Population Growth and Urban Land Use Change Along River Kaduna Floodplain

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SUMMARY

Metropolitan areas in the world are growing at unprecedented rates and creating extensive urban landscapes wherein many of the farmlands, river floodplain, forests and deserts have been transformed into human settlements. Major problems faced by these metropolitan areas are urban sprawl, loss of natural vegetation and open space and a general decline in the extent and connectivity of wetlands and wildlife habitat. Cities have changed from small, isolated population centers to large, interconnected economic, physical and environmental features, thus making population growth and the concentration of people in urban areas to create societal problems world-wide most especially in developing countries. What has compounded the situation is that population is not evenly distributed throughout the world as contained in population census hence making population prediction very difficult. Moreover, non-availability of current information in terms of database and maps to monitor and analyse the trend of events makes the situation worse. This study therefore uses Lansat imageries of 1976, 1987 and 2010 and Spot imagery of 1995 in conjunction with projected population census of 1976, 1987, 1995 and 2010 to examine the trend of population growth within the communities residing along River Kaduna floodplain and the attendant effect of the growth on urban land use change in the river floodplain within Kaduna metropolis. Remote sensing and Geographic Information System were used to produce land use and land cover map from the satellite imageries. The analyses of the results revealed, amongst others, that population growth is not the only factor that can effect change on urban land uses along River Kaduna floodplain within Kaduna metropolis. In line with this finding, it is recommended that other dimensions of population should be considered to actually find out whether population growth is a major factor of urban land use change along River Kaduna floodplain.