## **Preface**

In spite of its vast natural resource base, Dhupguri is among the backward blocks in the country. The international border with Bhutan and in particular with adjacent Bangladesh accelerates the influx of migrants since independence that have demonstrated its adverse effects on society, economy and environment. Besides, Dhupguri has its trove a vibrant mélange of many a tribe and community, its enormous variety of wild life, amidst the grandiose and vast verdant forest.

Being situated in the Himalayan foreland the rivers are frequently demonstrate flood and avulsion putting tremendous stress on already dwindling man-land ratio. Rapid transformation of land-use for short-term benefits and similar other ad-hoc intervention with myopic view results in increasing frequency and magnitude of disasters in addition to the deterioration in quality of life.

Dhupguri produces a huge quantity of surplus vegetables and agro-produce. The lack of cold storage and marketing facility are major impediment to the growth of this sector. On the other hand, those factors influence unwarranted transformation of agriculture-land to tea gardens, which again face lower acceptability in the international market. Despite profuse reserves of ground water, some parts especially along the northern foothills still facing drinking water crisis. To grow more food and fodder and to bring more lands under agriculture, creating more rain/surface water based irrigation facilities is a must. Deforestation has been a great menace. People virtually eking out on poor agriculture depend on forest produce and forest has been the surrogate source of income.

The available maps of the block including cadastal maps are old (surveyed 50 – 60 years back). Due to its strategic location, the SOI topographic maps are also not readily available. Thus, the development planners at different levels are facing serious problems with location attributes of planning aspects.

Under this backdrop, the Dhupguri geo-informatics aims to provide the pancheyet to block level development planners with multi-level geo-spatial digital database on natural

and cultural resources of the block. The GIS thus, developed would freed the development planners from guessing/ assuming in the planning processes and also equip them with the facilities of plan optimization.

In view of the 73<sup>rd</sup> and 74<sup>th</sup> Constitution amendments, the integrated geo-spatial database at gram samsad level (the lowest of the 3-Tier pancheyeti raj institutions) would play the vital role in guiding the decentralized planning processes in right direction. The geo-referred upgraded database of would be of immense help to all sections of decision makers in formulating and executing the various development plans at grass root level. It will also helps the academicians and researchers to undertake further problem oriented in depth study of various aspects of sustainable optimum utilization resource appreciation.