

PREFACE

An abandoned channel is an inactive channel, defined as a former stream channel through which water no longer flows. They are recognized as depression in the landscape and located at the position of a formerly active channel, though typically of considerably reduced width and depth. In this regard, morphometric analysis has been done for the basin area of Sankosh River and various morphometric data have been calculated by using of topographical maps published by the Survey of India and Remote Sensing and GIS platforms. It is also mentioned that numerous abandoned channels are also identified with the study of the mechanism of meander cut-off, channel avulsion and braid formation and explained in the chapter-III in detail. All these abandoned channels are naturally formed and provides different morphological characteristics along the Sankosh River of the study area. These abandoned channels are represented as various geomorphological features such as ox-bow Lake, meander scar, meander cut-off etc. over the flood plain of the concern river. It is mentioned that abandoned channels constitute an important source of natural resources which yields high economic and livelihood values to local people inhabited surroundings of the abandoned channels of the study area. But, abandoned channels are facing different kind of problems due to huge population pressure, land use change, climatic change and environmental change day by day. Therefore, the attempts has been made in the chapter VII to bring out some unexplored facts about the Restoration, conservation and management of abandoned channels which are supposed to be more useful to socio-economic development as well as risk reduction for human habitation and sustainable use of lands of the surrounding channels areas.

Present researcher seeks to undertake detailed study of the fluvial processes of the abandoned channel formation with their associated problems and to make a value added appraisals of the socio-economic importance of the channels' surrounding areas with some recommendations for sustainable management.