LULC MAP ASSAM, 2017

Methodology

The 2017 satellite imagery of Dispur, the State capital has been collected from Open Data Archive section of Bhuvan, ISRO for the month of November which is the latest data available on the site. The source of the map is IRS P6 LISS III 2017. Of the various tiles covering the Dispur district, the one in which location symbol was pinned has been chosen for the study. The map has been classified into six major land-use classes by using Maximum Likelihood Classifier (MLC) under Supervised technique in QGIS on 3-2-1 band. Further, conventional symbols were given to different LULC category.

Complexities:-

The supervised technique is more accurate way to LULC Classification but it turned out to little difficult to differentiate between different tones and especially texture for example- In case of vegetation, agriculture, plantations, forests etc.

The sandbanks and river deposits were mis-classified as settlement in supervised technique so, the manual correction using polygon digitization has been used to overcome the demerits of the system generated default.

Applications/Uses-

1- The map can be used to showcase the core region LULC of Dispur for college students, research scholars and GIS Analyst.

2- The map can be used to compare the other parts of the district which are less densely populated as compare to the core region.

3- The map can be used to various planning purpose seeing the Land uses and Open spaces.

4- The map helps in comparing the LULC of different time period say 2007 and 2017.

5- The LULC map can be co-related with the population pattern of the places.