ROLE OF BANGLADESH METEOROLOGICAL DEPARTMENT IN PROVIDING WARNINGS IN SUPPORT OF CYCLONE PREPAREDNESS PROGRAMME

By
Md. Akram Hossain
Director
Bangladesh Meteorological Department

Cyclone Seasons in the Bay of Bengal
1. Pre-monsoon season (March-May): Cyclones form in the Bay of Bengal (BOB) in April-May, sometimes in early June.
2. Post-monsoon season (October-November): Cyclones also form in the BOB in first half of December.

Natural Disasters in Bangladesh
(a) Tropical Cyclones and associated Storm Surge
(b) Nor’westers and Tornadoes
(c) Floods, Heavy Rainfall and Drought
(d) River Erosion and Earthquakes

Bangladesh Meteorological Department deals with
- Prediction of formation and movement of Tropical Cyclones and associated Storm Surge.
- Issuance of early warnings
- Dissemination of warnings to the recipients like CPP (Cyclone Preparedness Programme), DMB, Ministry of Food and Disaster Management, Other concern Ministries, Port Authorities, BTV, Bangladesh Betar, and other media.

Disaster Management in Bangladesh

For Disaster management in Bangladesh Government has formed the following Council/Committees:
(a) National Disaster Management Council- Headed by the Hon’ble Prime Minister
(b) Inter-Ministerial Disaster Management Co-ordination Committee- Headed by the Minister, Ministry of Food and Disaster Management
(c) National Disaster Management Advisory committee-Chaired by a person experienced in Disaster Management nominated by the Hon’ble Prime Minister.

BMD takes part in Disaster Management System in three stages:
- Normal Stage: BMD keeps careful watch over weather conditions, and ensure improvement of cyclone forecast and supply information on regular basis, also contributes to the awareness building in the vulnerable areas.
- Alert Stage: Issues alert warning of cyclones at least 36 hours ahead, ensures co-ordination among CPP, DMB, Bangladesh Betar, Bangladesh Television, and other mass media.

Warning Stages
As per Standing Orders of the Govt. on Disasters, BMD issues warnings and Signals at each of the specified stages:
(a) Warning stage: 24 hours before
(b) Danger stage: At least 18 hours before
(c) Great Danger stage: At least 10 hours before. BMD issues Special weather bulletins containing all the relevant information about cyclones.

Warnings for Cyclones
BMD is the initiator for the issuance of cyclone warnings for Bangladesh and the Bay of Bengal since its formation till landfall. Warnings are issued in different stages of the formation of cyclones:
1. Distant Cautionary Signals: Alert message is given to CPP, TV and Radio
2. Distant Warning Signals: Warnings are issued. When Local Warning Signal No. 4 is issued, Government of Bangladesh convene meetings for the disaster preparedness through the Inter-Ministerial Disaster Management Co-ordination Committee (IMD MCC), headed by the Hon’ble Minister in-charge of MOFDM.
3. Danger Signals: When BMD is sure to locate the landfall of cyclones (wind speed of 62-88 km/hour), Danger Signals are issued and the different Committees of Disaster Preparedness and Management take required steps for the impending danger.
4. Great Danger Signals: The port and the coastal people are likely to experience severe weather from a cyclone of great intensity (wind speed of 89 km/hour or more) that is expected to cross the coast, Great Danger Signals are issued. The National Disaster Management Council (NDMC), headed by the Hon’ble Prime Minister gives the directives for the preparedness, mitigation and evacuation.
As soon as the Alert message/Warnings/Danger warnings/Great Danger warnings are issued by BMD, these are disseminated on high priority basis to Cyclone Preparedness Programme (CPP), Ministry of Food and Disaster Management (MOFDM), TV, Radio, News media, etc. CPP has about 33,000 volunteers all along the 710 kms coastal region of Bangladesh. On the basis of the warning messages, CPP transmits the warnings to the grass root level through their volunteers. They warn the people in different ways to take precautionary measures. These are shown below:

WARNING MESSAGE DISSEMINATION PLAN

WORLD WEATHER WATCH (WWW)
UN ENVIRONMENT PROGRAMME (UNEP)
GLOBAL TELECOMMUNICATION SYSTEM (GTS)
NATIONAL METEOROLOGICAL COMMUNICATION CENTRE (NMCC)
STORM WARNING CENTRE (SWC)
BANGLADESH BETAR (RADIO)
BANGLADESH TELEVISION (BTV)
MINISTRY OF DISASTER MANAGEMENT & RELIEF
CYCLONE PREPAREDNESS PROGRAMME (CPP)
COASTAL VOLUNTEERS
NEWS PAPERS
GENERAL MASS
BANGLADESH ARMY
BANGLADESH NAVY
BANGLADESH AIR FORCE
MARITIME AND RIVERINE PORTS
FLOOD CONTROL AND FORECASTING CENTRE

THANK YOU