Changes of Shoreline in Western Coast in Sri Lanka from 1935 to 2005

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Changes in shoreline, vertically and horizontally relatively to mean sea level, are natural and continuous processes. Shoreline can change spatially and temporally altering the physical features of the coastal zone. This process can disturb the equilibrium of the coastal environment, which is recognized as delicate, sensitive and having highest biodiversity. On the other hand, shoreline change creates economic and social problems due to destruction of the land and properties of the shoreline. In order to monitor the changes of the coastal environment and economy, the rate of the shoreline change should be identified quantitatively.

The prime objective of this study is to quantify the shoreline change in the South West coastal zone in Sri Lanka with the help of available large-scale maps and field data. Oldest large-scale maps that depict the shoreline is available at the Railway Department of Sri Lanka, which were drawn in 1933 for the purpose of making plan for the railway track.

Map interpretation techniques, Geographical Information System (GIS), Global Positioning System (GPS) and basic statistical methods are to be employed in analyzing data and presenting the results.

Key Words: Geographical Information System (GIS); Global Positioning System (GPS); Shoreline; Western Coast

81

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