Reframing and Rethinking of Flood Forecasting in the GBM Basin

A Collaborative Partnership between Bangladesh and USA



The Institute of Water Modeling (IWM) and Tufts University School of Engineering and Water Diplomacy Program will host a Flood Forecasting Seminar on August 08 in Dhaka, Bangladesh (Venue: BWDB Conference Room, Time: 9:00 AM-1:15 PM)

A short (3-5 days) to mid-range (7-10 days) flood forecasting lead-time is desired to increase the flood response and preparedness in flood prone regions across the world. The major limitation of providing short to mid-range flood forecasting is mainly associated with the uncertainty in precipitation forecasts data and complexity of distributed hydrologic modeling.

This seminar will show the utility of a modeling framework with requisite simplicity – to paraphrase Einstein 'simple, but not simpler' - that identifies key variables and processes and develop ways to track their evolution and performance. Findings suggest that models with requisite simplicity – relying on flow persistence, aggregated upstream rainfall and travel time – can provide reliable flood forecasts comparable to relatively more complicated methods for up to 10-days lead-time for the Ganges, Brahmaputra, and upper Meghna gaging locations inside Bangladesh.

We have tested and validated the model with historical data. We plan to use 2017 Flood Season as a real-time test case and develop a Global Flood Forecasting Platform for several major rivers of the world. We look forward to your participation and feedback to make this more effective and operational.



School of Engineering





Program of Events

9:00	Registration
9:30	Welcome speech Md. Sohel Masud, Director, Flood Management Division, IWM
9:40	Flood Forecasting in Bangladesh: Current Status Md. Saiful Hossain, Superintending Engineer Processing and Flood Forecasting Circle (PFFC), BWDB
10:00	A New Look at Flood Forecasting for Large Rivers Shafiqul Islam, Tufts University
10:25	A Requisitely Simple Flood Forecasting Model for the GBM Basins Wahid Palash, PhD Candidate, Tufts University
11:00	Tea Break
11:20	Gaps in Floodplain Community Flood Forecasts: A GBM Experience Dr. Mashfiqus Salehin, Professor and Director, IWFM, BUET
11:40	Current Status and Challenge in the Disaster Management of Bangladesh and DDM's expectation from flood forecast Presentation from Department of Disaster Management
12:00	Group Discussion A Global Flood Forecasting Platform: How to move forward?
12:45	Chief Guest Md. Mahfuzur Rahman Director General, BWDB
1:00	Closing Remarks: Prof. Dr. M. Monowar Hossain Executive Director, IWM
1:15	Lunch and conversation continues

Venue: BWDB Conference Room Date: 8 August 2017 | Time: 9:00AM-1:30PM