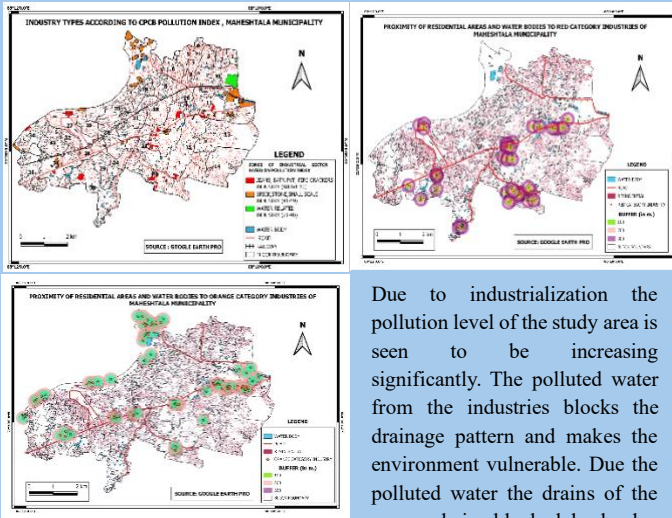


INDUSTRIALIZATION AND ITS IMPACT, PRESENT STATUS OF WATER BODIES AND ENCROACHMENT OF CANALS OF MAHESHTALA MUNICIPALITY

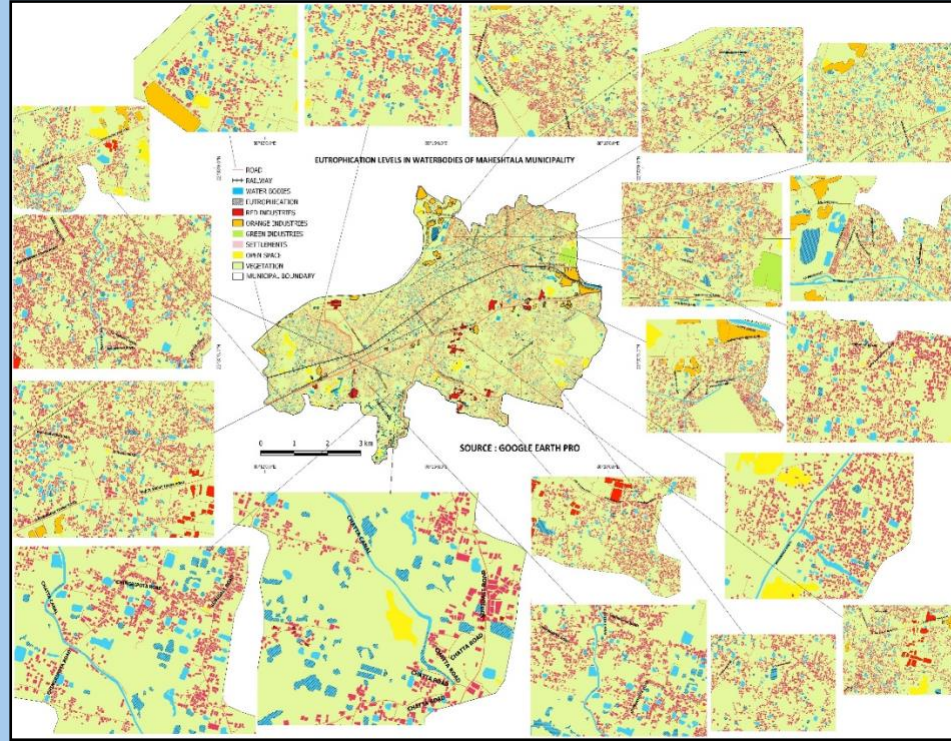
IMPACT OF INDUSTRIES ON MAHESHTALA MUNICIPALITY



Due to industrialization the pollution level of the study area is seen to be increasing significantly. The polluted water from the industries blocks the drainage pattern and makes the environment vulnerable. Due to the polluted water the drains of the area are being blocked day by day

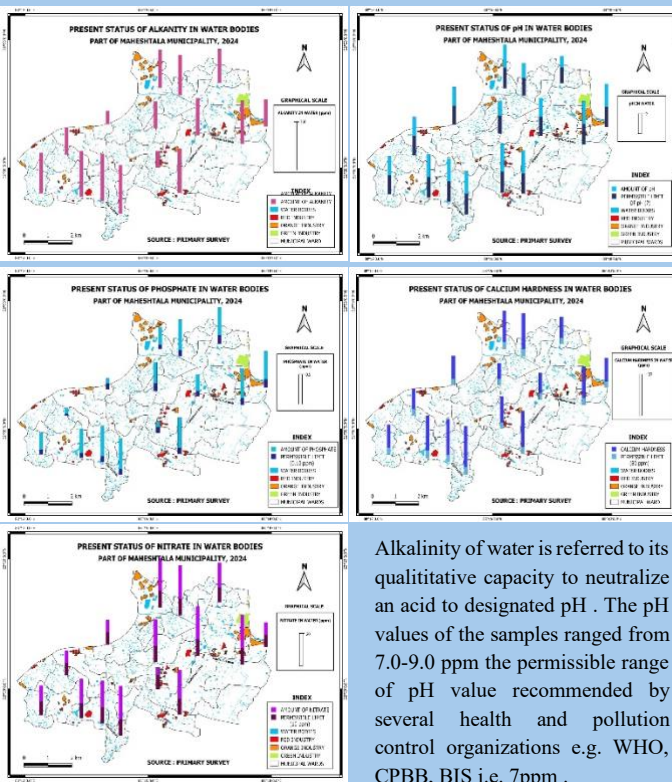
Which is an indicator of waterlogging. RED and ORANGE category industries makes the environment more vulnerable. Maps shows the 100, 200, 300 m. buffer of RED and ORANGE category industries. Landuse elements like settlement, waterbody, should be highly vulnerable in this area.

STATE OF WATERBODY EUTROPHICATION



Based on recent observations, waterbody eutrophication is a significant concern in Maheshtala Municipality. High levels of eutrophication have been recorded primarily in several wards, with the most severe cases observed in Ward 30, 23, 22, and 15. Additionally, Ward 26 and Ward 19 in the south-western part of the municipality also exhibit major eutrophication issues. Industrial areas show a particularly high degree of eutrophication, indicating severe pollution of water bodies in these regions. The elevated levels of nutrients, such as nitrogen and phosphorus, often associated with industrial runoff, contribute to this problem. The presence of eutrophication in these water bodies underscores the adverse environmental impact of industrial activities on local water quality. Eutrophication levels highlight a broader issue of water pollution, particularly pronounced near industrial zones.

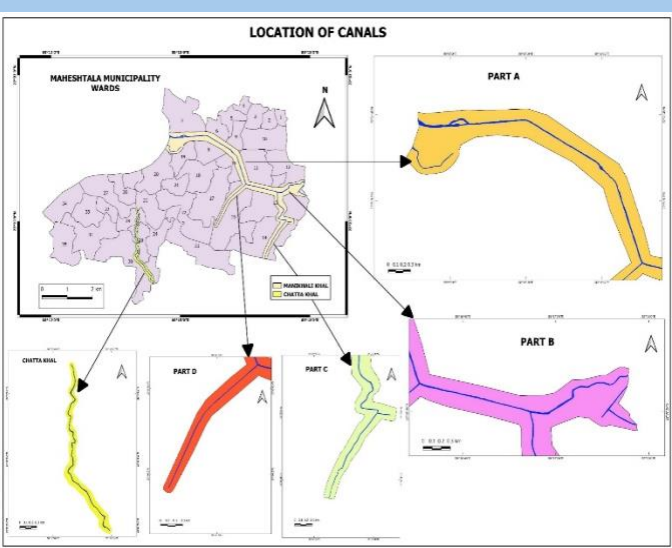
PRESENT STATUS OF WATER BODIES



Alkalinity of water is referred to its qualitative capacity to neutralize an acid to designated pH. The pH values of the samples ranged from 7.0-9.0 ppm the permissible range of pH value recommended by several health and pollution control organizations e.g. WHO, CPBB, BIS i.e. 7ppm.

Nitrogen in water occur in various forms like nitrate, nitrite, and ammonia natural process can cause low levels of nitrate in water. The nitrate value of samples ranged from 5-10ppm. The permissible limit of nitrate value recommended by BIS, 3ppm. Phosphorus occurs in national water waste waters almost solely as phosphates.

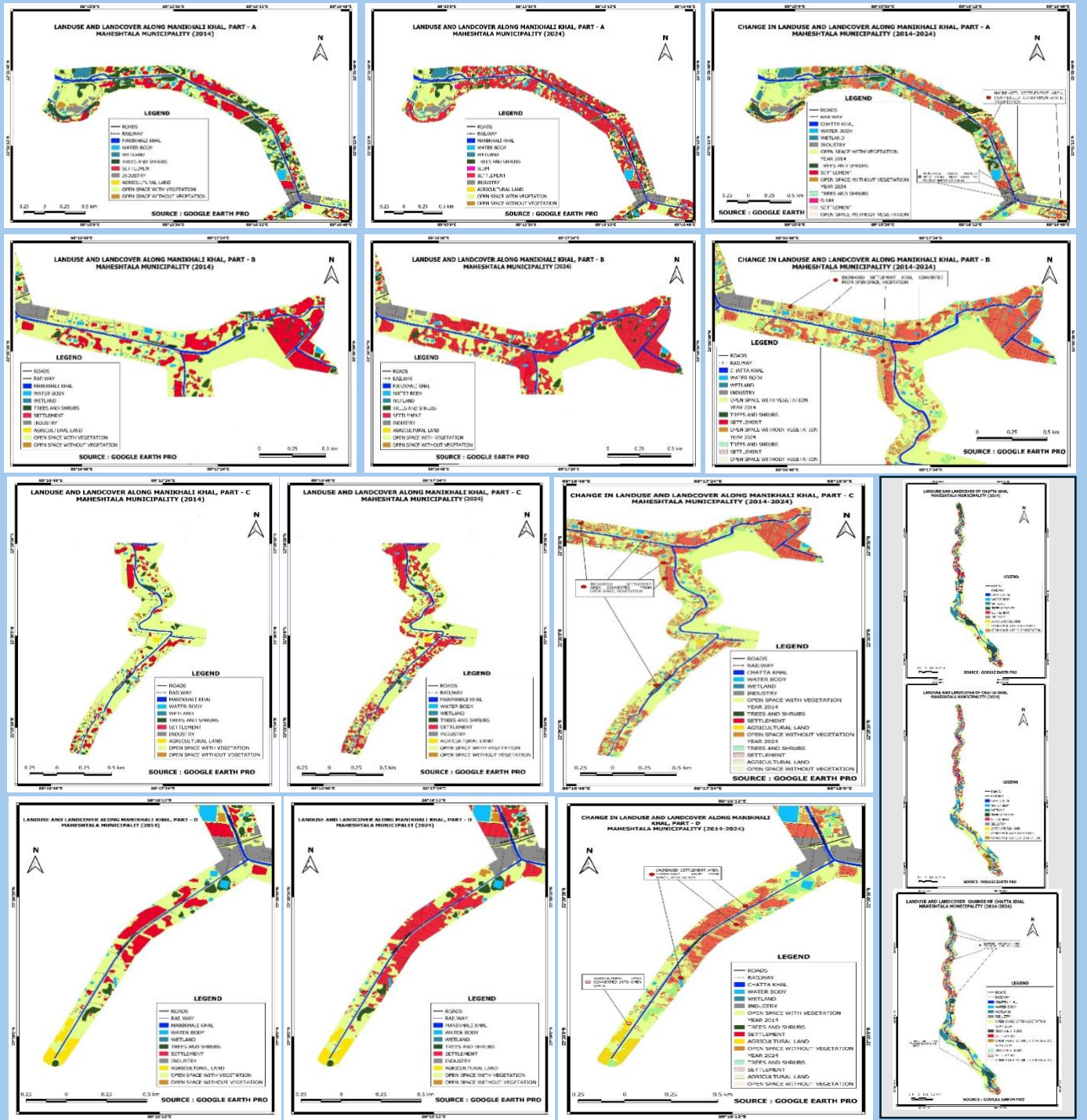
ENCROACHMENT OF CANALS



Severe industrial expansion (Dyeing, Textiles, Auto mobile, jute, chemical industry) with in Chatta canal And Manikhali canal has resulted in deterioration of canal water quality, expansion of slum area, and Congested streets. Whereas Manikhali canal and Chatta canal is getting the upmost effect from drastic Expansion of residential area by clearing off vegetation cover. Apart from all this activities, Chatta canal has been affected highly by the dyeing industries during the last decade.

There are two canals in maheshtala municipality the Manikhali khal and the Chatta khal.

LAND CONVERSION BESIDE CANALS



CROSS SECTION PROFILE OF CANALS

