Mapathon: “Mapping of natural resources / man-made features”

Sources of Data:

<https://bhuvan-app1.nrsc.gov.in/bhuvan2d/bhuvan/bhuvan2d.php>

https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php

Methodology:

1. The Shape file of Dantewada district, Chhattisgarh is provided by the ISRO which is the area of study for our team.
2. Bhuvan 2D is accessed using website:

<https://bhuvan-app1.nrsc.gov.in/bhuvan2d/bhuvan/bhuvan2d.php> and the shape file of Dantewada is added as layer to the map of India found in Bhuvan 2-d.

1. As per our topic of “Mapping of natural resources / man-made features.” We explored the various data which included natural and man-made resources. Natural resources included rivers, minerals and ores, forest cover, lakes and water-falls. The man-made resources included Roads, highways, drainage system, Bridges, Health centres, urban built-up, rural built up, mining areas, Religious -places i.e temple, mosque, church and gurudwara, Post-office, colleges, schools, Railway Station and Dams. All these resources are mapped on to the map and the final shape file is exported and saved.
2. Now the base file of Dantewada is exported to QGIS and superimposed with map of LULC map obtained from thematic services which highlights man-made structure i.e rural and urban build up.
3. After that, the shape file prepared for natural and man-made resources on Bhuvan -2D is superimposed on base file to get the over-all mapping of resources.

Application of Map:

The mapping of natural and man-made resources in Dantewada district involved Konta, Bijapur and Dantewada district is done, can be used for analysing distribution of man-made structures in the districts and trends in the building of these structures. Moreover, the maps are used for analysing the distribution of man-made resources like hospitals, schools, colleges and to design the policies or built-up plans to address the places which lack these facilities.

These maps can also be used see the trend of extraction of resources like mining of ores, stone mining or river mining and its impact on ecology i.e. forest reserves, rivers, lakes. So, these maps can be used to design appropriate policies or steps to manage the impact of human intervention on the environment.

1 division (Dantewada, Konta, Bijapur):

Dantewada district is one of the districts of Chhattisgarh State and Dantewada town is the administrative headquarters of this district. The Dantewada  
district occupies the southern part of Chhattisgarh state. Major part of the district is bounded between latitudes 17˚48’32”:19˚24’33”N and longitudes 80˚14’46”:82˚15’35”E. The total area of the district is approximately 3410.50 km2.Mineral and ores forms major economic activities in Dantewada district. Moreover, building material involving aggregate, sand, brick clay and stone are found in large quantity due to mineral extraction and availability of stone quaries. As per District Survey Report published in 2016 states that National Mineral Development Corporation Limited were allotted five mines of Iron ore and Precious Mineral and Smelting Limited were allotted eight mines of Tin ore. Total 15 stone quarries have been given on leases which were situated in Kirandul, Bade Bacheli, Dhurli, Gumda, BadeKameli and Kadampal. 10 sand quarries have been leased out on the bank of river Shankhani-Dhankhni at  
different villages for sand mining. Approximately 578.28 crore rupees royalty is earned from all minerals in the district in 2018-19