

## COMPARATIVE DETECTION OF LAND USE AND LAND COVER

### CHANGE IN LUDHIANA DISTRICT, PUNJAB, INDIA:

#### USING REMOTE SENSING AND GIS TOOLS

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#### ABSTRACT

*Studies on land use aspects of ecosystem play an important role in identifying major problems and to take suitable action to maintain “Ecological equilibrium” in the region. The main objective of this study is to provide a baseline status of the study area so that present land use pattern and temporal changes occurred, on the surroundings can be evaluated. Comparative land use pattern and land cover classes of Ludhiana district, Punjab, India for the years 1991, 2003 and 2014 were studied which indicated that the area under all land use and land cover classes has changed in the due course of time using Remote Sensing and GIS tools. The LANDSAT imageries of three years were studied with a purpose to know the status of land use and land cover changes in the study area. Land use and land cover classes along with the changes under different categories were identified from the satellite imageries. It was found that green cover and agricultural land were decreasing at an alarming rate and land was turning to barren land.*

**KEYWORDS:** Ecological Equilibrium, Land Use, Land Cover, Natural Vegetation, Remote Sensing and GIS

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