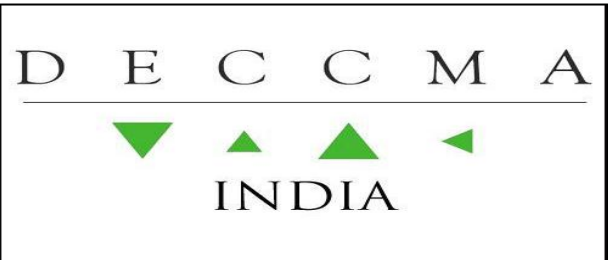


Urban Growth dynamics in Mahanadi delta



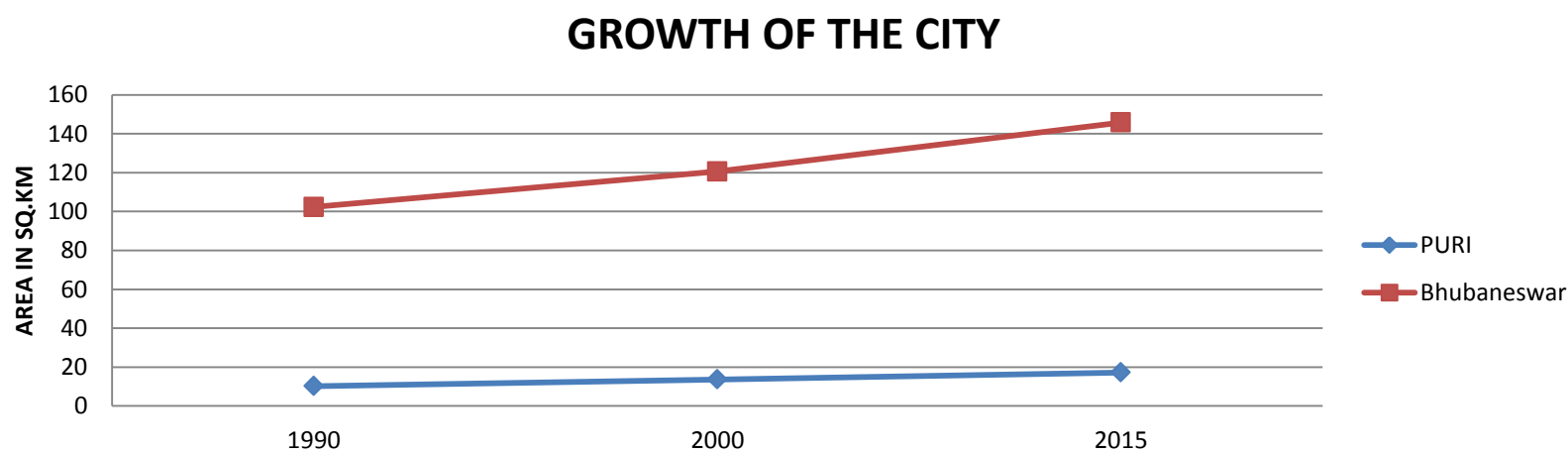
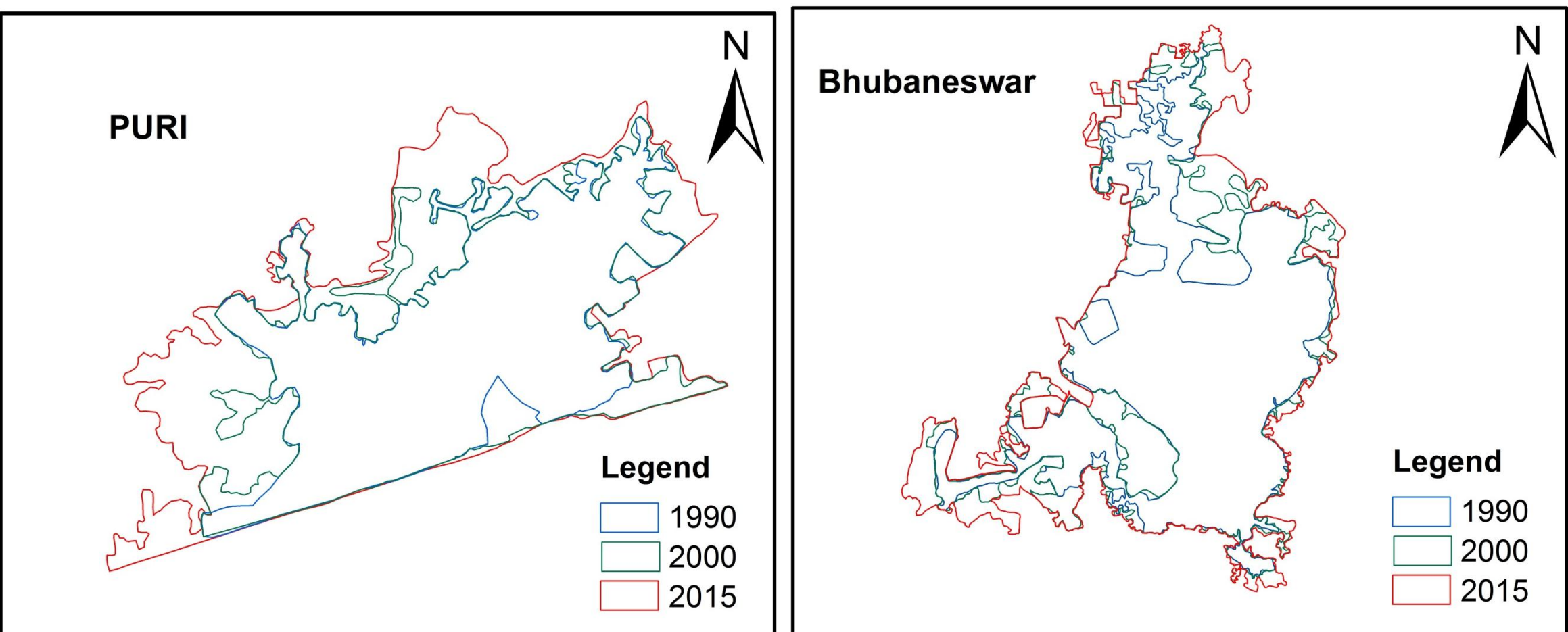
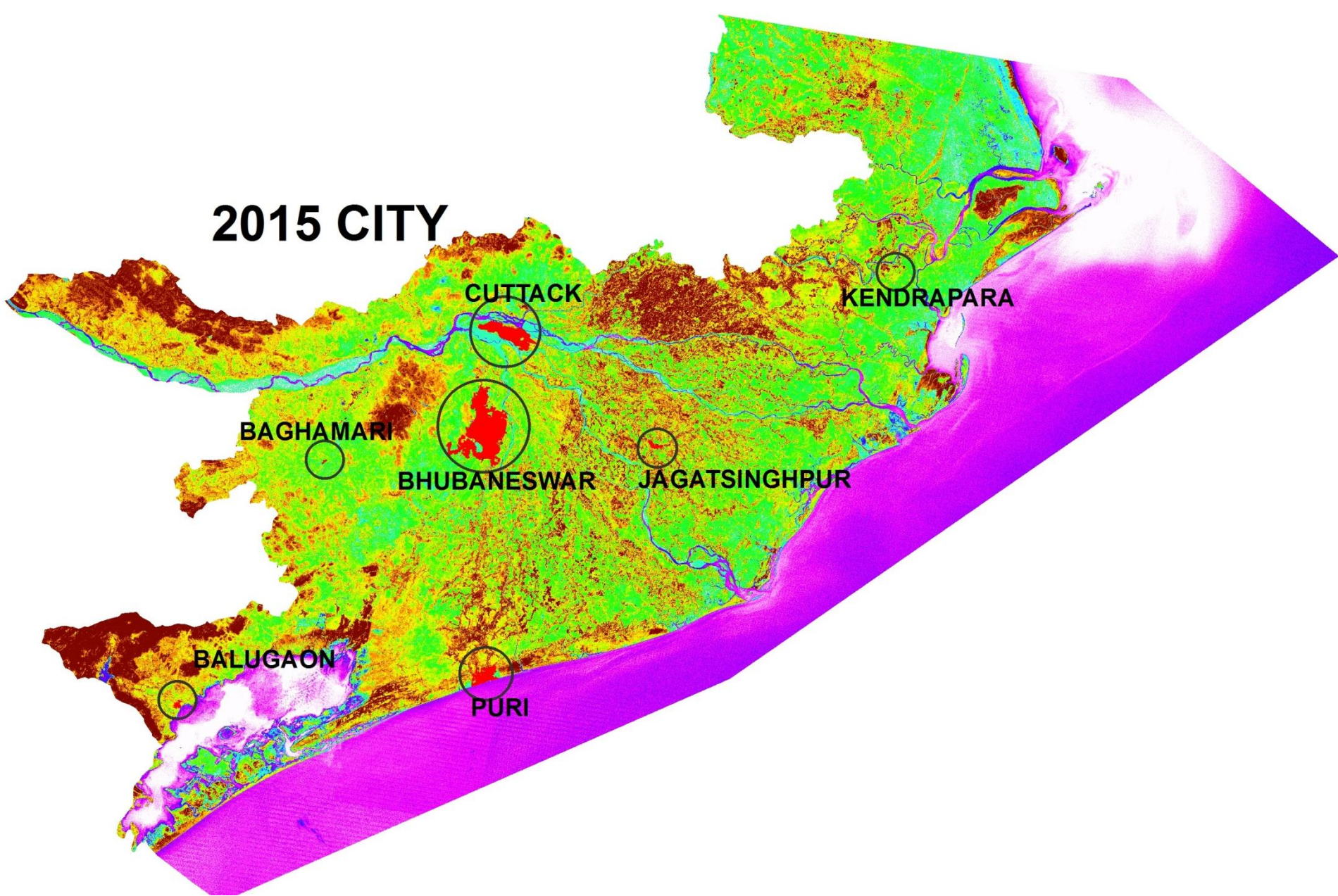
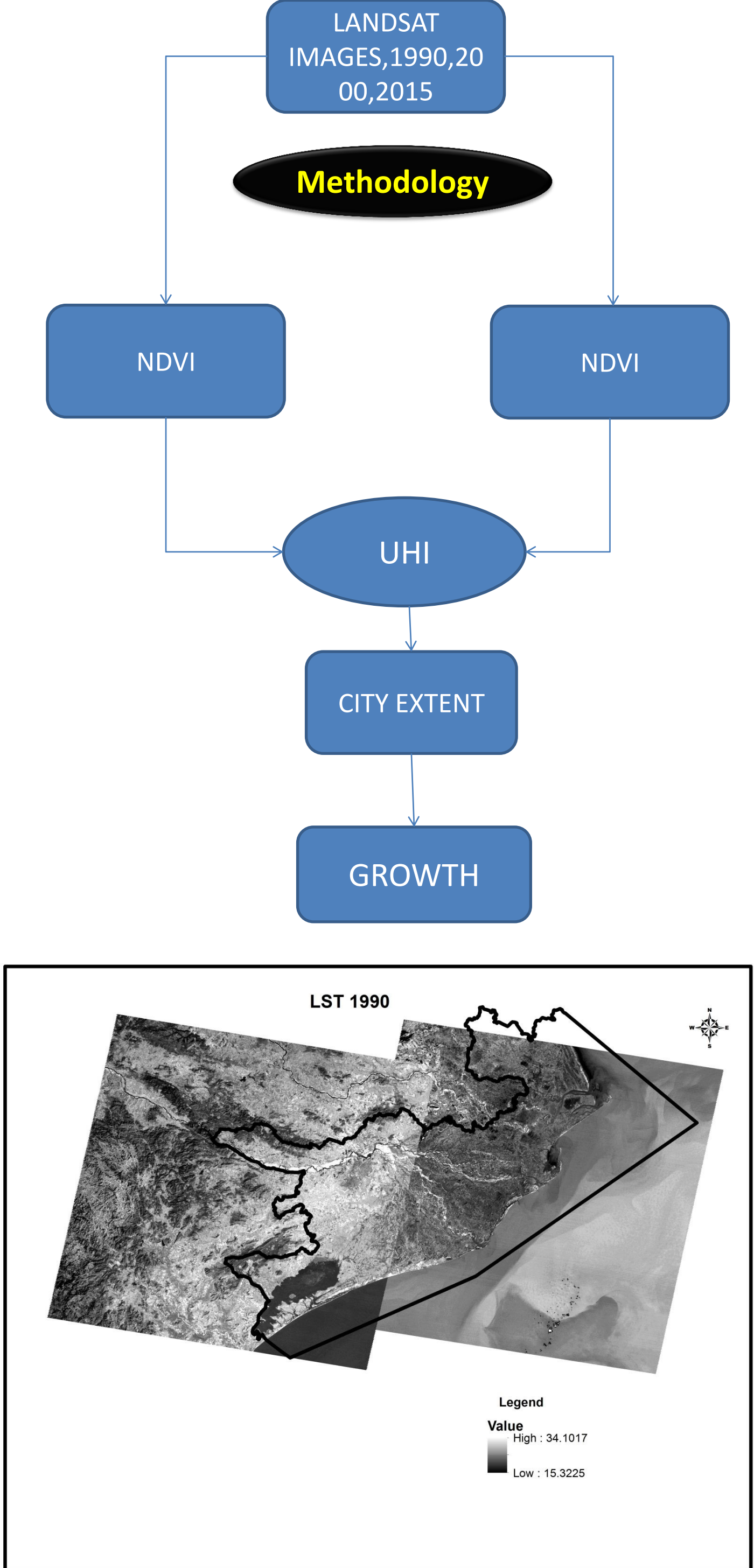
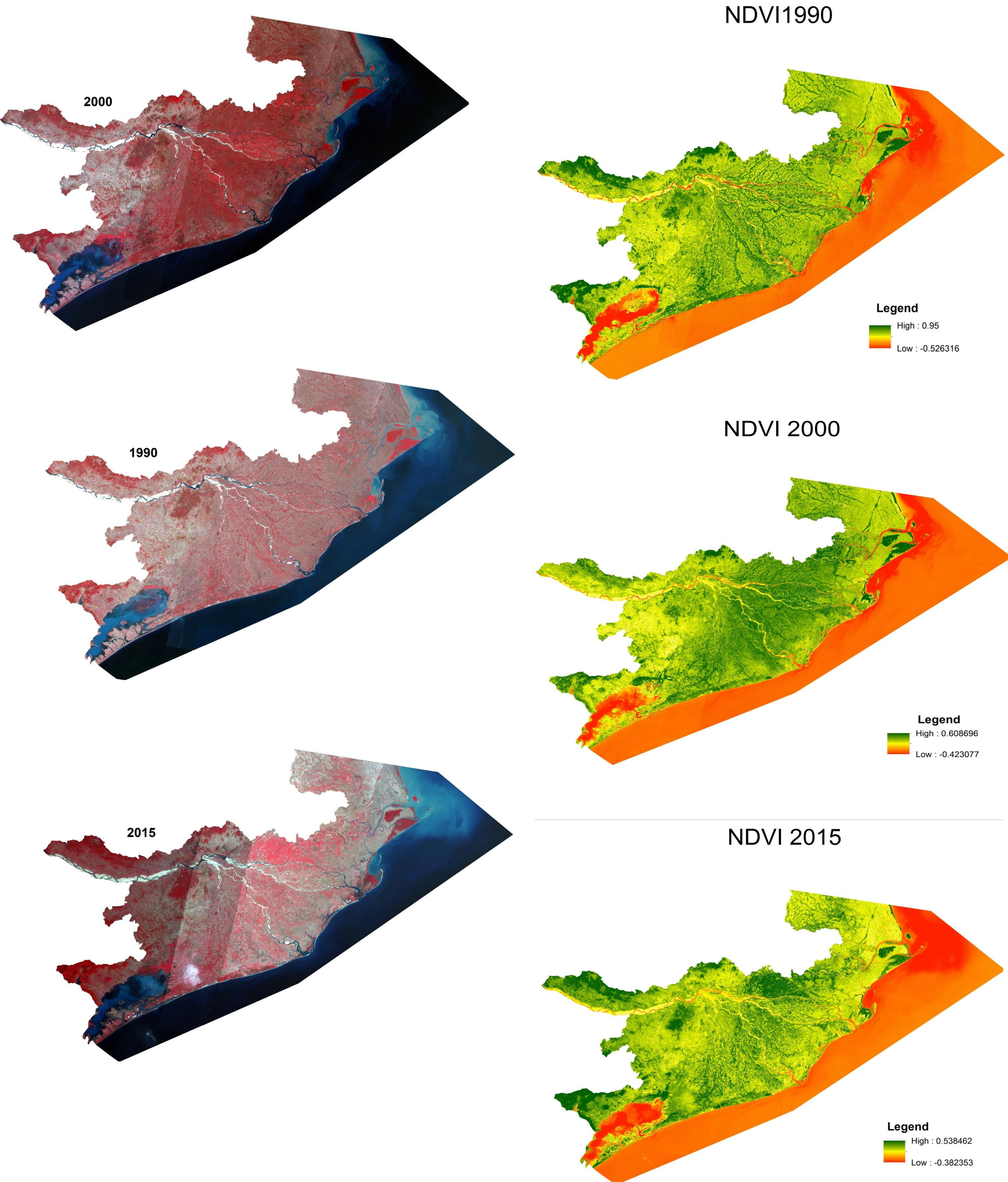
Anirban Mukhopadhyay



School of Oceanographic Studies, Jadavpur University, Kolkata, India

Abstract: In the present study the urban areas of Mahanadi delta have been extracted from thermal images of LANDSAT TM data over last decades(1990,2000,2015) using Urban Heat Island UHI approach. The boundaries of the urban areas have been extracted .The growth of the two most important urban areas have been calculated .This method may be helpful to analyse the growth dynamics of cities in developing countries and provide a foundation for obtaining solutions to uncontrolled urbanization.

Key Words: Mahanadi delta, Urban Heat Island, fractal dimension, end point rate



Conclusion:

1. Urban heat Island effect is useful for identifying the urban extent
2. Relationship between LST and NDVI is essential for extraction for UHI extraction
3. The urban extent of Bhubaneswar and Puri is increasing at almost 2% and 0.75% per year