

# **Application of Spatial Technology for Planning and Implementation of Development Activities in Eastern and Northern Coastal Sectors of Sri Lanka**

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**ABSTRACT.** Natural resources play an important role in socioeconomic development of any country. Compared to the other regions of the country, coastal zones which are rich in natural resources more contribute to sustainable development. For over last twenty five to thirty years it was severely affected by the natural resources in North and Eastern provinces of Sri Lanka due to the civil war. This was more significant along the coastal zone from Mannar to Batticaloa. It was observed that many agricultural and aquacultural lands, natural water resources, fisheries harbors, areas with economical mineral sands, etc are damaged seriously during the war. It has been establishing more economic development activities in Northern and Eastern provinces after the war. However, with the increase of development activities in the region, existing natural resources can be affected. Therefore, a proper method to be applied to identify the available natural resources in the area and to protect them while implementing new development activities.

Aerial photography, Geographical Information Systems (GIS) data and satellite images have proven their importance as additional tools in identifying prospective areas for natural resources and agriculture, also for locating suitable sites for establishing new development activities. Remote sensing provides synoptic view and better spatial information to extract natural resources which cannot be observed on the surface by naked eye due to war activities and other hindrances. GIS techniques such as overlay analysis, reclassification, buffering, etc can be applied for selecting suitable locations for development activities without affecting the natural resources. Integrated approach of remote sensing techniques, Aerial photo interpretation and GIS techniques with field data is cost effective, less time consuming and produces reliable information for identification of most suitable locations for the development activities in the Northern and Eastern coastal zones of Sri Lanka.

**Key words:** Remote Sensing, Coastal Zone, GIS.

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