







# APRIL- JUNE 2012 PROGRAM UPDATE

## ENHANCE EARLY WARNING SYSTEM FOR COMMUNITY BASED RESPONSE IN BANGLADESH

## A. EXPAND 1-10 DAY FLOOD FORECASTS

# Extend Forecast Boundary to Megna Basin

May-June 2012

The flood forecast scheme for the I-10 days has been extended up to Megna Basin from 2012. The historical discharge database for the Bhairab Bazar station collected from BWDB to set up the model and calibration of the model. The model need some more time to adjust due to lack of observed data base. Two model has been set up for Megna (i.e. lumped and distributed). The multi-model result will be shared once the model adjusted based on past database.

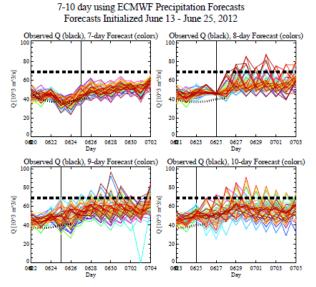
## **Operationalize I-10 days Flood Forecasts for 2012**

May-June 2012

From June 13, the operational flood forecasts for the three river basins (Ganges, Brahmaputra and Megna) start sending to FFWC and partners. The FFWC model is still in preparation to generate water level forecasts in major stations in the country. From FFWC the forecasts will be start dissemination to various organization through e-mail, internet and sms. The model also rerun for the year 2010 and 2011 to adjust calibration parameters for 2012. The model providing skillful forecast for 1-10 days.

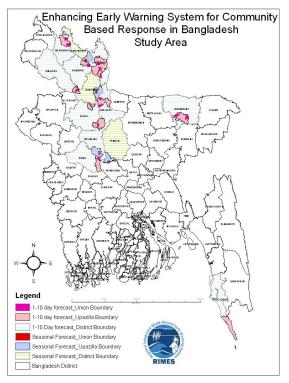
#### Site Selection for Forecasts Application May-June 2012

RIMES has developed a set of criteria (i.e. biophysical and socioeconomic) to select the sites for different scheme forecast application. The climate-hydrological data availability, accessibility, availability of FFWC forecast data has been considered as biophysical criteria.



Demand from the user, per capita food grain production, literacy, population exposed to the flood hazard has been considered as social criteria. Moreover the following criteria are also used to select sites:

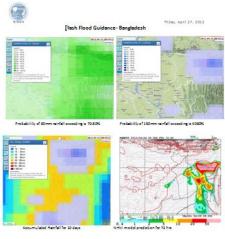
- Areas having larger concentration of population
- Historically flood prone areas (based on Historical disaster data)
- Areas with economically marginalized communities (having less coping capacity)
- Rapidly urbanizing/developing areas
- Areas with strong government/resources
- Areas adjacent to or upstream if previous pilot areas



## B. PILOTING FLASH FLOOD FORECASTING AND APPLICATION

#### **Generation of Flash Flood Forecast Guidance** April-May 2012

The thresholds for rainfall has been start developing based on the historical hazard records and literatures. Community level discussion couldn't started due to flood season and will start from next quarter. RIMES able to predict well in advance the flash flood occurrence in the NE part of Bangladesh in 2012. The information has been disseminated to FFWC and partner and well acknowledged. RIMES is developing flash flood guidance based on ECMWF rainfall forecasts, other Numerical Weather Prediction System, hydrological model as well as historical rainfall pattern. This



Current latal abserved reinfell at 3,0,0,0,1 x 583 mm ( marek & April). According la our guidance a continuous reinfall more than 820 mm in one month could trigger flash flood overt in the N-8 area of

interactive tool will be handover to FFWC at the end of the project.

## C. OPERATIONALIZE 20-25 DAY AND SEASONAL FORECASTS

#### **Seasonal Forecasts**

April-June 2012

RIMES signed an MoU with ECMWF to share the data for seasonal rainfall forecasts. The data sharing mechanism has not yet been finalized. Hence RIMES didn't able to produce any 20-25 days seasonal forecasts yet.

## C. OTHERS

### New Office of RIMES at FFWC, BWDB

March 2012

RIMES opened a new office inside FFWC, of BWDB office at WAPDA Building, 8th floor. RIMES stuff will seat in the office full time to provide technical support to FFWC and on the job training.

## D. TRAVEL

RIMES staff has been traveled to Bangladesh to set up office, signing MoU with FFWC of BWDB.

## E. UPCOMING ACTIVITIES: APR- JUN 2012

- I. Operational flood forecasting for 1-10 days and 20-25 days
- 2. Site profiling and field data collection
- 3. Flash flood warning dissemination system
- 4. Development guideline for risk communication tools for early warning
- 5. Expand forecasts location to 38 stations from 19 stations