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Quantitative Estimation of Coastal Changes Along Selected Locations of Karnataka, India: A GIS and Remote Sensing Approach

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ABSTRACT

Qualitative and quantitative studies on changes of coastal geomorphology and shoreline of Karnataka, India have been carried out using toposheets of Survey of India and satellite imageries (IRS-P6 and IRS-1D). Changes during 30 years period are studied at each station. Significant morphological changes in landforms like spit, channel Island, coastal plain, tidal flat, lateritic plain, alluvial plain and sand bar within and adjacent to estuarine river mouths of Kali, Sharavathi, Kollur-Chakkara - Haladi and Udyavara Rivers are observed. The study indicates that gradual erosion is observed at i) Karwar spit along the northern side of the Kali river mouth, ii) the spit at the southern side of the Sharavathi river mouth and iii) at some regions of Kundapur.

KEYWORDS

Coastal Geomorphology, Shoreline, Coastal zone, Erosion, Accretion, Beach

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