

Forest dynamism of a green space: a perspective from T.A. AFOLAYAN Wildlife Park, Akure, Ondo state, Nigeria

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Abstract

Poor physical planning had factually led to the destruction of valuable ecosystems in most academic institutions of developing countries such as Nigeria. This study aimed to detect the land cover change over time of T.A. Afolayan Wildlife Park, located at the Federal University of Technology, Akure, Nigeria for a period of twelve years using Ikonos and WorldView satellite imageries of the study area for two years time series (2001 and 2013), while supervised classification algorithm method was employed. Three land cover classes were compiled: non-forested vegetation, forested vegetation and bare surfaces (lands without shrubs and barren rocky areas). Non-Forested vegetations recorded a higher land cover area (44.86m²), while bare surfaces had the lower land cover area (11.02m²) in 2001. Forested vegetations recorded a higher land cover area (45.15m²), while bare surfaces had the lower land cover area (12.26m²) in 2013. It was observed that forested vegetation increased rapidly from 2001 to 2013 with percentage change (17.89%). Thus, the positive significant change substantiated the vegetation restorative capability and ecological stabilizing potential of a conservation area within the academic environment. However, if the steady growth in the forest land cover can be maintained, it will promote ecological sustainability and healthy environment.

Keywords: Green spaces; Landcover change; Geographic Information System

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