PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
JOURNAL OF HUMAN ECOLOGY
International Interdisciplinary Journal of Man-Environment Relationship

PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
J Hum Ecol, 39(3): 175-182 (2012)
DOI: 10.31901/24566608.2012/39.03.01

Fuzzy Indicator of Sustainable Land Management and Its Correlates in Osun State, Nigeria

Abayomi Samuel Oyekale

Department of Agricultural Economics and Extension, North-West University Mafikeng Campus, Mmabatho, 2735 South Africa

KEYWORDS Sustainable Land Management. Land Degradation. Fuzzy. Indicator. Nigeria

ABSTRACT Sustainable land management (SLM) is one of the major issues of concern to Nigerian policy makers due to persistent degradation of land. This study applied the fuzzy set method to compute composite indicator of unsustainable land use (IULU) from selected plot-level indicators. Results show that average IULU is 0.43 with 41.48 percent of the farms having higher values. Trends in vegetation covers, vigor of crop growth, crop yields, organic matter contents and type of seeds grown have highest contributions to IULU. Also, estimated parameters with Tobit regression show that education, household size, access to credit, access to extension and per capita farm income significantly reduced IULU, while farming experience, erosion problem and inadequate land problem increased it ($p<0.10$). The study noted that efforts to promote soil conservation technologies through extension workers and ensuring availability of credits, among others, will go a very long way in addressing land degradation.