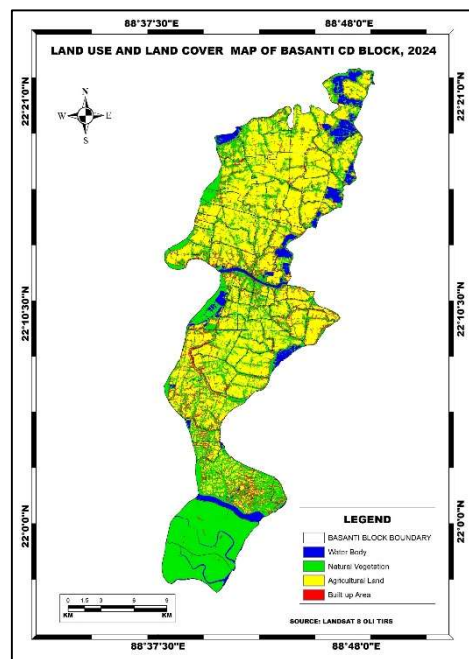
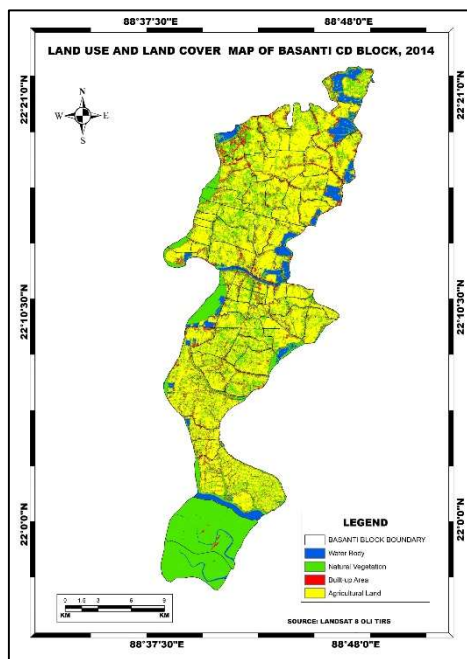
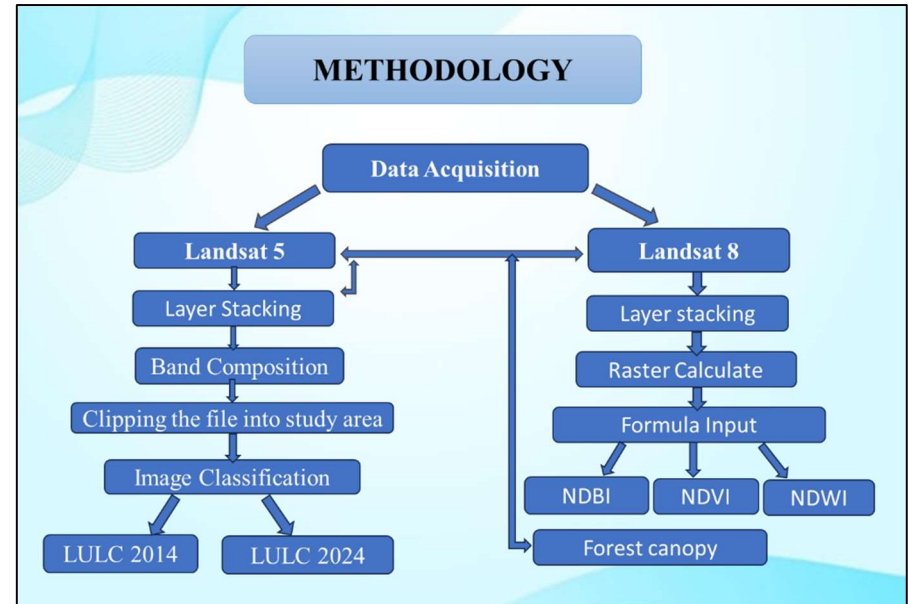
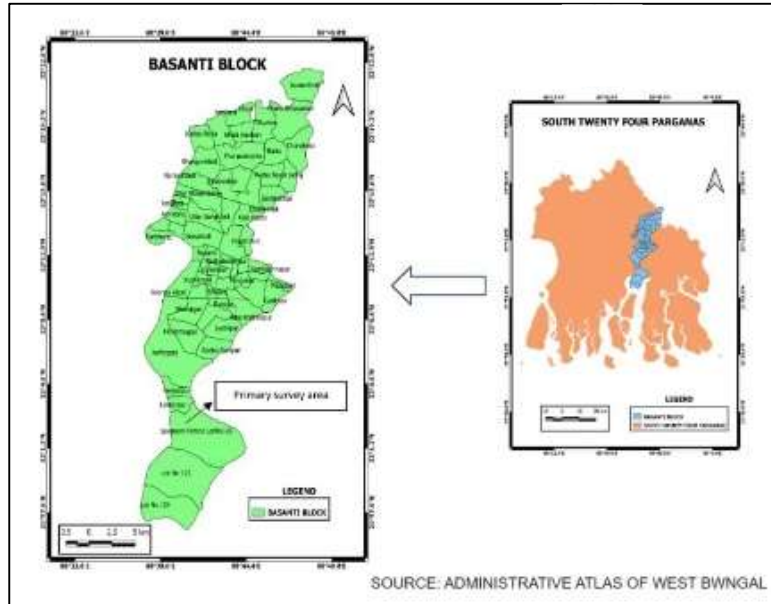


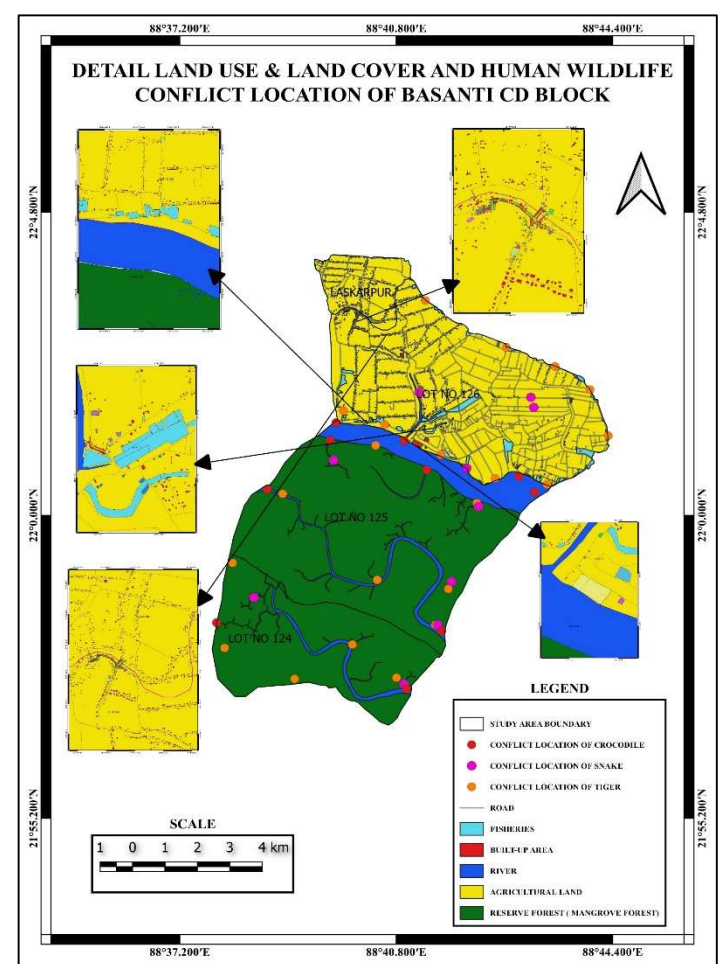
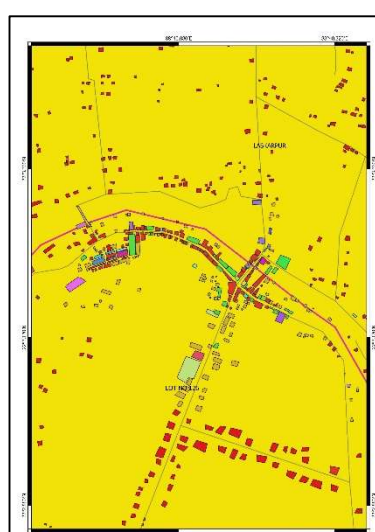
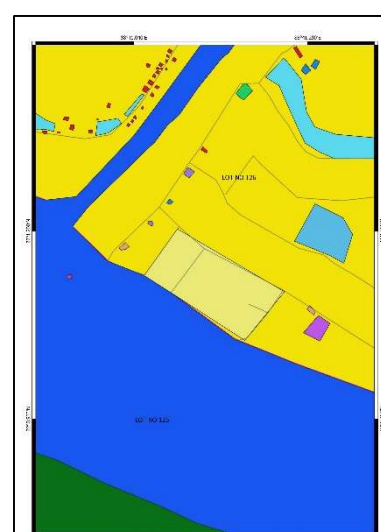
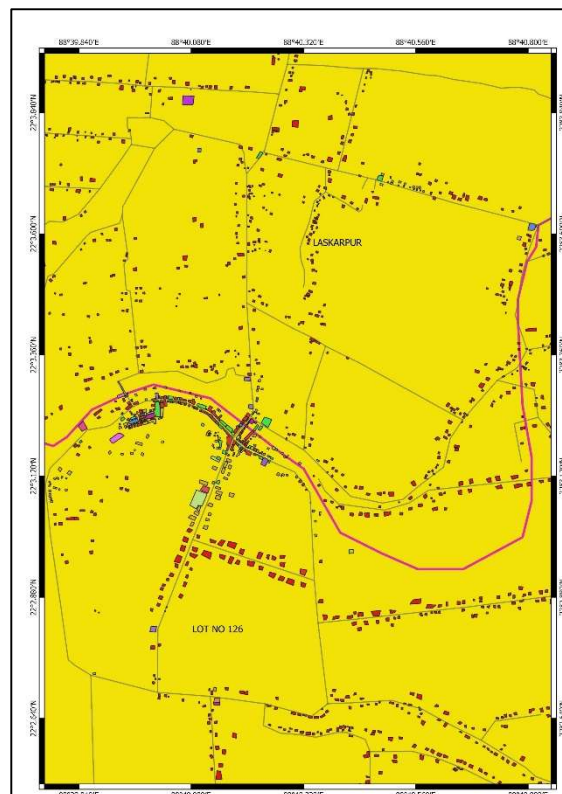
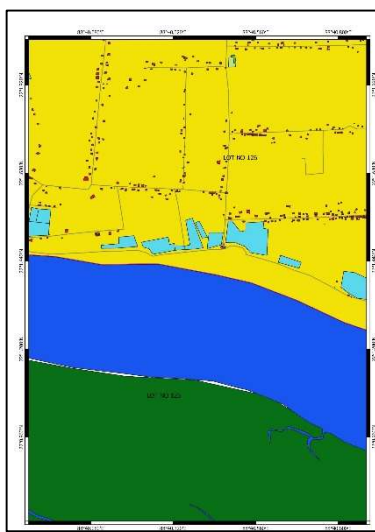
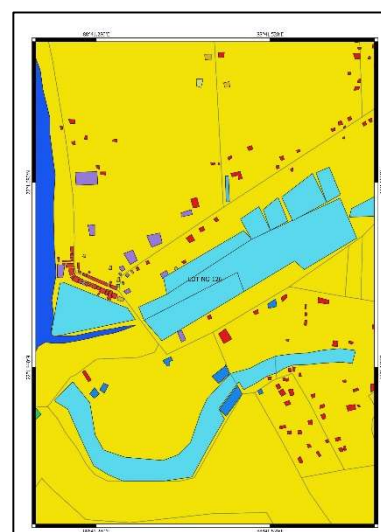
# HUMAN-WILDLIFE CONFLICT IN BASANTI CD BLOCK OF THE SUNDARBANS, WEST BENGAL

The study area is situated in the south-eastern region of the South 24 parganas, West Bengal State and eastern India. Basanti is one of the main deltaic islands in the Sundarbans region, bounded by the Matla and Vidyadhari rivers. Block has an area of 404.21 sq. km. Basanti cd block located at 22.09°N to 22.38°N and 88.35°E to 88.73°E.



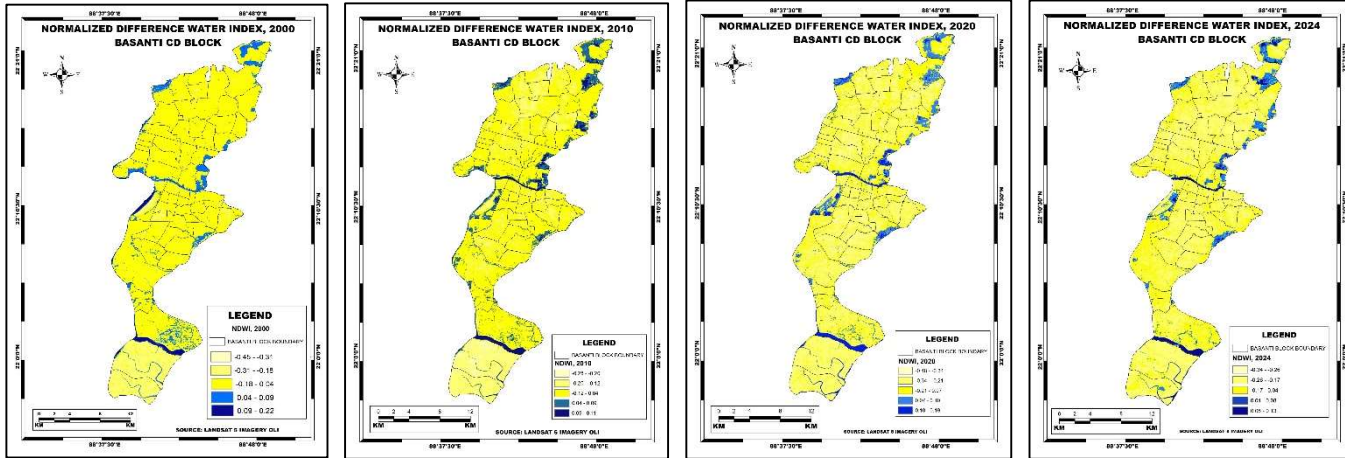
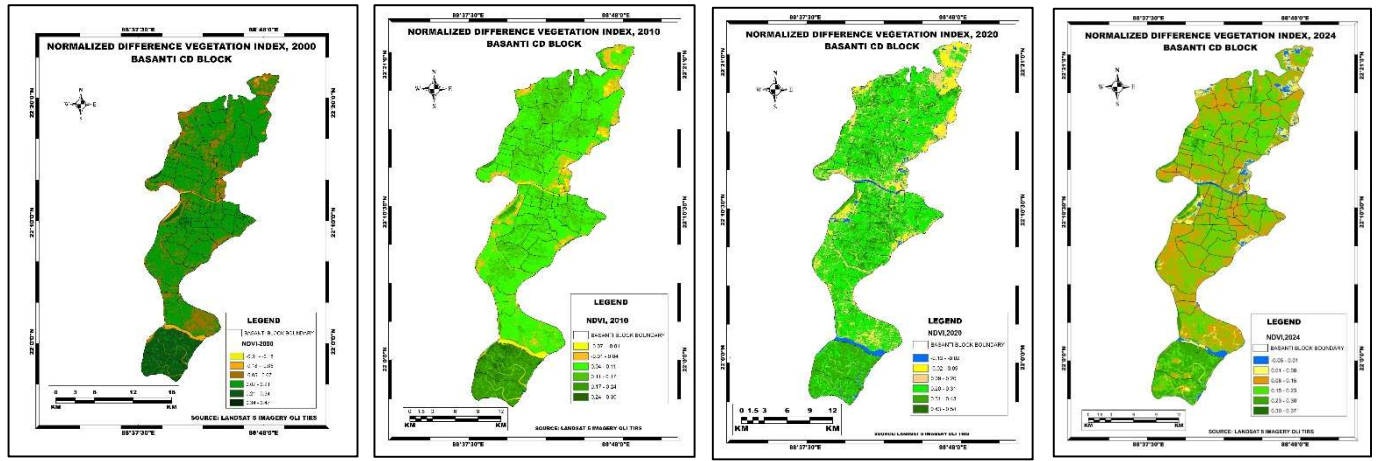
VALUE	LULC CLASS	COUNT	AREA IN SQUARE KM	PERCENTAGE
1	WATER BODY	26301	23.6709	5.987188359
2	NATURAL VEGETATION	166385	149.7465	37.87606308
3	AGRICULTURE	212551	191.2959	48.38534173
4	BUILT-UP AREA	34051	30.6459	7.751406822
5	TOTAL		395.3592	100

VALUE	LULC CLASS	COUNT	AREA IN SQUARE KM	AREA IN PERCENTAGE
1	WATER BODY	28195	25.3755	6.418340587
2	NATURAL VEGETATION	165869	149.2821	37.75860028
3	AGRICULTURE	204087	183.6783	46.45858753
4	BUILT-UP AREA	41137	37.0233	9.364471599
5	TOTAL		395.3592	100





The Normalized Difference Vegetation Index is referred to as **NDVI**. This remote sensing index is often utilized to evaluate the cover and health of plants. By quantifying the variations in how plants absorb and reflect light, the Normalized Difference Vegetation Index (**NDVI**), which is computed using satellite or aerial photography, aids in the distinction between areas with and without vegetation.



Lakes, rivers, and wetlands are among the water bodies that the NDWI is intended to detect and track. It uses vegetation's and water's reflectance qualities to set water apart from other forms of land cover. Specifically, it leverages the difference in how water reflects green light compared to near-infrared (NIR) light. The amount of water has decreased in the current years as compared to the previous years.

In remote sensing, building densities are mapped and built-up and non-built areas are distinguished using the Normalized Difference Built-Up Index (**NDBI**). It includes using the variations in spectral reflectance of metropolitan areas to analyze satellite imagery, especially Landsat data, to distinguish between developed and undeveloped areas. The **NDBI** is essential for urban planning and settlement change monitoring. This index is crucial for remote sensing applications since it is used to evaluate population estimates, land use changes, and urban growth in different regions.

