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Altitudinal Zone Wise Mapping of Forest Cover Using Remote Sensing & GIS

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Abstract:

Along with climate and soil, altitude plays an important role in determining the type of forests, which in turn has a bearing on its management practices. Forest Survey of India (FSI) has carried out classification of forest cover of the country as per the altitudinal zone using SRTM DEM*** (2006). Forest cover map of the country was made from the Resourcesat LISS III data (spatial resolution – 24m, minimum mappable area –1 ha). The data of forest cover was then analyzed in GIS format for all the States and UTs to determine the forest cover in different altitude zones. The zones for the analysis have been taken as 0 – 500m, 500 – 1000m, 1000 – 2000m, 2000 – 3000m and above 3000m. The DEM used in the analysis has a resolution of 90m, which is appropriate for national and subnational level information of this kind. The information generated is likely to be found useful for forest management, biodiversity and wildlife habitat studies, working plans, productivity & plantation survival studies, and for afforestation planning.

*** Shuttle Radar Topography Mission Digital Elevation Model