

Methodologies used, Complexities and Potential applications of the Map:-

1. RESOURCES:

- Mapathon 2020 Database(for boundary purpose of Gorakhpur district)
- Website of Public Works department, Uttar Pradesh i.e., <http://uppwd.gov.in> (to get the details of roads in Gorakhpur district)

2. SPECIFIC STEPS INVOLVED IN QGIS:

- Using 'Select feature tool', boundary of Gorakhpur district was taken from India-District boundary map which was already provided by the Mapathon 2020 team.
- Through Open Street Map feature in QGIS, Map data of this place (Gorakhpur district) was obtained.
- Using 'Clip all displayed layers' plugin, this district's map consisting of different displayed layers i.e., both raster & vector files containing features of this particular region were clipped and therefore this tool helped in dealing with multiple data by clipping them at once.
- Using 'Create layer' feature, different shapefile layers were created & stylisation was done in the map.

3. COMPLEXITIES:

- While using Clipping multiple layers plugin, an error occurred when operation was done before downloading the Open Street Map data. Enabling the 'save vector style' option is advisable in order to show the exact OSM data of this (Gorakhpur district) region.
- Mark the respective road network using Line shapefile feature, only after doing the proper scaling so that the desired road features can be studied accurately at low scale.

4. APPLICATIONS:

- It is helpful for Road diversion process, for Traffic control or any other special purposes.
- Market Analysis:- This map is also useful for Market Analysis. The major district road i.e., Pipraich roadway heads from Padaribazar Police chowki, & joins Pipraich & Kaptanganj region. These areas are agriculturally rich but due to improper condition of that road, the farmers don't want to bring their goods to Gorakhpur city for selling purposes. Therefore, farmers there can be exploited easily by the local merchants.