

## PREFACE

Environmental degradation and associated phenomena are the most pervasive of natural problems that undermine the economic and cultural development of the Darjeeling hills. Deforestation along with high intensity rainstorm induced accelerated slope degradation process further complicated the problem.

Implementation of various development programs, construction of human settlement and roads to cater the ever-increasing population, exploitation of forest produce to generate potential, boosting of agriculture growth, tourism, tea plantation, quarrying on the Himalayan immature geology trigger the disaster, huge and complex, never encountered before. The situation was different even 150 years ago. The hills were densely covered by natural vegetation with very thin population and the harmonious relation between the man and nature was well preserved. Extensive heedless deforestation, haphazard construction of roads and settlements, unscientific and illegal quarrying, over grazing, inadequate drainage, in other wards unscientific and unplanned use of fragile hill slopes, has led to the establishment of vicious cycle of degradation. During heavy and concentrated rainfall, catastrophic soil erosion and innumerable landslips are caused to transport huge amount of fertile soil from the Darjeeling hills.

The Darjeeling Himalaya is thus, slowly embracing to the inevitable sterility. The declining carrying capacity of Darjeeling hills is already visible in many sectors i.e., drinking water, transport, housing, etc. In consequence, the environmental quality has also been deteriorated to its all-time low. Climatic change is also visible and significantly demonstrated in rise in temperature, decline in relative humidity and rainy days. The rainfall became more erratic in nature over the past hundred years. It is therefore, becomes imperative to suggest remedial measures and its active implementation. Only then can the geopolitical and ecological stability of this extremely vulnerable region of the country be protected.