## **SNAPSHOT**



# Mobile Technology-Based Disaster Early Warning System: Saving Lives & Livelihood

### Context

Effective and timely dissemination of early warning saved peoples' lives, livelihoods and assets as demonstrated during the devastating Cyclones Sidr and Aila. They provide the valuable golden hours that save lives and assets and allow the mitigating of averting altogether the potential losses. As long as Bangladesh' recorded history disasters take heavy toll on people's lives, livelihood, assets and robbing the hard earned development momentum. While the threats of disasters are always there and even being worsened by the climate change, the way Bangladesh live with the risks has changed dramatically. Response and relief that used to be the paradigm of the past disaster management has shifted to mitigation, preparedness and culture of risk reduction.

The government, UNDP and development partners (UK Aid, European Union, Embassy of Norway, SIDA, and Australian Aid) instituted the Comprehensive Disaster Management Programme (CDMP) to shepherd the paradigm shift. The Phase I laid the foundation for the



policy, institution and technical capacities while the Phase II (2009 – 2014) scales them up to all hazard, all stakeholders, all phases of disaster management in rural and urban settings.

The CDMP Phase II piloted the use of mobile technology involving the Short Message Service (SMS) and the Interactive Voice Response (IVR) to transmit weather advisory and disaster early warning to the population atrisk in Cox' Bazaar (coastal area) and in Sirajganj (flood prone area) in early 2010, and it is now scaled up to the whole Bangladesh.

Operating under the auspices of the Ministry of Disaster Management and Relief, this facility provides the general public the 24/7 access to fetch an updated pre-recorded multi-hazard early warning messages are collected from Flood Forecasting and Warning Centre (FFWC) and Bangladesh Meteorological Department (BMD).

The system offers bilingual format of Bengali and English and is now covering all existing six mobile telephone networks thereby having the footprint in the whole Bangladesh.





#### **ACTIONS**

The key objective of people-centred multi - hazard early warning systems is to provide the communities at-risk sufficient lead time information and thus empower them to take the timely and appropriate actions to reduce the potential injury, loss of life and damages to property and the environment.

It comprises four inter-related elements, i.e. a) risk communications on hazards and vulnerabilities; b) awareness of people at-risk to be accompanied with monitoring; c) effective dissemination of warnings; and d) strategies, preparedness, and capacities to respond.

Accessible by dialling '10941' from all mobile phone operators, the 'Early Warning' is disseminating five hazard-related information i.e. daily weather forecast, rainfall, cyclone, flood and landslide.

The following warning systems are available:

 Inland river port warnings, four times daily, for better river navigation.



- Sea bulletins, twice a daily, to help protect the incoming and outgoing vessels in the Bay of Bengal.
- 24 Hour Weather Forecast including rainfall and temperature for the general public.
- 5 Day Weather Forecast including rainfall and temperature for farmers.















## **Comprehensive Disaster Management Programme (CDMP II)**