

P R E F A C E

We live in a land of million rivers. It is easy to imagine the part each of these rivers and their numerous tributaries play in our cultural as well as economic life. Over the ages, we have accepted with gratitude the benefit in the form of easily productive, fertile, riverine silt. But, the destructive fury of these rivers has been a constant headache. Our inability to rein these destructive forces has probably arisen from the lack of knowledge of the basic physical characteristics of these rivers. Since Independence, several attempts have been made to turn the work of these rivers wholly to our advantages by a number of 'Multipurpose Projects'. It is very unfortunate that these have only been partly successful. Also, studies in this field of river dynamics have been mostly narrow, envisaging only segments of the total problem.

The Lish and the Gish, the two left bank tributaries of the mighty river Tista, are and becoming progressively more, problem ridden. Ever since the British occupation, the physico-cultural set-up of the catchments of these two rivers has been seriously disturbed. Tea plantation, extensive heedless deforestation, shifting cultivation, haphazard mining and construction works, inadequate drainage, in other words - unscientific and unplanned usage of land has led to the establishment of the vicious cycle of denudation; heavy and concentrated rainfall aggravating soil erosion, landslides and floods ruining the lives and properties of the local inhabitants. At this moment, therefore, suggestion of remedial measures and their active implementation is of vital concern, for on it, depends the ecological balance and geopolitical stability of this strategically important part of the country.

A number of case studies on landslide and flood-problems of these two basins have been attempted in post independent India, both at personal and government levels. Sad to say, most of them are found wanting in a systematic and comprehensive approach to the problem.

As such, the present researcher has been investigating into these vast and inter-woven problems of the rivers Lish and Gish since July 1981 and the present dissertation is

the outcome of this long pursuit.

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