MAPATHON
ROAD MAP OR TRANSPORTATION NETWORK OF RANGAREDDY DISTRICT

Methodology

Our goal is to build a clean and easily understood road transportation map of Rangareddy district, using ISRO's BHUVAN SATELLITE DATA. While doing this map we have learned how to collect required data and use it to make useful maps with the help of new technologies like QGIS.

ISRO DATA USAGE

The ISRO data that has been used to do the road transportation or road network is collected from Bhuvan 2D. From this Bhuvan 2D, the area of interest was selected and then tracing of the National highways and State highways was done using the option called "draw tools". In the draw tool, draw line and draw point tools are used. "Draw lines", are used for tracing of the road lines and "draw points", are used to locate, label and name particular areas. And it is also used for tagging or mentioning specific regions , places or mandals.

QGIS Software steps used

To make the Road transition or road network map, open-source software "QGIS" was so much useful.

Steps Used:

- Collecting data, Using the Indian district boundaries "shp" file that was given and then Filtering the area of interest by using tools present in the QGIS software.
- Placing the National Highways first and second, placing State Highway and third was placing ORR (Outer Ring Road), labelling the specific type of road, Dividing the district into mandals using boundary lines.
- Importing the project to New Print Layout and then Adding legends, scale, and North direction arrow.

Complexity

- Collecting the road map data was difficult because of the colour contrast.
- Zooming in and out was so much difficult and that is the major issue when collecting data and Road differentiation colours for National and State highways are similar and are a bit confusing . It was also hard to differentiate between Nehru OuterRingRoad(ORR) and railway networks as they have similar colour.

Potential application of the MAP

- Road network or road transport map is mainly useful in the present pandemic situation for transportation of vaccines and other medical equipment quickly with efficiency.
- Perishable commodities like vegetables,fruits and milk are transported more easily and quickly by roads than by railways.