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Spatio-Temporal Dynamics of Raichur City

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Land use changes are irreversible changes and directly influence the regional and global environmental quality. Urbanisation is one of the major driver of land use land cover (LULC) changes. Planned urbanisation would help in maintaining the environmental quality and sustenance of natural resources while meeting the demand of population in cities. However, unplanned urbanization in most of the rapidly urbanising cities has caused serious concerns in both environmental quality and on human's livelihood due to urban sprawl. Urban sprawl refers to the uncoordinated land use resulting from lack of integrated and holistic approach in regional planning. Information related to the rate of growth, pattern and extent of sprawl is required by urban planners to provide basic amenities. This paper discusses land cover and land use dynamics of Raichur a tier II city in Karnataka. Spatio-temporal land use changes have been analysed for Raichur city with a buffer of 2 km. Land over changes have been analysed using distance based vegetation indices, which indicated vegetation to be 80.80% through NDVI in 2009. Land use analysis show during the period from 1989 to 2009 urban area has increased from 1.45% to 5.80%.

Keywords: Raichur, Land use, Land cover, Urbanisation.