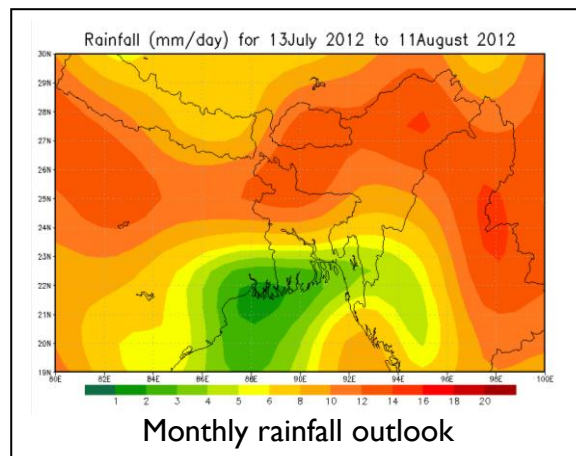# APR-JUNE 2012
PROGRAM UPDATE

Piloting of Bay of Bengal Cyclones and Depression tracks and landfall for enhanced accuracy and improved lead time for disaster risk reduction in Nobo Jibon Program areas, Bangladesh

CONCURRENT MONITORING OF DEPRESSIONS, CYCLONE FORMATION AND TRACKING

Capacity Building on Agro-met 7 days Forecasts and Monthly Rainfall Outlooks
June 2012

RIMES together with BMD conducted a training at SC Barisal office to build the capacity on 7 days Agro met forecasts for agriculture use and monthly rainfall outlook for strategic decision making for the community people. The training was provided to the SC staffs as well as partner NGOs and local Government. At the same time, data assimilation using local observed data is continuing at RIMES for enhancing the cyclone model forecasts.

Monthly rainfall outlook

Installation of Rainfall Observation System
March 2012

To validate the local level forecasts information, a web-based sms application has been set up to collect the community level rainfall observation on daily basis. RIMES together with BMD professionals has handed over the manual rain bucket and a mobile phone to the SC Volunteers to regular monitor the rainfall at the community level and upload the data to the web server

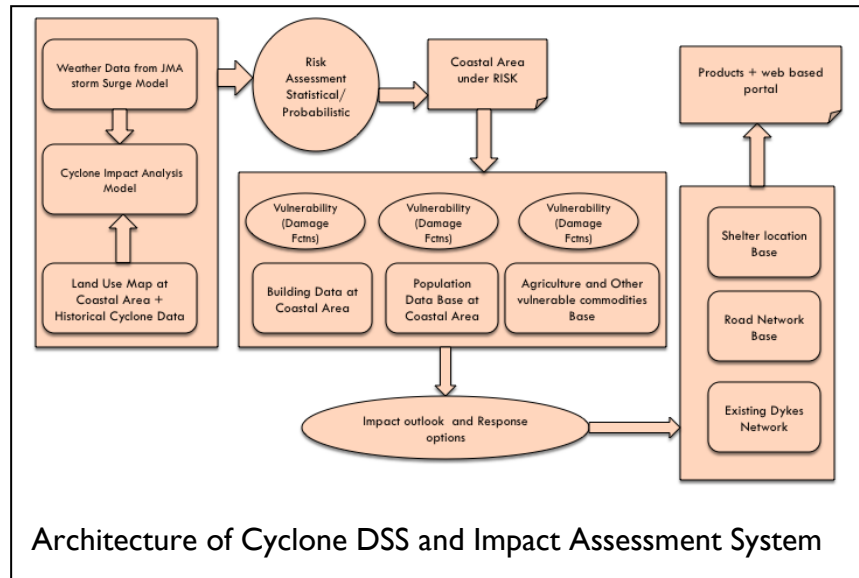Community Level Data Collection System

through SMS.

PRE-IMPACT ASSESSMENT TOOL DEVELOPMENT AND CAPACITY BUILDING

Development of DSS (Decision Support System Tools) to Undertake Pre-Impact Assessment
April-June 2012

The impact assessment and decision support system is a Web-GIS based system with integrated GIS based mapping environment and the application is written using language such as PHP, Javascript, Fortran and Perl. The whole system architecture is shown in Figure. The system will use severe cyclone forecast in 3

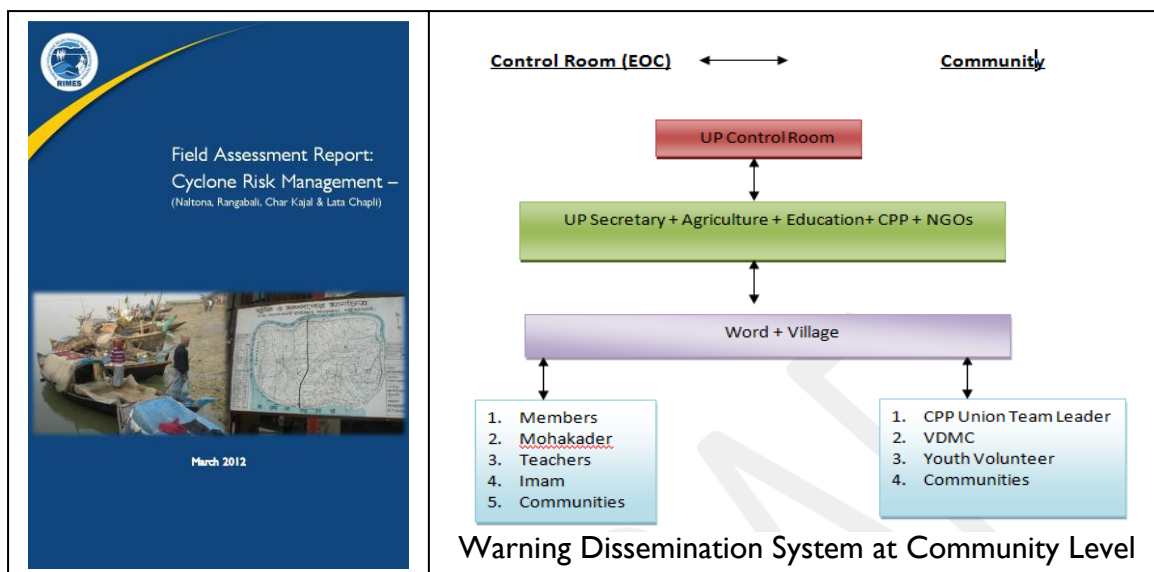Architecture of Cyclone DSS and Impact Assessment System

to 5 days in advance and using JMA storm surge model, and associate the severity (wind speed and surge height) and projected track with the stored historical cyclone database to identify the potential impact or risk zone at coastal belt of Bangladesh. Once the risk zone is identified and surge height and velocity are known from the Storm Surge model the system will run inundation model to generate coastal inundation map at the community level. These coastal inundation map and wind speed along with local database (i.e. building, population, Land-use, etc.) will be pre-computed damage metric to generate potential impacts outlooks on each vulnerable commodities (building, population, agriculture, livestock, etc.). The system will be capable to projecting impact outlooks along with suggestive response option (such as evacuation to shelters, critical road infrastructure during emergency, agro response etc.). These information can be readily used by the local Government and different sectors in advance for decision making purposes.

Site Profiling Report for Cyclone Risk Management
April-June 2012

The site profile report for the five pilot sites provides the outcomes of the two assessments (i.e. EWS Audit and hazard ready community toolkit) conducted in the pilot areas to access the coastal risk, vulnerabilities, community need assessment, effective warning communication system. The Assessment conducted through questionnaires survey, focus group discussions and training and workshop outcomes.

Warning Dissemination System at Community Level

PILOT APPLICATION OF TECHNOLOGY

Establishment of EOC at Notona & Lata Chapli Union
18-19 April 2012

RIMES team visited Noltona & Lata Chapli union on April 18 & 19, 2012 to discuss on the emergency operation system facilities and requirements. The meeting was conducted with the Chairmen and members of the Union Parisad. RIMES has planned to showcase these two unions as model EOC with all facilities available for emergency communication. A list of equipments have been identified to support in these two unions to enhance the EOC.

Meeting With CPP on EWS Requirement
19 April 2012

RIMES team also visited the CPP office at Barisal to discuss on the EWS requirement and capacity building for CPP. It has been identified that CPP already has taken initiatives to enhance the CPP volunteers and community capacity on emergency response and EWS. RIMES will support CPP as per the request by CPP in those training.

4th National Monsoon Forum
10-11 June 2012

The Bangladesh Meteorological Department (BMD) organized the 4th National Monsoon Forum on 10-11 June 2012, at BMD Headquarters, Dhaka. The Forum brought together 23 participants from government and non-governmental organizations. The Monsoon Forum is a platform for the seamless generation and integration of hazard risk information of all timescales and

Demonstration of the Operations of BMD to the participants

strengthen the multi-hazard early warning system through a regular and sustained multi-stakeholder dialogue process between early warning information provider and users at the national and local level.

TRAVEL

RIMES staff has been travel to Bangladesh and pilot sites to conduct training and assessment with SC, Bangladesh Meteorological Department (BMD) and discussions with Cyclone Preparedness Program (CPP).

UPCOMING ACTIVITIES: JULY- SEP 2012

- Development of storm surge inundation model for the selected areas to combine with WRF output and decision support system tool

- Training on Decision Support System at Community Level