Land Use / Land Cover changes in Yenagoa, Bayelsa State

Appah L. KUROTIMINIPRE and Ayeni Abayomi WINSTON, Nigeria

SUMMARY

Information on landuse/landcover in the form of maps and statistical data is very vital for spatial planning, management and utilization of land. In this study, Remote Sensing and geographic information system (GIS) were used in order to study Land use / Land cover changes. Land use change may influence many natural phenomena and ecological processes, including runoff, soil erosion and sedimentation and soil conditions. The Urban areas are changing due to various human activities, natural conditions and development activities. According to the user requirements, updating of landuse mapping is required to various sections. The aim of this study is to detect land use changes between 1988 to 2008 using satellite images of Land Sat 7 ETM+ 1988 and 2008. The objectives of the study is to see the Land use / Land cover changes in Yenagoa metropolis and identifying hotspots of land cover changes using multi temporal satellite data and also studying relationship between human pressure on Land use / Land cover and its impacts in the vital Urban habitats. By using two epoch (1988,2008) satellite imageries with the support of Geographic Information System (GIS) and Remote Sensing, spatial pattern of land use change of Yenagoa in recent 20 years is interpreted and extracted, and elucidated the human driving forces for the changes of cultivated land. Results showed that in the period 1988 to 2008, the main trends of Yenagoa and use change were the transforming from grassland, woodland, and unused land to cultivated and settled land.

Appah L. Kurotiminipre and Ayeni Abayomi Winston
Land Use / Land Cover changes in Yenagoa, Bayelsa State