

PREFACE:

The present exploration has studied Raiganj, a small city which is located in the southwestern part of Uttar Dinajpur district in West Bengal, India, for its urban growth dynamics and LULC changes for the years 1999, 2009, and 2019. It is a well-known fact that fast and haphazard urbanisation is occurring all throughout the planet alarmingly. Land use and urban sprawls have emerged as two of the most important and pressing concerns in urban studies as cities expand upward and outward. To understand the reason and criteria behind the rapid urban growth, the study of major economic activities and the land use land cover pattern is necessary. Here in this study, it is analysed how the structure and pattern of LULC in the study area changing and the pattern and dynamics of urban expansion in this area. Significant effect of urbanization in Raiganj area can be found from the present study. According to that government can also be aware and take action to avoid the adverse effect of urban growth in that specific area and can execute proper urban planning. One of West Bengal's most significant commercial hubs, Raiganj receives about 2 lakh daily business visitors. Agriculture also plays a significant role in the city's economy. In the past two decades, the Raiganj Urban Agglomeration (UA) has rapidly increased its built-up area. Remotely sensed images provide a wide range of detailed and accurate spatial time series data. High resolution, defined spectral bandwidth, and accurate geographic references are important characteristics that make satellite data more important in the analysis of change detection. Remote sensing (RS) and Geographic Information Systems (GIS) have been used for the precise analysis of urban expansion, urban sprawl detection and change detection analysis in the study area. Additionally, there aren't many research publications and studies on urbanisation in this region. This location has been chosen for this purpose, and this analytical investigation will be useful for future references.