

LAND USE/LAND COVER CHANGE DETECTION IN GREATER LAGOS (NIGERIA): 1984-2002.

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This paper examines the land use/land cover changes that have taken place in Lagos for the last two decades due to the rapid urbanisation. Lagos is one of the fastest growing mega-cities in the world; yet it lacks reliable modern, scientific monitoring techniques to effectively monitor and manage the land use changes brought about by urbanization. The capabilities of remote sensing in terms of large spatial coverage, spatial and temporal resolutions adequate for these type of studies as well as the ability of GIS to handle spatial and non-spatial data are the optimal approach for this. A post-classification approach was adopted with a maximum likelihood classifier algorithm. The Landsat TM (1984) and Landsat ETM+ (2002) were merged with SPOT-PAN (2002) to improve classification accuracies and provided more accurate maps for the modelling and analysis. It also made it possible to overcome the problem of spectral confusion between some urban land use classes.

Land Use Map of Metropolitan Lagos was digitised and overlaid on the land use/cover maps produced from satellite images to assess the adequacy of the land use map that is been used for planning purpose in the study area. This also outlined the importance of the use of GIS and RS to effectively monitor and manage land use and land cover change in Lagos. The land cover change map revealed that recreational and agricultural land uses are most threatened: most land allocated for these uses have been legally or illegally converted to other land uses within and outside the metropolis. Also, the land use change spatial pattern analysis shows conversion of land use classes as well as transition from one class to another.

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