

# Stakeholder Workshop on Adaptive Delta Management

27 January 2020



A stakeholder workshop was held on 27th January, 2020 at the institute building of BUET. The workshop was organized by the 'Adaptive delta management: development, acculturation, and dissemination in Bangladesh and Indonesia' project funded by Urbanizing Deltas of the World Program of the Netherlands Organization for Scientific Research (NWO). Along with the faculty members of IWFM, the key professionals from different organizations including BWDB, WARPO, LGED, CEGIS, IWM, UNDP, Dutch Embassy, PKSf, IUCN, Blue Gold project and ICCCAD participated in the workshop. The key speakers in the workshop were Prof. Wil Thissen, TU Delft, and project leader, Umme Kulsum, PhD fellow, TU Delft/IWFM and Mr. Bhuiya Md. Tamim Al Hossain, PhD fellow, Utrecht University/IWFM. The open discussion was moderated by Prof. M Shah Alam Khan, IWFM, and Bangladesh project leader. The discussion by the eminent stakeholders focused on meta-modeling for exploratory analysis, grasping uncertainties in community livelihood adaptations, and reflections on the operationalization of the Adaptive Delta Management (ADM) approach to the Bangladesh situation.

The workshop started with a brief overview of the project and the ADM approach in strategic long term planning in highly dynamic deltas under deep uncertainty.

The main outcomes of the PhD research to develop an approach to support ADM by systematic exploration of Community Livelihood Adaptation (CLA) as uncertainty for sustainable delta management were shared. Two multi-method adaptive approaches were illustrated in the context of the BDP 2100 strategies: the first is an unframed scenario using a mental model/cognitive map to explore farmers' decision making and subsequent adaptation pathway while the second is a framed scenario using Motivation and Ability (MOTA) framework- as a basis for rational decision/action model and a computational model for potential integration with the available modeling platforms. The roles of these approaches as tools for anticipating adaptation of local community at the local planning and implementation were also discussed.

The progress of the ongoing PhD research to develop a fast, integrated model (metamodel) of the physical system of Bangladesh delta to support sustainable development under a deeply uncertain future and to use the metamodel to explore adaptation pathways under multiple futures and other uncertainties for Bangladesh were shared. A metamodel is a relatively small,

simple, fast and robust model for mimicking the behavior of large complex models of integrated systems. The developed model will facilitate scenario exploration of long term future. The presentation also illustrated some outcomes such as simulation of water flows across the country and flooding under several plausible future policy actions.

After reflections on the differences in the delta contexts, culture, institutional capacity and implications for ADM, the open discussion focused on different aspects of research project including research uptake opportunity, clarifications, and future practical applications. The workshop closed with a vote of thanks.

