Spatial Growth of City and its Impact on Environment - A Case Study of Bhubaneswar City

Authors: Rachita Lal

Abstract : Urban sprawl is a significant contributor to land use change in developing countries, where urbanization rates are high. The most important driver of environmental changes is also considered to be the shift in land use and land cover. Our local and regional land managers must carefully analyze urbanization and its effects on cities to make the best choices. This study uses satellite imagery to examine how urbanization affects the local ecosystem through geographic expansion. The following research focuses on the effects of city growth on the local environment, land use, and Land cover. The primary focus of this research is to study, To understand the role of urbanization on city expansion. To study the impact of spatial growth of urban areas on the Land cover. In this paper, the GIS tool will be used to analyze. For this purpose, four digital images are used for the years 2000, 2005, 2011, and 2019. The use of the approach in the Bhubaneswar Urban Core, one of the fastest developing and planned cities in India, has proved that it is highly beneficial and successful for monitoring urban sprawl. It offers a helpful tool for quantitative assessment, which is crucial for determining the spatial dynamics, variations, and changes of urban sprawl patterns in quickly increasing regions.

Keywords: LULC, urbanization, environment impact assessment, spatial growth

Conference Title: ICGPD 2022: International Conference on Geography, Planning and Development

Conference Location: Paris, France Conference Dates: November 14-15, 2022