

# Bangladesh Experiences on Emergency Preparedness

Discussant: Dr Md Atiqur Rahman  
Ministry of Disaster Management and Relief

# Context/1

- Bangladesh, being one of the most disaster-prone countries in the world, has made remarkable progresses in reducing disaster-related deaths, the forces are resilient community association with science, technology as well as early warning.

# Context/2

The country ranks

- first out of 162, third out of 73, and sixth out of 89 countries in terms of -
- number of population exposed to flood, tsunami and cyclone respectively; translated into-
  - 14% GDP exposed to disasters per year – the highest in the world (UNISDR Global Assessment Report 2011).

# Context/3

- Much progress has been achieved in the face of considerable vulnerability and exposure to natural and human-induced hazards.
- Between 1990 and 2008 Bangladesh incurred an average annual loss equal to 1.8% of the GDP due to disasters which threatened the hard earned development. Damage and loss due to disasters is still on the rise.

# Context/4

- Bangladesh has made the paradigm shift from the conventional response and relief oriented approach to more comprehensive disaster management framework.

# Pillars of Disaster Management/1

- Community Resilience
- Legal and Institutional Framework
- Committee System
- Volunteerism
- Vibrant NGO/ CSO/CBO
- Wider Safety Net programmes
- Community based early Warning System and
- Strong Political Commitment

# Regulatory Framework /1

- Disaster Management Act , 2012 and Disaster Management Rules, 2015
- Standing Orders on Disaster (revised in 2010)- has created a wide-range of institutional arrangements to deal with disaster management related issues from national down to local levels.

# Regulatory Framework /2

- National Plan for Disaster Management (2005-2015 , forming 2016-2021)
- Disaster Management Plan at Sub-district (upazila) and District levels
- Guidelines for Government at all levels.



# Institutional Arrangements/1

## 4.1 At National level:

- Ministry of Disaster Management and Relief
- Department of Disaster Management
- National Disaster Management Council (NDMC)
- Inter-Ministerial Disaster Management Coordination Committee (IMDMCC)
- National Disaster Management Advisory Committee (NDMAC)

# Institutional Arrangements/2

At National level (contd.)

- Earthquake Preparedness and Awareness Committee
- National Platform for Disaster Risk Reduction
- National Disaster Response Coordination Group
- Cyclone Preparedness Program (CPP) Implementation Board.

# Institutional Arrangements/3

## 4.2 At Local Levels :

- District Disaster Management Committee
- Sub-district (upazila) Disaster Management Committee
- Union Disaster Management Committee
- City Corporation Disaster Management Committee
- Municipality (Paurashava) Disaster Management committee
- Local Disaster Response Groups

# Use of equipment

- Use of modern light and heavy search and rescue equipment have been purchased and distributed among the stakeholders such as Armed Forces Division, Fire Service and Civil Service Department, City Corporations and CPP volunteers and Urban volunteers.

# Buffer Stock of Relief Materials

- Every year Government allocate budget for rural infrastructure construction maintenance purposes and a handsome amount of budget to combat unforeseen causes (if any)
- Government always maintain a buffer stock of relief materials with district and sub-district level offices- such as-Gracious relief (cash and food grains), CI sheets, blanket etc.

# Experiences and Success on Emergency Preparedness/1

Community based Early Warning in CPP programme :  
A key factor to reducing cyclone-induced-life loss from 300,000 in the 1970's to today's negligible number (less than 3500) in same level of Cyclone in Sidr struck in 2007).

# Experiences and Success../2

Community Risk Assessment (CRA) and Fast Track Risk Assessment (FTRA) are participatory process primarily for the rural areas to:

- Assess hazards, vulnerabilities, risks, ability to cope
- Prepare coping strategies and

# Experiences and Success--/3

- Prepare a risk reduction action plan (RRAP)
- This is an inclusive method of DRR, while emergency preparedness .
- The CRA method is applying by all stakeholders that endorsed by Ministry of Disaster Management and Relief.



# Emergency health preparedness

Emergency health preparedness for human security provides by Directorate-General Health services (DG HS) through-

- Personnel and logistical planning
- Supplies and equipment allocation
- Ambulance , medication, food supplies
- Coordination, etc.

# Use the science and technology

Emergency preparedness using the science and technology with traditional practices and community resources.

The key to reduction of disaster is adoption of both natural and social science, built in the form of strengthening technologies and capacities for an effective early warning system, or dissemination of the warning alert to the last mile. But there are miles to go before we take a breath of satisfaction.

# Achievements/1

- Satellite tracking services of cyclone and its landfall predictions up to an hour interval.
- Interactive Voice Response (IVR) based hotline accessible from any cell phone by dialing the unique number “10941” that provides critical, easy to understand weather information and warning for upcoming flood, cyclone, inland river warning, seaport signals etc. to over 110 million mobile phone subscribers;

# .....Achievements/2

information and warning for upcoming flood, cyclone, inland warning, seaport signals etc. to over 110 million mobile phone subscribers;

- Extension of flood forecasting lead time from 3 days to 5 days by adoption of flood forecast modeling.
- This has the potential to save more than 70% of movable resources/capital goods from flood.

# Use IVR and SMS

- Use IVR and SMS for Early Warning Impact on Tropical Storm – Cyclone Mohashen ( May 2013)
- Around 1.1 million people took shelter by getting EW (early warning) through IVR and SMS (around 40 ,000 SMS received & 63,000 people called in IVR) . Due to those ICT base EW dissemination not a single casualty was reported among the fisherman communities.

# What made the difference?

- Construction of Cyclone shelters, Flood shelters and Earthen Killa ( elevated land for livestock)
- Construction of Embankments in Coastal Belts
- Increased resilience of the vulnerable communities.
- More holistic, multi-disciplinary DRR approach ( mainstreaming of DRR)

# What made the difference--/2

- Community based disaster preparedness
- ICT in DRM and Effective Communication
- Community Radio services
- Involvement of Armed Forces in aid to civil powers in case of catastrophic disasters
- Active CPP implementation Board
- Legal bindings for all concerned to involve in disaster response