

ABSTRACT-

“Visakhapatnam”- A port city which is rapidly growing and experiencing rapid urbanization. The city has recently expanded due to the rising demand for land and the growing population. It is growing in every direction, which has had a significant impact on urban land use that has an impact on the city's social and physical environment. Due to the location of numerous companies, which had caused a significant sprawl with the development of new residential colonies, the city has gained actual significance since 1970.”The city's ability to expand spatially has been constrained by barriers to the north, south, and east. The cities of Visakhapatnam are expanding in the southwest, northwest, and northeast. The amount of greenery in metropolitan areas is being negatively impacted by the rate of urbanization .

Giving a look into the changes on the land use and land cover is always a advantage for government because a proper plan can help to make a proper city plan as well as to slow down the growth of urban heat island due to rapid urbanization.

This project describes the pattern in shifting LULC and changing in land LST in Visakhapatnam. It is challenging to utilise meteorological data to predict future shifts in LST. in these regions since there are so few weather observatories there (Zhou et al., 2019). With the easy use of remote sensing it has become accessible to see ground phenomena from a remote distance to make modelling of urban growth pattern analysis(Bhatta, 2009), various scales of risk analysis, and temporal land cover change analysis. On a global and regional scale, satellite images are frequently used to study the rate and extent of urbanisation.