

***Applied Geomorphological study in a controlled tropical river  
The case of the Damodar between Maithon/Panchet  
Reservoir and Falta. (Tentative Title)***

The Damodar River, a subsystem of the Ganga, has gone through several river-training programs at macro and micro-level. Flow regime of the river has been changed due to major control structures. Floods and control structures have given rise to a set of geomorphic features or sandbars and are now used as a resource base mostly by the refugees. These sandbars have very high resource potentialities under specific socio-economic environment. Based upon their knowledge of river stages, they have matched land use at fine scales to flood experiences applying a concept of flood zoning to the riverbed. Every available space has been utilized rationally and judiciously. From their personal experience, people can assess short-term risks and long-term benefits of release of water from the reservoirs. The controlled lower Damodar is a product of twin processes: hydro-geomorphic processes on the one hand and anthropogenic land utilization process on the other. Valuable long-term data from multiple sources has been used in this study. Data from topographical maps, cadastral maps, and satellite images has been consolidated. Significant stress has been given on extensive and intensive field survey and perception survey. The primary objectives of this book have been to trace the impact of control measures on flow regime, channel, and sedimentation characteristics and consequent changes in the perception and adaptation of the riverbed occupiers to life with floods and dams. Various planning approaches for holistic watershed management have been discussed.