Development of a near-real time flood inundation analysis system for a deltaic flat river basin in a data-scarce region: Case of the Bago River basin, Myanmar

Developing countries are often exposed to recurring annual floods affecting a large part of the population.

- Decision Support Systems (DSS) are essential to respond quickly and appropriately to a natural or man-made disaster.
- They are useful for monitoring the current state of the watershed as well.
- Myanmar currently lacks such a system.

Models used:
Hydrological model: Water and Energy Budget-based Distributed Hydrological Model (WEB-DHM)
Inundation model: Rainfall-Runoff-Inundation model (RRI)

System Design:
Using the concepts of system design, comprehensive analysis which included multiple joint meetings, individual meetings, workshops and field surveys were conducted, resulting in a system which has been specifically designed for the target stakeholders, and the outputs are tailor-made results as requested.