GEOSPATIAL ANALYSIS OF LAND USE CHANGE IN KURUWITA

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Land use is an overall content of the land utilization in an area. Kuruwita have been selected for the study area for this study that has significant spatial and geographical approach as the semi-urban area. The study focuses to the land use and its change through the one decade. (2013-2022) The land use change has been measured by five land use types. The study mainly expects to identify the land use change of the Kuruwita as a semi-urban area. The identified change has been analyzed from perspective of temporal and spatial. On other hand, considering geographical, socio-economic development facts have been used for the analyzation. Finally, the study tries to observe the change of the land use in Kuruwita as semi-urban developing territory. The research methodology is based on Geography Information System (GIS) and its techniques. Supervised Classification have been used for the classify the satellite images and research result generating. Mapping the land use result has been shown the urban transformation in ten years and deforestation and the water source degradation rapidly through process of urban transformation. The urban area has expanded throughout the ten years as 22 km^2 to 78km^2 (8% to 30%). Forest area has been deducted 30% to 10% of total land. Water resources have been diminished by the half of its existed. (8% to 4%) As the conclusion, this study shows the urbanizing trends in study area and the some of the natural resource degradation through the land used mapping and geometrical, field calculations. Kuruwita as divisional secretariat area should be conducted the sustainability program for the turning semi-urban area to urban area. The urban transforming process should be more sustainable as recommendation.

Keywords - *Geography Information System, Geo-Spatial Analysis, Image Classification, Land Use, Rural Development*

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