

MATHEMATICAL MODEL STUDY OF RIVER BRAHMAPUTRA WITH EMPHASIS ON CLIMATE CHANGE– Funding agency: MoJS through Brahmaputra Board



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Objective: Development of Hydrological model, 1D and 2D Hydrodynamic model, Sediment and Morphological study and Climate Change Model for the Brahmaputra; Capacity building of the Engineers of Brahmaputra Board

- ❖ An Indigenous User Friendly Hydrodynamic Model named as **B**raided **R**iver **A**id: **H**ydro **M**orphological **A**nalyzer (**BRAHMA**) has been developed, implemented and applied in the field for finding solution to some river problem
- ❖ A Hydrological model has been set up in SWAT for the entire Brahmaputra Basin and validated through multi-point calibration using flow data and successfully applied for water and sediment yield.
- ❖ Sediment data from the Brahmaputra River from Majuli to Dhiuburi has been collected and physical and chemical properties has been analyzed.
- ❖ Large scale physical model and mathematical model has been applied in parallel to utilize advantages of both.
- ❖ Climate Change study for the entire basin is carried out and possible changes in precipitation and temp projected

