduce disaster risks as much as possible, and that such risks are properly considered in general development planning.

In pursuit of the above objectives, the Government is establishing the Disaster Management Bureau (DMB) to spearhead a set of inter-sectoral (inter-ministerial) activities at national and local levels. The present Programme is designed to support the DMB and its activities during an initial three-year period.

**Performance indicators:** Since the incidence of severe cyclones, floods, and other potentially damaging phenomena is inherently unpredictable and as their intensity varies greatly, it may not be possible to directly verify or measure the effectiveness of the Programme in the short-term. The success or otherwise of the Programme will be indicated by the actual losses caused by natural disasters in the coming years, whether these are less than might otherwise have been expected on the basis of past experience, and the speed with which communities affected by disasters recover.

**Assumptions:** The success of the Programme will depend upon the appointment by Government of suitably qualified specialist personnel to the new Disaster Management Bureau (DMB), and the early and sustained commitment of senior government ministers to improved disaster management as a national, and inter-sectoral, priority.

Progress towards the achievement of the overall goal, and the specified objectives and outputs, would be affected by the occurrence of a major disaster during the lifetime of the Programme Intervention. The Intervention and the technical assistance inputs are intended primarily to strengthen institutions and enhance preparedness and coping capacities at all levels. In the event of a major disaster, those institutions would necessarily have to give full attention to responding to that situation, and the technical assistance team would provide advice and assistance to them in their operations. The effects that this would have on the progress of the Programme Intervention are difficult to anticipate.

## C.2 Immediate Objectives

The immediate objectives are to:

- 1: Increase awareness at all levels of society concerning the practical ways of reducing disaster risks and losses.
- 2: Strengthen national institutional capacity for disaster management with emphasis on preparedness and support to disaster management committees at district, thana and union levels.
- 3: Enhance the knowledge and skills of key personnel having disaster management responsibilities, develop in-country disaster management training capabilities, and provide relevant operational guidelines in the form of a disaster management handbook.
- 4: Establish disaster action plans in the most disaster prone districts and thanas, and mobilize local communities in the most disaster prone areas to prepare and protect themselves, and to increase their own capacities to cope with and recover from disasters.
- 5: Promote proven local-level risk reduction ("proofing") measures and develop post-disaster assistance strategies to maximize recovery benefits.
- 6: Improve the effectiveness of warnings and warning dissemination systems, and the guidelines for facilities at shelters and evacuation sites for populations in high-risk areas.

The programme will take action at various levels simultaneously: at union and community level; at district/thana level; and at national level. It is envisaged that work at local level will be initiated in three districts and be extended progressively. A total of 50-60 thanas in 15 districts might be covered by the end of the three-year period. A total of 350-400 unions, representing a total population of some 10 million people, may therefore be covered during the period. The priority districts and thanas will be those that have the highest ("high" and "very high") Hazard Indices as indicated in the Hazard Indices Map prepared in the context of Project BGD/91/021.

Although the DMB will be concerned with all types of disaster, its activities during the first three years will focus particularly on cyclone and flood risks (the major risks). Consideration may also be given to river bank erosion. At the district, thana and union levels, community education and mobilization, training workshops, and the development of local-level Disaster Action Plans, will all focus on the particular hazards to which the particular localities are prone.

## C.3 Specific Outputs and Activities

The situation and/or achievements that are expected by the end of the three years, and the activities that are to be undertaken in relation to each of the above-mentioned immediate objectives, are listed below.



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The technical assistance and related inputs to be provided by UNDP, UNICEF and other development partners are intended to help the newly established DMB in what will be an initial three year period of intense activity during which a range of new activities are to be initiated both at national level and in the most disaster prone areas. It is hoped that, by the end of this period, the DMB itself and many of the training and other activities will be sufficiently well-established for basic work to be continued by the regular staff of the DMB building on the alliances that will have been developed with other concerned organisations both governmental and non-governmental. Local level plans should have been established in the most disaster prone thanas, and the DMB be able to gradually extend the development of similar plans in the lower risk areas, while ensuring the maintenance and continuous performance of plans and arrangement in the area covered during this three year period.

**Immediate Objective 1: Increase awareness at all levels of society concerning the practical ways of reducing disaster risks and losses.**

**Output 1.1:** Increased awareness and understanding among the general public of the measures that can be taken at household and community levels to reduce disaster risks and losses.

**Activity 1.1.i:** Undertake preliminary research (needs assessment) to determine the extent of knowledge and any misconceptions concerning the status of disaster management in Bangladesh, and in particular the practical possibilities for low-cost measures to reduce disaster risks and losses.

**Activity 1.1.ii:** Produce audio-visual materials and information kits for use in briefing sessions on the status and possibilities for improved disaster preparedness and cyclone and flood proofing in Bangladesh.

**Activity 1.1.iii:** Produce materials for use by the mass media concerning disaster preparedness and practical measures that household and local communities can take to reduce disaster risks and losses including attention to the particular vulnerabilities and needs of women and children.

**Activity 1.1.iv:** Arrange briefings and the provision of information and documentation on disaster management on an ongoing basis to news media representatives/reporters.

**Activity 1.1.v:** Arrange annual national disaster preparedness days to promote awareness and test preparedness plans at various levels. These activities to involve government officers and agencies, schools, the business community, professional and other associations, PVDOs, and, most of all, the people in the high-risk areas.

**Output 1.2:** Increased understanding of the status and possibilities for disaster preparedness and proofing in Bangladesh among Members of Parliament, senior officials, and other influential groups.

**Activity 1.2.i:** Arrange briefing sessions in Dhaka for Members of Parliament, and officials of Deputy Secretary rank and above, on disaster preparedness and possibilities for practical, local level cyclone and flood proofing measures.

**Activity 1.2.ii:** Arrange a short study tour for policy makers and senior officials to review arrangements for cyclone preparedness in a neighbouring country.

**Activity 1.2.iii:** Arrange briefing sessions at divisional and district levels for officials, public representatives, PVDOs, businessmen, and others on disaster preparedness and possibilities for practical, local-level cyclone and flood preparedness and proofing measures.

**Output 1.3:** Basic information concerning disaster risks, preparedness arrangements, and proofing possibilities, included in school curricula and teacher training.

**Activity 1.3.i:** Collaborate with the Text Book Board and other relevant education authorities to arrange for the inclusion in text/reading books and other materials for use in grades V-VIII of information concerning disaster risks and the practical possibilities to reduce those risks.

**Activity 1.3.ii:** Collaborate with the relevant education authorities to arrange for the inclusion of disaster management information relevant to each particular geographic area in the training given to primary and secondary school teachers through the various PTIs and TTCs, and to educational supervisors.

**Immediate Objective 2: Strengthen national institutional capacity for disaster management with emphasis on preparedness and support to disaster management committees at district, thana and union levels.**

**Output 2.1:** DMB serving as an effective national co-ordination unit for disaster management -- promoting prevention/mitigation and preparedness measures at all levels, and serving as a national Emergency Operations Centre (EOC) during emergencies -- with necessary expertise (trained staff), facilities, documentation, information and communication systems.

**Activity 2.1.i:** Prepare standard operating procedures for the DMB covering its functions during normal times and, as national emergency operations centre, during an emergency. [Note: Disaster management training for senior DMB staff is provided for under Activity 3.1.ii.]

**Activity 2.1.ii:** Refine and further develop the databases and prototype management information systems developed under BGD/91/021, and develop additional systems to support prevention and preparedness planning, emergency response, and post-disaster rehabilitation programmes.

**Activity 2.1.iii:** Co-operate with FAP:19 and BARC (supported by UNDP BGD/93/003) in exploring the possible uses of a Geographic Information System (GIS) in support of disaster management and national and district levels, and, if appropriate, in installing and applying the system in the DMB and testing its application at district level.

**Activity 2.1.iv:** Develop a computerized catalogue and referencing system for the library/documentation collection started under BGD/91/021.



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**Activity 2.1.v:** Develop regular liaison and information exchange with the disaster management focal points in concerned line agencies, and for collaboration with the Disaster Mitigation and Reconstruction Cell to be established within the Planning Commission and with bodies concerned with environmental protection.

**Activity 2.1.vi:** Establish appropriate procedures including lines of communication with focal points, in particular with the 'PSO' cell, to enable DMB to act as the national EOC during emergencies.

**Output 2.2:** A national policy statement and overall strategy for disaster management proposed to the Government for approval. Recommendations for other elements of a comprehensive disaster management programme required to complement the activities of the present programme.

**Activity 2.2.i:** In consultation with concerned ministries, line agencies, professional associations, PVDOs, and others, propose a text for a national policy statement concerning disaster management.

**Activity 2.2.ii:** Based on the draft policy statement, and in consultation with the Planning Commission and the bodies mentioned above, outline a strategy and prepare a draft for an overall (comprehensive) Disaster Management Programme incorporating the present Programme and proposals for additional programme elements considered necessary, and cross-referencing other relevant ongoing projects under other sectoral programmes.

**Output 2.3:** A National Disaster Plan approved and published, incorporating, amongst other things, refined Standing Orders (definitions of responsibilities, co-ordinating mechanisms, lines of communication), and arrangements for necessary logistic support services.

**Activity 2.3.i:** Follow up on the review of existing Standing Orders undertaken under BGD/91/021 and, in consultation with all concerned ministries, line agencies, and other bodies, prepare a consolidated statement of responsibilities including aspects specific to cyclones, floods, or other types of disaster.

**Activity 2.3.ii:** Through consultations with governmental agencies responsible for various aspects of transportation, with transport associations, and with the Armed Forces, draw up plans for logistic support operations at times of emergency.

**Activity 2.3.iii:** Prepare and issue a draft overall National Disaster Plan, drawing on the models and experience available from other countries in the region, and incorporating the revised Standing Orders and logistics plan.

**Output 2.4:** Up-dated and up-graded internal contingency (disaster action) plans in key line agencies and other relevant bodies.

**Activity 2.4.i:** Provide advice and assistance to BWDB, other key line agencies, other relevant bodies, and water control projects, in reviewing, updating and publishing their internal contingency (disaster action) plans. Provide similar advice to PVDOs, if requested.

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**Output 2.5:** A core group of individuals experienced in managing emergency and post-disaster operations on call at short-notice.

**Activity 2.5.i:** Establish a roster of individual, including present and former government officials and others, who have proven experience and abilities in managing emergency assistance operations and planning recovery programmes. Keep the roster planning recovery programmes. Keep the roster up-to-date; ensure that all rostered individuals are indeed available at short notice and have up-to-date instructions; arrange periodic group training workshops.

**Output 2.6:** Improved arrangements to ensure the rapid availability, following disasters, of supplies necessary to ensure survival and meet basic needs, and to expedite recovery.

**Activity 2.6.i:** In collaboration with the Directorates of Relief and Rehabilitation, Food, Health, and Agricultural Extension, the Departments of Public Health Engineering and Local Government Engineering and other relevant bodies, review arrangements for the supply and, where necessary, the stockpiling of commodities and equipment (food; water pumps; shelter materials and other relief supplies; tubewell spare parts, agricultural inputs; etc.)

**Activity 2.6.ii:** In collaboration with the Ministry of Finance, National Board of Revenue, Custom authorities and other concerned agencies, seek to develop and introduce effective 'fast track' clearance procedures for genuine relief materials.

**Output 2.7:** Improved telecommunications for disaster-related purposes. This includes: adequate telecommunications within the DMB; standing arrangements for collaboration during emergencies between organisations operating telecommunication systems; and improved access to telecommunications by operational assistance agencies.

**Activity 2.7.i:** Install the telecommunications equipment being purchased under BGD/91/021 in the premises of the DMB and in selected districts, and make appropriate arrangements for the operation, use and maintenance of that equipment. (This equipment is expected to be delivered only after the end of BGD/91/021).

**Activity 2.7.ii:** Work with T&T, CPP, Police, all line agencies having their own telecommunications networks, and the Armed Forces, to establish arrangements for co-operation and mutual assistance in communications during emergencies.

**Activity 2.7.iii:** Work with the T&T and the relevant authorities to establish arrangements to enable major operational assistance agencies, including government approved PVDOs, to establish or have access to telecommunications facilities during emergencies.

**Immediate Objective 3:** Enhance the knowledge and skills of key personnel having disaster management responsibilities, develop in-country disaster management training capabilities, and provide relevant operational guidelines in the form of a Disaster Management Handbook.



**Output 3.1:** Senior staff of the DMB and key personnel in selected training institutes and other organizations trained in disaster management, and exposed to experiences and arrangements in some other countries in the region.

**Activity 3.1.i:** Arrange a short general management and team training workshop for the staff of the DMB.

**Activity 3.1.ii:** Arrange overseas training in 4-6 week disaster management courses for up to 16 persons including senior staff of the DMB plus key personnel from selected training institutes and other organizations. (Training to be at ADPC-Bangkok, CDPC-Cranfield, or similar internationally recognized institutions. Participants continued service in their current posts, contributing directly to programme implementation, to be assured.)

**Activity 3.1.iii:** Sponsor the participation of other personnel from training institutes and other organizations (government and non-government) in disaster management courses arranged by in-country bodies. Course programmes to be approved by the NPD and senior technical assistance personnel who may provide technical assistance in refining the course content and materials. Criteria for selection of participants to be specified by the NPD. In consultation with UNDP and UNICEF, staff of the Planning Commission, line agencies and major donors responsible for drawing up and/or appraising development projects will be included as well as personnel responsible for disaster preparedness and response activities. At least ten percent of trainers should be women.

**Activity 3.1.iv:** Arrange study tours for senior staff of the DMB and selected personnel from training institutes (up to 18 persons in total) and other organizations to learn from the experiences of other countries in the region that face similar hazards.

**Activity 3.1.v:** Arrange refresher training (in year 3) for personnel trained under 3.1.ii and others who have benefitted from specialist disaster management training.

**Output 3.2:** A range of education and training resources (trainers and materials) available, and the materials widely distributed, to promote and support disaster management training for various target audiences and at different levels.

**Activity 3.2.i:** Establish a taskforce on disaster management awareness and training, and in consultation with that group define the disaster management training needs of different groups of government personnel and others, and related curricula and training material requirements. [Follow up on the work initiated under BGD/91/021].

**Activity 3.2.ii:** In consultation with the taskforce and through collaboration with existing government agencies, training institutes and PVDOs, arrange the preparation, production and distribution of training materials suitable for the various target groups/audiences, making the maximum use of existing materials. [Follow up on the work initiated under BGD/91/021].

**Activity 3.2.iii:** Arrange training in the organization of disaster management training workshops and the use of the available training materials for trainers from institutions

and organizations that are to organize workshops or include modules in other training courses.

**Activity 3.2.iv:** Support the operations of the Disaster Management Training and Awareness Task Force, DMB and other trainers organizing courses and workshops as part of the present programme.

**Output 3.3:** Increased capacity of in-country organizations providing disaster management training.

**Activity 3.3.i:** Identify organizations that have proven capacity to provide disaster management training for various target audiences, and increase their capacity through the provision of documentation, training materials, advice and, exceptionally, some equipment. [Linked to 3.1.ii.]

**Output 3.4:** All DCs, ADCs and DRROs, and TNOs and PIOs from the selected (most disaster prone) thanas, trained in basic disaster management and their specific responsibilities.

**Activity 3.4.i:** Arrange disaster management workshops for all DCs, ADCs and DRROs.

**Activity 3.4.ii:** Arrange disaster management workshops for TNOs and PIOs in the selected (most disaster prone) districts.

**Activity 3.4.iii:** Arrange orientation training for the Union Chairmen and Union Secretaries within the selected (most disaster-prone) thanas.

**Output 3.5:** Disaster management modules introduced into the basic and refresher training of a wide range of government personnel (including BCS officers, police, field staff of line agencies, etc) and others, including religious leaders.

**Activity 3.5.i:** Work with BPATC, NILG and other training institutes throughout the country, and the responsible/parent authorities, to assist them in including appropriate disaster management modules in their regular courses for all levels of personnel. Provide relevant material and, if necessary, resource persons in collaboration with other concerned agencies, working through the above mentioned taskforce/working group. [Follow up on the work initiated under BGD/91/021.]

**Activity 3.5.ii:** Assist line agencies in defining the disaster-related training needs of their field-based staff, in preparing short modules (curricula and training materials) for inclusion in the basic and/or refresher training, and in arranging special disaster management workshops for certain of their personnel, as required.

**Output 3.6:** A Disaster Management Handbook (for government personnel and others) covering, in the first instance, general aspects of disaster preparedness, proofing, and response, and specific aspects relating to cyclones and floods.

**Activity 3.6.i:** In consultation with all concerned agencies (governmental and non-governmental), make a thorough review of:



- existing procedures and criteria for initial damage and needs assessments following a disaster; and
- policies and guidelines concerning possible assistance needs and standards of provision. [Follow up to work initiated under BGD/91/021].

**Activity 3.6.ii:** In consultation with all concerned agencies (governmental and non-governmental), and drawing on the Bengal Famine Code (1943) and more recent handbooks from elsewhere, develop:

- improved procedures, guidelines and criteria for early assessments;
- guidelines on possible assistance needs and standards of provision;
- guidelines and decision aids for resource allocations (including refined "distress/deprivation" factors); and
- guidelines on accountability.

**Activity 3.6.iii:** incorporate the above, together with details of national policy [2.2.i], and model disaster action plans [4.1.ii] in a preliminary draft Disaster Management Handbook, and provide copies to the Disaster Management Committees at district, thana and union levels, and concerned line agencies, taking account of the guidelines prepared for and used by PVDOs.

**Activity 3.6.iv:** Prepare and publish a refined and expanded version of the Handbook incorporating:

- guidelines concerning feasible, local-level "proofing" measures arising from 5.1.i;
- guidelines for post-disaster assistance strategies arising from 5.3.i;
- details of refined cyclone and flood warnings and dissemination systems arising from 6.1.i/ii and 6.2.1; and
- guidelines on the management of shelter sites arising from 6.3.1.

**Immediate Objective 4: Establish disaster action plans in the most disaster prone districts and thanas. and mobilize local communities in the most disaster prone areas to prepare and protect themselves, and to increase their own capacities to cope with and recover from disasters.**

**Output 4.1:** Model disaster action plans for use at district, thana and union levels, and guidelines on preparing such plans including hazard mapping and vulnerability analyses.

**Activity 4.1.i:** In consultation with all concerned agencies and on the basis of initial, pilot work in the field, prepare guidelines for the preparation of simple hazard maps and basic vulnerability analyses at district, thana and union levels.

**Activity 4.1.ii:** Develop, through practical experience at field level, model disaster action plans for use at district, thana, and union levels. Plans to include, amongst other things: warning dissemination systems; designation of shelter sites; evacuation procedures; rescue procedures; a rescue and relief logistics plans; damage and needs assessment procedures; role of PVDOs and arrangements for co-ordination; special considerations relating to the needs of women and children; etc. [This to be done within the context of the refined Standing Orders, see 2.3.]

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**Output 4.2:** Disaster action plans, including hazard maps and disaster profiles, prepared by the Disaster Management Committees in the selected (most disaster prone) districts and thanas, and in unions within those thanas.

**Activity 4.2.i:** Select the priority thanas (and districts) to be taken up for assistance in the development of thana level plans.

**Activity 4.2.ii:** Arrange a series of workshops for the Disaster Management Committees in each of the selected (most disaster-prone) districts and thanas to:

- review the disaster risks and status of disaster preparedness;
- prepare hazard maps (in conjunction with the LGED Plan Books) and inter-sectoral disaster profiles; and then
- draw up and test a Disaster Action Plan for the district or thana.

In support of this, provide the committees with copies of the most accurate maps available, and any data or hazard maps prepared by FAP:19 or other studies. (Women should make up at least two percent of the membership of the disaster management committees, and the full participation of people's representatives, PVDOs and voluntary organisations be assured).

**Activity 4.2.iii:** Provide guidance, training materials, and other assistance to the selected/priority thana disaster management committees and relevant local bodies (government or non-government) to provide training to the union-level committees and to assist them in preparing hazard maps, disaster profiles, and disaster action plans for their own (union) areas.

**Output 4.3:** Enhanced public awareness in the selected, most disaster-prone thanas, of actions that can be taken at household and community levels to reduce losses due to the the particular hazards they face, and to cope with and recover from disasters that do occur.

**Activity 4.3.i:** Follow up the work initiated under FAP:14, FAP:23, BGD/91/021, and the research and pilot projects of other organisations, and undertake further formative research and pilot projects at grass-roots level in the priority areas to:

- determine people's perceptions and attitudes in relation to disasters and ways of reducing losses;
- identify proven risk reduction (proofing) response and recovery techniques and strategies that can be adopted by individual households or villages;
- identify the most effective communications strategies and methods; and
- develop, through experimentation, participatory strategies for increasing popular awareness and understanding of possibilities for self-help.

**Activity 4.3.ii:** In collaboration with other agencies (governmental and non-governmental) develop community mobilization strategies, prepare and produce information and motivational materials for use at community (village) level.

**Activity 4.3.iii:** Identify and mobilize potential motivators (from government, e.g. Social Welfare, and PVDOs) and establish co-operation with other resource organizations and individuals at thana level, union and village levels in the selected



(most disaster prone) areas. Provide training, at thana level, for the selected motivators, among whom there should be equal numbers of men and women.

**Activity 4.3.iv:** Arrange advocacy/promotional events in the selected (most disaster-prone) districts, thanas and unions, to raise public awareness of practical, local level actions that can be taken to reduce disaster risk, including attention to the special vulnerabilities and needs of women and children.

**Activity 4.3.v:** Working with the other bodies/organisations identified under 4.3.ii, organize community mobilization programmes through the union Disaster Management Committees in the selected (most disaster-prone) thanas to motivate and help village/neighbourhood communities to organize themselves individually and collectively to:

- plan and implement feasible local-initiative risk reduction ('proofing' and small-scale protection) measures; and
- draw up and practise community-level preparedness arrangements including response to warnings, and arrangements for evacuation, rescue, and initial self-help relief and recovery activities.

**Immediate Objective 5: Promote proven local-level risk reduction ("proofing") measures and develop post-disaster assistance strategies to maximize recovery benefits.**

**Output 5.1:** Tried and tested, low-cost techniques for 'proofing' (risk reduction) measures to reduce damage and losses at household and community level in rural and urban areas.

**Activity 5.1.i:** In collaboration with relevant government bodies and PVDOS, follow up on the recommendations of FAP:23 and other studies and arrange pilot testing and further studies at community level, as required, of techniques that can be applied at community level in rural and urban areas to reduce damage and losses due to cyclones and floods. This may include:

- housing mitigation possibilities (simple construction techniques to increase resistance of traditional structures to high winds and floods);
- means of protecting and preserving critical household assets, using ferro-cement tanks and/or other techniques.

**Output 5.2:** Recommendations concerning the viability of insurance against flood and cyclone damage for particular population groups, and/or mutual savings schemes.

**Activity 5.2.i:** Arrange field studies, drawing on experience in Bangladesh and elsewhere, to assess the viability of insurance schemes, and mutual savings schemes, to provide some degree of protection for low-income groups against flood and cyclone damage.

**Output 5.3:** Recommendations for improved strategies for assistance to disaster-affected populations to promote rapid and sustainable recovery, and the ways in which these assistance strategies could be tested and progressively introduced.

**Activity 5.3.i:** Arrange studies and pilot schemes, building on experience at community (grass roots) level, to develop and test alternatives to existing relief

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strategies that could promote recovery and reduce dependence, while meeting humanitarian needs following a disaster.

**Immediate Objective 6: Improve the effectiveness of warnings and warning dissemination systems, and the guidelines for facilities at shelters and evacuation sites for populations in high-risk areas.**

**Output 6.1:** Improved cyclone warnings providing more specific information to threatened populations.

**Activity 6.1.i:** Follow up on existing field research regarding the receipt and interpretation of cyclone warnings by people in the cyclone belt, and conduct additional communications research as required, to establish and test more specific and explicit warning messages.

**Activity 6.1.ii:** Collaborate with BMD, CPP and others to refine the system of cyclone warnings in terms of both content and the mechanisms for dissemination at local level. [Continuation of the process initiated under BGD/91/021.]

**Output 6.2:** Improved local-level flood warning dissemination systems.

**Activity 6.2.i:** Liaise with BWDB/FFWC and FAP:10 in relation to the development of improved flood forecasting, and collaborate with relevant line agencies, BDRCS, PVDOs, and other organisations that are or could be involved in warning dissemination, to develop and test local, community-based flood warning dissemination arrangements. [Linked to 4.3.v, local-level preparedness including evacuation planning.]

**Output 6.3:** Improved guidelines for facilities at shelters and other safe (evacuation) sites in the high-risk cyclone and flood-prone areas, and their management.

**Activity 6.3.i:** Collaborate with all concerned government and non-government organizations in following up on the work of the Multi-Purpose Cyclone Shelter Programme, FAP:14 and FAP:23 and preparing guidelines for the facilities to be provided at shelters and other safe (evacuation) sites and the management of those facilities during an emergency. This to include ensuring adequate access routes, potable water sources, and facilities for women and other particularly vulnerable groups at the shelters/safe sites.

**Annex IV** provides some further details concerning the proposed field activities, training and community mobilization activities. The notes and guidelines provided in this annex may be refined by further work in the context of the current project, BGD/91/021, before commencement of the follow-on programme intervention described in the present document. The details may be further modified as found necessary during implementation.

#### **C.4 Annual Work Plan**

The present Programme Intervention will be implemented over three years. Detailed annual work plans will be defined and approved by the Inter-Ministerial Disaster Management



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Coordination Committee (IMDMCC) each year, in meetings attended by UNDP, UNICEF and other development partners.

**Table 7** shows the provisional Work Plan and lists the activities that will form the major focus in year 1.

During the second and third years it is expected that the emphasis will shift to intensified activities in the field, in the most disaster/prone areas, with training and the preparation of plans at district and thana level, and community mobilization and planning at union and village level.

Studies to be undertaken in the context of the present Programme Intervention will be specifically designed to build on and complement those that have already been undertaken in the context of BGD/91/021 and by other organizations, notably PVDOs: see **Annex IV**. In these cases, the emphasis would be on 'action research', i.e. an activity that seeks to develop and test possibilities in actual practice.

### C.5 Inputs

#### a) General

The Government will provide inputs in kind in respect of staff, the regular staff of the DMB, including all normal allowances, local travel/DSA costs, and the local costs in relation to: the provision and maintenance of office premises; related utilities (electricity, telephone charges, etc.); The value of these inputs is some Tk 403.72 lakh (equivalent to US\$1.02 m). The Government will also be responsible for all taxes including CDVAT and taxes which may be levied on monies paid to the international consultants.

UNDP and other development partners associated with UNDP on a co-financing basis will provide up to of US\$2.58 million for: the planned technical assistance, including both international and national consultants; vehicles, and essential office supplies, computing and other equipment as listed in **Table 8** and in **Annex III**; overseas training fellowships and study tours and funds for field research and for the production of the Disaster Management Handbook, other guidelines and plans that are indicated in the various activities specified in Section C.3. **Figure 6** shows the technical assistance inputs on a bar chart. The job descriptions for the proposed technical assistance personnel are included in **Annex IX**.

The senior staff of the DMB will themselves be the counterparts for the technical assistance consultants as follows:

Consultant	Counterpart
<i>International</i>	
Programme Management Adviser	Director-General, DMB (NDP)
Disaster Management Specialist	Director-General, DMB (NDP)
Training	Director, Training and Public Awareness
Telecommunications	Director, Logistics and Telecommunications
Logistics	Director, Logistics and Telecommunications
MIS/GIS	Director, Monitoring and Information Management

**TABLE 7**  
**Provisional Workplan for Programme Activities**

Activities	FResponsible DMB Cell	Contributing Consultants	Year 1 quarters			Year 2			Year 3		
			1	2	3	4	5	6	7	8	9
<b>Immediate Objectives 1: Increase awareness at all levels of society concerning the practical ways of reducing disaster risks and losses.</b>											
1.1.i Preliminary research to determine the extent of knowledge and minconceptions	TPA	SA									
1.1.ii Produce audio – visual materials and information kits		TM, DM, DP, SA									
1.1.iii Produce materials for use by the mass media		TM, DM, DP, SA									
1.1.iv Arrange briefings and the provide information to news media representatives/Journalists	DMPC, TPA	PM, DP									
1.1.v Arrange annual national disaster preparedness days		PM, DM, TM									
1.2.i Arrange briefing sessions in Dhaka for Members of Parliament, and senior officials		PM, DM, TM									
1.2.ii Arrange short study tour for policy makers and senior officials	TPA	PM, VT									
1.2.iii Arrange briefing sessions at divisional and district levels for officials, public representatives, NGOs, etc.		PM, VT									
1.3.i Arrange inclusion of DM information in school text/reading books for grade V – VIII.		TM, DM, DP, SA									
1.3.ii Arrange inclusion of DM information in teacher training		TM, DM, DP, SA									
<b>Immediate Objective 2: Strengthen national institutional capacity for disaster management with emphasis on preparedness and support to disaster management committees at district, thana and union levels.</b>											
2.1.i Prepare standard operating procedures for the DMB	DMPC	PM, DM, DP									
2.1.ii Refine and further develop the databases and prototype management information systems	MIM	VI, DM, MI, DP									
2.1.iii Explore possible uses of GIS for disaster management in co – operation with FAP:19 and BARC	MIM, DMPC	VI, DM, MI, DP									
2.1.iv Develop a computerized catalogue for the DMB library/documentation collection	MIM	MI									
2.1.v Establish regular liaison and information exchange with focal points in concerned line agencies	MIM, DMPC	PM, DM, DP									
2.1.vi Establish procedures to enable DMB to act as the national EOC during emergencies	DMPC	PM, DM, DP									
2.2.i Propose a text for a national policy statement concerning disaster management		PM, DM, DP									
2.2.ii Prepare a draft for an overall (comprehensive) Disaster Management Programme		PM, DM, DP									
2.3.i Finalize the review of existing Standing Orders and prepare a consolidated statement of responsible	LT	PM, DM, DP									
2.3.ii Draw up plans for logistic support operations at times of emergency		VL, DP									
2.3.iii Prepare and issue a draft National Disaster Plan incorporating the revised Standing Orders and logistics plan (incl. translation)		PM, DM, DP									
2.4.i Help key line agencies to review, update and publish their internal contingency (disaster action) plan	DMPC	DM, DP									
2.5.i Select individuals with proven experience and abilities for roster service and up – date their skills	DMPC	PM, DP									



Activities	Responsible DMB Cell	Contributing Consultants	Year 1 quarters				Year 2		
			1	2	3	4	1	2	3
2.6.i Review arrangements for the supply and stockpiling of commodities and equipment	LT	VL, PM, DP							
2.6.ii Establish 'fast track' clearance procedures for genuine relief materials		PM, DP							
2.7.i Install the telecommunications equipment being purchased under BGD/91/021		VC							
2.7.ii Establish arrangements for co – operation and mutual assistance in communications during emergencies.		PM, VC, DP							
<b>Immediate Objective: 3 Enhance the knowledge and skills of key personnel having disaster management responsibilities, develop in – country disaster management training capabilities and provide relevant operational guidelines in the form of a disaster management handbook</b>									
3.1.i Arrange general management and team training for staff of DM	TPA	PM							
3.1.ii Arrange overseas training for up to 16 persons (DMB staff and other key personnel)		PM, VT							
3.1.iii Sponsor participation of personnel from training institutes and other organizations in DM courses of national institutions		PM, VT, TM							
3.1.iv Arrange study tours for DMB staff and selected personnel from training institutes and other organisations (max. 18 persons)		PM, VT							
3.1.v Arrange refresher training for personnel trained under 3.1.ii and others		DM							
3.2.i Define the DM training needs of different groups, and related curricula and training materials requirements	TPA, all	VT, DM, DP, TM							
3.2.ii Arrange the preparation, production and distribution of audio – visual and printed training materials for the various target groups/audiences		VT, DM, DP, TM							
3.2.iii Train trainers in conducting disaster management sessions/workshops	TPA	VT, TM							
3.2.iv Support the operations of the training task force, DMB staff and other trainers organizing courses and workshops		PM, TM							
3.3.i Provide publications and equipment to enhance the capacities of organizations that have proven disaster management training capabilities		PM, TM							
3.4.i Arrange disaster management workshops for all DCs, ADCs and DRROs		TM, VT, DM, DP							
3.4.ii Arrange disaster management workshops for TNOs and PIOs in the selected districts		TM, VT, DM, DP							
3.4.iii Arrange orientation training for the Union Chairmen and Union Secretaries within the selected thanas		TM, VT, DM, DP							
3.5.i Assist BPATC, NILG and other training institutes to include appropriate disaster management modules in their regular courses		TM, VT, DM, DP							
3.5.ii Assist line agencies to prepare and include short modules relating to disasters (including damage and needs assessment) in their basic and/or refresher training courses		TM, DM, DP							
3.6.i Review procedures and criteria for initial damage and needs assessments, and guidelines concerning assistance needs and standards of provision	DMPC	DM, DP							
3.6.ii Develop improved guidelines for early assessments and possible assistance provisions; decision aids for resource allocations; guidelines on accountability		DM, DP							
3.6.iii Prepare and circulate a preliminary draft DM Handbook for DM Committees at district, thana and union levels, and concerned line agencies		DM, DP							

Activities	Responsible DMB Cell	Contributing Consultants	Year 1 quarters				Year	
			1	2	3	4	2	3
3.6.iv Refine and expand the Handbook including guidelines on local level 'proofing' measures and post disaster assistance strategies (inc. transation)	DMPC	PM						
<b>Immediate Object 4: Establish disaster action plans in the most disaster prone districts and thanas, and mobilise local communities to prepare and protect themselves, and to increase their own capacities to cope with and recover from disasters</b>								
4.1.i Prepare guidelines for hazard maps and basic vulnerability analyses at district, thana and union levels		DP, DM, SA						
4.1.ii Develop model disaster action plans for use at district, thana, and union levels. Print and provide copies to DM committee in selected priority areas	DMPC	DP, ZD, DM, SA						
4.2.i Select the priority thanas (and districts) to be taken up for assistance in the development of thana level plans.		PM, DP						
4.2.ii Arrange workshops for the DM Committees in the selected districts and thanas to review disaster risks and status of preparedness, and draw up and test Disaster Action Plans.	DMPC, TPA	DP, TM, ZD, SA						
4.2.iii Provide training for union level committees and assist them to prepare disaster action plans	DMPC, TPA	ZD						
4.3.i Undertake (a) formative research and (b) pilot projects to determine people's perceptions, identify proven community level risk reduction and response/recovery strategies, and identify the most effective communications strategies and methods, etc.	TPA	PM, SA, DP						
4.3.ii Develop strategies and produce information and motivational materials for community level mobilisation	TPA	TM, SA, ZD						
4.3.iii Identify, mobilize and train potential motivators and other resource organization to undertake community mobilisation at village level	DMPC, TPA	DP, ZD, DM, SA, TM						
4.3.iv Arrange advocacy/promotional events in the selected districts, thanas and unions.	TPA	TM, ZD						
4.3.v Motivate and help communities to organize themselves to plan and implement local initiative risk reduction measures and plans (for evacuation, etc). Operating costs for motivators	DMPC, TPA	ZD						
<b>Immediate Objectives 5: Promote proven local level risk reduction ('proofing') measures and develop post disaster assistance strategies to maximize recovery benefits</b>								
5.1.i Arrange pilot testing at community level of techniques to reduce damage and losses		PM, DP, SA, ZD						
5.2.i Arrange field studies to assess the viability of insurance schemes, etc.	DPC	PM, DP, SA, ZD						
5.3.i Develop and test alternatives to existing relief strategies that could promote recovery and reduce dependence		PM, DP, SA, ZD						



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Activities	Responsible DMB Cell	Contributing Consultants	Year 1 quarters				Year	
			1	2	3	4	2	3
<b>Immediate Objective 6: Improve the effectiveness of warnings and warning dissemination systems, and the for facilities at shelters and evacuation sites for populations in high risk areas</b>  6.1.i Establish and test more specific and explicit warning messages 6.1.ii Refine the system of cyclone warnings in both content and mechanisms for dissemination at local level 6.2.i Develop and test local, community based flood warning dissemination arrangements 6.3.i Prepare and issue guidelines for the facilities to be provided at shelters and other safe (evacuation) sites and the management of those facilities during an emergency.	DMPC, TPA	DP, DM, SA ZD						
	DMPC	PM, DP, SA ZD						
	DMPC, TPA	PM, DP, SA ZD						
	DMPC	DM, DP, SA						

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**TABLE 8**  
**Inputs**

Description	(nr)	Length of input (months)	Total input (months)
<b>1. GOB</b>			
Staff			
Director General, DMB	1	36	36
Senior Specialists (Director)	4	36	144
Specialists (Deputy Directors) and other officers	18	36	648
Supporting staff	41	36	1476
Office rent, Utilities and Operating costs and CDVAT	—	—	—
<b>2. Technical Assistance and Related Inputs of UNDP and other Development Partners</b>			
International consultants — Details on Figure 6	2	—	33
Visiting international consultants "	—	—	16
National consultants "	4	12–24	75
Visiting national consultants	—	—	20
Zonal Disaster Preparedness Specialists (national)	6	30	180
Supporting Staff	11	36	396
Overseas Fellowships and Study Tours	—	—	—
Production of plans, handbooks etc. (incl. translation)	—	—	—
Field research studies	—	—	—
Expendable equipment (Stationaries, software etc.)	—	—	—
Non-expendable equipment	—	—	—
Vehicles (6 x 4WD, 1 x Saloon)	7	—	—
Miscellaneous Support Cost	—	—	—
Vehicle Operations and Maintenance	—	—	—
<b>3. Input of UNICEF</b>			
In-country training and local level planning	—	—	—
Public Awareness and Community Mobilisation	—	—	—
<b>4. Evaluation:</b>			
UNDP	—	—	—
UNICEF	—	—	—



**National**

Disaster Preparedness  
Training  
Social Anthropologist  
MIS

Disaster Management, Planning & Co-ordination  
Director, Training and Public Awareness  
Disaster Management, Planning & Co-ordination  
Director, Monitoring and Information Management

A counterpart will be designated for each visiting specialist (international and national) when the terms of reference are defined.

The Zonal Disaster Preparedness Specialists (ZDPs) will work with the District, Thana and Union level Disaster Management Committees, which are headed by the DC, TNO and Union Chairman respectively. The Ministry of Relief officers at District (DRRO) and Thana (PIO) levels will act as counterparts to the ZDPs. The ZDPs will work under the direction of the Director, Disaster Management, Planning and Coordination, DMB.

UNICEF will provide up to US\$1.5 million for community mobilization and in-country training activities including: needs assessments and related research; the development and production of materials for sensitization, training and community mobilization; direct operating costs associated with the training and community mobilization activities. UNICEF staff are also expected to provide advice and assistance to the staff of the DMB and to district and thana level officers in the actual organization of these field activities.

The vehicles, computer and other office equipment provided by UNDP to the Ministry of Relief under Project BGD/91/021, listed in **Annex III**, will be transferred to the DMB and will be used for the purposes of the proposed Programme Intervention.

The assistance of UNDP, its co-funding donors and UNICEF represent complementary inputs to a single, integrated programme support activity covering the full range of the activities of the DMB during the period 1994-6.

**b) Specific Inputs**

		(US\$ '000)
<b>i) Government</b>		1,022
Establishment Costs (including allowances, TA/DA etc)		412
Director General	36 months	
Directors (4)	144 months	
Deputy Directors (7)	252 months	
Other Officers (11)	396 months	
Supporting Staff (41)	1,476 months	
Rent and utilities		273
CDVAT		177
Travelling and other allowances		92
Office Operation and Maintenance		68
<b>ii) UNDP and other Co-financing Donors</b>		2,513
<b>Budget Line 11.51 (16 x 17000)</b>		272
Programme Management Adviser	16 months	



Figure 6

**Technical Assistance Inputs  
Staffing Chart**

Post	Year 1	Year 2	Year 3	Total MM
<b>International Specialists</b>				
1. Programme Management Adviser	■	■	■	16 (1)
2. Disaster Management Specialist	■	■	■	17
3. Visiting Specialists				
Training	■	■	■	3
Telecommunications	■	■	■	2
Logistics	■	■	■	2
MIS/GIS	■	■	■	3
4. Unallocated	■	■	■	6
			<b>Sub total</b>	<b>49</b>
<b>National Experts</b>				
<b>Dhaka based Specialists</b>				
1. Disaster Preparedness	■	■	■	24
2. Training	■	■	■	24
3. Sociologist/Social Anthropology	■	■	■	12
4. Management Information	■	■	■	15
5. Visiting Specialists (2)				20
Local level planning; local level warning dissemination systems; training materials development; mass communications; folk media; data base management; library science/documentation systems; community mobilization; water transport systems; storage and commodity management etc	■	■	■	
			<b>Sub total</b>	<b>95</b>
<b>Field based Specialists</b>				
Zonal Disaster Preparedness				
1	■	■	■	30
2	■	■	■	30
3	■	■	■	30
4	■	■	■	30
5	■	■	■	30
6	■	■	■	30
			<b>Sub total</b>	<b>180</b>
			<b>Total</b>	<b>324</b>

(1) The input of the Programme Management Adviser will be provided on an intermittent basis through a separate international contract with OPS.

(2) Precise requirements to be specified during implementation and be agreed between the Government (NDP) and UNDP.



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<b>Budget Line 15</b>	Duty Travel	50
<b>Budget Line 16</b>		120
	<b>Evaluation Missions</b>	
	Initial and Final	
	Consultants (2 Nr.) for three weeks each for two missions (fee, per diem, air fares)	
	( $2 \times 2 \times 75 \times 15,000 + 2 \times 2 \times 21 \times 1000 + 2 \times 2 \times 3,500$ )	
	<b>Annual Programme Reviews</b>	
	Staff (3 Nr.) for one week each for three APRs (per diem, air fares)	
	( $3 \times 3 \times 7 \times 100 + 3 \times 3 \times 3,500$ )	
<b>Budget Line 17</b>		190
a)	<b>Dhaka based Specialists</b> (95 x 2000)	
	Disaster Preparedness	24 months
	Training	24 months
	Sociologist/Social Anthropology	12 months
	Management Information System	15 months
	Visiting Specialists in various disciplines	20 months
	<b>Total</b>	<b>95 months</b>
b)	<b>Field Based Specialists</b> (180 x 60 000/39.5)	275
	Zonal Disaster Preparedness	180 months
<b>Budget Line 21</b>	<b>Sub-Contracts</b>	
21.01 a)	International (staff costs including travel, per diem etc)	(33 x 17 000)
	Disaster Management Specialist	17 months
	Visiting Specialists	
	Training	3 months
	Contingency Planning	3 months
	Logistics	3 months
	Telecommunications	2 months
	MIS/GIS	3 months
	Unallocated	6 months
	<b>Total</b>	<b>33 months</b>
b)	Support Staff (396 x 6 000/39.5) comprising secretaries, word processors/operators, drivers	60
c)	Vehicle O/M	170
	$5 \times 36 \times 440 + 7 \times 30 \times 440$	

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**Budget Line 22 Sub-contract**

**22.01 Field Research Studies**

160

including studies and action  
research associated with flood  
proofing, insurance, mutual saving,  
alternative relief strategies,  
community based flood warning  
dissemination.

**Budget Line 31 Fellowships (See also Annex IV)**

96

Disaster Management Training for Director  
General, Directors and Deputy Directors of  
DMB (8 persons) and focal points from other  
agencies and organisations including Cabinet,  
Planning Commission, Ministry of Relief  
(Deputy Chief Planning, XEN and 2 Assistant  
Secretaries), Ministry of Agriculture, Police,  
Training Institutions and PVDOs (8 persons)  
at ADPC, Bangkok, Thailand and Cranfield  
Disaster Preparedness Centre, England.

**Budget Line 32 Study Tours (See also Annex IV)**

72

for high level officers, politicians, MoR,  
DMB staff and DM focal points from other  
agencies and organisations. Countries to be  
visited: India, Philippines, Vietnam and  
Indonesia.

**Budget Line 33 Development Production and Distribution  
of DM Handbook and related Plans and Guidelines**

195

**Budget Line 45 Local Procurement**

52

including stationery

**Budget Line 46 International Procurement**

220

including furniture, computers, ACs, vehicles,  
generator, and copiers

**Budget Line 52 Report Production**

5

miscellaneous reporting costs

**Budget Line 42 Sundries**

at 0.5% total costs

15

**iii) UNICEF**

1,500

**Research**

252

including preliminary and formative research,  
training needs assessment, pilots



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<b>Training</b> at national, district, thana and union levels	459
<b>Development and Production of Materials</b> including information and training materials both printed and audio visual, social mobilisation materials	420
<b>Advocacy and Promotion</b> at natational, district and district level	300
<b>Operations Costs</b> including evaluation	69

## D. RISKS

The major risks to this programme support are:

### i) Loss of interest on the part of the government

Disaster related programmes often have a high priority in the immediate aftermath of a major disaster but attention tends to decline rapidly as time passes, priority is given to other pressing problems especially if more than 3-4 years pass without any major recurrence. However, the memory of the 1991 cyclone (which is still fresh), the existing momentum of the Flood Action Plan, and two significant cyclone alerts during 1992, can all be expected to continue towards sustaining government commitment during the lifetime of the present Programme Intervention.

### ii) Failure of the government to take the necessary administrative steps to ensure success

Effective disaster management requires cooperation among many governmental institutions. There will be a great risk of failure if the Government does not ensure (a) the appointment of personnel of sufficient stature and appropriate technical expertise to the new Disaster Management Bureau and (b) the development of the National Disaster Management Council and the Inter-Ministerial Disaster Management Co-ordination Committee as effective bodies to promote and co-ordinate preventive and preparedness activities on a permanent basis (not just bodies that meet at time of disaster. If personnel of insufficient stature or with insufficient technical expertise are appointed, discontinuation of certain activities should be considered. Specific locally based activities however, might continue as they can be designed to "stand alone" programmes and should have a high measure of self-sustainability if they are properly designed and executed.

### iii) Failure to reach the most vulnerable groups and achieve effective community mobilization.

Local communities are beset with tensions; many of which lead to competition, dependencies and even stress. Within any community there are some people who ultimately benefit from the effects of disasters, at the expense of others. The local setting for co-operative effort and for the building of self-reliance may not be found everywhere. It may prove difficult to reach, consult and most of all involve the most vulnerable groups, especially women. The initial pilot projects in community mobilization will seek to identify ways of generating the maximum consensus and mutual support within communities in relation to local proofing and preparedness measures, but this may not succeed everywhere.

Disaster Management (proofing and preparedness) at community level is a community responsibility, and the success of otherwise of the Programme will be entirely dependent on the motivation that exists, or can be generated, within and among local communities, and on consensus being found within the communities themselves.



## E. PRIOR OBLIGATIONS AND PREREQUISITES

### a) Prior Obligations

The Government will:

- i) establish a National Disaster Management Council (NDMC) and Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC) as standing bodies, superseding the national level committees provided for in the existing Standing Orders for Cyclone and Flood. The membership and functions of the NDMC and IMDMCC will be in line with the proposals summarized in Section B.3 above, and described in more detail in **Annex II**.
- ii) formally approve and initiate associated administrative action (including establishment of all the necessary staff posts) to set up a Disaster Management Bureau (DMB) as a permanent entity within the Government as summarized in Section B.3 above. This includes issuing the formal gazette notice establishing the DMB and renaming the Ministry of Relief to include Disaster Management;
- iii) select and appoint a suitable individual as Director-General of the Disaster Management Bureau and finalize arrangements for the appointment of the other staff of DMB, on the basis of the job descriptions included in **Annex VIII**. Each individual must have professional qualifications and experience relevant to the particular specialist post concerned. They may be appointed either on government service or on contract service, following interview by a specially-constituted selection panel. They should serve with the Bureau for a minimum of three years; and
- iv) designate and prepare suitable, secure premises to house the DMB. The premises must provide sufficient accommodation suitable for both the 'normal time' functions of DMB, including convening small workshops/seminars and collaborating in the production of training materials, and those of the National Emergency Operations Centre during an emergency. They must be accessible to both government personnel (civilian and military) and others (including PVDOs and donors).

The Programme Support Document will be signed by GoB, UNDP and UNICEF. UNDP assistance will only be provided if the prior obligations stipulated above have been met to UNDP's and the participating agencies/donors satisfaction.

### b) Prerequisites

Within three months of the signature of this Programme Support Document, and before any UNDP funds are committed for operational purposes, the Government will:

- i) appoint suitable individuals to all posts of the DMB as indicated in **Figure 5**; and

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- ii) ensure the provision of sufficient telephone lines and all other necessary facilities in the premises of the DMB.

During the period of implementation of the Programme Intervention, the Government will ensure that the DMB is transferred from the GoB Development Budget to the Revenue Budget. The Ministry of Establishments has already agreed in principle to the transfer and the consent of Ministry of Finance is awaited.

During the period of implementation of the Programme Intervention, the Government will ensure rapid consideration of all drafts and proposals prepared by DMB, and prompt decisions on those proposals in order to expedite the implementation of the activities concerned. This includes amongst other things:

- i) approving the selection of the pilot thanas (and districts) where work on the development of local-level disaster action plans is to be initiated, and informing all concerned authorities of the Programme and the importance the Government attaches to it. This should normally be done within three months of the initiation of work on Programme Intervention; and
- ii) approving the revised and consolidated Standing Orders and the associated National Disaster Plan, and issuing the same in the name of the NDMC (or other appropriate high level authority). This should normally be done within twelve months of the initiation of work on the Programme Intervention.

The PSD will be signed by GoB, UNDP and UNDP assistance will be provided, subject to UNDP receiving satisfaction that the pre-requisites listed above have been fulfilled or are likely to be fulfilled.



## F. EXECUTION AND IMPLEMENTATION ARRANGEMENTS

Execution responsibility rests with the Government which has designated the Ministry of Relief (MoR) as its focal point for all disaster related activities. For this reason, it has been proposed that the ministry be renamed to include Disaster Management. Within this ministry, the **Disaster Management Bureau (DMB)** is to be the Executing Agent for the Programme Intervention described in this PSD.

The DMB is also responsible for the implementation of the programme activities, which constitute the main functions and responsibilities of the DMB during the three-year period, 1994-96. Many of the activities will be undertaken in co-operation with other government and non-government agencies. The technical assistance and other inputs to be provided by UNDP, UNICEF and co-financing donors are designed to assist the DMB, in collaboration with other agencies as appropriate, to undertake the various activities and achieve the stated objectives. Arrangements for co-operation with other agencies will be agreed at the Inception Meeting.

The Director-General, DMB, will be the **National Programme Director (NPD)** and, he will be fully responsible for the overall administration and management of the Programme Intervention and accountable for the production of the outputs, achievement of objectives, and the use of the resources provided by UNDP and other contributing development partners.

Implementation of the Programme Intervention will be overseen by the **Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC)** through an executive sub-committee i.e. specially constituted for the programme, if found necessary. UNDP, UNICEF and other co-financing donors will be invited to attend meetings convened to review the progress of the programme.

The **National Disaster Management Advisory Committee (NDMAC)** will provide professional advice to the IMDMCC in relation to this programme, as required. If found necessary, a sub-committee of the NDMAC may be formed to:

- Review the progress reports of the programme, the proposed work plans, and all *ad hoc* related reports and documents prepared by the DMB and the consultants, and provide their technical comments to the NPD and the IMDMCC
- Advise and assist the NPD in identifying and appraising candidates for consultancy posts; monitoring and reviewing the progress of programme implementation in general; and drawing up recommendations to the Government for any further measures to be taken in connection with improving disaster management.
- Provide advice and guidance to the NPD and his staff on specific topics. and ensure that all work and reports, including the work of the consultants, is of satisfactory professional standard.

The overall arrangements are shown diagrammatically in **Figure 7**.



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The consultants, both international and national, will be selected and appointed following the standard procedures agreed between the Government and UNDP. Unless otherwise agreed at or before the Inception Meeting (see I below):

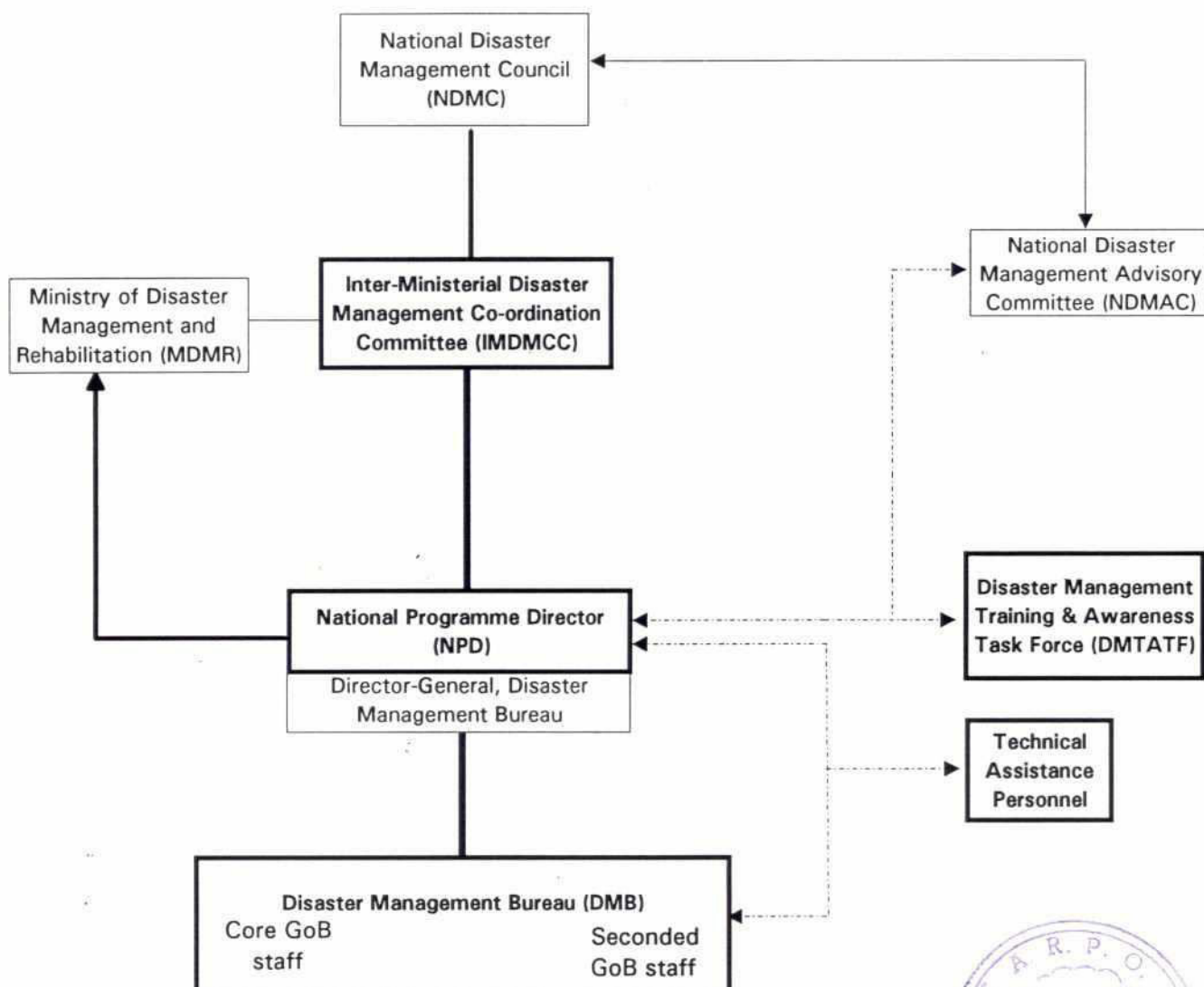
- OPS will serve as Implementing Agent for the appointment of the international Programme Management Adviser on an individual basis and for other international consultants through a sub-contract. Selection from among the candidates and the international consulting firms proposed by OPS will be made by the Standing Selection Committee of the MoR with the participation of representatives of UNDP and UNICEF. A letter of agreement will be signed between the DMB and OPS for the provision of these services (see model in **Annex VI.**).
- National experts and consultants will be recruited on an individual basis. They will be selected by the Standing Selection Committee of the MoR with the participation of representatives of UNDP and UNICEF, and be appointed by the NPD. Payments will be made to the experts and consultants directly by UNDP at the request of the NPD.
- Local procurement and contracts for studies, the production of materials, implementation of overseas training and study tours funded by UNDP (and its co-financing donors) will be undertaken by the DMB following normal government rules and procedures. Payments will be made to suppliers directly by UNDP at the request of the NPD. The terms of reference for studies to be funded out of the UNDP contribution will be agreed between the NPD and UNDP before any contracting process is initiated".
- All procurement and contracts for studies and the production of materials funded by UNICEF will be undertaken by UNICEF, in consultation with the NPD, following normal UNICEF rules and procedures.
- Funds for other in-country activities financed by UNDP will be advanced by UNDP to the DMB which will report on and account for the use of the funds as specified in **Annex VI.**
- UNICEF will finance various in country training workshops and related activities; normal UNICEF rules and procedures for disbursement of funds will be followed.

Once appointed, the Programme Management Advisor, would provide his assessment of firms or individual candidates for other positions to the Selection Committee. Preliminary technical proposals for the international consultancy sub-contract may be invited from organizations/firms that are considered to be potential contractors, and the precise Terms of Reference and Scope of Work may then be reviewed and refined in mutual agreement between the Government and UNDP.

UNDP will, at the request of the NPD, arrange a short workshop to train key management and administrative staff of the DMB in the procedure relating to national coordination of UNDP funded project and programme.



## Programme Intervention Organisational Set-up



→ Reporting

←- - - - - Advice and Consultation



Entities directly involved in programme implementation.  
(N.B: DMB exists; other entities to be provided specifically for the purposes of the programme)



## G. MANAGEMENT AND COORDINATION ARRANGEMENTS

The Director General, DMB, will be National Programme Director (NPD) and be responsible for the day-to-day management of the Programme Intervention. The Programme Management Adviser, directly recruited by OPS, will advise and assist the NPD in all aspects of his duties, in particular he will oversee the performance of the international sub-contractor and national consultants.

The IMDMCC (or relevant sub-committee) will meet at least once every three months to:

- consider the proposed annual work plans, endorse or suggest modifications to them, as required, and make general recommendations concerning programme implementation for approval by the Government and UNDP;
- monitor the implementation of the Programme, provide guidance to the NPD, and make recommendations for action to be taken by other bodies including action to resolve inter-sectoral or any other problems encountered;
- to review and take account of recommendations by any independent assessments and evaluations arranged by UNDP;
- ensure co-ordination with related activities of other ministries and agencies, and timely action by all concerned on specific actions that are necessary for the implementation of the present Programme;
- act as an effective link between and among the various operational bodies, governmental and non-governmental, with responsibilities relevant to the objectives and activities of the Programme Intervention.

The first meeting of the IMDMCC in relation to this programme, which will be the Inception Meeting, will take place within three months of the start of the Programme Intervention to, amongst other things, approve the work plan for the first year and agree the complementary actions to be taken by the various ministries and their dependent bodies, and by others. Subsequent meetings will take place after 6, 9, 12, 15, 18, 21, 24, 27, 30, 33 and 36 months. The meetings after 9 and 21 months will consider the work plans for the second and third years respectively. The NPD will submit to each IMDMCC meeting a brief report on progress, any difficulties, and recommendations for actions by various parties to expedite implementation of the various Programme activities and assure the accomplishment of the specified outputs and objectives.

A broad-based standing **Disaster Management Training and Awareness Task Force (DMTATF)**, including representatives of concerned government agencies, training institutes, and PVDOs active in training in the field, will serve as a consultative and advisory committee in relation to the planning, implementation and monitoring of the training, communications and community mobilization activities. This includes the development and production of information and training materials. The Task Force will seek to ensure the co-ordination of activities with those of other agencies and programmes.

The membership of the DMTATF will be established by mutual agreement between the NPD, UNICEF and UNDP, and approved by the IMDMCC. It should include professional



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representatives of bodies such as the Directorates of Social Welfare, Health, Youth, Relief and Rehabilitation; DMB, BPATC, NILG, BARD, BDRCS, CPP, ADAB, VHSS and selected PVDOs; UNICEF and UNDP; and members of the technical assistance team.

The DMTATF will meet every two months, with additional meetings if and when required.

The IMDMCC will ensure the integration of the activities undertaken with those in all relevant sectors. At the working level, the Focal Points Operational Co-ordination Group (FPOCG) will provide the forum for regular inter-sectoral consultations and co-ordination in relation to all disaster management activities.

## H. MONITORING, REPORTING AND EVALUATION

The first meeting of the IMDMCC in relation to this programme, to be held within three months of the start of work under this agreement, will constitute the Inception Meeting. Progress will be subject to joint review by representatives of the Government, UNDP and UNICEF, at least once every 12 months through a process of Annual Programme Reviews (APRs). The first such meeting will take place some 12 months after commencement of the Programme Intervention. The NPD shall prepare and submit a Programme Progress and Evaluation Report to each APR. Additional review meetings may be held during the period of the Programme Intervention at the request of UNDP or the Government.

Progress reports will be prepared by the NPD at the end of month 3 and thereafter at six-monthly intervals, as indicated in **Table 9**. They will be submitted to the IMDMCC within one month of the end of the period concerned. The reports at months 9 and 21 will include proposed workplans for Years 2 and 3 respectively, for consideration and approval by the IMDMCC. These reports will also be submitted to the APR meetings at the end of Years 1 and 2.

The Programme Management Adviser (PMA) will be responsible for overseeing the work of the international sub-contractor and ensuring that outputs are in conformity with the agreed Workplan.

The PMA, the sub-contracted international personnel and the locally engaged individual national specialists will assist the NPD in preparing reports on the activities in which they are directly involved.

The report prepared at the end of Month 33 will be the Draft Terminal Report. It will describe the progress of all activities, under all objectives, and be reviewed at the Terminal Review meeting.

Each short-term specialist will be expected to prepare a concise report of his/her activities, findings and recommendations at the end of each input.

The technical assistance personnel will assist with the preparation of working papers on specific topics related to their particular expertise, as requested by the NPD.

The Programme Intervention will be subject to an initial evaluation after 12 months and a final evaluation shortly after the termination of the Programme Intervention. UNDP will establish the terms of reference and organize the evaluations in consultation with the Government (MoR/MDMR), UNICEF, the co-financing development partners, and any other United Nations body considered appropriate. The evaluation after 12 months will be designed specifically to provide feed back and guidance to the NPD and the consultants concerning the progress and future work of the programme. The final evaluation shall include detailed consideration of the effectiveness of community participation and mobilization, the involvement of women, and the impact of activities on the environment.



**TABLE 9**

**Reports and Review Meetings**

Months from start	Description
3	First Progress Report (Inception Report) including revised Workplan for Year 1: Inception Meeting
9	Second Progress Report, including Draft Workplan for Year 2.
12	Initial Evaluation
13	Annual Programme Review (APR) meeting.
15	Third Progress Report and revised Workplan for Year 2
21	Fourth Progress Report, including Draft Workplan for Year 3
23/24	Annual Programme Review (APR) meeting
27	Fifth Progress Report and revised Workplan for Year 3
33	Draft Terminal Report
35	Terminal Review Meeting
36	Terminal Report
	Terminal Evaluation

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## I. BUDGETS

**Table 10** shows the consolidated budgetted contribution of UNDP and other development partners over the three year period.

**Table 11** shows the GOB disbursement of donor funds, while **Table 12** shows the OPS disbursement.

**Table 13** shows the budgetted contribution of UNICEF.

**Table 14** shows the budgetted contribution of the Government.



**TABLE 10**  
**Consolidated Project Budget : UNDP and other Development Partners**

Project Number	: BGD/92/002
Project Title	: Support to Comprehensive Disaster Management
Revision code	: A
Source of fund	: 01 UNDP – IPF
AOS Source of funds	: 03 IPF Subline
Executing Agent	: Government of Bangladesh
UN Implementation Agent	: OPS

Description	Implem Agency	TOTAL mm	Cost \$	AOS \$	mm	1994 Cost \$	AOS \$	mm	1995 Cost \$	AOS \$	mm	1996 Cost \$	AOS \$
10 PERSONNEL													
11-51 Programme Management Adviser	OPS	16	272,000	29,920	8	136,000	14,960	4	68,000	7,480	4	68,000	7,480
15 Duty Travel	GOB		50,000			15,000			20,000			15,000	
16 Evaluation/Annual Programme Review	OPS		120,000			60,000						60,000	
17 National Experts/Consultants													
17-01 Disaster Preparedness Specialist	GOB	24.0	48,000		12.0	24,000		12.0	24,000		0.0	0	0
17-02 Training Specialist	GOB	24.0	48,000		12.0	24,000		12.0	24,000		0.0	0	
17-03 Sociologist/Social Anthropologist	GOB	12.0	24,000		12.0	24,000		0.0	0		0.0	0	0
17-04 Management Information Specialist	GOB	15.0	30,000		12.0	24,000		3.0	6,000		0.0	0	0
17-05 Visiting Consultants	GOB	20.0	42,000		8.0	17,000		8.0	17,000		4.0	8,000	
17-06 Zonal Disaster Preparedness Specialist	GOB	180.0	273,000		36.0	55,000		72.0	109,000		72.0	109,000	
17-99 Sub - Total		275.0	465,000		92.0	168,000		107.0	180,000		76.0	117,000	
19 Component Total			907,000	29,920	100.0	379,000	14,960	111.0	268,000	7,480	80.0	260,000	7,480
20 SUB-CONTRACT													
21 International													
21-01 International Consultant, supporting staff, and Vehicle O&M	OPS		791,000	87,010		355,000	39,050		304,000	33,440		132,000	14,520
22 Local													
22-02 Field Studies	GOB		160,000			80,000			80,000				
29 Component Total			951,000	87,010		435,000	39,050		384,000	33,440		132,000	14,520

[illegible]



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TABLE 11  
Project Budget : GoB Disbursements of Development Partners Funds

Project Number : BGD/92/002  
Project Title : Support to Comprehensive Disaster Management  
Revision code : A  
Source of fund : 01 UNDP - IPF  
AOS Source of funds : 03 IPF Subline  
Executing Agent : Government of Bangladesh  
UN Implementation Agent : OPS

Description	Implem Agency	TOTAL		1994		1995		1996	
		mm	Cost \$	AOS \$	mm	Cost \$	AOS \$	mm	Cost \$
15 Duty Travel	GOB		50,000			20,000			15,000
17 National Experts/Consultants									
17-01 Disaster Preparedness Specialist	GOB	24.0	48,000		12.0	24,000		0.0	0
17-02 Training Specialist	GOB	24.0	48,000		12.0	24,000		0.0	0
17-03 Sociologist/Social Anthropologist	GOB	12.0	24,000		0.0	0		0.0	0
17-04 Management Information Specialist	GOB	15.0	30,000		3.0	6,000		0.0	0
17-05 Visiting Consultants	GOB	20.0	42,000		8.0	17,000		4.0	8,000
17-06 Zonal Disaster Preparedness Specialist	GOB	180.0	273,000		36.0	55,000		72.0	109,000
17-99 Sub - Total		275.0	515,000		92.0	183,000		107.0	200,000
22 Local									
22-02 Field Studies	GOB		160,000			80,000			
Sub - total			160,000			80,000			
30 TRAINING									
31 Fellowships	GOB		96,000			32,000			32,000
32 Group Training (Study Tour)	GOB		72,000			24,000			24,000
33 In - Service Training	GOB								
33.01 Design, Production and Distribution of DM Handbook and related documents (incl. translation)	GOB		135,000			45,000			50,000
33.02 Production of Disaster Plans for the agencies	GOB		60,000			20,000			20,000
39 Component Total			363,000			121,000			126,000

40	EQUIPMENT						
45	Local procurement	GOB	52,000	15,000	19,000	18,000	
46	International procurement (Over US\$ 70,000)	GOB	220,000	220,000			
49	Component Total		272,000	235,000	19,000	18,000	
50	MISCELLANEOUS						
52	Reporting Costs	GOB	5,000	1,000	2,000	2,000	
53	Sundry	GOB	15,000	5,000	5,000	5,000	
59	Component Total		20,000	6,000	7,000	7,000	
99	PROJECT TOTAL		1,330,000	620,000	427,000	283,000	





TABLE 12  
Project Budget: OPS Disbursements

Project Number	: BGD/92/002  
 Project Title	: Support to Comprehensive Disaster Management  
 Revision code	: A  
 Source of fund	: 01 UNDP-IPF  
 AOS Source of funds	: 03 IPF Subline  
 Executing Agent	: Government of Bangladesh  
 UN Implementation Agent	: OPS

	Description	Implem Agency	TOTAL		1994		1995		1996	
			mm	Cost \$	AOS \$	mm	Cost \$	AOS \$	mm	Cost \$
10	PERSONNEL									
11.51	Programme Management Adviser	OPS	16	272,000	29,920	8	136,000	14,960	4	68,000
16	Evaluation	OPS		120,000			60,000			60,000
	Sub - Total		16.0	392,000		8	196,000		4	128,000
21-01	International Consultant, supporting staff, and Vehicle O&M	OPS		791,000	87,010		355,000	39,050		132,000
	Sub - Total			791,000	87,010		355,000	39,050		132,000
99	TOTAL			1,183,000	94,490		551,000	39,050		260,000
										22,000

TABLE 13

UNDP Project No.: BGD/92/002/A/01/99

Project Budget: UNICEF

Project Title: Support to Comprehensive Disaster Management

Code	Description	Total Cost (\$)	1994 Cost (\$)	1995 Cost (\$)	1996 Cost (\$)
	<b>Research</b>				
	Preliminary and formative research + }	42,000	37,000	5,000	0
	Training needs assessment }				
	Pilot projects	210,000	110,000	70,000	30,000
	<b>Sub-Total</b>	<b>252,000</b>	<b>147,000</b>	<b>75,000</b>	<b>30,000</b>
	<b>Training</b>				
	a)	National level, including:			
	- Study tour }				
	- Refresher/updating }				
	- General management training DMB }	120,000	52,000	35,000	33,000
	- DM courses }				
	- Training of the trainers }				
	b)	District, Thana and Union level, including:			
	- DM training for officials }				
	- Training of the trainers }	339,000	127,000	115,000	107,000
	- Training of DM committees }				
	- Training of motivators }				
	<b>Sub-Total</b>	<b>459,000</b>	<b>179,000</b>	<b>150,000</b>	<b>140,000</b>
	<b>Development and Production of Materials</b>				
	- Information and training materials, both printed and A-V	330,000	130,000	130,000	70,000
	- Materials for social mobilisation	60,000	30,000	30,000	
	- Model disaster action plans	30,000	0	20,000	10,000
	<b>Sub-Total</b>	<b>420,000</b>	<b>160,000</b>	<b>180,000</b>	<b>80,000</b>
	<b>Advocacy/Promotion</b>				
	- Briefing sessions at national level, divisional and district level	55,000	18,000	18,000	19,000
	- Annual disaster preparedness days }				
	- Promotional events in selected districts }	245,000	82,000	82,000	81,000
	- Continued social mobilisation }				
	<b>Sub-Total</b>	<b>300,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>
	<b>Operational Costs</b>				
	Training taskforce - DMB	24,000	8,000	8,000	8,000
	<b>Evaluation</b>	45,000		15,000	30,000
	<b>Total</b>	<b>1,500,000</b>	<b>594,000</b>	<b>528,000</b>	<b>388,000</b>



TABLE 14

UNDP Project No.: BGD/92/002/A/01/99

## Project Budget: Government Contribution in Kind

Project Title: Support to Comprehensive Disaster Management

Description		Total		1994		1995		1996				
		Input (mm)	Cost (Tk. Lakhs)	Input (mm)	Cost (Tk. Lakhs)	Input (mm)	Cost (Tk. Lakhs)	Input (mm)	Cost (Tk. Lakhs)			
<b>Establishment Costs</b>												
Director General	1	36	5.40	12	1.8	12	1.8	12	1.80			
Director	4	144	18.72	48	6.24	48	6.24	48	6.24			
Deputy Director	7	252	}	84	}	84	}	84	}			
Assistant Director	2	72		24		24		24				
Telecommunication Officer	3	108		36		21.6		36		21.6	36	21.60
Research Officer	4	144		48		48		48		48	48	
Accounts Officer	1	36		12		12		12		12	12	
Engineering Supervisor	1	36		12		12		12		12	12	
Computer Operator	2	72		24		24		24		24	24	24
Draftsman	1	36	12	12	12	12	12	12				
Technical Assistant	1	36	12	12	12	12	12	12				
Radio Technician	2	72	24	24	24	24	24	24				
Telephone/Teleprinter Operator	2	72	24	24	24	24	24	24				
Stenographer	3	108	73.80	36	24.6	36	24.6	36	24.60			
UDA	4	144	48	48	48	48	48	48				
P.A.	5	180	60	60	60	60	60	60				
Cashier	1	36	12	12	12	12	12	12				
Driver	7	252	84	84	84	84	84	84				
Accounts Clerk	1	36	12	12	12	12	12	12				
Motor Cycle Driver	2	72	24	24	24	24	24	24				
MLSS	10	360	120	120	120	120	120	120				
Sub-total	64	2304	162.72	768	54.24	768	54.24	768	54.24			
			(US\$ 411 940)		(US\$ 137 310)		(US\$ 137 310)		(US\$ 137 310)			
<b>Miscellaneous</b>												
Office rent			30.00		10.00		10.00		10.00			
Utilities (conservancy, furniture, telephone etc.)			78.00		38.00		20.00		20.00			
CDVAT			70.00						70.00			
Travelling and other allowances			36.00		12.00		12.00		12.00			
Office Operation and Maintenance			27.00		9.00		9.00		9.00			
Sub-total			241.00		69.00		51.00		121.00			
			(US\$ 610 120)		(US\$ 174 690)		(US\$ 129 110)		(US\$ 306 320)			
Total GoB			403.72		123.24		105.24		175.24			
			(US\$1 022 060)		(US\$ 312 000)		(US\$ 266 420)		(US\$ 443 630)			

Notes : 1 Lakh = 100 000  
: mm = months

## J. LEGAL CONTEXT

This programme support document shall be the instrument referred to as such in Article 1 of the Standard Basic Agreement between the Government of Bangladesh and the United Nations Development Programme, signed by the parties on 25 November 1986. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government cooperating agency described in that Agreement.

The following types of revisions may be made to this programme support document with the signature of the UNDP Resident Representative only, provided he or she is assured that the other signatories of the project document have no objections to the proposed changes:

- a. Revisions in, or addition of, any of the annexes of the programme support document;
- b. Revisions which do not involve significant changes in the immediate objectives, outputs or activities, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation; and
- c. Mandatory annual revisions which rephase the delivery of agreed inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility.



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**ANNEX I**  
**DISASTER MANAGEMENT BASIC**  
**CONCEPTS AND DEFINITIONS**

## DISASTER MANAGEMENT: BASIC CONCEPTS AND DEFINITIONS

### 1. Introduction

There are significant differences in the definitions and usage of terms by various organizations, institutions, and individual experts concerned with disasters, both in Bangladesh and internationally. The definitions adopted represent a compromise between those proposed by DHA and other international authorities, and the present usage of terms in Bangladesh. The terms given have been widely discussed during the course of the project and may be regarded as the consensus view. They are presented in a logical, more-or-less chronological sequence, not in alphabetical order. An English/Bangla Glossary is included.

### 2. Overall Framework: Phases and Related Activities

Many people tend to think in terms of three phases, or stages: 'pre-disaster', 'disaster', and 'post-disaster'. However, there is an important sub-division to be made within the 'pre-disaster' phase, between 'normal' times and the period following a warning being given, when a number of emergency measures may have to be taken, including evacuation. There are also questions concerning the ending of the 'disaster' phase, and the start of the 'post-disaster' phase.

It is suggested that the most helpful categorization is:

- |   |  |                   |
|---|--|-------------------|
| 1 | Normal time                                  |                   |
| 2 | Alert and Warning                            | )                 |
|   |  | ) Emergency phase |
| 3 | Disaster (rescue and basic needs)            | )                 |
| 4 | Recovery (rehabilitation and reconstruction) |                   |

In practice, the transition from one phase to the next is not necessarily clear cut, particular activities phase in and phase out progressively, and overlap with each other. For example, certain relief activities will continue, declining progressively, while recovery activities build up. Similarly, the 'recovery' phase gradually merges into 'normal', ongoing development, as illustrated in **Figure 1**.

However, the main focus of activities is significantly different during each of the three phases listed above, and they are therefore useful to conceptualize the process, and to define who does what, when.

**Figure 2** provides a schematic outline of the phases and associated major activities.



### 3. Disasters and Disaster Management

A **Disaster** is an event, natural or man-made, sudden or progressive, that seriously disrupts the functioning of a society, causing human, material, or environmental losses of such severity that the affected community has to respond by taking exceptional measures. The disruption (including to essential services and means of livelihood) is on a scale that exceeds the ability of the affected society to cope using only its own resources.

**Disaster Management** includes all aspects of planning for and responding to disasters. It refers to the management of both the risks and the consequences of disasters, and includes:

- (i) the incorporation of preventive/mitigation measures into overall development plans and activities at all levels in disaster-prone areas: this may include structural and non-structural measures to reduce the likelihood (probability) of disaster occurring and the consequences of those that cannot be prevented;
- (ii) preparedness plans and related measures in disaster-prone areas to warn people of imminent threats and organize appropriate emergency responses, when necessary: this includes forecasting, warning dissemination systems, and standing arrangements for evacuation and the organization of rescue, relief and short-term rehabilitation activities;
- (iii) emergency response to disasters when they occur, including rescue, relief, short-term rehabilitation/repairs; and
- (iv) post-disaster reconstruction/long-term rehabilitation.

### 4. 'Normal' Time

'**Normal' Time** refers to a period when there is no current emergency, nor any immediate threat of a disaster, but long-term measures are taken in anticipation of the impact, at some unknown time in the future, of known hazards.

The measures to be taken during 'peace time' fall into two main categories:

- (i) preventive/mitigation measures to reduce vulnerability and risks on a long-term, permanent basis;
- (ii) preparedness arrangements to provide warnings (when possible) and establish contingency plans and capacity for emergency response (when required).

**Disaster Prevention/Mitigation** measures are designed to reduce, on a permanent basis, the adverse impact of floods, cyclones (including storm surges), and other hazards (potentially damaging events). The measures may be aimed at reducing the probability or intensity of particular hazards, or the vulnerability of the society and its assets to the impact of those that do occur.

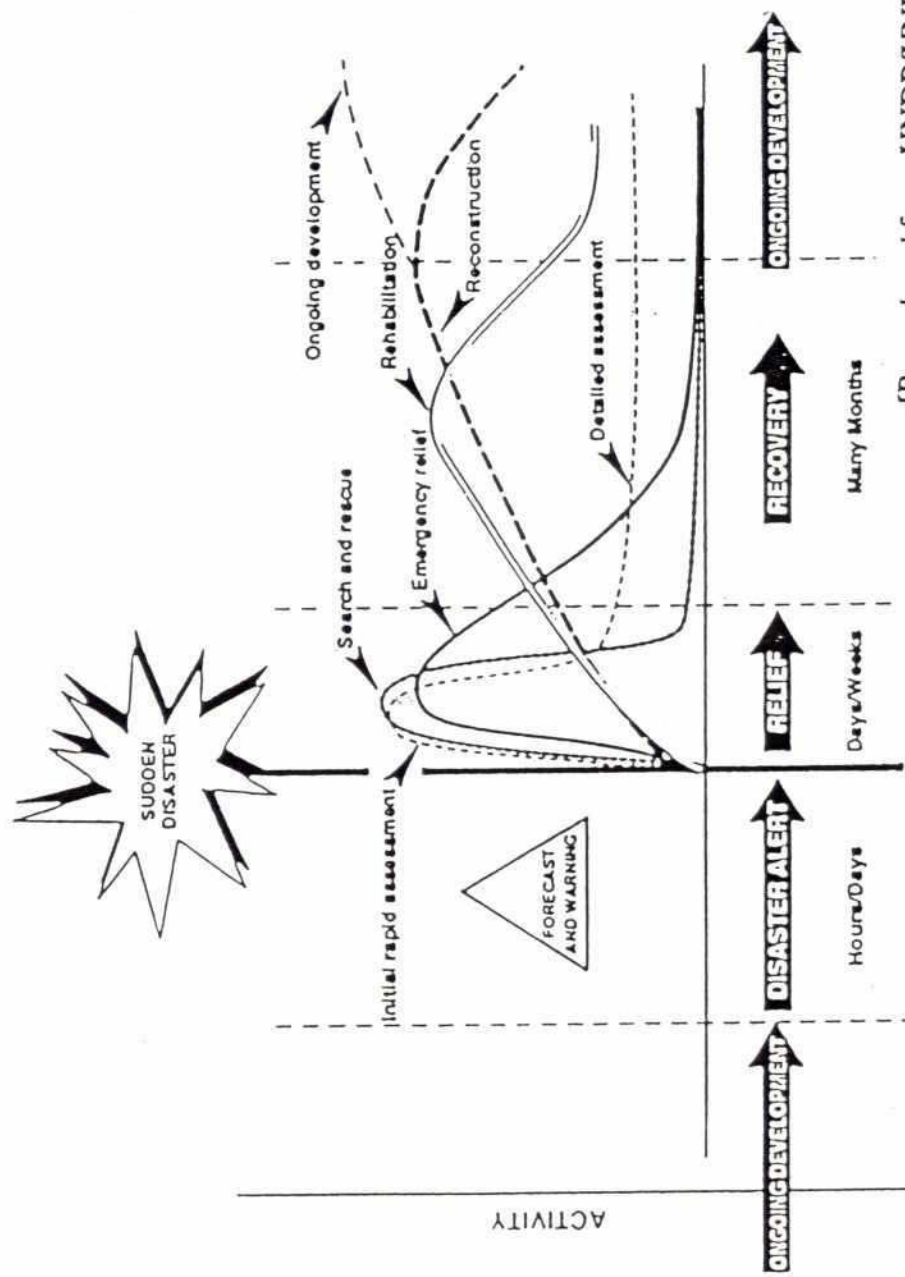


Figure 1

[Reproduced from UNDP/UNDRO Disaster Management Manual]



# Main Phases and Activities in Disaster Management

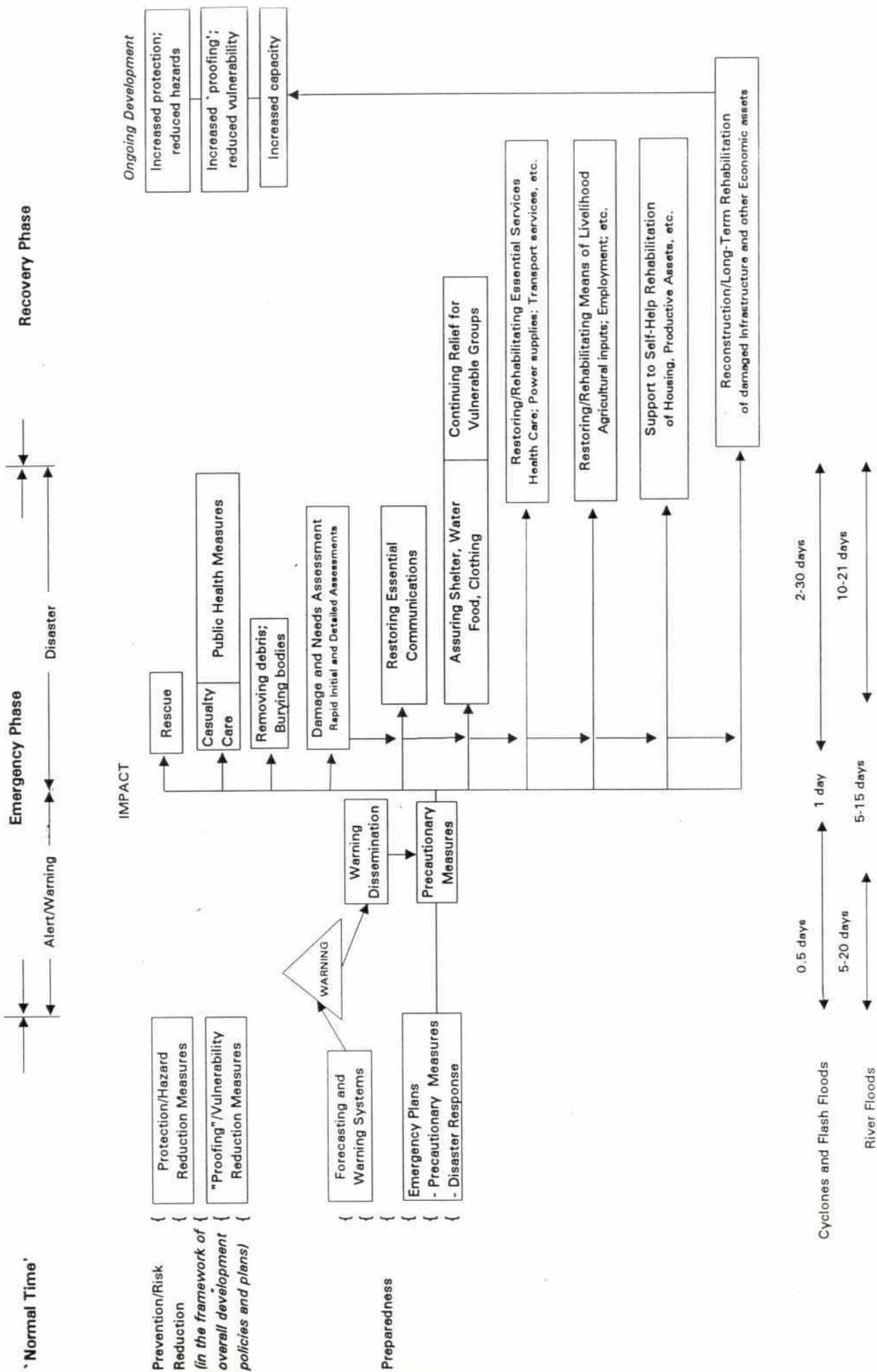


Figure 2

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Specific measures can include:

- (i) **'Protection', or Hazard Reduction:** Embankments, drainage channels, afforestation, and other 'structural' or 'physical' measures to reduce the impact of floods or cyclones (including storm surges), or the likelihood and impact of floods. Adequate maintenance must be assured.
- (ii) **'Proofing', or Vulnerability Reduction:** This can take several forms:
  - Land use planning (or 'zoning') which seeks to ensure that people and economic assets are not located in hazardous areas, and that new developments do not create new risks -- sometimes referred to as hazard avoidance. Can be attempted through regulations or incentives.
  - Improvements in designs and construction standards for new buildings and other structures, and strengthening existing ones, to better withstand high winds, floods, earthquakes or other phenomena which are likely to occur in the locality -- sometimes referred to as hazard resistance. Can apply to engineered and non-engineered structures, and be attempted through regulations, incentives, and/or training.
  - Adoption by individual households and local communities of various measures to reduce the likelihood of losses of valuable assets (through improved storage arrangements, for example). Can be encouraged through public education and community mobilization.

**Disaster Preparedness** measures to ensure the readiness and ability of the society -- Government, other organizations, communities, and individuals -- to take precautionary measures in advance of an imminent threat, in cases where advance warnings are possible, and to organize timely response in the event of a disaster.

Preparedness involves:

- (i) Forecasting and warning dissemination systems for cyclones and floods (including potential breaches of embankments); and
- (ii) Operational capability (plans, procedures, resources) to ensure timely action at all levels -- by communities, Government, major institutions, NGOs, and other organizations -- when a warning is issued and following a disaster impact.

The latter includes arrangements (at local level) for the evacuation of people, livestock, and movable property, from threatened localities, and the implementation of other temporary, precautionary measures to protect lives and property when a warning is issued; and arrangements at all levels to organise search and rescue, provide relief, and make emergency repairs to restore essential services, when needed. Education, training, and practice drills, are essential at all levels.



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**Warning systems** are arrangements to rapidly disseminate information concerning an imminent disaster threat to officials, institutions, and the population at large, in the areas at immediate risk.

Warnings normally concern cyclones or floods. A warning system involves links to forecasting systems; the organizational and decision-making processes to decide on the issuing of particular warnings; arrangements to broadcast the warnings by radio and through other mass media; and arrangements for the local dissemination of warnings and instructions within the communities at risk.

The effectiveness of any system depends on the prior education and training of officials and the population to the meaning of the warnings and the actions to be taken.

**Vulnerability (Vulnerability analysis)** is the extent to which a community, structure, service, economic activity, or geographic area is likely to be damaged or disrupted by the impact of a particular hazardous phenomenon.

Vulnerability analysis is the process of estimating the vulnerability to particular hazardous phenomena of specified elements (structures, services, or whole communities) at risk. Combined with an analysis and mapping of the hazards to which an area is prone, it provides a basis for planning relevant preventive and preparedness measures.

For engineering purposes, vulnerability analysis involves the analysis of theoretical and empirical data concerning the effects of particular phenomena on particular types of structures.

For more general socio-economic purposes it involves consideration of all significant elements in society, including physical, social and economic considerations (both short- and long-term), and the extent to which essential services (and local coping mechanisms) will be able to continue functioning.

## **5. Alert (or Warning) Phase and Activities**

**Alert (or Warning) phase** is the period from the issuing of an alert or public warning of an imminent disaster threat to its actual impact, or the passage of the threat and the lifting of the warning. The period during which pre-impact precautionary, or disaster containment, measures are taken.

**Precautionary (Emergency Risk Reduction) Measures** are actions taken in response to a disaster warning to minimize or contain the eventual negative effects. This includes, as and where needed, evacuation and other precautionary measures, flood-fighting and similar measures. These precautionary (pre-impact) measures are pre-planned, and practised, as a part of preparedness, and put into effect when specified conditions arise.

**Emergency Phase** is the period during which exceptional (emergency) measures have to be taken to save lives and property, and to meet the basic needs of the survivors in respect of shelter, drinking water, food, and medical care.

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An emergency phase begins when a warning is issued requiring immediate action to be taken to protect lives and property, it extends through the actual impact/occurrence of a disaster and the period immediately following when special measures are required to ensure the survival and meet the basic needs of the victims.

## **6. Impact and Post Impact Phase and Activities**

**Emergency relief** is assistance provided to save and preserve lives, and meet the basic subsistence needs of disaster victims.

Relief includes material aid to enable affected families to meet their basic needs for shelter, clothing, water, and food (including the means to prepare food), and emergency medical care. Relief supplies and services are provided free of charge -- on a humanitarian basis -- in the days and weeks immediately following a sudden disaster. They may need to be provided for extended periods in the case of severe drought and population displacements (refugees or internally displaced people).

Emergency relief measures are planned and implemented on the basis of the (post-impact) assessment, but may be initiated on the basis of past experience and preparedness plans until sufficiently comprehensive assessment data are available.

**Damage and Needs Assessment (post-impact)** is the process of determining the impact of a disaster on a society; the needs for immediate, emergency measures to save and sustain the lives of survivors; and the possibilities for facilitating and expediting recovery.

Assessment is an interdisciplinary process undertaken in phases and involving on-the-spot surveys and the collation, evaluation and interpretation of information from various sources concerning both direct and indirect losses, short- and long-term effects. It involves not only determining what has happened, what resources are available to the affected communities, and what assistance might be needed, but also defining objectives and how relevant assistance can actually be provided to the victims, considering both short-term needs and long-term implications.

**Damage assessment** is the preparation of specific, quantified estimates of physical damage resulting from a disaster, and recommendations concerning the repair, reconstruction or replacement of structures and equipment, and the restoration of economic (including agricultural) activities.

## **7. Recovery Phase and Activities**

**Recovery Phase** is the period, following the emergency phase, during which actions are taken to enable victims to resume normal lives and means of livelihood, and to restore infrastructure, services and the economy in a manner appropriate to long-term needs and defined development objectives.

Recovery encompasses both rehabilitation and reconstruction, and may include the continuation of certain relief (welfare) measures in favour of particular disadvantaged, vulnerable groups.



2/2  
**Short-term rehabilitation and repairs** are actions taken in the aftermath of a disaster to enable basic services to resume functioning, to assist victims' self-help efforts to repair dwellings and community facilities, and to revive economic activities, including agriculture.

Rehabilitation focuses on enabling the affected populations (families and local communities) to resume more-or-less normal (pre-disaster) patterns of life.

**Reconstruction/Long-term rehabilitation** is the permanent reconstruction or replacement of severely damaged physical structures, the full restoration of all services and local infrastructure, and the revitalization of the economy (including agriculture).

Reconstruction must be fully integrated into ongoing long-term development plans taking account of future disaster risks and possibilities to reduce those risks by the incorporation of appropriate mitigation measures. Damaged structures and services may not necessarily be restored in their previous form or locations. Reconstruction may include the replacement of any temporary arrangements established as a part of emergency response or short-term rehabilitation.

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**ANNEX II**  
**FUNCTIONS OF KEY DISASTER MANAGEMENT BODIES**



## National Disaster Management Council (NDMC)

Chair: Prime Minister

Members: 5-6 key ministers: Relief, Finance, Local Government, Home, Roads, Communications, Shipping, Flood Health .....?

5-6 key Secretaries: as above .....?

Principal Secretary;

PSO; 3 Cabinet Secretary

Eminent representatives of PVDOS

Member-Secretary: Cabinet Secretary

Frequency of meetings: Twice a year to review presentation/mitigation and preparedness aspects.

As required during an emergency: probably daily during first few days, weekly later.

### Functions: (a) general

1a.1 Establishing policies and providing overall direction for all aspects of disaster management, including defining priorities and criteria for the allocation of resources.

1a.2 Reviewing and initiating follow up action, as and when required, on recommendations of the National Disaster Management Advisory Committee (NDMAC), and on reports of the Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC) concerning the implementation of policies and programmes in relation to prevention/mitigation, preparedness, emergency response, rehabilitation and reconstruction.

### Functions: (b) in relation to disaster prevention/mitigation

1b.1 Establish overall policies and priorities for the consideration of disaster risks and the incorporation of disaster prevention/mitigation measures in general development planning. Review reports on the implementation of policies, and any related recommendations submitted by the IMDMCC, and initiate follow-up action as required.

### Functions: (c) in relation to disaster preparedness

1c.1 Establish national policies in respect of disaster preparedness, and promote appropriate action by all sections of society. Review reports on the implementation of policies, and any related recommendations submitted by the IMDMCC, and initiate follow-up action as required.

1c.2 Approve and endorse up-dated Emergency Standing Orders and a National Disaster Plan, when formulated, including general policies and standards for the provision of relief following disasters.

1c.3 Ensure the integration of all relevant national capabilities in an overall National Disaster Plan, and monitor the overall state of preparedness and that of individual departments, agencies, and services. Ensure the complementarity and the adequacy of arrangements within and between the civil administration, Armed Forces, and PVDOS.

1c.4 Ensure collaboration between the civil authorities and the Armed Forces in training for disaster preparedness and emergency response.

1c.5 Consider the need for legislation in relation to disaster prevention/mitigation and preparedness.

1c.6 Report to Parliament on the overall state of emergency preparedness.

**Functions: (d) in relation to emergency response**

1d.1 *In the event of a warning (an imminent disaster threat):* Review the overall state of preparedness and decide on any additional measures to be taken.

*In the event of a disaster:*

1d.2 Review/establish priorities and criteria for the allocation of available relief materials, funds, and transport units. Ensure that these are observed in actual allocations.

1d.3 Release funds from national resources for specified purposes, and authorize special, emergency procedures where appropriate.

1d.4 Monitor the progress of relief and rehabilitation operations, and the planning for reconstruction, and take action whenever necessary to ensure efficient and effective operations within the framework of defined policies and priorities.

1d.5 Review the findings of the final evaluation, or "post mortem," of the emergency response, and take action on the associated recommendations of the IMDMCC.

**Functions: (e) in relation to rehabilitation and reconstruction**

1e.1 Monitor the process of damage assessment, review the consolidated reports and proposals for reconstruction, and approve the overall reconstruction programme with specified priorities.



## National Disaster Management Advisory Committee (NDMAC)

(This Committee replaces the National Disaster Prevention Council, established in 1988, and serves as the National IDNDR Committee)

- Chair: An eminent person with relevant experience to be nominated by the President/Prime Minister.
- Members: Representatives of the Parliamentary Committee on Disaster Management (maximum 8)?  
Eminent professionals from government service, universities, other institutions, PVDOs, and aid organizations, nominated by ..... having recognized experience in specific technical and/or management aspects relating to disaster prevention/mitigation, preparedness, or response – including experts in water resources, meteorology, earthquake engineering, physical planning, social anthropology, education, etc. (maximum 30)?
- Chairman, BDRCS  
President, Federation of Chambers of Commerce and Industries  
President, Institution of Engineers  
Chairmen: Insurance Companies' Association; Krishi Bank; Grameen Bank

Member-Secretary: .....  
Secretary MDMR / Additional Secretary DMB

Frequency of meetings: Twice a year, with *ad hoc* meetings when considered necessary by the Chairman.

Sub-Committees: The Committee may form such technical sub-committees as it finds appropriate, and designate the Chairmen for such committees. Additional specialists may be co-opted to those sub-committees at the discretion of the chairmen. [Sub-Committees may be formed in relation to: cyclone warnings; flood forecasting; earthquake risks; social aspects and people's participation; etc..]

### Functions: (a) general

2a.1 Provide advice to the NDMC, and directly to MDMR and DMB, on specific technical, management, and socio-economic aspects relating to disaster prevention/mitigation, preparedness, emergency response, rehabilitation and reconstruction.

2a.2 Promote awareness of disaster risks and mitigation possibilities among all professional and other groups represented in the Committee, and encourage such groups to arrange workshops, training, and research, as appropriate, by and among their constituent members.

2a.3 Provide a forum for inter-disciplinary exchanges of ideas and experience relating to disaster risks, and promote inter-disciplinary collaboration in addressing the issues involved.

## Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC)

Chair: Minister of Disaster Management and Relief (DMR)

Vice-Chair: Cabinet Secretary

Members: Member Programming/SEI, Planning Commission

All concerned secretaries: .....

PSO;

D-G PVDO Affairs Bureau

S-G BDRCS

Member-Secretary: Secretary DMR

Frequency of meetings: Twice a year to review prevention/mitigation and preparedness aspects (prior to NDMC meetings).  
During an emergency: daily during the initial stages; twice weekly later  
(An Executive Relief Management Sub-committee may be formed.)

### Functions: (a) general

3a.1 Implementation of NDMC policies and decisions on an inter-ministerial basis. Monitoring and reporting to the NDMC the status of activities in relation to disaster prevention/mitigation, preparedness, emergency response, rehabilitation and reconstruction.

3a.2 Co-ordination of action by all government agencies, and overall direction of the activities of the DMB.

### Functions: (b) in relation to disaster prevention/mitigation

3b.1 Make recommendations to the NDMC concerning policies and priorities for the incorporation of disaster prevention/mitigation measures in general development planning. Ensure and co-ordinate the provision of corresponding guidelines to sectoral planners and local-level officials. Review the effectiveness of policies and priorities, and report to NDMC with recommendations for any modifications considered necessary. Review the adequacy of guidelines, and arrange for improved guidelines to be prepared and issued, when necessary.

3b.2 Establish procedures and criteria for the appraisal of development projects in terms of (i) the vulnerability of the project and its outputs to known risks, and (ii) the likely effects of the project on the vulnerability of the people and other assets in the locality. Review the effectiveness of arrangements (the adequacy and application of procedures and criteria) for the appraisal of development projects, and make any needed improvements.

3b.3 Co-ordinate the preparation, and monitor the implementation, of specific disaster prevention/mitigation projects, relevant regulations, and other risk reduction measures. Establish priorities and co-ordinate the mobilization/allocation of the necessary resources. Ensure the necessary technical supervision, and arrangements for the long-term maintenance of structures and other measures.

3b.4 Monitor arrangements to increase national expertise and up-to-date knowledge of disaster risks and mitigation possibilities among sectoral planners, local-level officials, and others including PVDOs and other aid agencies. In liaison with the NDMAC and its technical sub-committees, promote the inclusion of relevant material in the training provided for technical and professional personnel, and co-ordinate inter-sectoral research, where required.



3b.5 Monitor and report to the NDMC on the implementation of national policies and priorities in relation to disaster risks and mitigation.

**Functions: (c) in relation to preparedness**

3c.1 Review the efficiency of national forecasting and warning systems, and ensure effective co-ordination between the various bodies involved.

3c.2 Approve refined/up-dated Emergency Standing Orders and the National Disaster Plan, including general policies and standards for the provision of assistance following disasters.

3c.3 Make recommendations to the NDMC for legislation in relation to disaster prevention/mitigation and preparedness.

3c.4 Ensure the preparation of action plans by all relevant agencies, in conformity with the agreed responsibilities of each agency. Ensure that all plans and guidelines are properly co-ordinated with each other, and lines of communication between agencies at all levels are appropriately defined.

3c.5 Monitor, and report annually to the NDMC on the overall state of emergency preparedness.

3c.6 Review and co-ordinate the provision of guidelines and practical support to local-level warning dissemination systems.

3c.7 Ensure co-ordination between all agencies involved in public information and awareness activities in relation to disasters.

3c.8 Ensure co-ordination between all concerned government agencies, and with PVDOs, in the organization of training in disaster preparedness and emergency response.

3c.9 Ensure the establishment of facilities for a national Emergency Operations Centre (central control room) in an appropriate location, and the provision of necessary equipment for use during an emergency. Ensure arrangements for specified personnel from concerned line agencies, the Armed Forces, and any other appropriate bodies, to be assigned temporarily, at short notice, to reinforce the core staff at times of emergency.

3c.10 Ensure adequate arrangements to deploy additional radio communications equipment (and operators) rapidly into areas where normal telecommunications are disrupted; and establish arrangements whereby operational agencies (governmental and PVDOs) can establish/operate/have access to radio networks, where needed, under proper authority.

3c.11 Establish arrangements by which trained and experienced senior civil service officers can be promptly sent on temporary assignments to reinforce the district, thana, and union-level administrations in disaster-affected areas, and other experienced personnel be mobilized through professional associations, etc.

3c.12 Ensure the establishment of arrangements for rapid but thorough (independent) technical assessments of physical damage and specification of reconstruction requirements. (This to be done in consultation with the major donors in order to ensure their acceptance of and prompt response to the findings.)

Functions: (d) in relation to emergency response

3d.1 *In the event of a warning (an imminent disaster threat):* Ensure that warning information is passed to all concerned officers, agencies, and public dissemination channels, and that all concerned bodies are on stand-by.

*In the event of a disaster:*

3d.2 Arrange the assignment of additional civil service officers to support the responsible authorities in the affected areas, if required.

3d.3 Co-ordinate action by various line agencies to restore communications and essential services, and the mobilization and assignment of Armed Forces units and personnel for specified operational support functions.

3d.4 Review/establish priorities and criteria for the allocation of available relief materials, funds, and transport units. Review actual allocations.

3d.5 Recommend releases of funds for specified purposes. Authorize special, emergency procedures, where appropriate, including delegating additional authority to the operational level (if not already adequately provided for in the Standing Orders).

3d.6 Co-ordinate the issuing of information (to donors, PVDOs and the news media) and requests to donors/the international community for additional aid, if needed.

3d.7 Ensure the maximum sharing of information between all concerned bodies, and the co-ordination of the activities of all operational agencies (governmental and PVDO).

3d.8 Monitor the progress of operations in all areas; take action to resolve problems notified by the DMB or other agencies; ensure that operations are being effectively carried out within the general framework of established policies and guidelines.

3d.9 Co-ordinate the preparation of detailed damage assessments and proposals/projects for reconstruction/long-term rehabilitation of the affected areas.

3d.10 Report to the NDMC and, through ERD, to donors on the progress of operations and the use of resources. Provide information to the news media through the Ministry of Information.

3d.11 Review the findings of the final evaluation, or "post mortem," of the emergency response arranged by the DMB, and approve publication. Submit the report to the NDMC with recommendations for action.

Functions: (e) in relation to rehabilitation and reconstruction

3e.1 Co-ordinate the detailed assessment of damage to major infrastructure, economic assets, and public service facilities/utilities, and the consolidation of data from district-level authorities concerning other damage. Ensure the rapid but thorough (independent) specification of requirements for reconstruction in consultation with potential donors, including arranging joint assessments, where required.



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**ANNEX III**  
**EQUIPMENT**

## Support to Comprehensive Disaster Management

### EQUIPMENT

#### 1. Equipment to be Procured under Project BGD/92/002/A/01/99

Budget Code	Description	Nr.	Unit Cost (US\$)	Amount (US\$)
<b>45.</b>	<b>Local</b>			
45.1	Furniture (sets) For Zonal Disaster Preparedness Specialists	6	1,000	6,000
45.2	Stationery etc	24	1,500	36,000
	24 months at \$1,500			
	12 months at \$833	12	833	10,000
<b>46.</b>	<b>International</b>			
46.1	Vehicles	7	20,000	140,000
46.2	Computers	6	4,000	24,000
46.3	Digitizer	1	8,000	8,000
46.4	Plotter	1	4,000	4,000
46.5	Air Conditioner	10	1,500	15,000
46.6	Generator	1	8,000	8,000
46.7	Copiers	2	3,000	6,000
46.8	Laser Jet Printer	2	3,000	6,000
46.9	Motor Cycles	2	2,000	4,000
46.10	Overhead Projector	1	3,000	3,000
46.11	Fax (Cannon 270)	1	2,000	2,000
Sub-total for 46.				220,000
<b>Total</b>				<b>US\$ 272,000</b>



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2. List of Equipment and Furniture supplied under BGD/91/021 to be transferred to BGD/92/002

Sl/No.	Description	Quantity	Remarks
1	Conference Table	6 Nos.	
2	Executive Table	14 Nos.	
3	Steno Table	3 Nos.	
4	Full Secretariat Table	4 Nos.	
5	Executive Chair (Revolving)	14 Nos.	
6	Steno Chair	3 Nos.	
7	Conference Chair	40 Nos.	
8	Wooden Table for Phtocopier	1 No.	
9	Book Shelves Wooden	10 Nos.	
10	Steel Almirah	2 Nos.	One with safe custody
11	File Cabinet	3 Nos.	
12	Center Table	3 No.	
13	Airconditioner Split-type 1=2, 1=2, 1=1	3 Nos.	
14	Ceiling Fan	4 Nos.	
15	Cannon NP-3825 Photocopier	1 No.	
16	Spiral Binding Machine	1 No.	
17	Flip Chart Board	1 No.	
18	Computer AST Premium II 386/25	1 No.	
19	AST 286 Brabo 286/16	1 No.	
20	Ast 386/25 Exec Laptop	1 No.	
21	Dell 333P 386DX Upgradable up to 486/50 with NEC 19" Color Monitor	1 No.	
22	Dell 333P 386DX with Monocrom Monitor	1 No.	
23	Digitising Tablet Summagraphic Summa Sketch	1 No.	
24	Dell 150 Tape Backup for Dell 333P	2 Nos.	
25	HP IIIP Laser Jet Printer	1 No.	
26	Data Transfer Switch	1 No.	
27	Powertronix UPS Model No. GX 750	2 Nos.	
28	PK UPS	1 No.	

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Sl/No.	Description	Quantity	Remarks
29	Best UPS	2 Nos.	
30	Voltage Stabilizer	3 Nos.	
31	Disk Bank 3.5"	3 No.	
32	Disk Bank 5.5"	1 No.	
33	Fax Machine Cannon 2705	1 No.	Installed in Control Room
34	Epson LQ 1170 Printer	2 Nos.	One installed in Control Room
35	OKI Microline ML 391 Printer	1 No.	
36	Abaha Bangla Software Package	1 Package	One installed in Control Room
37	Non-Windows Software	9 Packages	1. WordPerfect Version 5.1 2. Lotus 123 Version 2.4 3. Dbase IV Version 1.5 4. Freelance Graphics Version 3.1 5. Norton Utilities Version 6.0 6. Norton Commander Version 3.0 7. Central Point Anti Virus 8. Lotus Impress 9. Dbase R&R Report Writer
38	Software Package for Windows	4 Packages	1. WordPerfect for Windows 2. Lotus 123 for Windows 3. Micrografix Graphics for Windows Version 3.0 4. Dbase IV Version 1.5 (All of 4 packages installed in Control Room)
39	PC ARC/Info Software Version 3.4D Starter Kit PC ARCDIT, PC ARCPlot, PC Overlay, PC Network, Data Conversion Video Training tapes.	1 Package for each	
40	ARC View	1 Package	
41	AST Premium 486/33 Computer	1 No.	Installed in the Control Room of Ministry of Relief.
42	Intelligent Printer Buffer with 4 in and 2 out Parallel Ports 5123 K Memory	1 No.	
43	2 MP Memory Expansion Board for HP Laser Jet IIIP Printer	1 No. 1 No.	
44	Punch Machine Heavy Duty	1 No.	
45	Computer Mouse	1 No.	
46	Cordless Telephone set	1 Set	
47	Casio Calculator	6 Nos.	



Sl/No.	Description	Quantity	Remarks
48	Heavy duty Stapler Machine	1 No.	
49	Small Wooden Shelf	1 No.	
50	Library Table with 7 Drawers	1 No.	
51	Digital PABX, Equipped for 4 T&T lines and 30 extension lines, expandable to 8 T&T lines and 72 extension lines with accessories.	1 No.	Telecommunication Equipment procurement for DMB are yet to be received.
52	HF/SSB transceivers, complete with antennas and accessories for 12 stations, batteries and battery chargers with accessories	12 Nos.	"
53	Electronic teleprinter, telex version with auto-dialling, multiple address transmission and VDU display unit, complete with accessories and spares.	1 No.	"
54	Fax equipment with autodialling, relay broadcast, multi broadcast facility with accessories and spares.	5 Nos.	"
55	Bijoy Bangla Software	1 Package	
56	Toyota Land Cruiser (Jeep) No. AJAS-039 Chassis No. FJ70-0018698	1 No	
57	Toyota Station Wagon No. AJAS-040 Chassis No. AT177-0000848	1 No	
58	Toyota Station Wagon No. AJAS-041 Chassis No. AT177-0000850	1 No	
59	Toyota Hiace Commuter No. AJAS-042 Chassis No. RZH 104-0008185	1 No	
60	Toyota Hiace Commuter No. AJAS-043 Chassis No. RZH 104-0008209	1 No	

**ANNEX IV**

**NOTES ON PROPOSED FIELD ACTIVITIES,  
TRAINING AND COMMUNITY MOBILISATION**



## ANNEX IV

## FIELD ACTIVITIES, TRAINING AND COMMUNITY MOBILIZATION

## IV.1 Introduction

The proposed activities can be roughly divided into

- i) research and studies;
- ii) training, awareness raising and community mobilization;
- iii) development and production of plans, guidelines and other materials.

The different types of activities are elaborated in the following paragraphs. However, one should keep in mind that they are closely related both conceptually and in practice. Information on the various activities needs to constantly be shared to ensure that they are consistent all together, working from unified standpoints towards unified goals.

The DMB and the work undertaken in the context of the present Programme Intervention will focus on preventive and preparedness measures in relation to natural disasters. The initial focus of most activities will be on cyclones and floods. At national level (within the DMB), this should fairly quickly be extended to include concerns relating to river bank erosion, earthquakes, and landslides. If the need is identified to undertake detailed work on any of these aspects (e.g. to develop seismic monitoring capacity or building codes), complementary projects would be proposed.

In natural disasters, women (and children) are the most vulnerable group. Therefore, while focusing on preventive and preparedness measures, special attention should be paid to their particular situation and needs. Furthermore, care must be taken to ensure that women also actively participate in the programme, in the preparation, the planning and the implementation of activities at all levels.

## IV.2 Research and studies

There is very little information available on popular beliefs and attitudes toward disasters, or on ways in which communities traditionally mobilize themselves. Research on existing behaviours and beliefs will be undertaken in order to understand:

- what people in disaster-susceptible areas consider appropriate behaviour;
- what blocks exist to adopting life-saving measures (e.g. fear of loss of property, or of harassment of women);
- what traditional behaviours lead to the saving of life and protection of



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property.

Local institutions will be involved in conducting this research as a means of building their capacity.

Supportive to training activities, a comprehensive disaster management training needs assessment will be conducted, to determine the current level of knowledge and skills of particular groups and to define specific training objectives (curricula) accordingly.

Frequent reviews should be conducted during the life of the programme to ensure that the trainings pursue an appropriate and effective course.

### Previous Studies

A considerable number of small-scale studies have been made and reported on by various government agencies, research institutes, and NGOs, following earlier disasters, and particularly following the floods of 1987 and 1988, and the cyclone of 1991.

The Flood Action Plan (FAP) process represents a set of inter-linked studies to specify means of achieving greater control over flooding in order to: protect important urban centres and infrastructure; increase agricultural production and other economic outputs in areas that can be protected against unusually severe flooding; and reduce the human and material losses, caused by unusually severe floods, among populations living in areas that are not protected. Of particular relevance in terms of non-structural (non-engineering) measures are the proposals for what has come to be termed "flood proofing", suggested but not yet specified in detail by FAP:14 and FAP:23 and improved flood forecasting measures that are to be developed under FAP:10.

There is no need to duplicate the work that has already been done. The need is to put into practice the various practical measures that already have been proposed. However, some aspects require more in-depth analysis, and there are a number of areas that have been identified in earlier reports that have yet to be addressed, such as:

- housing mitigation possibilities: simple construction techniques that would increase the resistance of traditional structures to high winds and floods, and the resistance of all structures to earthquakes;<sup>1</sup>
- ferro-cement tanks, or other means of protecting and preserving critical household stocks and property;

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<sup>1</sup> A linkage may be established with the UK/ODA-assisted Oxford Polytechnic Project that is preparing guidelines on how to set up and run training and educational programmes in "safe building", and with other similar initiatives elsewhere.



- the viability of flood and crop damage insurance and/or mutual savings schemes to provide some degree of protection for low-income groups against flood and cyclone damage; and
- the development of post-disaster assistance strategies that promote recovery and reduce the dependence created by existing relief strategies, while ensuring that humanitarian needs are met.

In these cases, the emphasis would be on "action research", i.e. an activity that seeks to develop and test possibilities in actual practice.

The research will pay special attention to perceptions and behaviour of, and bottle-necks and possibilities for women. Female experts will participate in research activities in general, and in the gender focused issues in particular.

The terms of reference for studies to be funded out of the UNDP contribution will be agreed between the NPD and UNDP before any contracting process is initiated.

#### IV.3 Training

##### IV.3.1 Coordination of the various training activities

Training, public awareness and community mobilization activities are central to the effort to improve preparedness (hence the effectiveness of response) and to promote "proofing" in the field, at district level and below. Where needed, they will be supported by:

- i) the research such as mentioned above (VI.2);
- ii) action to produce or otherwise ensure the availability of appropriate training and information materials;
- iii) the identification and orientation/training of suitable training organizers and resource persons.

Three main types of education/awareness building/training activities are envisaged:

**Advocacy/Sensitization** reaches the political leaders, senior officials and other influential people regarding the importance of a comprehensive approach to disaster management in order to obtain their commitment and support.

**Disaster Management Training** strengthens the capacities of managers and leaders to fulfill their respective functions. To a significant degree it involves improving basic management and inter-personal skills.

**Community Mobilization** is the process of motivating and supporting people to organize and take appropriate initiatives to protect themselves, their property and their communities against hazards.

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Successful implementation of the programme will call for the involvement of all possible training resources. The DMB will play a nodal role in the coordination of the programme, working with all the agencies involved to ensure the coherence of the various components and the best possible use of available human and material resources.

Related training for personnel of the Armed Forces will continue to be organized by the Armed Forces Command and Staff College (AFCSC). The DMB and AFCSC will co-ordinate closely, and collaborate in the preparation and use of training materials. Joint training sessions and exercises will be arranged, if found to be feasible, between AFCSC and BPATC or other training institutes.<sup>2</sup>

A Disaster Management Training and Awareness Task Force (DMTATF), or standing working group, will be formed (convened by the DMB). It may include among others representatives of: the line agencies most directly concerned (e.g. Social Welfare, Health, LG); BPATC; other training institutions (e.g. NILG, BARD); the Armed Forces Division/AFCSC; local disaster management training organizations (e.g. SADMC, BDPC); ADAB; VHSS; NGOs having significant training programmes of their own; concerned professional associations as well as UNDP, UNICEF and other interested agencies.

The DMTATF will operate as a forum for the exchange of information and experience in relation to these activities, and to co-ordinate the efforts and activities of all concerned in the preparation, distribution and use of related training materials. It will held regular reviews of the training programme in order to assess its appropriateness and effectiveness, and consequently propose adjustments.

The DMTATF will work in close collaboration with agencies involved in research, education and other aspects of the programme to ensure that unified messages are developed and promoted. In this way, a mutually reinforcement among all partners and activities would be achieved.

The proposed outputs of the 'Support to Comprehensive Disaster Management' project indicate that training will be a critical, and complex, component of the project. The success of a viable national disaster management training programme will be determined by the seriousness with which training, and the essential policy formulation on which it must be based, is pursued. A sustained commitment will be required from concerned people, all of whom must be aware, interested, and involved in the process, from senior policy makers down to the individual villagers who are the usual victims of the disasters which so frequently strike Bangladesh. Political commitment will be essential to the success of the programme. Without it the whole process will lack authority, focus and eventually, relevance.

#### IV.3.2 Specific Training Activities

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<sup>2</sup> As a first step in this direction, training workshops may be scheduled simultaneously at BPATC and AFCSC with the two groups of participants being brought together for sessions and simulation exercises on one or two days.



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Through the training process, many ideas about themes, policies and directions will develop and be further refined. These will need to be incorporated into future training reviews.

All specific training elements (syllabi and topics for each audience, identification of individual participants and trainers, appropriate training methods, etc.) will place special attention on women and children. Their vulnerabilities and needs will be included in the curricula. Moreover, women will participate in training activities at all levels. With regard to community mobilization, the identification and training of female motivators is of special importance as they will be the persons who can work with women at the community level. Therefore, equal numbers of female and male motivators should be identified/trained.

The 'Disaster Management Training Strategy' (BGD/91/021 Final Report, Vol V) describes the overall approach and presents a detailed Training Activity Matrix which provides a basis for planning the wide range of activities envisaged.

The paragraphs below, outline the activities proposed for each group.

**a) Sensitization of political leaders and senior officials**

One-day seminars would be organized with the aim of covering approximately 50% of all members of Parliament and officials of deputy secretary rank and above, perhaps a total of 1,000 persons at national and district levels. Audio visual and printed materials would be prepared for and used by these audiences.

**b) Training of staff of the DMB**

A short (1-week) introductory workshop will be arranged for senior staff of the DMB - shortly after the appointments are completed (but not later than 3 months after the commencement of the Programme Intervention). The course will be arranged in conjunction with an appropriate institute in Bangladesh and be specifically designed as a team-building exercise as well as to enhance the knowledge and skills of the personnel individually.

Opportunities will be provided for the Director General, the Senior Specialists and Specialists to attend 4/6 week disaster management training courses organized by internationally recognized specialist institutions, notably the Asian Disaster Preparedness Centre (Bangkok) and the Cranfield Disaster Preparedness Centre (Shrivenham, England),<sup>3</sup> and to participate in short study tours to other countries in the region which face similar hazards, such as India, Thailand, Philippines, Viet Nam, and Indonesia. Where possible, staff will be deputed for this training, and these study tours, in pairs. Arrangements will be made (within the Programme Intervention, with bilateral donors, or other funding agencies) for an equal number of places to be made available on the same courses and study tours for officers from the Armed Forces, or personnel from other institutions or NGOs substantially involved with the DMB in specific activities covered by the present Programme Intervention.

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<sup>3</sup> APDC is recommended on account of its proximity (hence relatively low travel costs) and its extensive previous involvement with disaster management planning and training in Bangladesh. CDP is recommended on account of its established relationship with the AFCSC.



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Staff of the DMB participating in such training, or study tours, must be on non-rotational assignments and expected to remain in their posts for at least a further three years. Personnel of the Armed Forces, to be nominated by the Armed Forces Division, will be officers assigned to the AFCSC or posts in which they would be directly involved in providing support to the civil authorities in the event of a major disaster. Personnel from other institutions (e.g. BPATC) or NGOs will be individuals who are directly involved with the DMB and its activities under the present Programme Intervention. Proposals will be agreed by the National Programme Manager and the Project Management Advisor in consultation with the Disaster Management Training and Awareness Task Force.

c) **Training of other government officers and personnel of key line agencies**

In addition to sensitizing high level officials and providing specific training for government officers (and others) presently serving in the selected, priority districts and thanas, the present Programme Intervention will also seek to develop a basic understanding of disaster management issues and responsibilities among government officials in general, and among other key community leaders, and to ensure that line agency personnel are provided with training relevant to the specific tasks they would be called on to perform in relation to 'proofing' and disaster response. These activities would be planned in consultation with and with the co-operation of the Disaster Management Training and Awareness Task Force.

The DMB - in consultation with the DMTATF - will work closely with the BPATC in the preparation of specific disaster management training modules, and related training materials (including case studies and simulation exercises), for inclusion in the regular courses provided by the BPATC and its associated centres. These modules will be tailored to the particular needs of each of the various groups of personnel served. They will introduce the participants to practical measures and procedures for disaster management in the context of national policies and the National Disaster Plan, and will help the officials concerned to use the Disaster Management Handbook. Preliminary modules will be developed and introduced in parallel with the development of those two basic documents.

The DMB will, in similar fashion, work closely with the other departments and training institutes that provide basic and refresher training for other personnel who have important roles and responsibilities in relation to promoting and/or implementing disaster proofing, preparedness, and/or response measures. This includes the police academies; fire service and civil defense; ansars and VDP training academy; health service training programmes; agricultural extension training institutes; rural development training academies/centre; DPHE; LGED. It also includes non-government training institutes and programmes, such as Imams training; universities; professional institutes; and NGO training centres. (The inclusion of relevant material in the school curricula and the training of school teachers is also vital, and referred to below).

In all these cases, the DMB (and the technical assistance team) will assist the institutions concerned in defining training objectives for each group of trainees, in preparing/assembling relevant material, and in identifying suitable resource persons to assist in conducting the sessions. Within the limits of the budget available the DMB would arrange for the production of the necessary training materials. Other costs would be borne by the institutions/departments concerned. Exceptionally, funds may be made available to cover the



costs of travel and honoraria for outside resource persons during an initial 12-month period.

In-country Disaster management training workshops will be sponsored/arranged for one or two key personnel from each of the training institutes involved, and for personnel from other organizations including staff of the Planning Commission, line agencies and major donors responsible for drawing up and/or appraising development projects. Special workshops, of 6-10 days duration, may be organized in collaboration with suitable local institutions, or arrangements be made for the individuals to attend the regular courses of such institutions.

Assistance will also be provided to key line agencies to arrange short training workshops for certain of their personnel, focusing on the specific, technical responsibilities and tasks for their personnel in relation to disaster proofing, preparedness and response. Workshops will be arranged for the thana-level officers assigned in the selected priority thanas. Assistance will be provided to the agencies concerned in defining the training needs, preparing and producing training materials, and in funding the workshops. These would be organized in phases, for four or five separate groups of officers. The departments concerned would have overall responsibility for organizing the workshops.

Assistance would also be provided to the same line agencies, as required, in defining the training needs of and developing training materials for use with other groups of personnel (district level offices and others). The costs of such training would be borne by the departments concerned.

#### d) Training and Planning at District, Thana and Union levels

There is a need for specific training of key officers at the three levels, and of team building within the disaster management teams. Apart from general orientation, training will be built around the process of developing local-level Disaster Plans. The main training activities will be phased in during the 3-years period following an initial, preparatory period during which Standing Orders are refined and model plans prepared for the various levels.

While work is proceeding on up-dating and consolidating the Standing Orders, work will be initiated in one or two thanas to orient the thana level personnel and support them with the preparation of hazard maps, disaster profiles, and local Disaster Action Plans. Similar work will then be undertaken in one or two unions and the district headquarters. This initial experience will provide the basis for refining the Standing Orders before they are finalized and incorporated into the Disaster Management Handbook, and for defining the training needs and strategies, and the training materials required, for the main training and planning activities at these levels.

Specific training will be provided for DCs, ADCs, DRROs, TNOs, PIOs, Union Chairmen, and Union Secretaries. This will be done through short workshops organized at divisional and district levels. Separately, workshops will be organized for each district and thana disaster management team as a group, these will be designed around the process of preparing the hazard maps and disaster profiles for the district/thana concerned, and lead into the preparation of local disaster action plans. The ZDPs will assist in organizing these workshops and in following up with all concerned parties to help develop the local plans.



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It is envisaged that 15 priority districts may be covered during the initial 3-year period. Within these districts, in addition to the district level personnel, all TNOs and PIOs would be trained (approx 120 thanas). The 50-60 most disaster prone thanas would be taken up for development of the thana level team and union level activities (in 400 unions). These provisional targets will be reviewed in the course of implementation and annual workplans be prepared accordingly. It is envisaged that a series of three workshops would be held in each location to initiate and follow through on the process of developing the local plans.

e) **Refresher training of rostered personnel**

It is proposed to establish a roster listing experienced individuals available at short notice to assist in the management of emergency operations. Once this is done, arrangements will be made to convene periodic workshops to be attended by the rostered individuals. The 1-day workshops would be designed to keep all those on the roster up-to-date with regard to policies and procedures, and to maintain direct contact between those individuals and the staff of the DMB. Such workshops may be envisaged every two years. A single workshop might therefore be held during the lifetime of the present Programme Intervention.

f) **Public Awareness and Community Mobilization**

There is a need for complementary activities on the ground within target communities and through the media. Pilot project methodologies can be used to listen to the population, and to mobilize local leaders, associations, NGOs, women's groups and cultural groups. Suitable media will be selected to reach both opinion leaders and officials on the one hand, and directly to the community on the other. Based on the assessed needs, communications materials may be produced, including videos and printed materials. A joint programme with the Directorate of Social Welfare, and/or other agencies, may be considered. The experience of the Department of Health Education, the Expanded Programme of Immunization, the Campaign for Mass and Primary Education, BRDB and others, should be considered. Radio and TV may be considered to reinforce the work at community level.

The DMTATF may serve as the mechanism to involve and harmonize the efforts of a number of organizations (Government and non-government). Information/educational materials would be developed and disseminated in a similar manner to that indicated above for the more general training materials. Project field staff, 'motivators', would be mobilized from existing government and/or non-government organizations to organize community level activities, and to mobilize and co-ordinate the activities of agencies and organizations already active within the communities. They would be given additional training for the purpose. Orientation/training may be provided for local radio and print media personnel and others involved in campaigns.

The effectiveness and costs of the programme would be monitored including through periodic research to determine any changes in awareness and behavior patterns.

During an initial stage, various methods will be tried out, and different materials will be field-tested, in a small number of different localities (thanas). Use will be made of existing facilities and personnel at thana level and below. Teachers and retired government officers living in the villages, the local scouts, guides and teachers' associations may be mobilized



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as well as NGOs, voluntary organizations and associations active in each locality.

The Zonal Disaster Preparedness Specialists will advise and assist the disaster management committees at thana level to plan and organize these activities, and relevant information/educational materials will be developed and provided.

In parallel with these activities, arrangements will be made with the relevant education authorities for the inclusion of suitable material in the school curricula, in general reading/text books, for Grades V to VIII. Relevant items/modules will also be introduced into the training provided for primary and secondary school teachers through the PTIs and TTCs. The latter will be specifically adapted to the areas served by each institution focusing on cyclone risks in the institutes primarily serving the cyclone belt, for instance.

#### **IV.4            Development and production of plans, guidelines and other materials**

Regarding training and information materials, the DMB, in consultation with the DMTATF, and in collaboration with concerned government agencies, training institutes, professional associations, and NGOs, will arrange the preparation, production and distribution of materials suitable for the various target groups/audiences. Following up on the work initiated under BGD/91/021, the DMB, supported by the DMTATF will:

- i)     act as a clearing house for information on existing training materials available and suitable for use in Bangladesh;
- ii)    arrange (fund), where necessary, the reproduction of existing materials for use within the various activities envisaged under the present Programme Intervention; and
- iii)   specify requirements for additional materials and arrange the development and production of such materials, providing funds, where required.

Existing materials, which are specifically relevant for use in Bangladesh, will be used/adapted to the maximum extent possible. The development and production of additional materials will be arranged primarily through collaboration with existing organizations (governmental and non-government) that have demonstrated capability and experience in the development and production of effective education and training materials (The DMB may establish limited capacity to design and reproduce small items, if found to be necessary).

Besides training and information materials, a number of different types of plans and related guidelines are required. Where applicable, the special vulnerabilities and needs of women will be taken into account in these documents.

The principal ones are:

##### **(a)    National Disaster Plan**

This would, inter alia, define:

- the specific roles and responsibilities of, and lines of communication between, all concerned bodies including; national committees; the DMB/EOC; ministries; the Armed Forces; line agencies; the civil administration and disaster management committees in the field; BDRCS; CPP; NGOs; and others;
- the warning systems for different kinds of predictable events (notably cyclones and floods);
- the overall process of response to (i) warnings and (ii) disasters, including the specific steps involved and the responsibilities of concerned bodies in relation to each step;<sup>4</sup>
- arrangements for logistics support and telecommunications;
- model Disaster Action Plans for district, thana and union-levels.

(b) **National Disaster Management Handbook**

This would, inter alia incorporate:

- details of the responsibilities under the National Disaster Plan;
- model disaster action plans and related guidelines for districts, thanas and unions;
- improved procedures, practical guidelines and criteria for early assessments of damage, needs, and resources available, following a disaster;
- guidelines on possible assistance needs and standards of provision;
- guidelines and decision aids (e.g. work sheets) for resource allocations, and refined distress/deprivation indicators;<sup>5</sup> and
- guidelines on reporting and accountability.

(c) **District, thana and union-level hazard maps and disaster profiles:**

- Maps prepared at district, thana and union levels (prepared in conjunction with the LGED Plan Books) showing the precise areas subject to particular

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<sup>4</sup> In developing the national plan, the models that are provided in existing handbooks and examples available from other countries should be studied. Sources include; Disaster Management; A Disaster Manager's Handbook, N. Carter, ADB 1991; plans from Hong Kong, and India (AP and Orissa).

<sup>5</sup> "Distress factors", developed in 1985, have been used in the allocation of VGD resources, including post-disaster special VGD cards. A review of these factors was undertaken by WFP in 1991 but a decision made to await the publication of the new census data before making any changes to the present system.



intensities of flood damage, storm surge, or other hazard; and

- Disaster profiles prepared at each level on an inter-sectoral basis would include basic data on the area, the infrastructure and services available; an analysis of the vulnerability to particular hazard of people, infrastructure, and other economic assets; the specific arrangements and resources (human and material) available to support "proofing", preparedness and disaster response (relief and rehabilitation), when needed.

(d) **District, thana and union level Disaster Action Plans:**

Based on the local hazard maps and disaster profiles, and the general guidelines provided by the DMB, Disaster Action Plans would define the specific responsibilities and tasks of the various civil officers, police, line agency personnel, and other organizations represented in the local disaster management communities (and any Armed Forces operational support unit deployed during an emergency). These local plans would cover aspects similar to those indicated above for the National Disaster Plan;<sup>6</sup>

(e) **Contingency (Disaster Action) Plans of Line Ministries/Agencies:**

Internal plans for action within individual line ministries and line agencies to ensure their ability to satisfactorily fulfil their responsibilities as defined in the National Disaster Plan. These plans would include:

- the specific roles and responsibilities of, and lines of communication between, all concerned sections and field units/personnel of the ministry/line agency, and their relationship with other bodies; and
- the overall process of response to (i) warnings and (ii) disasters, including the specific steps involved and the responsibilities of concerned sections/units in relation to each step.

All these documents, including the model plans and all guidelines, will be issued in Bangla. Those for use at union level will be prepared in very simple language. (Provision is included in the programme budget for translation to enable the inputs of the international consultants to be fully utilized, and for the final documents to also be accessible to the international donor and NGO communities.)

## IV.5 Responsibilities and Institutional Arrangements

In the event of a major disaster, the DMB would function as a national Emergency Operations Centre, as described in *Functions and Structure of a Disaster Management*

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<sup>6</sup> Model plans for district, thana and union levels must be developed through a process of actual planning in one or two districts thanas and unions taking account of the examples that are available from other countries

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Unit/Organization in Bangladesh, MOR/UNDP BGD/91/021 Working Paper No. 1(rev.1).  
The technical assistance personnel would assist as indicated in their individual job descriptions.

Responsibility for the overall management of response to any emergency, including a major accident, will continue to rest with the Civil Administration, supported by the Police, the emergency services (under the Ministry of Home Affairs), and all other line agencies, as required. The DRR assures the provision and distribution of relief, where needed, as the MOH assures medical and health care. In extreme cases, specific operational assistance from the Armed Forces may be requested.

Arrangements for local government, and the responsibilities of local government bodies, are presently being reviewed and discussed in Parliament. New arrangements are expected to be defined and put into effect in the near future. In the mean time, it is envisaged that:

(a) At the district and thana levels:

- The overall co-ordination and management of preparedness and disaster response activities is, and should remain, the responsibility of the civil administration, supported by all line agencies and other operational organizations in the district/thana (governmental and non-government/voluntary), and monitored by representative local bodies;
- Standing Disaster Management Committees should be established, replacing the earlier Relief Co-ordination Committees. These committees, chaired by the DC/TNO would include the local officers of line agencies, representatives of BDRS, CPP, NGOs, voluntary organizations, professional associations, women's representatives, and representatives of the union parishads.<sup>7</sup> Care should be taken to assign female members as well. These committees would:
  - i) ensure the co-ordination of all preparedness and response activities, including training and the preparation of local hazard and vulnerability maps (in conjunction with LGED and the Thana Plan Books), and Disaster Action Plans; and
  - ii) promote public awareness and community mobilization for disaster management, and the planning and implementation of local-level measures to reduce risks through "proofing" or small-scale protection measures.

(b) At union level:

- The management of disaster response has been and will remain the

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<sup>7</sup> At times of major disasters, when the Armed Forces are mobilized in support of the civil power, the commanders of the military units assigned to particular districts and thanas would also be included as members of the relevant disaster management committees.



responsibility of special union committees under the chairmanship of the Union Chairman. These committees should be consolidated with broad-based membership including teachers' representatives, extension and other government workers, BDRCS, CPP, NGOs, voluntary organizations, women's representatives, and ward members. Care should be taken to assign female members as well.

- Union Councils have, under the Standing Orders for Flood and for Cyclone, been responsible for taking preparedness measures also, although no training or support has been provided in this connection. The mandates of the Union Disaster Management Committees should explicitly include equivalent responsibilities to those listed as (i) and (ii) above for the district and thana committees. Guidelines, training and some practical support should be provided to them in this connection.

(c) At community (village/neighborhood) level:

- Through public awareness/education programmes focusing specifically on the local situation, information on actions that can be taken to reduce risks and losses must be made available to people living in disaster-prone areas. These programmes must be developed on a participatory basis, including local research and consultations, and should encourage communities to take appropriate measures at the level of individual households and also collectively, on a neighborhood or village basis; and
- These community-level groups should then be encouraged to organize local-level activities and to interact with the union-level committees in relation to risk reduction and preparedness measures, and response, when needed.

The findings and recommendations of the FAP:14 Study, which are supported by the field work undertaken by BGD/91/021, emphasize the importance of building up neighborhood-level capacity. They highlight a desire among people in flood and cyclone-prone areas for support from the union level and above in relation to warnings, shelter sites, improved roads, security of property, and rehabilitation assistance, rather relief. There is also a desire for improved techniques for protecting (saving) food stocks, drinking water supplies, and other valuable property, during storm surges and floods. These priorities and felt needs, subject to local confirmation, should form the basis of approaches to disaster management at local level.

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**ANNEX V**

**FLOOD PREPAREDNESS:  
CONCERNS OF THE FLOOD ACTION PLAN AND FPCO**



## ANNEX V

**FLOOD PREPAREDNESS: CONCERNS OF THE FLOOD ACTION PLAN AND FPCO**

The Flood Policy Study, and the subsequent 'Flood Action Plan' (FAP), in 1988/89 identified the need for improved preparedness in relation to flood risks. A specific component project was provided, FAP:11 (See **Table V.1**). A draft project document was prepared in 1989 entitled 'Comprehensive Disaster Preparedness'. The focus of the proposals was on flood risks, with the expectation that other risks, notably cyclone, would be incorporated in a later phase. One element was to be the creation of a small 'Office of Emergency Preparedness'.

Subsequently, it was recognized that the proposals needed to be seen in the broader context of 'disaster management', and a revised proposal was prepared entitled 'Comprehensive Disaster Management'. Later, brief Terms of Reference for FAP:11 (Disaster Preparedness) were drafted by FPCO/FAP-POE (See below).

Following the April 1991 cyclone, a UNDP-assisted project BGD/91/021 (Assistance to the Ministry of Relief) was taken up. The activities of project included some of those that had been envisaged by FPCO/FAP-POE, and the finalization of the proposals and project document for the longer-term disaster preparedness/management project.

Through a long process of consultation, agreement has been reached within the Government on new organizational arrangements and structures for disaster management, including disaster preparedness, covering all types of natural disaster. The Disaster Management Bureau (DMB) is now being established and a programme of technical assistance and other inputs has been drawn up to assist the DMB in carrying out a wide range of activities, with initial priority emphasis on cyclone and flood risks.

This Programme Intervention covers the concerns of the FPCO/FAP-POE within the context of a broader approach to the disaster-related needs of Bangladesh. It has recently been proposed by the Steering Committee of BGD/91/021 that this Programme Intervention BGD/92/002 entitled 'Support to Comprehensive Disaster Management' should be taken up through normal channels, not through the FAP process. It is, however, clearly understood that it covers the purposes for which the component FAP:11 was originally envisaged.

The draft Terms of Reference prepared by FPCO/FAP-POE are reproduced in **Table V.2**. This table indicates whether the particular topic was addressed during the course of BGD/91/021 and also under which activity it will be addressed in the follow on project BGD/92/002, Support to Comprehensive Disaster Management.

**TABLE V.1**  
**List of Flood Action Plan Projects**

<b>FAP</b>	<b>Description</b>
1.	Brahmaputra Right Embankment Strengthening
2.	North West Regional Study
3.	North Central Regional Study
3.1	Jamalpur Priority Project
4.	South West Area Water Management Study
5A.	South East Regional Study
5B.	Meghna Estuary Study
5C.	Chittagong Coastal Area Study
6.	North East Regional Study
7.	Cyclone Protection Project
8A.	Greater Dhaka Protection Project
8B.	Dhaka Integrated Flood Protection Project
9A.	Secondary Towns Protection Project
9B.	Meghna Left Bank Protection Project
10.	Flood Forecasting and Early Warning Project
11.	Disaster Preparedness Programme
12.	FCD/I Agricultural Review
13.	O&M Study
14.	Flood Response Study
15.	Land Acquisition and Resettlement
16.	Environmental Study
17.	Fisheries Study and Pilot Project
18.	Topographic Mapping
19.	Geographical Information System (GIS)
20.	Compartmentalization Pilot Project
21.	Bank Protection Pilot Project
22.	River Training and Active Flood Plain Management Pilot Project
23.	Flood Proofing Pilot Project
24.	River Survey Programme
25.	Flood Modeling/Management Project
26.	Institutional Development Programme



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**TABLE V.2**  
**Specific Activities of Concern to FPCO/FAP-POE**

Draft Terms of Reference prepared by FPCO//FAP-POE(1990)	Action under BGD/91/021	Activity under BGD/92/002
<b>4.1 The project will be carried out in three phases</b>		
a) a preparatory phase during which activities to be undertaken by the project will be identified and incorporated in a revised project documents	-	-
b) Phase 1 of the project in which the Office of Disaster Management would be set up, its staff trained in their duties and training programme initiated for other officials and members of the public; and	-	-
c) Phase II of the project in which training activities would continue and a Geographical Information System (GIS) for disaster management would be set up	-	-
<b>4.2 The following activities will be carried out during the preparatory phase.</b>	-	-
a) Review the status and effectiveness of the country's existing procedures for disaster management in order to identify measures needed to up-date and strengthen them to make them more fully capable of meeting current and future needs, including those to be created by the implementation of water control projects under the Flood Action Plan. Included in the procedures to be reviewed should be:	Yes, but no specific focus on FAP project	-
i) the Standing Orders for Flood and for Cyclone of the Ministry of Relief and Rehabilitation;	Yes	-
ii) the Ministry of Relief's procedures for administering relief and rehabilitation during and after disaster.	Not yet, could be initiated in extension period to 20 December 1993	2.4.i
iii) BWDB's Flood Forecasting and Warning systems and BMD's Windstorm Warning Centre, particularly in relation to the use made of such warnings by officials, local government and the public;	Yes	-
iv) the Ministry of Agriculture's Flood and cyclone Code and Drought Code;	Yes	2.4.i
v) BWDB's current procedures for dealing with emergencies in water control project areas	Yes	2.4.i
vi) the Bangladesh Power Development Board's procedures for emergency release of water from Kaptai dam;	No	2.4.i
vii) systems operated by other agencies, such as; Bangladesh Railway; Roads and Highways Department; municipalities; Bangladesh Bank's agriculture credit guarantee fund; etc	No	2.4.i
b) In the light of the findings of that review, make recommendations on:		
i) the nature and scale of revisions needed to up-date and revise existing procedures for disaster management;	Preliminary Draft for revised Standing Orders prepared	2.2.i/ii; 2.3.i/iii; 4.1.ii; 3.6.i/ii
ii) the nature and scale of training required to make the revised procedures fully functional at both operation and public levels	Overall Training Strategy prepared	3.2.i
iii) suitable institutions which might be involved in providing training in disaster management procedures	Yes	3.2.i
iv) the functions of the proposed office of Disaster Management and an appropriate staffing pattern; and	Yes	-
v) the technical assistance requirements for establishing a modern Office of Disaster Management able, inter alia, to meet the needs of future development envisaged under the Flood Action Plan.	Yes, no specific focus on FAP	-

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Draft Terms of Reference prepared by FPCO//FAP-POE(1990)	Action under BGD/91/021	Activity under BGD/92/002
c) Arrange a study tour for a small number of senior officials to observe how ODMs are organized and operate in other countries in the Asia-Pacific region.	Yes	-
d) Prepare a project proforma (PP) for the proposed project for approval by the Planning Commission and a project document for approval by UNDP.	Yes	-
4.3 Subject to amendments that might be recommended during the preparatory phase, it is envisaged that the following activities would be undertaken during the implementation of Phase I of the project.	-	-
a) Set up and equip an Office of Disaster Management (ODM)	Yes, DCMU initially to become DMB during extension	-
b) Training staff of the ODM in basic disaster management techniques.	No	3.1.ii
c) Revise and disseminate the Ministry of Relief's Standing Orders for Flood and for Cyclone (in English and in Bangla)	Initial revisions made	2.3.i
d) Assist other agencies to revise their disaster management procedures.	Yes, initial revision to Standing Orders	2.4.i; 2.6.i
e) Develop an improved system for the transmission of flood warnings to upazila and village levels, and for the rehearsal of officials and the public in measures to be taken on receipt of such warnings.	No	6.2.i
f) Develop procedures for managing emergencies in water control projects, including the provision of warnings to the public and arrangement of evacuation procedures where necessary.	No	2.4.i; 2.6.i
g) Develop disaster management curricula for introduction in appropriate training centres in Bangladesh (possibly including the Public Administration Training College, the Rural Development Academics at Comilla and Bogra, and the National Institute for Local Government)	No, although initial discussions held with PACT, BARD, NILG AFCSC etc. PATC has initiated its own a DM Cell/Unit	3.2.i; 3.5.i
h) Arrange training in disaster management procedures for various categories of officials at national, regional, district and upazila levels whose normal responsibilities involve them in disaster management functions during emergencies	No	3.1.ii/iii; 3.4.i/ii
i) Arrange similar training for chairmen and members of upazila and union parishads, members of voluntary agencies and other persons involved in disaster management during emergencies.	No	3.4.iii
j) Arrange overseas training in modern disaster management techniques for selected officials of the Ministry of Relief and other relevant agencies	Some training with ODA assistance	3.1.ii
k) Prepare a project document amendment for Phase II to incorporate any revision of activities considered necessary in the light of experience gained during the operation of Phase I.	-	-
4.4 During Phase II, it is envisaged that the following activities would be undertaken.		
a) Continue training activities initiated in Phase I	-	Numerous
b) Prepare, on a pilot basis, disaster hazard and disaster vulnerability maps for selected localities, preferably including an urban area and a water control project area.	No	4.1.i; 4.2.ii
c) Set up a Geographical Information System (GIS) for disaster management.	Yes, Pilot in progress	2.1.iii



Specific concerns expressed by the FPCO-PoE in a meeting on 27 January 1993 are highlighted below together with the relevant BGD/92/002 activity reference number.

**BGD/92/002 Activities**

Flood Proofing

1b.4.v, 2d.1.1, 2d.3.i, 3d.1.i, 3d.2.i.

Information Systems

1a.1.iii, 3c.1.i/ii

Warning Systems

3a.1.i, 3a.2.i

Operational Orders

1b.1.i/ii, 1b.2.i/ii, 1b.3.i, 1c.1.i

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**ANNEX VI****GUIDELINES FOR NATIONALLY EXECUTED PROJECTS  
INCLUDING MODEL IMPLEMENTING AGENT AGREEMENT**



## GUIDELINES FOR NATIONALLY EXECUTED PROJECTS

### Financial and accounting arrangements.

#### A. General

1. The (Government authority named on cover page of the project document), hereinafter referred to as "the Government", is responsible to the Administrator of UNDP for the custody and proper use of funds advanced to it by UNDP.
2. The Government will maintain separate accounts (include a separate bank account) for UNDP resources. It will use the funds provided to it only for inputs financed by UNDP, in accordance with the project budget covering UNDP's contribution. (See PPM Part III, Section 30305, subsection 3.0.)
3. Advances of funds to and payments by UNDP on behalf of Governments are governed by the applicable UNDP Financial Regulations and Rules and directives regarding the utilization of currencies.
4. The Government will provide UNDP with financial statements of UNDP funds received and spent, prepared in accordance with the UNDP financial year (1 January to 31 December) in (English, French or Spanish) a/. The periodicity and content of such statements are set out below. Annual financial statements will be audited by the legally recognized auditors of the Government's own accounts. To the extent feasible, the audit principles and procedures prescribed for the United Nations will be applied by the auditors, who will provide audit reports annually together with the report set out below.
5. For the purpose of reporting to UNDP, US Dollars equivalents will be calculated at the United Nations operational rates of exchange. The Resident Representative of UNDP will inform the Government of such United Nations rates of exchange and of changes thereto when occur.

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a/ Amend as appropriate

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B. Advance of Funds

6. Advance will be made by the Resident Representative at the request of the Government in accordance with the project document and in the required currencies subject to the conditions set out below.

7. The Government will indicate its cash requirements from UNDP funds for each period of the schedule of advances included in the project document at last two weeks before payment is due (attachment 1 of this annex, Request for advance of funds). Advances will be made by UNDP at the time indicated in the schedule of advances, in the amounts and currencies requested by the Government. (See also paragraph 9, below for requests for cash advances in currencies not available to the UNDP field office.)

8. If the schedule of advances included in the project document no longer reflects actual requirements for funds, a new schedule will be prepared by the Government in consultation with the Resident Representative, in accordance with the format indicated in attachment 5 of this annex, Schedule of advances. Advances should normally be sufficient to cover anticipated cash requirements for a maximum of three months.

9. Local currency advances to the Government will normally be made by the Resident Representative.

10. Advances to the Government in US Dollars will be made by the Resident Representative if this currency is available to him or her. The Resident Representative will arrange for advances in currencies not available to him or her to be made by UNDP Headquarters or other field offices, as deemed appropriate.

C. Direct payments by UNDP

11. At the request of the Government, UNDP will, after verification of the supporting documentation, make payments directly to individuals or firms providing UNDP-financed services or goods. The requests will be addressed to the Resident Representative who will either arrange for the payments to be made by his or her office or by UNDP Headquarters. The requests will indicate payee, amounts and currencies required, justification for the request and payment instructions reflecting payee's bank, its address and the account number.

12. The Resident Representative will provide the Government with statements of direct payments made by UNDP within 15 days following 30 April, 31 August and 31 December, for incorporation in the project delivery report in accordance with paragraph 13 (b), below.



#### D. Periodic financial statements

13. The Government will furnish the Resident Representative with certified financial statements within 30 days following 30 April and 31 August and within 60 days following 31 December. The statements will include the following:

- (a) Status of funds advanced by UNDP (attachment 2 of this annex). The statement will be submitted for each period indicated above and will be prepared in the currency of the advance. Separate statements will be issued where different currencies have been advanced. Each statement will reflect cumulatively for the year the amount of funds available at the beginning of the year, funds advanced by UNDP, funds expended by the Government during the reporting period and the resulting balance at the end of that period. The statement will also detail expenditure incurred by month in local currency and the US Dollar equivalent calculated at the applicable United Nations operational rate of exchange;
- (b) Project delivery report (attachment 3 of this annex). The report will be submitted for each period indicated above and will reflect cumulative current-year expenditure classified according to the items listed in the approved project budget. It will incorporate the expenditure incurred by the Government, and where appropriate, the expenditure statement of the co-operating agency, if any, and the statement of direct payments made by UNDP;
- (c) Annual report of UNDP-financed non-expendable equipment (attachment 4 of this annex). The Government will furnish the Resident Representative, for the year to 31 December, within 60 days following that date and together with other financial statements due at that date, with an annual report of non-expendable equipment. The report will include all UNDP-financed non-expendable equipment furnished to the project during the year. Non-expendable equipment purchased by the co-operating agency, if any, and furnished to the project will also be included. The report will describe each item in detail, list the identification number given by the Government and the serial or registration number assigned by the maker and reflect the cost at the US Dollar equivalent at the time of purchase calculated at the United Nations operational rate of exchange;
- (d) Expenditure statement for jointly financed projects. In the case of joint financing of project activities by the Government and UNDP and, as the case may be, other sources of assistance, the certified financial statements referred to above shall be accompanied by a separate statement reflecting expenditure for the full project covering the same period as the certified financial statements. To this expenditure statement should be added an indication of the apportionment by the Government of the reported expenditure to UNDP's contribution and other available funds.

14. If the Government cannot submit the financial statements on the date on which they are due, it will inform the Resident Representative of the reasons and indicate the planned submission date.

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E. Government's annual audited financial statements

15. A certified and audited annual financial statement of the status of funds advanced by UNDP, as described in paragraph 13(a), above, will be made available by the Government to the Resident Representative within 120 days after the end of the calendar year.

16. The financial statement will be audited and attested to by the entity specified in paragraph 4, above.

F. Government final financial statements

17. Upon financial completion of UNDP assistance to a project, the Government will provide final financial statements to cover the period 1 January to the date of either financial completion or refund of the unspent balance of UNDP funds, if any (see paragraph 18, below). The financial statements will be audited so as to conform to the requirements set out in Section E above. The format given in attachments 2 and 3 of this annex should be used. The statements will be provided within 120 days from the date of financial completion to the Director, DOF, with copies to the UNDP Resident Representative.

18. If there is an unspent cash balance of UNDP funds held by the Government, that balance will be refunded by the Government in the currency of the advance not later than 30 days after the date of financial completion.

G. Audit by UNDP

19. All accounts maintained by the Government for UNDP resources may be audited by the UNDP internal auditors and/or the United Nations Board of Auditors or by public accountants designated by the United Nations Board of Auditors.



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FOR PROJECT: \_\_\_\_\_ NO: \_\_\_\_\_

For the purpose of this study, 12 subjects were selected.

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Home (typed)  
Title  
Government agency (department)

REQUEST FOR ADVANCE OF FUNDS FROM UNDP

For the period from \_\_\_\_\_ 19\_\_ to \_\_\_\_\_ 19\_\_

Certified by:

---

Name (typed)  
Title  
Government agency (department)

Certified by:

Name (typed)

Title

Government agency (department)



GOVERNMENT OF \_\_\_\_\_

STATUS OF FUNDS ADVANCED BY UNDP a/

FOR PROJECT \_\_\_\_\_ NO. \_\_\_\_ / \_\_\_\_ / \_\_\_\_

For the period 1 January to \_\_\_\_\_ 19\_\_\_\_  
(In \_\_\_\_\_ [currency] \_\_\_\_\_)A. Summary of funds received and expended Amount  
(In currency of advance)

Balance at 1 January 19\_\_\_\_	XXX XXX

Add: Advances received from UNDP	XXX XXX

Total funds available for project purposes	XXX XXX

Deduct: Total expenditure for year-to-date YYY YYY b/Balance at .....19\_\_\_\_ XXX XXX  
-----

Represented by: .

Cash in bank	XXX XXX

Cash on hand	XXX XXX

Balance at .....19\_\_\_\_	XXX XXX

a/ A separate statement is required for each currency advanced by UNDP.  
b/ This amount should be the same as the total expenditure (in currency of advance) in table B.

B. Summary of expenditure by month

	Expenditure (In currency of advance)	UN operational <u>rate of exchange</u>	Expenditure (In US \$ equivalent)
January	XX XXX	X.XX	XX XXX
February	XX XXX	X.XX	XX XXX
March	XX XXX	X.XX	XX XXX
April	XX XXX	X.XX	XX XXX
May	XX XXX	X.XX	XX XXX
June	XX XXX	X.XX	XX XXX
July	XX XXX	X.XX	XX XXX
August	XX XXX	X.XX	XX XXX
September	XX XXX	X.XX	XX XXX
October	XX XXX	X.XX	XX XXX
November	XX XXX	X.XX	XX XXX
December	<u>XX XXX</u>	X.XX	<u>XX XXX</u>
Total	YYY YYY <u>a/</u>		<u>XXX XXX</u>

Certified correct by:

Approved by:

\_\_\_\_\_  
Name (typed)  
Chief Accountant  
Government agency (department)

\_\_\_\_\_  
Name (typed)  
Title  
Government agency (department)

AUDIT CERTIFICATE  
(As issued and signed by the Auditors)  
REQUIRED ONLY FOR ANNUAL AUDITED  
AND FINAL AUDITED FINANCIAL STATEMENTS

a/ This amount should be the same as the total expenditure for year-to-date in table A.



Attachment 3

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GOVERNMENT OF \_\_\_\_\_

PROJECT TITLE \_\_\_\_\_ UNDP Project no. ( / / )

Project delivery report  
for funds provided by United Nations Development Programme (UNDP)  
for the period 1 January to 19  
(Prepared in US dollars)

Budget line	Description	EXPENDITURE				
		Budget for year	Government	UNDP direct payments	Co-operating agency	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
99.00	TOTAL		a/			

Certified correct by:

Approved by:

\_\_\_\_\_  
Name (typed)  
Chief Accountant  
Government agency (department)

\_\_\_\_\_  
Name (typed)  
Title  
Government agency (department)

AUDIT CERTIFICATE  
(As issued and signed by the Auditors)  
REQUIRED ONLY FOR ANNUAL AUDITED  
AND FINAL AUDITED FINANCIAL STATEMENTS

a/ Total of US dollars equivalent shown in each attachment 2.

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Attachment 4

GOVERNMENT OF \_\_\_\_\_

Annual report of UNDP-financed non-expendable equipment a/

For project no: \_\_\_\_\_

For the year ended 31 December 19\_\_

Description	Government identification number	Maker's serial or registration number	Cost In US dollars b/
Total			

Certified by:

\_\_\_\_\_  
Name (typed)  
Title  
Government agency (department)

a/ Includes those items of equipment valued at \$400 or more, and with a serviceable life of at least five years, and those items of equipment although valued at less than \$400, which are office furniture, filing cabinets, office machines, attractive items (such as cameras, projectors, stop watches, briefcases) or other similar items as determined by the Government.

b/ US dollar equivalent at time of purchase calculated at the United Nations operational rate of exchange.



Attachment 5

[PROJECT NUMBER AND TITLE]

SCHEDULE OF ADVANCES a/

US \$

A. Funds advanced to date . XXX XXX

B. Funds to be advanced in forthcoming 12 months b/

i. To Government

<u>Date</u>	<u>Amount</u>	
_____	_____	
_____	_____	
_____	_____	
_____	_____	
_____	_____	
	Total	XXX XXX

ii. To co-operating agency XX XXX

C. Funds to be advanced in subsequent periods XXX XXX

TOTAL ALLOCATION PER PROJECT BUDGET (LINE 99) X XXX XXX

a/ To be included in the project document immediately following the budget for UNDP's contribution (part IV). Advances should only cover anticipated cash requirements for a maximum of three months.

b/ The period to be covered should be the 12 months following the date of approval of the project revision.

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Model Implementing agent Agreement



Dear (name of head of agency),

1. Reference is made to consultations between officials of the Government of [name of country] (hereinafter referred to as "the Government") and officials of the [name of UN organization] (hereinafter referred to as "the implementing agent") with respect to the participation of the UN organization in the implementation of UNDP assistance to project [number and title of project], to be executed by the Government. The latter shall be represented for the purpose of such execution by [name of government authority so designated].
2. In accordance with the project document and with the following terms and conditions, we confirm our acceptance of the services to be provided by the implementing agent towards the implementation of this project. The terms of reference should include appropriate provisions for close consultations between the implementing agent and the Government on the implementation of all aspects of the services to be rendered by the implementing agent.
3. The implementing agent shall provide the services and facilities described in attachment 1, (Description of services), of this letter of agreement and in accordance with the terms of reference included therein. In addition, any technical backstopping and monitoring support services to be provided by the implementing agent under a "TSS-2 Agreement" are cross-referenced here, in recognition of the implementing agent's responsibility to the Government for the close collaboration and coordination of the provision of those services.
4. The Government shall retain overall responsibility for the implementation of UNDP assistance to the project through its designated project co-ordinator.
5. The personnel assigned by the implementing agent to the project shall work under the supervision of the project co-ordinator. They shall be provided with the appropriate technical guidance and administrative support by the implementing agent. While they will be accountable to the implementing agent for the manner in which they discharge their functions, they have an obligation to co-operate closely with government staff and assist in project implementation in accordance with the overall directives laid down by the Government in consultation with the implementing agent.
6. In the event of disagreement between the project co-ordinator and the project personnel of the implementing agent, the matter under dispute shall be referred by the project co-ordinator to the implementing agent for the purpose of finding a satisfactory solution. In the interim, the decisions of the project co-ordinator shall prevail.



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7. Upon acceptance of this letter of agreement and pursuant to the project budget of the project document and the work plan, the Government agrees to the implementing agent's requesting advances of funds directly from UNDP, incurring expenditure within the limits set out in attachments 2 and 3 (Implementing Agent Project Budget covering UNDP contribution, and Implementing Agent Project Budget covering Administrative and Operational Services), and making the necessary financial arrangements directly with UNDP for the reimbursement of expenditures incurred by the implementing agent as described in those attachments, subject to the following:

- (a) Expenditures for personnel services are limited to salaries, allowances and other emoluments including the reimbursement of income taxes due to the implementing agent's personnel under its rules and regulations and including travel costs on appointment to the project, duty travel within the project country or region and repatriation costs. The implementing agent shall budget for the costs of such experts on the basis of estimated actual costs. The implementing agent shall be reimbursed for the provision of such services on the basis of actual costs for category I cost elements and its average cost for category II cost elements effective at the time of provision of such services. Adjustments in the expert months of services, referred to in attachment 2, may be made in consultation between the Government and the implementing agent if this is found to be in the best interest of the project and if such adjustments are in keeping with the provisions of the project document;
- (b) Expenditures for sub-contracting are limited to expenditures made under the implementing agent's financial regulations and rules;
- (c) Expenditures for fellowships, or other training facilities are limited to expenditures made in accordance with the fellowship or other relevant regulations of the implementing agent. Within such total allocation, adjustments with respect to the training component may be made in consultation between the implementing agent and the Government, if this is found to be in the best interest of the project and if such adjustments are in keeping with the provisions of the project document;
- (d) Expenditures for purchase of equipment are limited to expenditures for procurement of such equipment, under the implementing agent's rules and regulations; and,
- (e) Within the budgetary limitations of the project document, the Government shall be responsible for providing miscellaneous services such as secretarial assistance, postage and cable services, and transportation as may be required by the implementing agent personnel in carrying out their assignment. However, expenditures for these services may be incurred by the implementing agent within such amounts as specified in attachment 2.

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8. A cumulative statement of expenditure shall be submitted by the implementing agent at 30 June and 31 December. The statement, to be prepared in accordance with the format given in attachment 4, will be submitted to the Government through the UNDP resident representative within 30 days following those dates. The Government will include the reported expenditure in the project delivery report.
  9. The implementing agent shall recast and rephrase its project budget as necessary, and in collaboration with the Government and UNDP, when submitting its statement of expenditure to the Government. Rephasings should be carried out in accordance with established UNDP practices, and subject to the expenditure flexibility provisions accorded by UNDP to the executing agent. The Government shall adjust its records and confirm the revision submitted by the implementing agent.
  10. The implementing agent shall submit such reports relating to the project as may reasonably be required by the project co-ordinator in the exercise of his or her duties, as well as other reports required by the Government in connection with its obligations to submit reports to UNDP.
  11. The implementing agent shall provide the Government with an annual report of UNDP-financed non-expendable equipment purchased by the implementing agent for the project. The report shall be submitted within 30 days following 31 December, together with the statement of expenditure due at that date. The reported equipment shall be included by the Government in its main inventory for the project.
  12. The implementing agent shall submit candidates for the posts foreseen in section 1 of attachment 2 and obtain clearance from the Government for the personnel to be assigned to the project.
  13. The implementing agent shall provide the Government with job descriptions for the incumbents of the posts to be filled by the implementing agent and shall obtain the Government's clearance.
  14. The implementing agent shall enjoy the privileges, immunities and facilities that are accorded to executing agencies and their personnel under the agreement concerning assistance concluded by the Government and UNDP. The privileges and immunities to which the implementing agent and its personnel are entitled may be waived only by the [title of the head of the UN organization concerned) of the implementing agent.
  15. Any changes to the project document which would affect the work being performed by the implementing agent in accordance with attachment I shall be recommended only after consultation with the implementing agent.
  16. Any amendments to these arrangements shall be mutual agreement through an appropriate supplementary letter of agreement.
  17. For any matters not specifically covered by this arrangement, the appropriate provisions of the project document (and revision thereof) and the appropriate provisions of the financial regulations and rules of the implementing agent shall, mutatis mutandis, apply.



- 2
18. All further correspondence regarding the implementation of this agreement, other than signed letters of agreement or amendments thereto, should be addressed to [name and address of designated government official]
  19. The Government and the implementing agent shall keep the resident representative fully informed of all actions undertaken by them in carrying out the agreement.

If you are in agreement with the provisions set forth above, would you kindly sign and return to this office two copies of this letter. Your acceptance shall thereby constitute the basis for your organization's participation in the execution of the above named project.

Yours sincerely,  
For the Government of [country]

[name and title]  
[date]

Signed on behalf of the [implementing agent]

[name and title]  
[date]

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**ANNEX VII**  
**MODEL UNDP PROJECT (THIRD  
PARTY)COST SHARING AGREEMENT**



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Model UNDP project (third-party) cost-sharing agreement

Instructions for use

1. This model agreement is to be used when a third-party donor intends to make a cost-sharing contribution to an already identified project in a particular recipient country (or countries, in the case of an inter-country project).
2. First preambular paragraph: Where a signed project document is available, this may be attached to this Agreement and the last clause of this paragraph would then read "which Project is described in the Project Document (project title and number)" annexed as Attachment A to this Agreement.
3. Fourth preambular paragraph: In Annex III is a model letter from UNDP to the recipient Government which is to be used in order to inform the recipient Government of the proposed third-party cost-sharing contribution. This letter must be sent to the recipient Government before the draft third-party cost-sharing agreement is submitted for signature.
4. Fifth preambular paragraph: Where the executing agency has already been identified, the words "an executing agency" should be replaced by the name of the organization to be designated.
5. Article I, paragraph 2: The number and title of the bank account and the name and address of the bank of deposit are to be obtained from the UNDP Treasury Section.

AGREEMENT BETWEEN THE UNITED NATIONS DEVELOPMENT PROGRAMME AND  
(Government or other donor)

WHEREAS the United Nations Development Programme (hereinafter referred to as "the UNDP") and the Government of (recipient country) have agreed to co-operate in the implementation of a project in (recipient country) (hereinafter referred to as "the Project") which Project is summarized in Attachment A to this Agreement and is more fully described in a Project Document (project title and number);

WHEREAS the (Government or other donor) (hereinafter referred to as "the Donor") has informed the UNDP of its willingness to contribute funds (hereinafter referred to as "the contribution") to the UNDP on a cost-sharing basis towards implementation of the Project;

WHEREAS the UNDP is prepared to receive and administer the contribution for the implementation of the Project;

WHEREAS the Government of (recipient country) has been duly informed of the contribution of the Donor to the Project;

WHEREAS the UNDP shall designate an Executing Agency for the implementation of the Project (hereinafter referred to as "the Executing Agency");

NOW THEREFORE, the UNDP and the Donor hereby agree as follows:

Article I

1. The Donor shall, in the manner referred to in paragraph 2 of this Article, place at the disposal of the UNDP a contribution in the amount of United States dollars \_\_\_\_\_.
2. The Donor shall, in accordance with the schedule of payments set out below, deposit the contribution in (title and number of bank account) at the (name and address of bank of deposit):

<u>Date payment due</u>	<u>Amount (US\$)</u>
(a)	
(b)	
(c)	
(d)	

The above schedule of payments takes into account the requirement that contributions shall be paid in advance of the implementation of planned activities. It may be amended to be consistent with the progress of project delivery.

3. All financial accounts and statements shall be expressed in United States dollars.
4. The UNDP may agree to accept contribution-payments in a currency other than United States dollars provided such currency is fully convertible or readily usable by UNDP and subject to the provisions of paragraph 5, below. Any change in the currency of contribution-payments shall be made only in agreement with the UNDP.



5. The value of the contribution-payment, if made in other than United States dollars, shall be determined by applying the United Nations operational rate of exchange in effect on the date of payment. Should there be a change in the United Nations operational rate of exchange prior to the full utilization by the UNDP of the contribution-payment, the value of the balance of funds still held at that time will be adjusted accordingly. If, in such a case, a loss in the value of the balance of funds is recorded, the UNDP shall inform the Donor with a view to determining whether any further financing could be provided by the Donor. Should such further financing not be available, the assistance to be provided to the Project may be reduced, suspended or terminated by the UNDP.

#### Article II

1. The contribution shall be utilized by the UNDP for the purpose of meeting the costs of the Project as set out in the Project Document as well as the costs of support services relating thereto as specified in the following paragraph. Any additional costs of the Project which are not to be met from the contribution, as well as the source of their financing, are also set out in the Project Document.

2. The contribution shall be charged with an amount equivalent to \_\_\_\_\_ per cent of all project expenditures made from the contribution, which amount shall, in accordance with UNDP regulations, rules and directives, be utilized by the UNDP in reimbursement for support services provided by the Executing Agency and any other support services required.

3. Any interest income attributable to the contribution shall be credited to the UNDP Account and shall be utilized in accordance with established UNDP procedures.

#### Article III

1. The contribution shall be administered by the UNDP in accordance with UNDP regulations, rules and directives, applying its normal procedures for the execution of its projects.

2. Project management and expenditures shall be governed by the regulations, rules and directives of the UNDP and, where applicable, the regulations, rules and directives of the Executing Agency.

Article IV

1. The implementation of the responsibilities of the UNDP and of the Executing Agency pursuant to this Agreement and the project document shall be dependent on receipt by the UNDP of the contribution in accordance with the schedule of payments set out in Article I, paragraph 2, above.
2. The aggregate of the amounts budgeted for the Project, together with the estimated costs of reimbursement of related support services, shall not exceed the total resources available to the Project under this Agreement as well as funds which may be available to the Project for project costs and for support costs under other sources of financing.
3. If unforeseen increases in expenditures or commitments are expected or realized (whether due to inflationary factors, fluctuation in exchange rates or unforeseen contingencies) the UNDP shall submit to the Donor on a timely basis a supplementary estimate showing the further financing that will be necessary. The Donor shall use its best endeavours to obtain the additional funds required.
4. If the contribution-payments referred to in Article I, paragraph 2, above, are not received in accordance with the payment schedule, or if the additional financing required in accordance with paragraph 3, above, is not forthcoming from the Donor or other sources, the assistance to be provided to the Project under this Agreement may be reduced, suspended or terminated by the UNDP.

Article V

Ownership of equipment, supplies and other property financed from the contribution shall vest in the UNDP. Matters relating to the transfer of ownership by the UNDP shall be determined in accordance with the relevant policies and procedures of the UNDP.

Article VI

The contribution shall be subject exclusively to the internal and external auditing procedures provided for in the financial regulations, rules and directives of the UNDP.



Article VII

The UNDP shall provide the Donor on request with the following reports prepared in accordance with UNDP accounting and reporting procedures:

- (a) periodic progress reports;
- (b) an annual report which will provide information on expenditure incurred during the previous year;
- (c) a final report within six months after the date of completion or termination of the Project.

Article VIII

The UNDP shall notify the Donor when all activities relating to the Project have been completed.

Article IX

1. Notwithstanding the completion of the Project, the UNDP shall continue to hold unutilized contribution-payments until all commitments and liabilities incurred in implementation of the Project have been satisfied and Project activities brought to an orderly conclusion.
2. If the unutilized contribution-payments prove insufficient to meet such commitments and liabilities, the UNDP shall notify the Donor and consult with the Donor on the manner in which such commitments and liabilities may be satisfied.
3. Any contribution-payments that remain unexpended after such commitments and liabilities have been satisfied shall be disposed of by the UNDP in consultation with the Donor.

Article X

1. After consultations have taken place between the Donor, the UNDP and the recipient Government, and provided that the contribution-payments already received are, together with other funds available to the Project, sufficient to meet all commitments and liabilities incurred in the implementation of the Project, this Agreement may be terminated by the UNDP or by the Donor. The Agreement shall cease to be in force thirty days after either of the Parties may have given notice in writing to the other Party of its decision to terminate the Agreement.



2. If the unutilized contribution-payments, together with other funds available to the Project, are insufficient to meet such commitments and liabilities, the UNDP shall notify the Donor and consult with the Donor on the manner in which such commitments and liabilities may be satisfied.
3. Notwithstanding termination of this Agreement, the UNDP shall continue to hold unutilized contribution-payments until all commitments and liabilities incurred in implementation of the Project have been satisfied and Project activities brought to an orderly conclusion.
4. Any contribution-payments that remain unexpended after such commitments and liabilities have been satisfied shall be disposed of by the UNDP in consultation with the Donor.

Article XI

This Agreement shall enter into force upon signature and deposit by the Donor of the first contribution-payment to be made in accordance with the schedule of payments set out in Article I, paragraph 2 of this Agreement.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto, have signed the present Agreement in the English (and \_\_\_\_\_) language(s) in two copies.

For the Donor:

(Signature)

Name:

Title:

Date:

For the United Nations  
Development Programme:

(Signature)

Name:

Title:

Date:



Model letter from UNDP to the recipient Government with respect  
to third-party cost-sharing arrangements

Dear \_\_\_\_\_,

This is further to the discussions that have taken place between (representatives of the recipient country), (representatives of the donor country), and the United Nations Development Programme with respect to the contribution which the Government of (donor country) has expressed a wish to make to UNDP on a cost-sharing basis towards the implementation of a project/projects in (recipient country).

As you have, I believe, been informed, it is envisaged that: (a) the Government of (donor country) would contribute a sum of approximately # \_\_\_\_\_ to UNDP towards the implementation of a project/projects in (recipient country); (b) UNDP would receive and administer the contribution in accordance with the applicable UNDP financial regulations, rules and directives; (c) the Government of (recipient country) shall be fully consulted in the selection, formulation, and any major revision of the project(s) in (recipient country); (d) if for any reason sufficient monies for project-related costs or liabilities are not available from the contribution, UNDP will consult with the Donor with a view to determining whether the additional financing required could be provided by the Donor; and (e) if such further financing is not forthcoming from the Donor, or from other sources, UNDP may reduce, suspend, or terminate the project(s) in question (and may, if necessary, charge the IPF of (recipient country), by means of an IPF project budget, for such costs or liabilities as may still be outstanding.) a/

I now have the pleasure of enclosing herewith for your consideration a copy of an Agreement to be entered into between the Government of (donor country) and UNDP to establish necessary arrangements for the receipt by UNDP of the contribution of the Government of (donor country).

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a/ The provision shown in parentheses shall not apply where the third-party cost-sharing arrangement concerned is in respect of the operations of UNSO, UNCDF or UNFSTD, or where the recipient Government concerned has relinquished its IPF.

It is my hope to proceed very soon to signature of the proposed Agreement with the Government of (donor country).

Yours sincerely,

Administrator  
United Nations Development Programme



X

**ANNEX VIII**

**JOB DESCRIPTIONS FOR DISASTER  
MANAGEMENT BUREAU PERSONNEL**

**Duties/Job Descriptions for  
Senior Staff of the Disaster Management Bureau**

1.	Director-General, Disaster Management / Additional Secretary DMB	page 2
2.	Senior Specialist/Director, Disaster Management	5
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5.	Senior Specialist/Director, Logistics and Telecommunications	13





## **Duties 1:**

### **Director-General, DMB (Additional Secretary)**

#### **(a) General**

1a.1 Responsible to the Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC), through the Secretary, Ministry of Disaster Management and Rehabilitation (MDMR), for:

- (i) Advising the Government on all matters relating to disaster management;
- (ii) Administering the Disaster Management Bureau; directing and supervising the work of the staff of the Bureau;
- (iii) Liaising with all concerned government bodies, aid agencies, NGOs, and voluntary organizations, and ensuring maximum co-operation and co-ordination in relation to all aspects of disaster management;
- (iv) Responsible as National Programme Director for the delivery of all BGD/92/002 outputs in accordance with annual Workplans that may be agreed from time to time by IMDMCC and donors;
- (v) Fulfilling the specific duties listed below, and performing other related tasks as and when requested by the Secretary MDMR.

#### **(b) In "Normal Time": in relation to disaster prevention/mitigation and preparedness**

1b.1 Promoting awareness of disaster risks, and the practical possibilities for reducing risks (vulnerability), among the populations of disaster-prone areas, all government staff assigned in such areas, and relevant professional groups.

1b.2 Liaising with the technical sub-committees of the National Disaster Advisory Committee.

1b.3 Promoting community level initiatives and action to reduce disaster risks and increase local coping capacities.

1b.4 Proposing policies for disaster mitigation (risk reduction), and collaborating with the Planning Commission, concerned line agencies and other bodies to establish relevant guidelines and procedures to ensure that measures to reduce risks are implemented wherever possible.

1b.5 Developing, in consultation with all concerned bodies, a National Disaster Plan, incorporating Standing Orders, and associated practical guidelines. Arranging widespread dissemination, regular reviews and up-dating of the Plan.

1b.6 Proposing legislation and regulations that may be required in relation to disaster prevention/mitigation and preparedness.

1b.7 Providing guidelines and practical assistance to other ministries and line agencies, and to district, thana and union authorities, for establishing contingency/action plans for their own organizations/areas, and in organizing regular exercises to test the refine those plans.

1b.8 Arranging, in collaboration with line agencies, local authorities, existing training institutes, and relevant NGOs, for training in disaster management to be organized for a wide variety of government personnel, elected representatives, and others.

1b.9 Establishing and maintaining facilities, information systems, operating procedures, and telecommunications systems, for a national emergency operations centre (EOC/control room), for immediate use when an emergency arises.

1b.10 Establishing and maintaining arrangements for the mobilization of additional personnel for the EOC and to assist local authorities in the field, when required, including skilled volunteers from professional associations.

1b.11 Providing a documentation and information service on all aspects of disaster management for line agencies and others.

1b.12 Monitoring and reporting to the Secretary MDMR and the NDMC on the vulnerability of people and economic assets to known hazards; the status of preparedness in the country; and any delays/bottlenecks in the implementation of disaster prevention/preparedness programmes and projects.

1b.13 Preparation of overall plans and budgets for the various activities to be supported by the DMB.

(c) **During an Emergency: in relation to emergency response**

*1c.1 In the event of a warning (an imminent disaster threat):*

- Ensuring that warning information is passed to all concerned officers, agencies, and public dissemination channels.
- Advising MDMR concerning instructions to be issued to agencies and personnel in the threatened areas.
- Activating the EOC, and liaising with concerned line agencies to ensure that they too activate their contingency plans.

*In the event of a disaster:*

1c.2 Ensuring the efficient, continuous functioning of the EOC.

1c.3 Arranging rapid reconnaissance and inter-sectoral assessment missions, where needed.

1c.4 Providing advice and guidance to local authorities in relation to damage and needs assessment, and relief and rehabilitation assistance operations; etc.

1c.5 Providing secretariat services and expert advice to the IMDMCC, and helping to ensure co-ordination between line agencies and between Government and NGOs in relation to relief and short-term rehabilitation activities.

1c.6 Advising the MDMR and IMDMCC of any specific requirements for additional personnel to be deputed to support the responsible authorities in the affected areas, and for any specific operational support required from the Armed Forces.

1c.7 Monitoring the progress of rescue, relief and short-term rehabilitation activities; identifying problems and unmet needs, and taking action to resolve/meet them or bring them to the attention of the IMDMCC for resolution.



1c.8 Making recommendations to MDMR and IMDMCC for allocations of available relief materials, funds, and transport units to district authorities (or, occasionally, direct to thana level).

1c.9 Making recommendations to MDMR and IMDMCC concerning the institution of special emergency procedures or delegations of authority, if judged necessary.

1c.10 Providing information to ERD concerning requirements for international assistance, and to MoInfo concerning the overall operational situation.

1c.11 Promoting the maximum sharing of information between all concerned bodies, and the co-ordination of the activities of all operational agencies (governmental and NGO). Liaising donors, UN agencies, NGOs and professional associations directly involved in relief and rehabilitation activities, and assisting MDMR in organizing informal information exchange meetings ("Disaster Forums") between Government and representatives of those bodies.

1c.12 Organizing regular (weekly?) sessions/workshops with all concerned to review progress and lessons learned, and to agree priorities and directions for continuing/new activities.

1c.13 Submitting reports to the IMDMCC on the progress of operations and the use of resources.

**(d) Post-disaster: in relation to rehabilitation and reconstruction**

1d.1 Co-operating with the Planning Commission and line agencies, as required, in compiling data on reconstruction requirements and in co-ordinating the preparation of an integrated reconstruction programme.

1d.2 Ensuring that risk reduction measures are built into all reconstruction programmes as much as possible.

1d.3 Undertaking a final evaluation, or at least a "post mortem", on the emergency response (including warning, relief and short-term rehabilitation operations), drawing lessons and preparing a report to the IMDMCC. Publishing the report and ensuring that the lessons are fed back into training activities and up-dated guidelines.

**QUALIFICATIONS**

Formal qualifications and at least ten years relevant work experience in management, public administration, development planning, or physical planning. A background in social anthropology and previous training in disaster management an advantage.

At least five years experience in field posts at divisional/district/thana level.

Personal experience in the organization of rescue, relief, and rehabilitation operations, and in collaboration between Government, NGOs, and voluntary organizations.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; a keen interest in disaster management; willingness to travel extensively throughout the country.

**Duties 2:  
Senior Specialist (Director), Disaster Management**

**(a) General**

2a.1 Responsible to the Director-General, DMB (Additional Secretary) for:

- (i) Directing and co-ordinating the work of the staff of the Disaster Management Planning and Co-ordination Cell of the DMB;
- (ii) Fulfilling the specific duties listed below, and performing other related tasks as and when requested by the Director General, Disaster Management.

**(b) In "Normal Time": in relation to disaster prevention/mitigation and preparedness**

2b.1 Proposing policies and priorities, and associated procedures and criteria, for the consideration of disaster risks and the incorporation of disaster prevention/mitigation measures in general development planning.

2b.2 Monitoring, in collaboration with the Planning Commission and IMED, the effectiveness of the established policies, priorities, and procedures, and making recommendations for changes in policies or guidelines when found necessary.

2b.3 Collaborating with the concerned line agencies, undertaking risk assessments, and proposing specific disaster prevention/mitigation projects and other measures (including regulations), as required.

2b.4 Collaborating with the responsible authorities to mobilize resources for prevention/mitigation measures, and to ensure necessary technical supervision and the maintenance of structures.

2b.5 Reporting to the MDMR and IMDMCC on the implementation of national policies and programmes in relation to disaster risks and mitigation.

2b.6 Arranging independent evaluations of the effectiveness of specific disaster prevention/mitigation measures.

2b.7 Collaborating with the responsible technical forecasting bodies (BMD and BWDB), related technical assistance projects, and those involved in the dissemination of messages (including TV, Radio and CPP) to ensure that cyclone and flood warnings from the national level are as timely and effective as possible.

2b.8 Collaborating with BWDB, CPP, district administrations, local authorities, NGOs, professional associations, voluntary organizations, and related technical assistance projects, to develop local-level warning dissemination systems. Providing (or arranging the provision of) guidelines, equipment and training in support of such local-level systems.

2b.9 Monitoring and reporting to the MDMR and IMDMCC on the effectiveness of warning systems.

2b.10 Preparing refined/up-dated Emergency Standing Orders in collaboration with the concerned line ministries and agencies, and incorporating them in a National Disaster Preparedness Plan for approval by IMDMCC.

2b.11 Collaborating with line agencies, as required, in the preparation of agency action/contingency plans, and in defining lines of communication between agencies at all levels.

2b.12 Proposing, in consultation with concerned line agencies and NGOs, general policies and standards for the provision of relief following disasters. Preparing and distributing practical guidelines (for use at various levels) on the organization of rescue and relief assistance operations.



2b.13 Preparing detailed guidelines, including model preparedness plans, for the district, thana, and union-level authorities. In co-ordination and collaboration with the Senior Specialist, Training, assisting those authorities in the most disaster-prone areas in preparing their own plans.

2b.14 Preparing a GOB Disaster Management Handbook incorporating: the up-dated standing orders; policies and standards of provision; practical guidelines and model plans.

2b.15 Monitoring and reporting to the MDMR and IMDMCC on the state of emergency preparedness in the disaster-prone districts and within the concerned line agencies.

2b.16 Collaborating with the Senior Specialist, Training, and other interested bodies including experienced research organizations and NGOs, to:

- prepare and distribute practical guidelines, for use at district, thana, union and village levels; [These guidelines on "how to be prepared" (for cyclones and floods) and "how to minimize damage and losses", etc., to be compiled on the basis of proven experience.]
- define training needs and review related curricula and materials.

2b.17 Establishing operating procedures for an effective Emergency Operations Centre (EOC), and ensuring that necessary facilities, services, and systems, are available and functional at all times. Establishing arrangements for the core staff of the DMB to be supplemented, when necessary (immediately a disaster threatens or occurs), by the secondment of pre-identified personnel from key line agencies, the Armed Forces and, possibly, NGOs, professional associations and international aid agencies.

2b.18 Organizing exercises of the EOC at least once a year, including personnel from line agencies and the Armed Forces.

2b.19 Establishing and maintaining a roster of individuals experienced in the management of emergency operations, and relevant technical specialists (government personnel and others), who would be available, at short notice, to: (a) undertake preliminary reconnaissance and assessment missions following a disaster, and (b) help to direct and co-ordinate operations (at national, zonal, or district levels) during the initial emergency relief phase. Co-ordinating with the Senior Specialist, Training to ensure the periodic group training for those on the roster.

2b.20 Collaborating with Establishment Division in maintaining arrangements by which trained and experienced senior civil service officers can be promptly sent on temporary assignments to reinforce the district, thana, and union-level administrations in disaster-affected areas. Ensuring these officers have up-to-date guidelines, and co-ordinating with the Senior Specialist, Training, to ensure the periodic group training for those on the roster.

2b.21 In collaboration with the NGO Affairs Bureau and the Senior Specialist, Information Management, keeping an up-to-date roster of NGOs having relevant experience and capabilities.

(c) **During an Emergency: in relation to emergency response**

2c.1 *In the event of a warning (an imminent disaster threat):*

- Mobilizing the staff of the DMB for their emergency (EOC) roles, establishing a duty roster (24-hour senior staff coverage) for the EOC, and instituting emergency operating procedures.
- Establishing and maintaining contacts with the disaster management focal points in concerned ministries, agencies, and the Armed Forces.

*In the event of a disaster:*

2c.2 Serving as Director of the EOC: managing the operations of the EOC on a day-to-day basis, ensuring the effective use of all available personnel (both DMB core staff and additional temporary personnel), and the efficient performance of all EOC tasks.

2c.3 Arranging immediate reconnaissance (e.g. overflights) of the affected area, and initiating action through the relevant operational agencies on the basis of the initial findings and past experience.

2c.4 Maintaining contact with the district administrations in the affected areas, and with all concerned line agencies. Ensuring that information on the situation, damage and needs is systematically received, analysed, and disseminated, as appropriate, by the Information Management Cell.

2c.5 Working with the Senior Specialist, Information Management, to propose priorities on the basis of available information, and to identify gaps in information and propose specific action to fill those gaps.

2c.6 Identifying needs for general staff support, or specific technical expertise, to assist local administrations and field personnel in specific areas: informing the Director General, DMB and assisting in mobilizing the required personnel.

2c.7 Making recommendations for the allocation of available rescue, relief and other relevant resources.

2c.8 Working with the Senior Specialist, Logistics and Telecommunications, to identify needs and define priorities for mobilizing and providing special resources and assistance in particular aspects of logistics, or in (re-)establishing telecommunications, in specific areas.

2c.9 Monitoring the progress of operations, including the release and delivery of resources against agreed allocations. Identifying any particular problems or bottlenecks and initiating action to resolve them, or immediately informing the Director General, DMB for his action.

2c.10 Providing advice and generally back-stopping the local authorities, officials, and operational agencies in the field. Arranging special mission to check information and solve problems on-the-spot, when necessary.

**(d) Post-disaster: in relation to rehabilitation and reconstruction**

2d.1 Reviewing proposed reconstruction programmes and projects, making recommendations concerning priorities, and ensuring that risk reduction measures are built into all such programmes and projects as much as possible.

2d.2 Reviewing the performance of the EOC, and co-operating with the Director General, DMB and any others designated to undertake a post-facto evaluation, or post-mortem, of the emergency operation:

- making any required improvements in EOC operating procedures, and agreeing with all concerned on any required modifications to existing Plans, including Standing Orders;
- arranging with the Senior Specialist, Training, for any required modifications to existing training curricula and materials, and for special training activities, if needed.

**QUALIFICATIONS**

Formal qualifications and at least eight years relevant work experience in management or physical planning; previous training in disaster management an advantage.

At least four years experience in field posts at divisional/district/thana level.

Personal experience in the organization of rescue, relief, and rehabilitation operations; in disaster preparedness or other forms of contingency planning; and in collaboration between Government, NGOs, and voluntary organizations.



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Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; keen interest in disaster management; willingness to travel extensively throughout the country.

### **Duties 3: Senior Specialist (Director), Training and Public Awareness**

**(a) General**

- 3a.1 Responsible to the Director-General, DMB (Additional Secretary) for:
- (i) Directing and co-ordinating the work of the staff of the Training and Public Awareness Cell of the DMB;
  - (ii) Fulfilling the specific duties listed below, and performing other related tasks as and when requested by the Director General, DMB.

**(b) In "Normal Time": in relation to disaster prevention/mitigation and preparedness**

3b.1 Convening, on a regular basis, a broad-based Working Group on disaster management training, to agree an overall training strategy and to co-ordinate training activities and the preparation of training materials. [This working group to include representatives of concerned line agencies, the Armed Forces, training institutes, professional associations, BDRCS, ADAB and selected NGOs.]

3b.2 Defining, in consultation with the other Senior Specialists, the specific training and related activities to be arranged by the DMB, and obtaining the approval of IMDMCC through the Director General, DMB.

3b.3 Arranging, in collaboration with other concerned agencies, training for district, thana and union-level officials, elected representatives, and other relevant persons, with specific reference to:

- the possibilities for local-level action to reduce risks and improve preparedness;
- the preparation of local-level disaster plans;
- the establishment of local-level warning dissemination arrangements.

3b.4 Promoting the regular testing of local-level disaster plans through drills, or exercises. Advising and, where necessary, assisting the local authorities in organizing such exercises.

3b.5 Arranging for the inclusion of relevant disaster management modules in the basic and refresher training of BCS officers, police, ansars, VDPs, all field level officers of line agencies. In collaboration with other concerned agencies, proposing curricula and providing corresponding training materials and trainers guides for the various target audiences. Mobilizing/ providing resource persons to assist the various training institutes in conducting the sessions, as required, and assessing the effectiveness of the training.

3b.6 Liaising with the disaster management focal point in the Military Staff College to ensure complementarity between the training provided to civil officers and to Armed Forces personnel, and to arrange joint training exercises whenever possible.

3b.8 Promoting broad-based public education concerning preparedness for and response to cyclones and floods, and the related training of extension workers, teachers, religious leaders, women's groups, and others. Producing (or arranging the production of) relevant educational and training materials, and providing support in the initial planning and organization of training activities and exercises at local level. Supervising and evaluating these activities on an ongoing basis.

3b.8 Arranging with the relevant education authorities for the incorporation of relevant disaster preparedness components in school syllabuses, and in teacher training courses (in PTIs and TTCs). Proposing material to be included in text books or reading books, and in teachers guides.

3b.9 Arranging, in collaboration with the Disaster Management Planning and Co-ordination Cell, for the initial and periodic refresher training of government officers and other professional persons who are placed on rosters for emergency service.



3b.10 Collaborating with the Disaster Management Planning and Co-ordination Cell in the compilation, design and production of the GOB Disaster Management Handbook.

3b.11 Proposing, in consultation with the relevant sub-committees of the National Disaster Management Advisory Committee, specific research studies on topics relevant to local-level prevention/mitigation measures or preparedness, and evaluating any research proposals made by other agencies or institutions. Arranging and supervising any studies that are approved and to be funded, wholly or in part, through the DMB.

**(c) During an Emergency: in relation to emergency response**

3c.1 Assisting the Director EOC (Senior Specialist Disaster Management) in the day-to-day operations of the EOC, with particular reference to the provision of advice and guidance to district administrations and operational staff in the field.

3c.2 Undertaking assessment and trouble-shooting missions to the field as directed by the Director General, DMB.

**(d) Post-disaster: in relation to rehabilitation and reconstruction**

3d.1 Assessing needs for specific training of government, local authority, or other agency personnel for specific aspects of rehabilitation operations. Making recommendations to the Director General, DMB, or other relevant authorities, and assisting in arranging the necessary training, where necessary.

**QUALIFICATIONS**

At least eight years experience in planning and organizing training and non-formal education programmes serving a variety of client groups.

Personal experience in collaboration between Government, NGOs, and voluntary organizations. Previous experience in the organization of rescue, relief, and rehabilitation operations, and in preparedness/contingency planning an advantage.

Previous formal training in disaster management, and in organizing disaster management training, an advantage.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; a keen interest in disaster management; willingness to travel extensively throughout the country.

**Duties 4:**  
**Senior Specialist (Director), Monitoring and Information Management**

**(a) General**

4a.1 Responsible to the Director General, DMB (Additional Secretary) for:

- (i) Directing and co-ordinating the work of the staff of the Monitoring and Information Management Cell of the DMB;
- (ii) Providing a full range of information management and computer services for the DMB as a whole;
- (iii) Fulfilling the specific duties listed below, and performing other related tasks as and when requested by the Director General, DMB.

**(b) In "Normal Time": in relation to disaster prevention/mitigation and preparedness**

4b.1 Ensuring the correct installation, use, maintenance and security of all computers and related equipment and software, purchased for or otherwise provided to the DMB. Specifying any additional requirements.

4b.2 In close collaboration with the other Senior Specialists, developing and maintaining management information systems, both manual and computerized, to support all disaster management activities and operations of the DMB.

4b.3 Arranging necessary training for all levels of staff of the DMB in the use of the management information systems and, when required, in basic computing skills.

4b.4 Developing and maintaining a data base of basic "baseline" information likely to be relevant for any aspect or phase of disaster management: establishing co-operative arrangements with line agencies and other relevant bodies to receive data from them, cross-check against data from other sources, and share DMB data with all those collaborating.

4b.5 Collaborating with the Senior Specialist, Disaster Management, in developing management information systems (manual and computerized), including forms and worksheets, for use by district, thana, and union-level authorities in all phases of disaster management. Collaborating with the Senior Specialist, Training, in designing and arranging training for personnel at those levels in the use of the proposed systems, forms and worksheets.

4b.6 Specifying, in consultation with the Senior Specialist, Disaster Management, user requirements for a Disaster Management GIS system, and co-operating with the Geographic Information Systems project (FAP:19) in the development and testing of such a system.

4b.7 Maintaining, in collaboration with the NGO Affairs Bureau, ADAB, and VHSS, a data base of NGOs having particular experience and capabilities in disaster management.

4b.8 Maintaining, in collaboration with the other Senior Specialists, Establishment Division, and relevant professional associations, rosters (data bases) of government officers and other personnel having relevant experience who are available at short notice for emergency management duties.

4b.9 Collecting data on the progress of programmes and projects that affect disaster risks, and preparing reports on the status of disaster prevention/ mitigation and preparedness in the country.

4b.10 If required, and on request of the Director General developing management information systems to support the operations of the DRR, and assisting in arranging relevant training for DRR personnel.



**(c) During an Emergency: in relation to emergency response**

4c.1 Ensuring the efficient operation of all management information systems, and the prompt entry of all incoming data from district administrations and other sources.

4c.2 Cross-checking all incoming data for plausibility (against baseline data) and consistency (against other reports). Informing the Director EOC (Senior Specialist, Disaster Management) of any uncertainties regarding particular reports, and proposing/initiating action to verify the data, when necessary.

4c.3 Reviewing available information on a regular, daily basis: bringing particular features to the attention of the Director EOC (Senior Specialist, Disaster Management) and identifying any significant gaps in information which may require follow-up action.

4c.4 Preparing regular (daily) analyses of: reports on damage and needs; allocations of resources (supplies, equipment, personnel); specific relief/ rehabilitation activities underway; contributions (pledged and delivered); unmet needs. Presenting information in ways that facilitate rapid understanding and decision-making.

4c.5 Preparing regular summary narrative reports on the situation, the progress of rescue, relief and rehabilitation operations, and problems/constraints.

4c.6 Providing advice and assistance to district administrations, and any zonal offices that may be established by the Government, in setting up and operating management information systems at their level to assist in the management of local-level relief and rehabilitation operations.

**(d) Post-disaster: in relation to rehabilitation and reconstruction**

4d.1 Co-operating with the Planning Commission and line agencies, as required, in compiling data on reconstruction requirements and planned programmes and projects.

**QUALIFICATIONS**

At least eight years experience in information management including both manual and computer-based systems.

Formal qualifications and at least five years relevant work experience in systems analysis and in the design, installation and operation of management information systems, with particular emphasis on defining users' information needs and the potential uses of information.

Personal experience in the organization of rescue, relief, and rehabilitation operations, and in collaboration between Government, NGOs, and voluntary organizations, an advantage.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; a keen interest in disaster management; willingness to travel extensively throughout the country.

**Duties 5:**  
**Senior Specialist (Director), Logistics and Telecommunications**

**(a) General**

5a.1 Responsible to the Director General, DMB (Additional Secretary), for:

- (i) Directing and co-ordinating the work of the staff of the Logistics and Telecommunications Cell of the DMB;
- (i) Fulfilling the specific duties listed below, and performing other related tasks as and when requested by the Director General.

**(b) In "Normal Time": in relation to disaster prevention/mitigation and preparedness**

5b.1 Assessing, and keeping under constant review the logistic facilities in the disaster-prone areas, including: transport capacities; storage facilities (including at union level); supplies of motor fuel and lubricants ("POL"). Preparing regular reports on the situation, including recommendations for feasible, cost-effective short- and long-term action to increase capacity, where required.

5b.2 Collaborating with line agencies having responsibility for transport (including Roads and Highways, BIWTA/TC, Biman, etc.), users of transport (such as the Directorate of Health and the DRR), and the Armed Forces, in preparing contingency logistic plans for different emergency scenarios.

5b.3 Preparing logistic-related elements of the National Disaster Plan, and specific, practical guidelines for both national and local levels on: the transportation, handling and storage of supplies; the evacuation of people from threatened or disaster-affected areas; planning reconnaissance missions and the movement of field personnel; assuring POL supplies. Collaborating with the Senior Specialist, Disaster Management, to incorporate these in both the national Plan and the GOB Disaster Management Handbook.

5b.4 Establishing agreements with private transport associations concerning the mobilization of road and river transport at times of emergency.

5b.5 Collaborating with responsible line agencies to establish arrangements to ensure the prompt availability of specific items commonly required for rescue, relief and initial rehabilitation operations, through stockpiling and/or standing arrangements with suppliers. Defining desirable minimum stock levels of critical items in strategic locations, and monitoring stock levels.

5b.6 Assisting the district authorities in the most disaster-prone areas to prepare their own contingency logistic plans as part of their overall disaster preparedness planning.

5b.7 Ensuring that the telecommunications equipment and facilities of the DMB are adequate and fully functional at all times, both for normal use and to support the operations of the EOC at times of emergency.

5b.8 Ensuring that the telecommunications equipment and facilities of the district administrations (notably that provided by or through the MOR or DMB) are fully functional at all times, both for normal use and to support the operations of the district EOC/control room at times of emergency.

5b.9 Assessing needs and the possibilities of assuring telecommunications links between district headquarters and thanas, and with certain isolated unions, in the most disaster-prone areas. Making proposals and following-up with concerned agencies and authorities.

5b.10 Collaborating with T&T, the Police and other line agencies having HF/VHF radio networks, the CPP, and the Armed Forces, to establish arrangements for collaboration in the use of available



telecommunications facilities during emergencies, and for the rapid (re-)establishment of links in isolated localities, when required.

5b.11 Working with the responsible authorities to ensure that recognized NGOs making important contributions to relief and rehabilitation operations have access to adequate telecommunications facilities, including HF/VHF radio communications where needed.

5b.12 Ensuring that telecommunications facilities are up-dated in line with improvements in T&T and related systems (e.g. the use of fax machines and electronic mail/bulletin boards).

**(c) During an Emergency: in relation to emergency response**

5c.1 Arranging transport for initial reconnaissance missions to/over the affected areas, including all necessary clearances and advice to authorities in those areas.

5c.2 Arranging transport, including fuel, for other assessment and operational support missions by DMB/EOC staff and others.

5c.3 Mobilizing transport from all sources to assist the local authorities in evacuation or rescue operations, where required.

5c.4 Assessing, and keeping under constant review, the overall logistic situation in the affected areas, and the capacities and constraints on transport and storage facilities. Making recommendations and, where possible, taking direct action to restore or increase capacity in the short-term.

5c.5 Collaborating with relevant line agencies (both those with responsibility for transport, and users of transport) and the Armed Forces, in co-ordinating the deployment and the use/tasking of available transport and related facilities, including ensuring fuel supplies.

5c.6 Providing advice and assistance, as required, to the district authorities in the worst-affected areas, in mobilizing and planning the most effective use of the transport capacities and storage facilities available to them. Identifying priority requirements for additional capacity and taking action to mobilize the required resources.

5c.7 Keeping the EOC telecommunications service functioning efficiently 24-hours-a-day.

5c.8 Liaising with T&T, the Police, other line agencies, the CPP, and the Armed Forces, to keep an up-to-date overview of all functioning telecommunications services, and helping to establish co-operation in areas where communications are a problem for certain agencies having important disaster-related functions.

5c.9 Advising the Director General concerning any requirements for urgent action to (re-)establish telecommunications links with isolated areas, possibly including the deployment of military signals units.

**(d) Post-disaster: in relation to rehabilitation and reconstruction**

5d.1 Collaborating with the responsible line agencies in defining priority requirements for rehabilitation and reconstruction of transport, storage and telecommunications facilities, and in monitoring the progress of such operations.

5d.2 Proposing, to the Director General and concerned line agencies, the measures that could be taken in the context of the overall reconstruction programme, and in ongoing development programmes, to reduce the vulnerability to future disasters of transport, storage and telecommunications facilities, and to improve services as an aid to preparedness.

**QUALIFICATIONS**



At least eight years experience the planning and management of logistic operations. Experience in field posts at divisional/district level an advantage.

Broad experience in transport (all modes) essential; knowledge and experience of storage and telecommunications an advantage.

Personal experience in the organization of rescue, relief, and rehabilitation operations, and in collaboration between Government, NGOs, and voluntary organizations, an advantage.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; a keen interest in disaster management; willingness to travel extensively throughout the country.



**ANNEX IX**  
**JOB DESCRIPTIONS OF**  
**TECHNICAL ASSISTANCE PERSONNEL**

X

## Support to Comprehensive Disaster Management Proposed Job Descriptions for Core Consultants

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<i>National experts/consultants</i>	
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4. Training and Public Awareness Specialist (24 months)	7
5. Sociologist/Social Anthropology Specialist (12 months)	9
6. Management Information Specialist (15 months)	11
7. Zonal Disaster Preparedness Specialists (30 months)	13

### *Note regarding Visiting Consultants*

In addition to the above experts/core consultants, who would provide extended inputs, provision is to be made for a number of short-term consultancies on specific topics to be arranged as and when required, but probably mainly within the first two years. Details of requirements, including job descriptions and lengths of assignments, would be specified and agreed by the Programme Management in the course of implementation, within the framework of agreed annual work plans. The following are general indications of the fields in which such short-term technical assistance may be required:

- (a) *International:* training; public awareness/education and community mobilization; telecommunications; management information systems; geographic information systems.
- (b) *National:* institutional arrangements and procedures; local-level planning; local-level warning dissemination systems; training materials development; mass communications; folk media; data base management; library science/documentation systems; community mobilization; water transport systems; storage and commodity management.



**1: Programme Management Adviser** (International, individually recruited by OPS)**(a) General**

To advise and assist the National Programme Director (Director General/Additional Secretary DMB) in the overall management of the Programme Intervention, and in the planning and co-ordination of other aspects of the broader Comprehensive Disaster Management programme.

To supervise the international Sub-Contracted personnel.

**(b) Specific**

To arrange and co-ordinate the inputs of the international Sub-Contractor and the locally recruited individual consultants, and to assist with the procurement of supplies and equipment, as agreed with the National Programme Director within the framework of (a) the contract between OPS and the consulting organization, and (b) the work plan approved by the IMDMCC.<sup>1</sup>

To advise and assist the Director General in:

- establishing the Disaster Management Bureau (DMB) as an effective unit for both "normal time" activities and to serve as an Emergency Operations Centre (EOC) during an emergency;
- developing effective collaboration between the all concerned line ministries and agencies, the Armed Forces, NGOs, professional associations, teaching and research institutions, and other relevant bodies, in relation to all aspects of disaster management;
- co-ordinating the development and implementation of public information activities, and seminars for high-level officials and people's representatives, to raise awareness and understanding of what can be done to reduce risks and increase coping capacities;
- co-ordinating the development and implementation of specific training activities for personnel at all levels who have specific responsibilities relevant to disaster prevention/mitigation, preparedness or response;
- promoting and monitoring the development of disaster preparedness planning activities at district and thana levels, and providing overall direction to the Zonal Disaster Preparedness Specialists and concerned DRROs.

To advise and assist in:

- the refinement of Standing Orders;
- the preparation of the National Disaster Plan;
- the compilation of a Disaster Management Handbook;
- the identification and selection of the priority districts and thanas to be targeted initially for training and assistance in developing local-level preparedness plans;
- the improvement of cyclone and flood warning systems in collaboration with the technical agencies responsible for forecasting -- BMD and BWDB, and associated technical assistance projects;
- the refinement of the "distress/deprivation" factor system as it relates to the allocation of resources for local-level preparedness measures, and for relief and rehabilitation;

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<sup>1</sup> This assumes that the Government engages a consulting organization to provide the consultancy services envisaged under the project/programme intervention, and that the same organization undertakes, or assists the Government in arranging, the procurement of the non-expendable equipment funded by UNDP.

- the establishment of rosters and other arrangements by which experienced officials and professionals can be mobilized, when needed.

In the event of a disaster:

- to advise the Director General, DMB in matters relating to overall co-ordination of response and the provision of operational support to district administrations and other agencies; and
- to assist the Director (Senior Specialist), Disaster Management, in his capacity as Director of the national Emergency Operations Centre (EOC), in ensuring the effective functioning of the EOC.

**(c) Qualifications**

Formal qualifications and at least fifteen years relevant work experience in project management, public administration, development planning, or physical planning. Formal training in disaster management expected.

At least ten years experience in developing countries of which at least five in Bangladesh or 'LDC' country experiencing similar natural disasters.

Personal experience in the organization of rescue, relief, and rehabilitation operations, and in collaboration between Government, NGOs, and voluntary organizations.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; and ability to work under pressure; willingness to travel extensively throughout the country.



## 2: Disaster Management Specialist (International, provided under Sub-Contract through an international firm)

### (a) General

Responsible to the Programme Management Adviser for the performance of the international Sub-Contractor and to act as Team Leader for the international Sub-Contractor;

To advise and assist the Director General, DMB the Director (Senior Specialist), Disaster Management, and other staff of the Disaster Management Bureau (DMB), in relation to the planning and implementation of disaster prevention/mitigation and preparedness measures.

### (b) Specific

To advise and assist the Director (Senior Specialist), Disaster Management, in:

- the development of improved procedures for the assessment of damage and needs following a disaster, and in the development of related guidelines and criteria;
- the establishment of policy guidelines and criteria for the provision of relief and rehabilitation assistance to various disaster-affected population groups;
- the development of guidelines and decision aids for resource allocations;
- the preparation of model preparedness plans for district, thana, and union-level authorities;
- the drafting of legislation relevant to disaster prevention/ mitigation, preparedness and response.

To contribute to:

- the identification of training needs and the specification of curricula, the content of training modules, and the review of training materials;
- the specification of the focus and content of public awareness activities and materials;
- seminars on disaster management for opinion leaders and senior officials, and specific disaster management training for mid-level officials and district-level officers (preparing and presenting material on general disaster management issues and techniques).

To advise and assist the Zonal Disaster Preparedness Specialists, and the District authorities (Disaster Management Committees), in:

- undertaking district-level vulnerability analyses;
- preparing district-level Disaster Action Plans;
- arranging the preparation of thana-level Disaster Action Plans.

Exchanging information with, and providing advice to, NGOs, concerned professional associations, and other relevant bodies, in relation to all aspects of disaster management.

In the event of a disaster, to assist the Assessment and Operational Support Cell of the national Emergency Operations Centre (EOC) in:

- gathering and analysing information on the overall situation, and on damage and needs, and making recommendations for action;
- organizing and, where appropriate, participating in assessment missions; and
- providing advice to, and arranging operational support for, district administrations and other agencies, as required, including participating in trouble-shooting missions, where needed.

(c) **Qualifications**

Formal qualifications and at least twelve years relevant work experience in disaster management, the management of development projects, and/or physical planning, formal training in disaster management expected.

At least seven years experience in developing countries of which at least five in Bangladesh or 'LDC' country experiencing similar natural disasters.

Personal experience in the organization of rescue, relief, and rehabilitation operations; in disaster preparedness or other forms of contingency planning; and in collaboration between Government, NGOs, and voluntary organizations.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; willingness to travel extensively throughout the country.

Note: It would be desirable for this specialist input to be provided by a single individual. However, the total input (27 man-months) may be divided between two persons if that enables a higher level of expertise and experience relevant to Bangladesh to be secured. In that case, the respective inputs must be carefully planned and managed to ensure the maximum of continuity in technical direction and operational activities.



### 3: Disaster Preparedness Specialist (National, individually recruited)

#### (a) General

Responsible to the Director General, DMB.

To co-operate with the international sub-contracted personnel and assist the Director (Senior Specialist), Disaster Management, in all aspects and activities relating to disaster preparedness, and the general planning of both prevention/ mitigation and preparedness measures.

To help develop the capacity of the Disaster Management Bureau through the transfer of knowledge and experience to the regular staff of the Bureau, in particular the members of the Disaster Management Planning and Co-ordination Cell.

#### (b) Specific

To assist in:

- finalizing the review and refinement of existing Standing Orders, and establishing arrangements for effective co-operation between all concerned agencies, including government bodies, NGOs, and other relevant organizations;
- obtaining, reviewing, and evaluating reports and research findings relevant to the planning and implementation of disaster preparedness and non-structural prevention/mitigation measures in Bangladesh;
- incorporating the findings of research and the lessons of experience into the development and implementation of policies, guidelines, field programmes, and training activities, relating to disaster management;
- the ongoing process of reviewing and refining the forecasting and warning systems for cyclones and floods;
- preparing the National Disaster Plan and related guidelines;
- drafting national policy documents and legislation, as required;
- preparing model Disaster Action Plans for district, thana and union levels;
- the training of personnel at district and thana levels, and the development of Disaster Action Plans at those levels;

In the event of a disaster, to assist the Assessment and Operational Support Cell of the national Emergency Operations Centre (EOC) in:

- gathering and analysing information on the overall situation, and on damage and needs, and making recommendations for action;
- organizing and, where appropriate, participating in assessment missions; and
- providing advice to, and arranging operational support for, district administrations and other agencies, as required, including participating in trouble-shooting missions, where needed.

#### (c) Qualifications

Formal qualifications and at least fifteen years' experience in project management, top level administration, development planning or physical planning. Formal training on disaster management in a centre of international repute.

Experience or deep involvement in disaster preparedness. Experience in operational planning. At least one year's experience as Disaster Preparedness Consultant.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; willingness to travel extensively throughout the country.



#### **4: Training and Public Awareness Specialist** (National, individually recruited)

##### **(a) General**

Responsible to the Director General, DMB.

To co-operate with the international sub-contracted personnel and assist the Senior Specialist, Training and Public Awareness, in all aspects and activities relating to the design and organization of training and public awareness activities.

To help develop the capacity of the Disaster Management Bureau through the transfer of knowledge and experience to the regular staff of the Bureau, in particular the members of the Training and Public Awareness Cell.

##### **(b) Specific**

To assist in:

- the assessment and definition of disaster management training needs of personnel in various agencies and at all levels of government;
- specifying curricula and related training material requirements for different groups of personnel (training audiences), and arranging the development and production of the required materials;
- planning and organizing workshops and other training activities for officials of all levels (including workshops aimed at developing Disaster Action Plans at district and thana levels);
- arranging for the incorporation of suitable disaster management modules in the basic and refresher training of a wide range of government and other personnel, including the development of the required modules and teaching aids, the training of trainers from the institutions concerned, and providing or arranging resource persons services;
- the organization of practise exercises/drills at community level.
- designing, organizing, and evaluating, mass communications and other public awareness activities in support of disaster prevention/mitigation and preparedness activities at household level, and community mobilization for action at village and union levels;
- selection of personnel for overseas fellowships and study tours
- the planning of itinerary for overseas study tours
- obtaining, reviewing, and evaluating reports and research findings relevant to the planning and implementation of training and community mobilization for disaster preparedness and non-structural prevention/mitigation measures in Bangladesh;
- incorporating the findings of multi-disciplinary research, and the lessons of field experience, into the development and implementation of public awareness and training activities relating to disaster management;
- preparing and designing the Disaster Management Handbook, including model plans for local levels.

In the event of a disaster, to assist the Assessment and Operational Support Cell of the national Emergency Operations Centre (EOC) in:

- gathering and analysing information on the overall situation, and on damage and needs, and making recommendations for action;
- organizing and, where appropriate, participating in assessment missions; and
- providing advice to, and arranging operational support for, district administrations and other agencies, as required, including participating in trouble-shooting missions, where needed.



(c) **Qualifications**

At least eight years experience in planning and organizing training and non-formal education programmes serving a variety of client groups.

Personal experience in collaboration between Government, NGOs, and voluntary organizations. Previous experience in the organization of rescue, relief, and rehabilitation operations, and in preparedness/contingency planning an advantage.

Previous formal training in disaster management, and in organizing disaster management training, an advantage.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; a keen interest in disaster management; willingness to travel extensively throughout the country.

**5: Sociologist/Social Anthropology Specialist** (National, individually recruited)**(a) General**

Responsible to the Director General, DMB.

To co-operate with the international sub-contracted personnel and assist the Director (Senior Specialists, Disaster Management and Training, in all aspects and activities relating to the general planning of both prevention/mitigation and preparedness measures, and the design and organization of training and public awareness activities.

To help develop the capacity of the Disaster Management Bureau through the transfer of knowledge and experience to the regular staff of the Bureau, in particular the members of the Disaster Management Planning and Co-ordination Cell, and the Training and Public Awareness Cell.

**(b) Specific**

To assist in:

- developing and testing alternative approaches to community mobilization for disaster prevention/mitigation and preparedness activities at household, village and union level;
- designing and evaluating public awareness activities in support of community-level activities;
- finalizing the review and refinement of existing Standing Orders as they relate to actions at community level, and establishing arrangements for effective co-operation between all concerned agencies, including government bodies, NGOs, and other relevant organizations;
- obtaining, reviewing, and evaluating reports, and social and anthropological research findings relevant to the planning and implementation of disaster preparedness and non-structural prevention/mitigation measures in Bangladesh;
- incorporating the findings of social and anthropological research, and the lessons of field experience, into the development and implementation of policies, guidelines, field programmes, and training activities, relating to disaster management;
- the ongoing process of reviewing and refining the warning dissemination systems for cyclones and floods to enhance their effectiveness at community level;
- preparing the guidelines concerning social aspects and community-level organization for inclusion in the National Disaster Plan, the Disaster Management Handbook, and model plans for local levels;
- preparing model disaster plans for union level;
- the training of personnel at district, thana and union levels;
- the organization of practise exercises/drills at community level;
- liaising with relevant technical sub-committees of the National Disaster Management Advisory Committee.

In the event of a disaster, to assist the Assessment and Operational Support Cell of the national Emergency Operations Centre (EOC) in:

- gathering and analysing information on the overall situation, and on damage and needs, and making recommendations for action;
- organizing and, where appropriate, participating in assessment missions; and
- providing advice to, and arranging operational support for, district administrations and other agencies, as required, including participating in trouble-shooting missions, where needed.



(c) **Qualifications**

Formal qualifications and at least ten years relevant experience in social aspects of development. Training and experience in community mobilisation activities would be an advantage.

A thorough knowledge of the social dynamics within various population groups in Bangladesh and the effects of disasters on various groups; personal experience in field investigations and the preparation of reports and recommendations relating to the impact of disasters on local communities, and on the responses of communities to such events.

Personal experience in collaboration between Government, NGOs, and voluntary organizations. Previous experience in the organization of rescue, relief, and rehabilitation operations, and in preparedness/contingency planning an advantage.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; and ability to work under pressure; willingness to travel extensively throughout the country.

## 6: Management Information Specialist (National, individually recruited)

### (a) General

Responsible to the Director General, DMB.

To co-operate with the international sub-contracted personnel and assist the Director (Senior Specialist), Information Management, in all aspects and activities relating to the establishment, maintenance and use of management information systems to meet disaster management requirements during "normal time", and those of the Emergency Operations Centre (EOC) during emergencies.

To help develop the capacity of the Disaster Management Bureau through the transfer of knowledge and experience in information management and the use of specific Management Information Systems to the regular staff of the Bureau, including but not limited to the members of the Monitoring and Information Management Cell.

### (b) Specific

To assist in:

- the installation, use, and maintenance, of computer hardware and software of the DMB;
- specifying user requirements, and developing, operating and maintaining both manual and computerized information systems to meet the needs of the DMB during "normal time", and those of the Emergency Operations Centre (EOC) during emergencies;
- developing, and continuously refining and up-dating, data bases of information relevant for all aspects of disaster management, and establishing collaborative relationships with other agencies (government and non-government) to ensure the maximum sharing of information;
- specifying the information requirements of those responsible for disaster management at district, thana and union levels, and in developing mechanisms to meet those needs (and contributing to the development of model disaster plans for those levels);
- developing and testing work sheets and other decision aids for use by staff of the DMB, civil administration officers, and others, in relation disaster prevention, preparedness and response;
- monitoring the progress of implementation and effectiveness of approved prevention/mitigation measures and of preparedness at all levels and in all sectors (line agencies);
- co-ordinating with another project (FAP:19) in their development of a Geographic Information System to support disaster management applications;
- obtaining, reviewing, and evaluating reports and research findings relevant to the planning and implementation of information systems in support of disaster management.

In the event of a disaster, helping to ensure the efficient operation of all management information systems of the national Emergency Operations Centre (EOC), and assisting in:

- analysing and cross-checking information available on the overall situation, and on damage and needs, and identifying any gaps or uncertainties;
- preparing analyses and summary reports on the progress of operations, allocations, contributions, and unmet needs, and highlighting significant features for management attention; and
- providing advice and support, in relation to information management, to district administrations and other agencies, and participating in trouble-shooting missions, as required.



(c) **Qualifications**

At least eight years experience in information management including both manual and computer-based systems.

Formal qualifications and at least five years relevant work experience in systems analysis and in the design, installation and operation of management information systems, with particular emphasis on defining users' information needs and the potential uses of information.

Personal experience in the organization of rescue, relief, and rehabilitation operations, and in collaboration between Government, NGOs, and voluntary organizations, an advantage.

Demonstrated leadership qualities; flexibility, initiative and a willingness to take responsibility; an ability to work under pressure; a keen interest in disaster management; willingness to travel extensively throughout the country.

**7: Zonal Disaster Preparedness Specialists** (National, individually recruited)**(a) General**

Responsible to and under the overall direction of the Director (Senior Specialist), Disaster Management, to assist the District and Thana Administrations, and the Disaster Management Committees at those levels, in developing local Disaster Action Plans, in including disaster prevention/mitigation measures in local development plans, and in promoting preparedness and mitigation measures at union and village level.

**(b) Specific**

To work with the Deputy Commissioners, District Relief and Rehabilitation Officers (who would be counterparts to the ZDPS), Thana Nirbahi Officers, and Project Implementation Officers, in forming the District- and Thana-level Disaster Management Committees (preferably as standing sub-committees of district and thana level development co-ordination committees).

To contribute to the development, by the DMB, of disaster management guidelines and model disaster plans for district, thana and union levels; to test these in the field and provide feedback to the DMB with recommendations for any improvements needed.

To work with the District and Thana Disaster Management Committees, and Union Committees, in:

- undertaking vulnerability analyses, and preparing hazard maps and disaster profiles of the areas concerned, identifying the localities, population groups, infrastructure elements, and community services that are exposed to particular hazards, and the resources that are available to respond to disasters;
- identifying minor structural and other preventive ("proofing") measures that can be taken to reduce the risks of loss of life or damage to property, economic assets, means of livelihood, and community services, and incorporating these measures into local development plans, to the extent feasible;
- preparing Disaster Action Plans and developing improved preparedness arrangements at district and thana levels;
- organizing public awareness (education) and community mobilization activities; encouraging and helping local communities (villages) to develop their own preparedness arrangements;
- organizing practice exercises/drills at local levels.

To assist the DMB and the relevant local authorities in organizing training workshops and related activities for district and thana level personnel, and to contribute to those training activities;

In the event of a disaster, to assist the Deputy Commissioners, District Relief and Rehabilitation Officers, Thana Nirbahi Officers, and Project Implementation Officers, (and the District- and Thana-level Disaster Management Committees), in:

- gathering and analysing information on the overall situation, and on damage and needs, and making recommendations for action;
- organizing and, where appropriate, participating in assessment visits; and
- helping to identify and find solutions to operational problems.



**(c) Qualifications**

Formal qualifications and at least five years of work experience, mainly in the rural areas would be expected.

A socio economic/training background would be an advantage.

An interest in disaster management and an appreciation of the effects of natural disasters on the country and its people would be looked for.

An ability to work with all strata of society and to work effectively without day to day supervision would be important.

