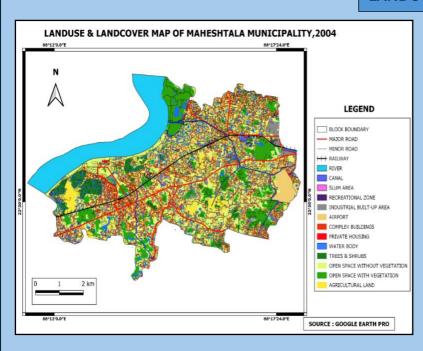
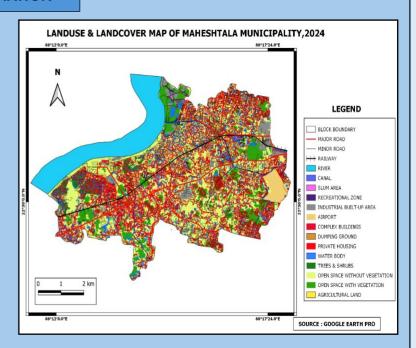
# LANDUSE AND LANDCOVER CHANGE OF MAHESHTALA MUNICIPALITY

#### LANDUSE - LANDCOVER TRANSFORMATION



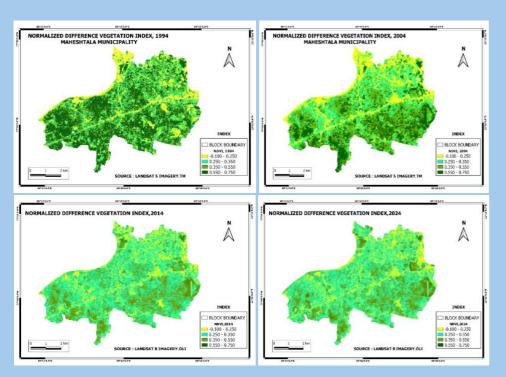
Land use is the human use of territory for economic, residential, recreational, conservational, governmental purposes. concept of land use is closely intertwined with human community development. The maps show the changing nature of land use pattern from 2004 to 2024. In the middle in the (Dakghar), in the east (Rabindranagar), in the western part (Bata Nagar) and in southern part (Khanberia) landuse is more changing. The rural area was seen in the outer part of main city, but now these are completely change and some rural area is seen in the southern part of the block like Khanberia, Moynagor, Chak Chatta , Rameshwarpur etc.



In the year of 2004 the area was more vegetated than the present. The agricultural lands occupied more area as compared to present scenario. The settlements and industrial areas were much less than the present. The area under open spaces was much higher than the present area under open space. The connectivity of road network has been significantly developed in last 20 years for better transport accessibility.

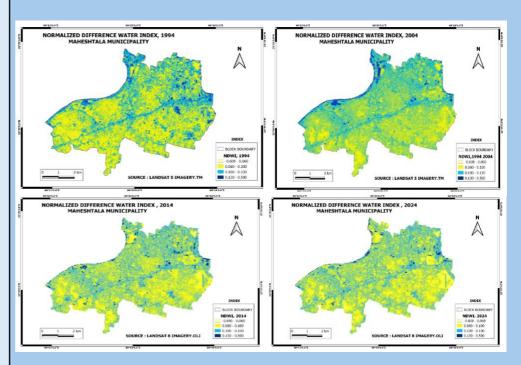
The eastern, western part and middle part of the study area has major impact of urbanization. The major roads passes through the middle of the area and the direction of this roads are from west to east. There are a little patches of agricultural lands lying on the south part of the study area.

#### **NORMALIZED DIFFERENCE VEGETATION INDEX**



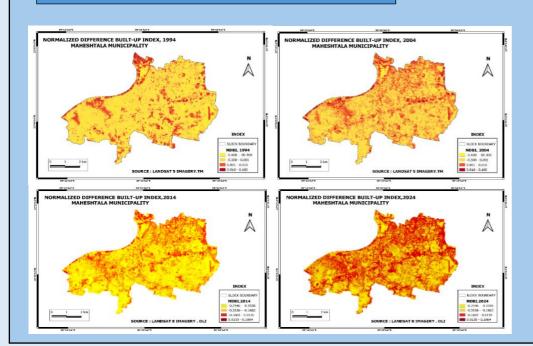
In past year 1994 the area under agricultural lands is more than the present situation. Due to urbanization the structure of occupation has changed. From primary sector peoples are tend to move in the secondary and tertiary sector. Because of that the area under agricultural lands turns into open space with vegetation.

### **NORMALIZED DIFERENCE WATER INDEX**



It is identified that the numbers of waterbody has decreased very much for industrialization. Due to the Industrialization the waterbodies has converted into residential area and wetlands. In past year 1994the waterbodies are more than the present situation. On the other hand in the year 2004, 2014 and 2024 water bodies are more decreased compare to past.

## **NORMALIZED DIFFERENCE BUILT UP INDEX**



Due to urbanization the population growth rate is so high in urbanized areas. We can see settlement is very low in the map of 1994, but after its 10 years later a growth rate is high in residential area. In the year of 2004 and the actual growth rate is tend in north eastern part of the blocks. Like ward nos. 1, 7, 10, 12, 27 etc. facing a growth in population. But after 10 years in 2014 we can see that a shift of population from north east to central and western part of the block. But in 2024 we can also identify a very much growth rate in population density compared to its previous year of 2014. In present time the areas like ward nos. 1, 3, 4, 5, 7, 12, 16, 25, 26, 27 etc is very much populated due to urbanization.