

# Characterization of Forest Fragmentation Dynamics using Geospatial Approach

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Forest landscapes are complex systems, influenced mostly by anthropogenic disturbances. Long-term forest cover data derived from multi-temporal remote sensing data can be used to understand the role of disturbance regimes. Restoration of fragmented landscapes is necessary to develop genetic linkages between organisms and biodiversity conservation. Remote sensing technology and geographic information systems are the tools, which can be used in mapping and detecting the potential effects of fragmentation. This study focuses on understanding the fragmentation pattern of forests in North Telangana, India. Forest cover maps for 2005, 2015 and simulated 2025 were used for characterisation of landscape level fragmentation. The analysis of forest fragmentation has indicated the reduction of large core area and increase of edge and perforated forests. Study of forest fragmentation pattern and its characterization could play a major role for addressing conservation issues related to biodiversity.

Keywords: Landscape, Fragmentation, GIS, Remote Sensing, Conservation