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SATELLITE REMOTE SENSING TECHNOLOGY FOR LAND USE PLANNING IN DEVELOPING COUNTRIES AND ITS IMPLICATION IN WATER INDUCED DISASTER MANAGEMENT.

Abstract

Satellite Remote sensing and Geographic Information System (GIS) has been an important tool for assessing, analyzing, and understanding the global, physical phenomena affecting the earth. Recent advancement in the use of remotely sensed satellite data has covered a wide range of application in the field of environment, agriculture, land use, disaster monitoring, etc. The increasing demand for earth observation technologies to assist in interpretation offers unprecedented scope to identify changes in land use and land cover more precisely over geography covering large areas, with low costs and processing time. Many studies have been done to assess and model different disasters using remote sensing technology and GIS at a widespread level globally. In this paper, satellite remote sensing technique is used for creating land use land cover map and that is used for quantifying riverbank erosion and deposition. Riverbank erosion and deposition are crucial in effecting changes in the river channel course. Flood and River erosion are the most frequently occurring natural hazards around the river that affect land use and land cover of the surface around it. This study will help in identifying vulnerable reaches near the river and provides the opportunity to adopt resilient strategies that may help in mitigating potential water-induced risk, and long-term socio-economic impacts of these recurring natural events using low-cost space-based techniques.