

PREFACE

A watershed or basin is a manageable hydrological unit. Balason is one of the most important rivers of North Bengal. The entire watershed of river Balason includes the highest point of the area (ridge line) to the outlet of the river in the plains where it meets another main river. In this watershed, large tracts of natural forests and grasslands were cleared to establish tea gardens and settlements. Tea gained much importance due to its unique flavour but this sector did not play any major role for the overall development of the area. This drastic change in land use badly affected the Balason basin area. Large number of labour was imported from outside, who were unaware about the area. Traders, middlemen and artisans followed the labour, increasing the population of the Balason basin at a faster rate. Sunnier eastern part of the basin was occupied in no time, and the ever increasing population carried out all sorts of activities in most unplanned and unscientific way. Tea gardens and factories, being the main economic institutions exploited land to such an extent that without proper research and planning the area will face severe problems of resource utilization in near future. Problems like deforestation, overgrazing, soil erosion, landslides, drying of water sources etc. needs proper management and developmental strategies.

The work commences with the *first chapter*, which deals with physical background of the study area, including physiographic divisions, geology, drainage, climate, soil and natural vegetation.

The *second chapter* discusses about the different drainage characteristics of the basin including drainage network and drainage basin morphometric analysis.

Study of human resources in the basin i.e. the distribution of population and their growth, composition, density and occupational pattern are discussed in the *third chapter*.

The *fourth chapter* gives an idea of different types of land uses, found in the basin. Moreover it deals with land tenure systems. The major types of crops grown, the principal cropped areas and their production, also occupies some space in this chapter.

The different socio-economic functions like education, health services, communication, transport, finance, industry, power, drinking water, recreation etc, their distribution and availability are the major areas of discussion in *chapter five*.

The *sixth chapter* deals with the identification of the major problems of the basin. These problems like 1) Physical, 2) Institutional and 3) Socio-economic are discussed in details. Physical problems viz. soil erosion, landslide etc, their causes and impact are discussed. Institutional problems highlight the problems related to land tenure systems. Socio-economic problems have dealt with problems related to socio-economic functions available in the basin.

The *seventh chapter* deals with different types of management of resources needed urgently to protect the study area from further damage. Appropriate management systems which are suitable for mitigating the problems of the basin are also dealt with.

The *eighth chapter* reviews the earlier strategies implemented in the basin and formulates the present strategies. Different types of suggestions for the future development of the Balason watershed are given in the chapter.

And finally the *tenth chapter* comprises of conclusion.

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