

**COUNTRY PROFILE ON  
DISASTER MANAGEMENT SYSTEM IN  
BANGLADESH**

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KOBE, JAPAN, 1<sup>ST</sup> MARCH, 2011**

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## My Research plan

- Study the community participation during disaster in Japan and Bangladesh.
- Learn basic ideas for preparing community through learning, training & drill in Japan.
- Conduct case study on the behavior of the community in response to disaster in Japan.
- Study the community participation and adaptation during disaster in Japan & Bangladesh.

## **Distinction between Hazard and Disaster**

- Basic difference between hazard and disaster is,
  - Disaster is an event
  - Hazard is the source of disaster (potential source of destruction)

## **What is “disaster management”?**

- We cannot avoid disaster
- But we may make forecast to some extent
- Information is essential to reduce damage
- Management include
  - Pre-avoid serious damages
- Data gathering, Early warning, Smooth evacuation
  - Recover quickly
- Information is most needed

## **Government Strategy in DM**

- 1. The highest budgetary allocation in DM is in line with the global strategy of “invest today for safer tomorrow”. But increasing trend of disaster frequency, severity, magnitude and extent due to external global factors demands additional resources.**
- 2. Immediate response to deliver basic needs of the affected population with GoB’s own resources.**
- 3. Ensure implementation of medium and long term intervention for sustainable risk reduction and mitigation with assistance from development partners.**

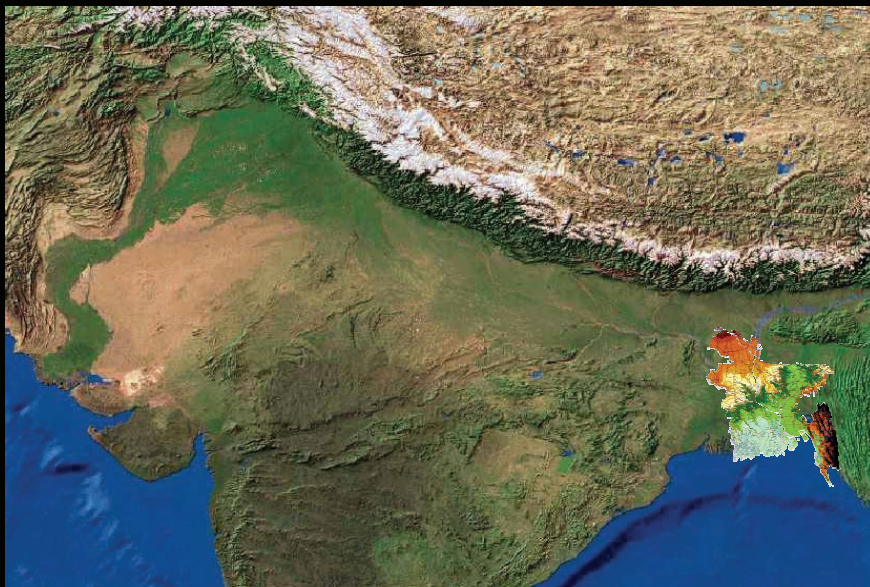
## **Overall Objective**

**To strengthen the capacity of the Bangladesh Disaster Management System to reduce unacceptable risk and improve response and recovery management at all levels.**

## LOCATION OF BANGLADESH



## Location of Bangladesh in South Asia



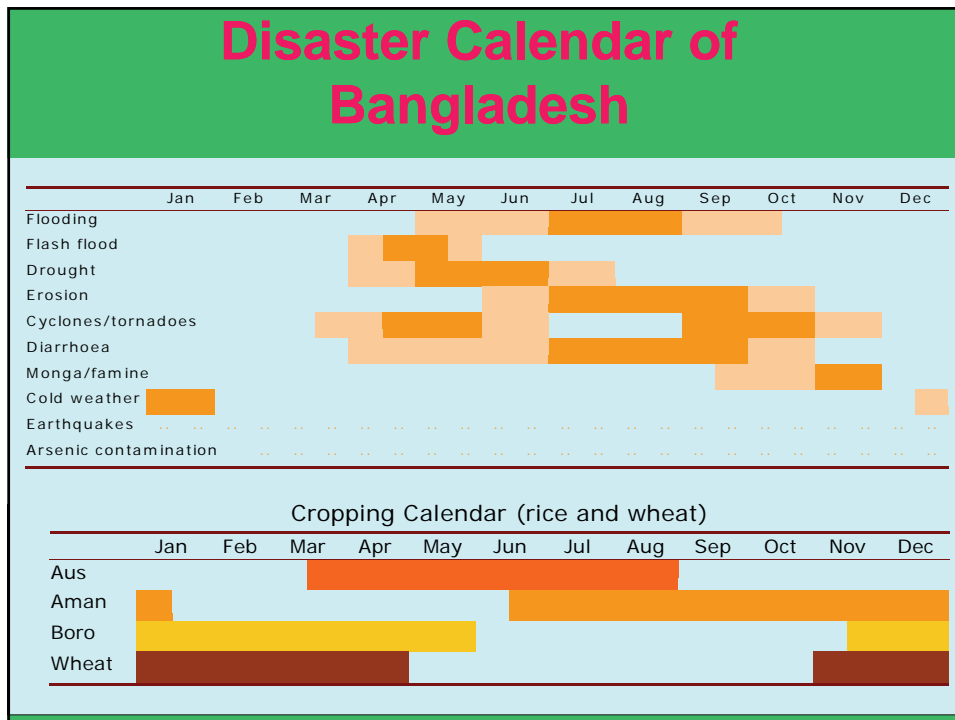
## Country Profile: Bangladesh

- Total population : 135 million
- Total Geographic Area : 144,000 sqkm
- Floodplains: 80% of total areas
- Located at fragile deltaic flood-plain
- More than 300 rivers ( 57 Trans boundary rivers)
- High-risk country to recurrent natural disasters



**Bangladesh have inherited the typical characteristics of one of the most natural disaster prone countries of the world due to geography, topography and geo-physical location. Flood and cyclone related losses almost every year create a major set-back for the sustainable development of the country.**

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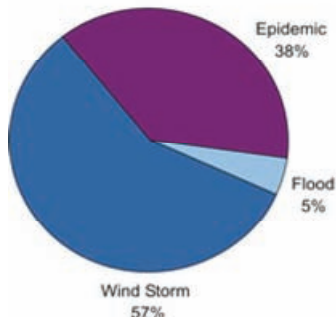


## Key factors of vulnerability

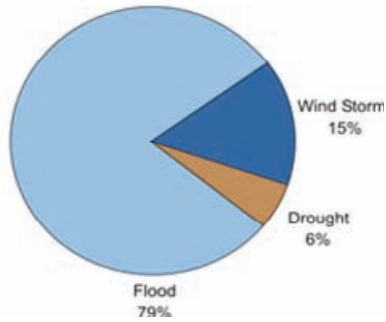
- Geographical location
- Dominance of flood plains
- Low elevation from the sea
- Global warming & climate change
- High population density
- High level of poverty

## Natural Disaster from 1904-2004

Percentage of people killed by disaster type

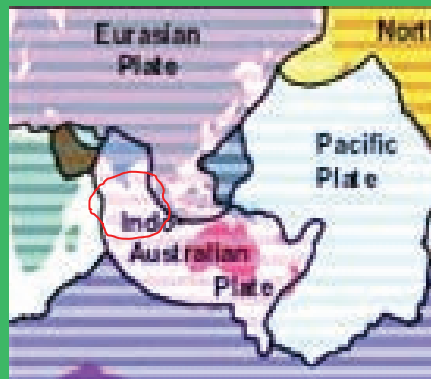


Percentage of people affected by disaster type



Source : ISDR website

## Tectonic Location of Bangladesh



## NATIONAL DISASTER CONTEXT

- Frequently hit by various natural disasters like Cyclones, Storm surges, Floods, Tornadoes, Droughts and other calamities.
- Monsoon flooding is an annual occurrence shaping lives and livelihoods.
- Almost 200 disaster events have occurred causing more than 500,000 deaths and leaving prolonged damage to livelihoods, infrastructure and the economy.
- Climate change is likely to cause significant impact in the form of severe floods, cyclones, droughts, sea level rise and salinity affecting agriculture, livelihoods, natural orders, water supply, health etc.
- The disaster vulnerable people demonstrates strong coping capacity to face the disaster challenges.

## Disasters and Bangladesh


### Major Hazards

- ◆ Flood
- ◆ Tropical Cyclone
- ◆ Storm Surge
- ◆ Tornado
- ◆ River Bank Erosion
- ◆ Drought
- ◆ Earthquake
- ◆ Arsenic
- ◆ Fire

### Major Disasters

Year	Disaster	Death
1970	Cyclone	300,000
1988	Flood	2,373
1988	Cyclone	5,704
1989	Drought	800
1991	Cyclone	138,868
1996	Tornado	545
1997	Cyclone	550
1998	Flood	1,050
2004	Flood	747
2007	Flood	1,071
2007	Cyclone(SIDR)	3,406
2009	Cyclone Aila	190




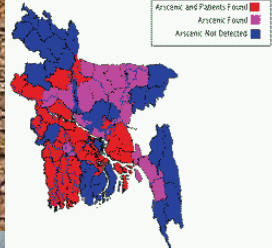








## Estimated Economic Losses Due to Floods & Cyclone

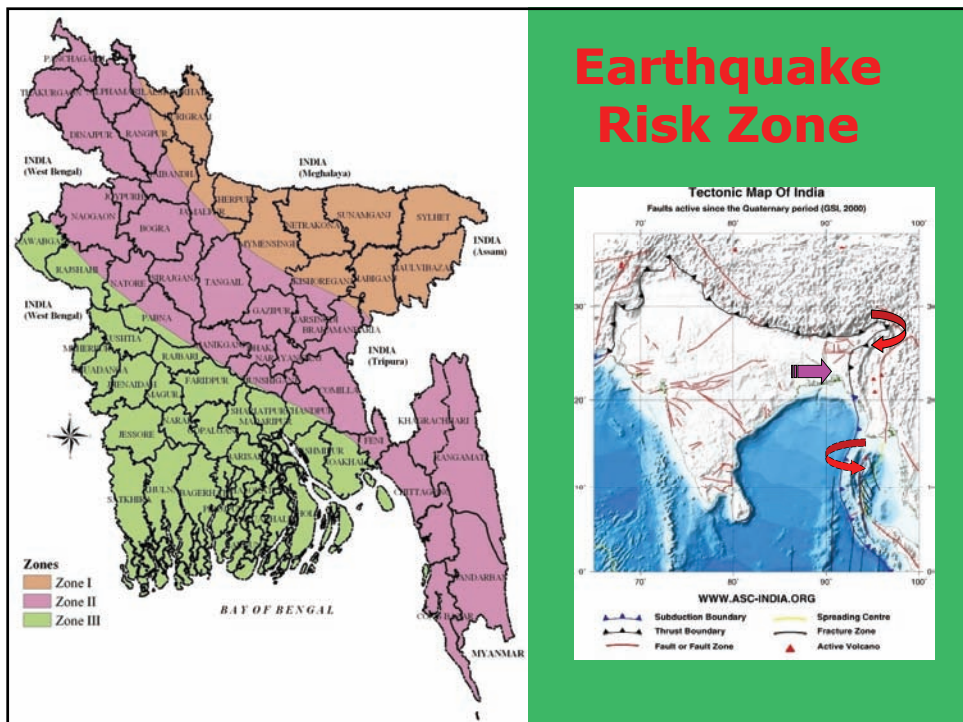
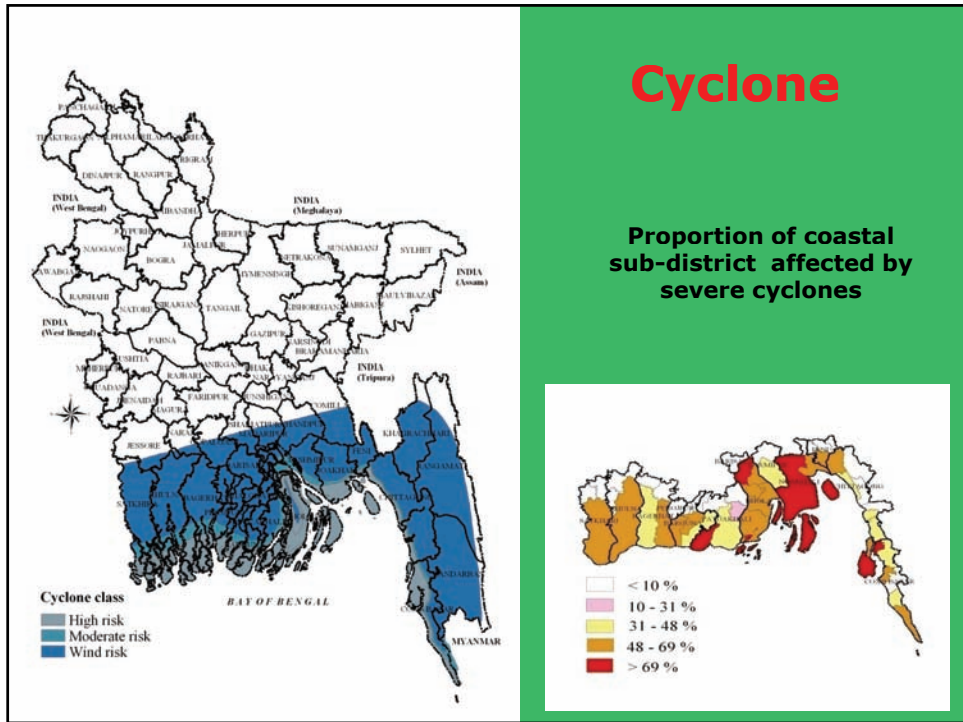
- ◆ 1987 floods US\$ 1.0 billion
- ◆ 1988 floods US\$ 1.2 billion
- ◆ 1998 floods US\$ 2.8 billion
- ◆ 2004 floods US\$ 2.3 billion
- ◆ 2007 floods US\$ 1.1 billion
- ◆ 2007 Cyclone(SIDR) US\$ 2.3 billion

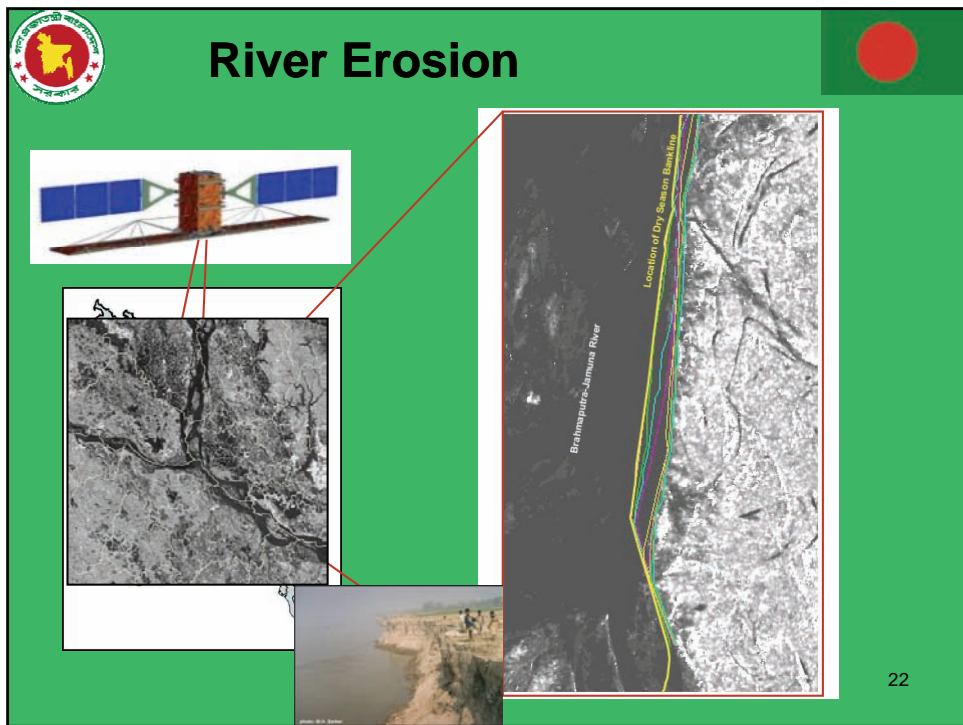
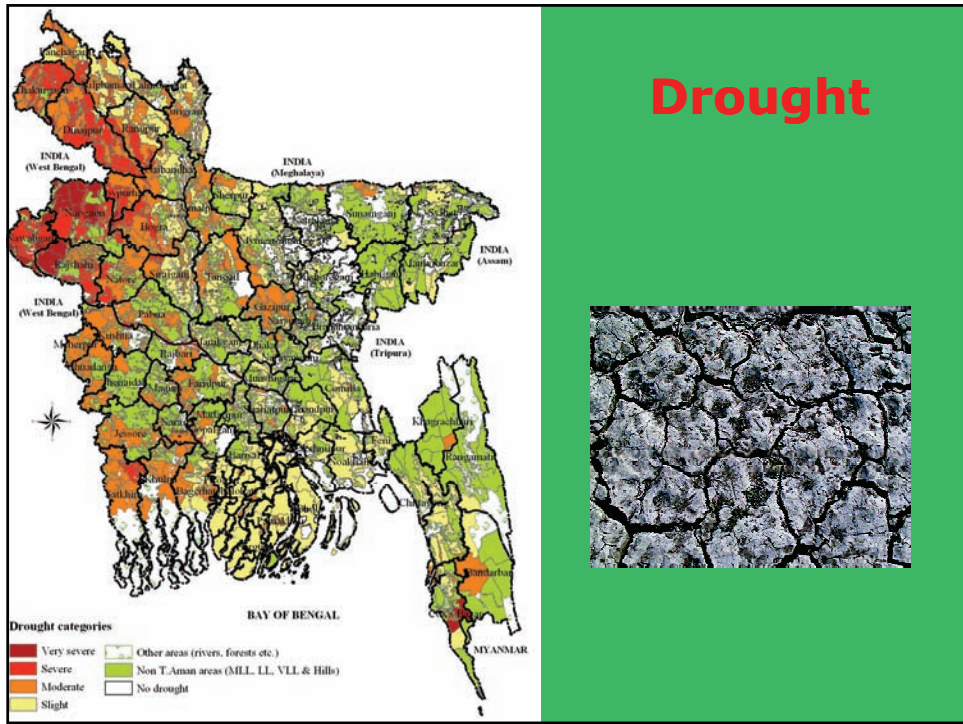
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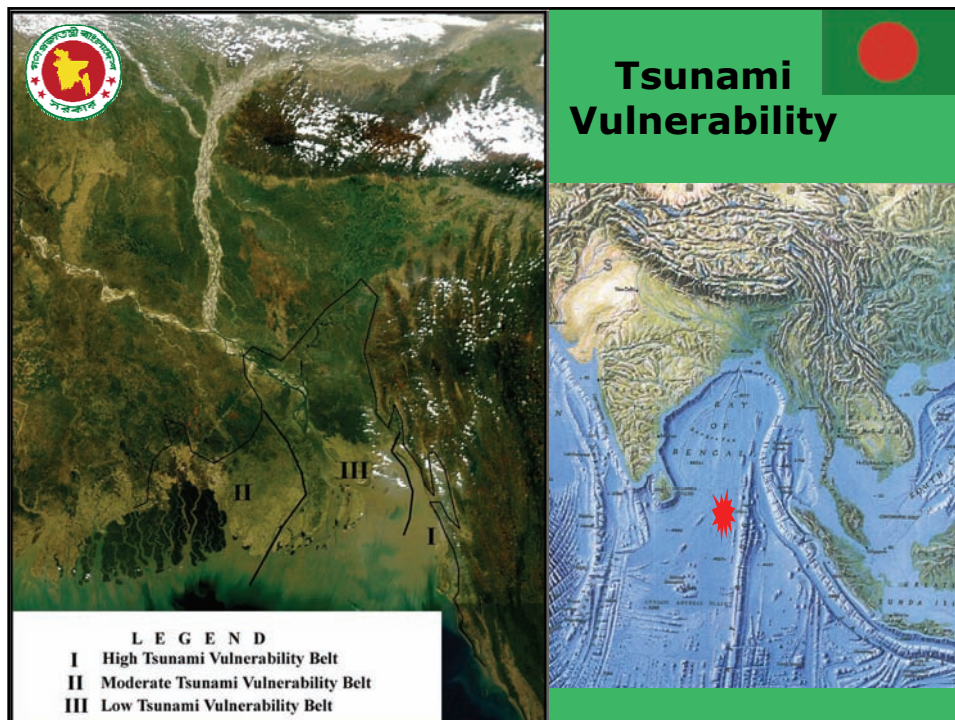
## Major Hazards of Bangladesh

- Floods** 
- Cyclone, Tornado and Storm surge** 
- Drought** 
- River bank erosion** 
- Water logging** 
- Salinity** 
- Monga**
- Arsenic**







## Disaster Management in Bangladesh: An Evolution

- Disaster Management in Bangladesh had gone through a process of significant reforms. Previously the focus was limited in relief activities.
- Following the devastating cyclone of 1991, the focus has been shifted towards adaptation of a holistic approach that embraces processes of hazard identification and mitigation, community preparedness and integrated response efforts.

## **GOB Vision on Disaster Management**

**To reduce the vulnerability of people, especially the poor, to the effects of natural, environmental and human induced hazards to a manageable and acceptable humanitarian level**

### **Mission:**

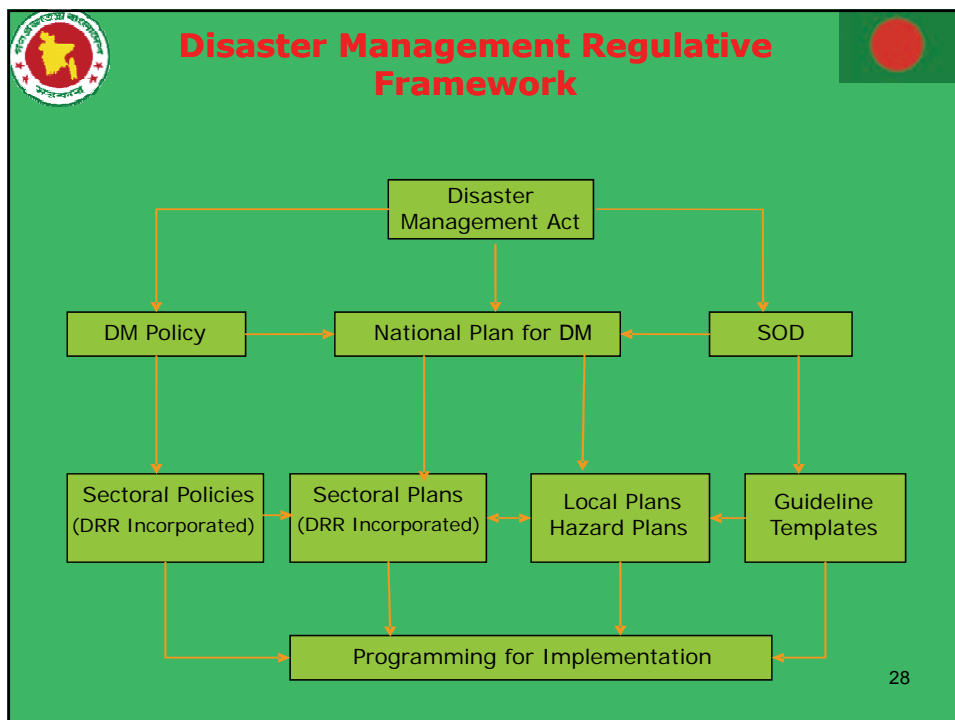
- to bring a paradigm shift in disaster management from conventional response and relief to a more comprehensive risk reduction culture



### **Overall Objective:**

- to strengthen the capacity of the Bangladesh Disaster Management System

## NATIONAL AND INTERNATIONAL DRIVERS

- ✓ Millennium Development Goals (MDG)
- ✓ Hyogo Framework for Action (HFA)
- ✓ United Nations Framework Convention on Climate Change (UNFCCC)
- ✓ SAARC Framework for Action (SFA)
- ✓ Poverty Reduction Strategy Paper (PRSP), Bangladesh
- ✓ Recommendations of the National Workshop on Options for Flood Risks and Damage Reduction in Bangladesh, 2004



**Disaster Management Legislation and National Disaster Management Plan has for final approval with the purpose of providing for the formulation of disaster management policy relating to preparedness and emergency measures, and rehabilitation program to deal with disaster.**

**As part of training and public awareness nearly 70000 people related to disaster have been trained through 700 courses/workshops/seminars.**

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## Poverty Disaster Interface

- Adverse long-term impact on economic and social activities
- The poor are more vulnerable to any kind of disaster
  - Depletion of assets
  - Income erosion due to loss of employment
  - Increase indebtedness
  - Out migration
- Cost to cope with disaster disproportionately higher for the poor

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## Strengthening DM and Risk Reduction Capacity


-  Learning and Development Strategy – to enhance the technical and management skills of the MoFDM staff and other govt. officials of key ministries
-  Development of standardized tools, procedures and guidelines– CRA Guidelines, RRAP Procedure
-  Nurturing partnership

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## Policy and Planning



- SAARC Framework for CDM
- National Plan of Action
- Disaster Management Act
- Standing Orders on Disaster
- MoFDM Comprehensive and Strategic Plans





## Hyogo Framework



-  **Adopting action-plan 2005-2015, Building the Resilience of nations and Communications to Disasters at the World Conference on Disaster Reduction in Kobe, Japan in January 2005, the 168 Governments present recognized their critical role in working with other actors to reduce disaster risk at national and local levels.**
-  **The first of the Hyogo Framework's five Priorities of Action is to "ensure that disaster risk reduction (DRR) becomes a national and local priority with a strong institutional basis for implementation". It details a set of related key activities including the:**

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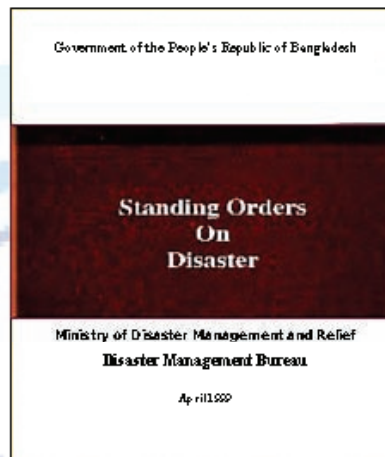



-  **Establishment of institutional mechanisms for Disaster Risk Reduction (National Platforms) with designated responsibilities;**
-  **Integration of risk reduction in various sectoral policies and planning;**
-  **Adoption of risk related legislation;**
-  **Decentralization of disaster-related responsibilities and resources;**
-  **Implementation of measures to foster political commitment and community participation.**

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### Standing Orders On Disaster

- The standing order creates the opportunity to establish disaster management committee at every level. However these committees are activated during the disaster.
- The standing orders for disaster management provide ample scope for the Government, NGOs and private sectors to think locally and planned need based program involving the community.

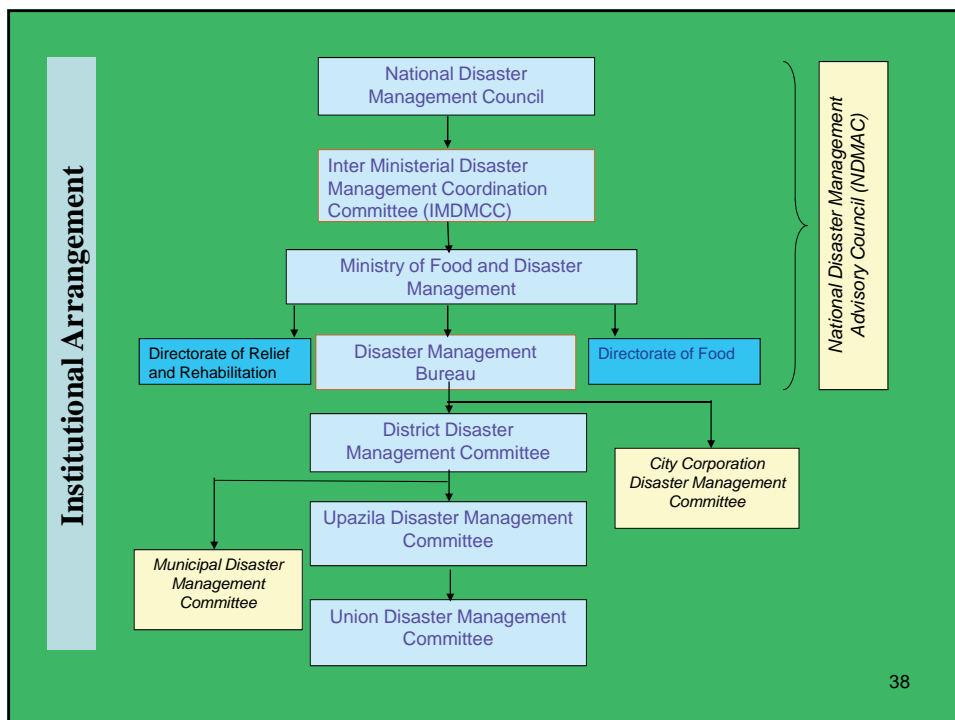


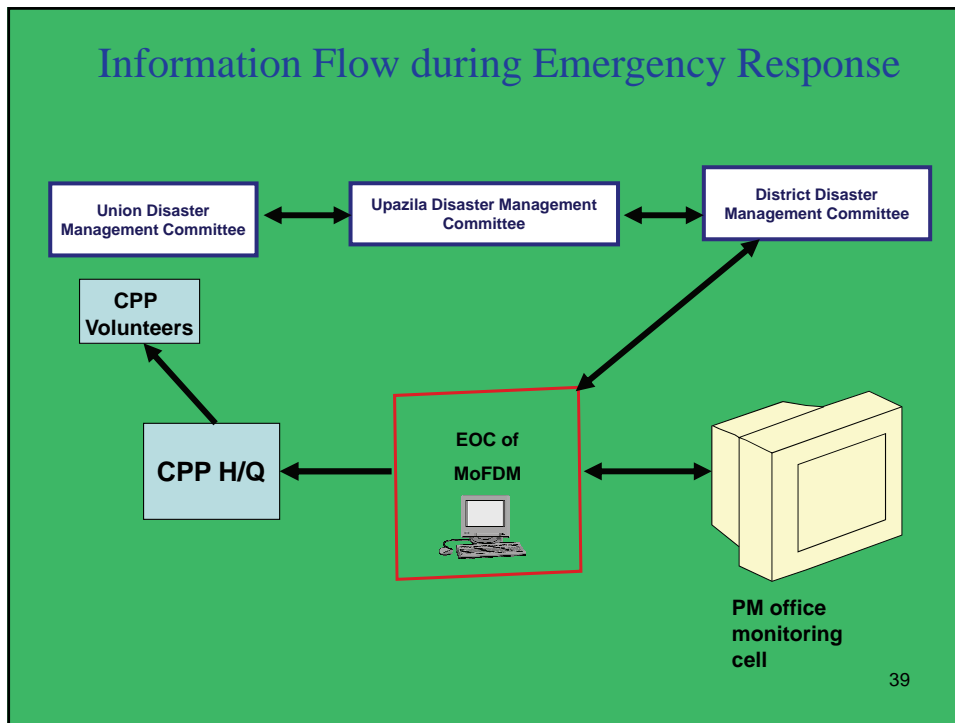
## National Committees under SOD

- **National Disaster Management Council (NDMC)**
- **Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC)**
- **National Disaster Management Advisory Committee (NDMAC)**
- **Cyclone Preparedness Program Implementation Board (CPPIB)**
- **Disaster Management Training and Public Awareness Building Task Force (DMTATF)**
- **Focal Point Operation Coordination Group of Disaster Management (FPOCG)**
- **NGO Coordination Committee on Disaster Management (NGOCC)**
- **Committee for Speedy Dissemination of Disaster Related Warning/ Signals (CSDDWS)**

## Field Level Committees under SOD


- **District Disaster Management Committee (DDMC)** headed by the Deputy Commissioner (DC) to co-ordinate and review the disaster management activities at the district level
- **Upazila Disaster Management Committee (UZDMC)** headed by the Upazila Nirbahi Officer (UNO) to co-ordinate and review the disaster management activities at the Upazila level
- **Union Disaster Management Committee (UDMC)** headed by the Chairman of the Union Parishad to co-ordinate, review and implement the disaster management activities of the concerned union
- **Pourashava Disaster Management Committee (PDMC)** headed by Chairman of Pourashava (municipality) to co-ordinate, review and implement the disaster management activities within its area of jurisdiction
- **City Corporation Disaster Management Committee (CCDMC)** headed by the Mayor of City Corporations to co-ordinate, review and implement the disaster management activities within its area of jurisdiction.






## Infrastructure for DRR

- ✓ Over 2,500 Cyclone Shelters along the coastal belt of Bangladesh.
- ✓ Killas (Elevated Land) for Shelter of Livestock.
- ✓ Flood Protection Embankment along coast line.
- ✓ 1400 Flood Shelters in Flood-Prone Areas.



## Information Management for Coordination

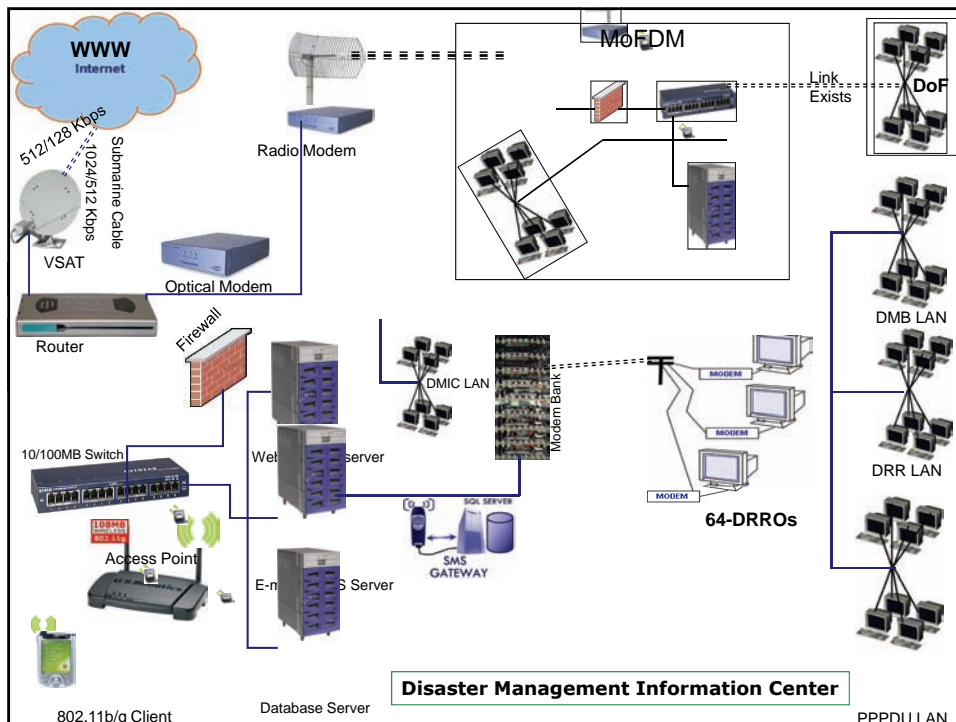


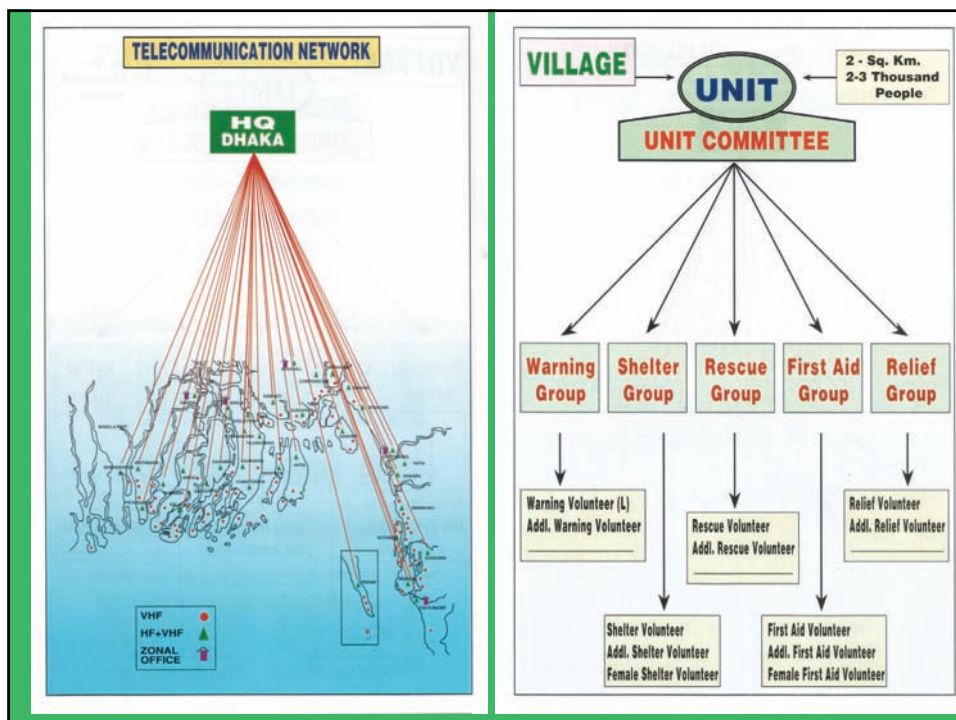
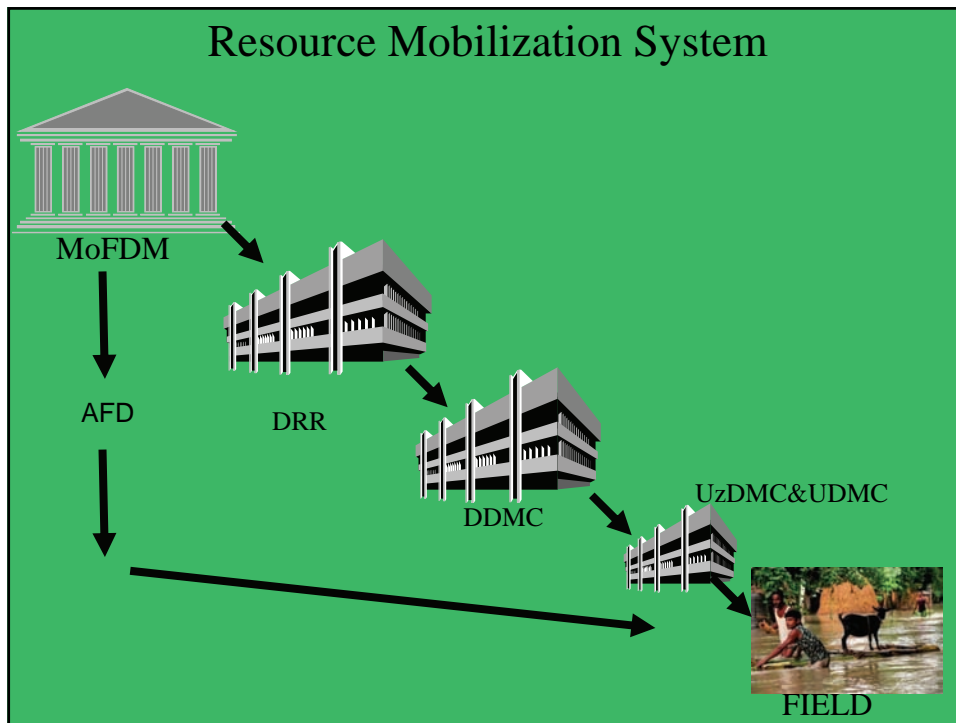
**Disaster Management Information Centre (DMIC) established to support information management and coordination.**

**The key objectives of DMIC:**

- To enhance disaster management coordination through improved facilities and information sharing capacities of DMIC during normal and emergency periods
- Improved capacity of information sharing during normal (non-emergency) periods
- EOC more effectively and efficiently coordinated during disasters

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## **Disaster Mitigation**

**GoB gives equal importance to both structural as well as non-structural mitigation measures.**

## **Structural Mitigation**

**As part of structural mitigation measures, GoB has so far constructed 2,023 cyclone shelters and 200 flood shelters.**

**About 4,000 km. long coastal embankment to protect coastal land from inundation by tidal waves and storm-surges, and drainage channels of total length 4,774 km. have so far been constructed.**

## Non-Structural Mitigation

- ▣ For non-structural mitigation GoB has given emphasis on
  - Legislation & Policy
  - Training and Public Awareness
- ▣ Disaster Management Legislation and National Disaster Management Plan has for final approval with the purpose of providing for the formulation of disaster management policy relating to preparedness and emergency measures, and rehabilitation program to deal with disaster.


### Non-Structural Mitigation... continued.

- As part of training and public awareness nearly 70000 people related to disaster have been trained through 700 courses/workshops/seminars.
- As part of public awareness activities, booklets containing information about cyclone, flood etc. and calendar, posters depicting disaster points have been regularly printed and distributed up to the grass-root levels.



### Non-Structural Mitigation... continued.



- ✓ **To raise awareness among the students on various hazards/disaster management, a chapter on disaster management has been included in the educational curricula from classes V to XII.**
- ✓ **GoB has included compulsory session of at least 02 hours on disaster management in the training curricula of all types of Training Institutes to train officials and non officials.**



## Ensuring knowledge management on disaster risk reduction

- Establishing National Disaster Management Information Centre (DMIC) – a central data and information hub to work round the clock
- Progressive expansion of DMIC to all 64 districts
- Progressive expansion of DMIC to all high risk Upazilas(sub-districts)
- Establishment of Disaster Management Information Network (DMIN) down to the community/household level – data received, processing, sharing and receiving and evaluating the feedback

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**GOB has included compulsory session of at least 02 hours on disaster management in the training curricula of all types of Training Institutes to train officials and non officials.**

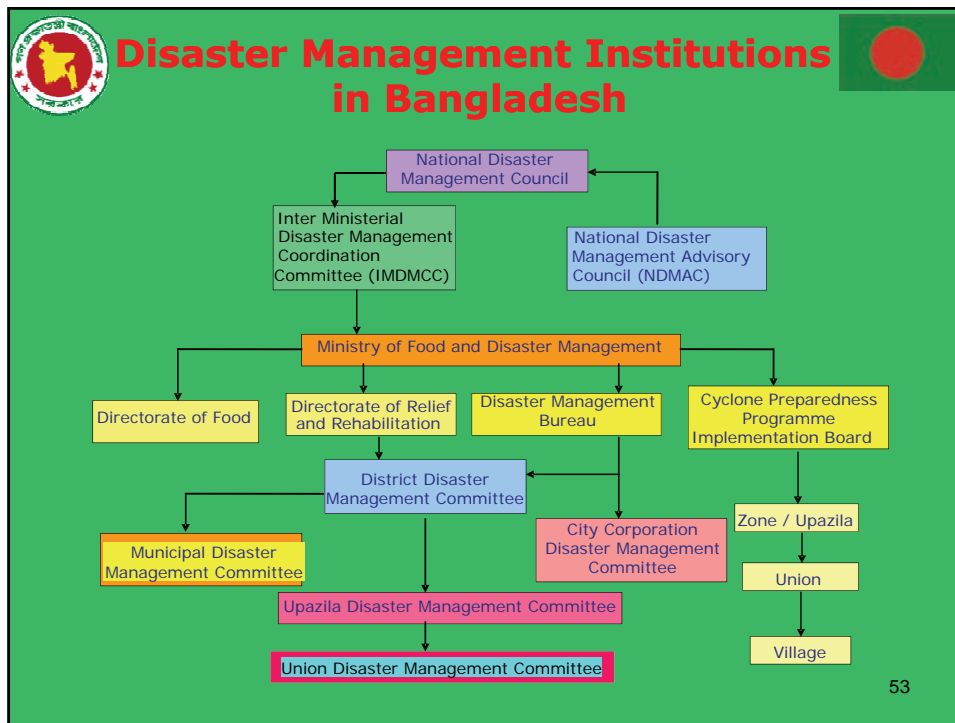
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## **Disaster Management Institutions in Bangladesh**

- » Ministry of Food and Disaster Management (MOFDM).
- » Disaster Management Bureau (DMB).
- » Directorate of Relief and Rehabilitation (DRR).
- » Directorate of Food.
- » Cyclone Preparedness Programme (CPP).
- » Disaster Management Committee at all Administrative Unit level.
- » Local Level Action Plan.

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## Cyclone Preparedness Program (CPP)

- **Community Based Early warning through devoted volunteers.**
- **A Joint Venture Program of GoB & BDRCS.**
- **To minimize loss of lives and properties in cyclonic disaster by strengthening the capacity in disaster management of the coastal people of Bangladesh.**
- **Covers 11 districts and 32 Upazilas (Sub-District).**
- **Total Volunteers: 42675**

## Comprehensive Disaster Management Program (CDMP)

CDMP is a strategic institutional and programming approach that is designed to optimize the reduction of long-term risk and to strengthen the operational capacities for responding to emergencies and disaster situations including actions to improve recovery from these events.

### CDMP.....

#### Strategic Focus Areas:

- **Professionalizing the Disaster Management System:** Establishment of Policy Program Partnership Development Unit, Professionalizing development of Disaster Management System, etc.
- **Partnership Development:** Advocacy and Capacity Building of DMCs.
- **Community Empowerment:** Program Gap Analysis, Risk Reduction Planning, Livelihood Security and hazard Awareness, etc.
- **Expanding Preparedness Program across a broader range of hazards:** Earthquake and Tsunami Preparedness , Climate Change and Research.
- **Strengthening Emergency Response Capabilities:** DMIC and Response Management.

## Limitations

- Insufficient Cyclone & Flood Shelter and Killa (elevated land for livestock).
- Insufficient coastal Embankment & Afforestation.
- Insufficient Equipments for Search & Rescue after earthquake .
- Needs countrywide Volunteers specially for earthquake.
- Needs huge investment for combating River Erosion.



# PUBLICATIONS



Government of the People's Republic of Bangladesh

**Standing Orders  
On  
Disaster**

Ministry of Disaster Management and Relief  
Disaster Management Bureau

August 1999

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

**দুর্যোগ বিষয়ক  
স্থায়ী আদেশাবলী**

দুর্যোগ ব্যবস্থাপনা ও ত্রাণ মহালয়  
দুর্যোগ ব্যবস্থাপনা ব্যুরো

আগস্ট ১৯৯৯

বন্যা মোকাবেলায়  
জনসাধারণের করণীয়



দুর্যোগ বিষয়ক বই

**ভূমিকম্প বিষয়ে  
গণসচেতনতা**



দুর্যোগ ব্যবস্থাপনা ব্যুরো

**জাতীয় দুর্যোগ প্রস্তুতি দিবস-২০০২  
National Disaster Preparedness Day - 2002**

৩১ মার্চ, রবিবার  
31 March, Sunday




"দুর্যোগ প্রশমনে প্রস্তুতিই প্রধান"  
Preparedness  
Key to Disaster Reduction

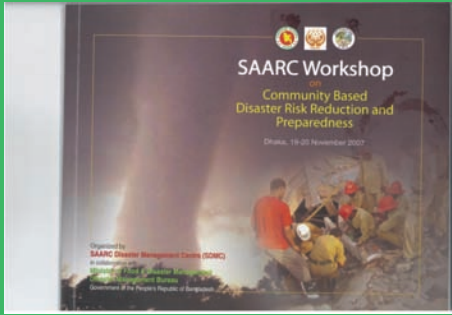
দুর্যোগ ব্যবস্থাপনা ব্যুরো  
Disaster Management Bureau  
দুর্যোগ ব্যবস্থাপনা ও ত্রাণ মহালয়  
Ministry of Disaster Management & Relief

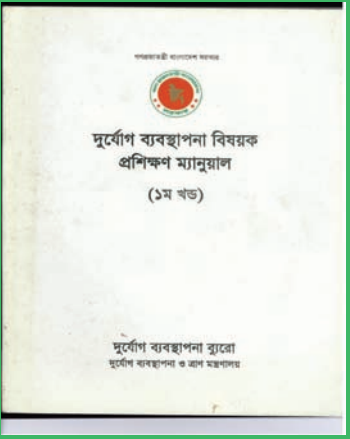
আমার সেবা  
অনেকদিনের  
অনেকদিনের



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 **PUBLICATIONS** 

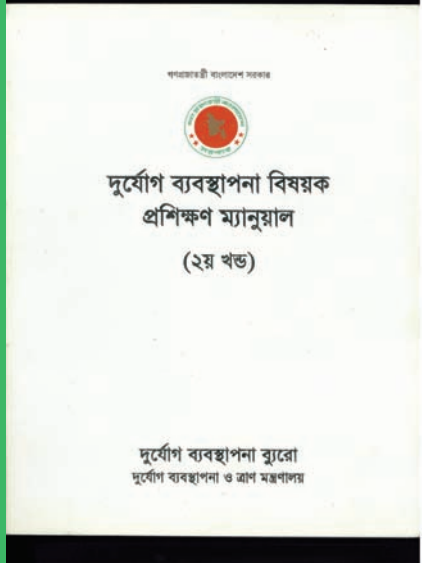


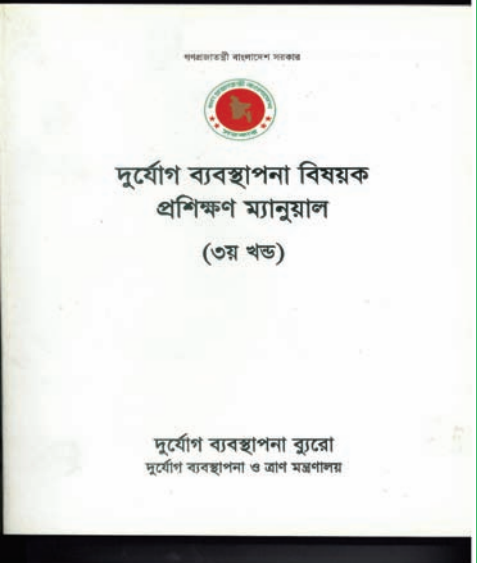


**SAARC SUVINOUR** **TRAINING MANUAL**

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 **PUBLICATIONS** 






**TRAINING MANUAL ( 2<sup>nd</sup> and 3<sup>rd</sup> Part)**


 **PUBLICATIONS** 

 <p>মুদ্রিত বাস্তবায়ন দ্বারা খাদ্য ও মাদক পুষ্টি মন্ত্রণালয় সার্বিক মুদ্রিত বাস্তবায়ন বিষয়ক বার্ষিক প্রতিবেদন <b>প্রশিক্ষণ সহায়িকা</b></p>	 <p>মুদ্রিত বাস্তবায়ন দ্বারা খাদ্য ও মাদক পুষ্টি মন্ত্রণালয় স্থানীয় মুদ্রিত পুষ্টি-হাস কৰ্ম-নিৰ্বাহক বিষয়ক <b>প্রশিক্ষণ সহায়িকা</b></p>	 <p>মুদ্রিত বাস্তবায়ন দ্বারা খাদ্য ও মাদক পুষ্টি মন্ত্রণালয় সার্বিক মুদ্রিত বাস্তবায়ন বিষয়ক বার্ষিক প্রতিবেদন <b>প্রশিক্ষণার্থী হ্যান্ডবুক</b></p>
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**TRAINING HANDBOOK AND TRAINERS GUIDE**

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 **PUBLICATIONS** 

 <p><b>Seminar Report</b> <b>IMPROVEMENT OF EARLY WARNING SYSTEM AND RESPONSES IN BANGLADESH TOWARDS TOTAL DISASTER RISK MANAGEMENT APPROACH</b> DECEMBER 19-24, 2002, DHAKA, BANGLADESH.</p> <p><i>Jointly Organized by</i> BPATC &amp; DMB, Bangladesh in Collaboration with ADRC &amp; UN OCHA, Japan</p>	 <p><b>SAARC Workshop</b> on <b>Community Based Disaster Risk Reduction &amp; Preparedness</b> Dhaka, Bangladesh 19-20 November 2007</p> <p>Organized by SAARC Disaster Management Centre (SDMC) in collaboration with Ministry of Food and Disaster Management &amp; Disaster Management Bureau, Bangladesh</p>
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 **FLOOD** 



 **CYCLONE** 







# TORNADO







# BUILDING COLLAPSE







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 **RIVER EROSION** 



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## Conclusion

- Disaster Management in Bangladesh had gone through a process of significant reforms.
- Following the devastating cyclone of 1991, the focus has been shifted towards adaptation of a holistic approach that embraces processes of hazard identification and mitigation, community preparedness and integrated response efforts.
- The development of mechanisms with regional and global partners for education, training and knowledge sharing on risk reduction applications is urgently needed.
- Special Fund for disaster-prone nations seeking technical and financial support to initiate risk reduction programs is also needed.

