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Monitoring Land Productivity Dynamics of Gombe State, Nigeria

Authors : Ishiyaku Abdulkadir, Satish Kumar J

Abstract : Land Productivity is a measure of the greenness of above-ground biomass in health and potential gain and is not related to agricultural productivity. Monitoring land productivity dynamics is essential to identify, especially when and where the trend is characterized degraded for mitigation measures. This research aims to monitor the land productivity trend of Gombe State between 2001 and 2015. QGIS was used to compute NDVI from AVHRR/MODIS datasets in a cloud-based method. The result appears that land area with improving productivity account for 773sq.km with 4.31%, stable productivity traced to 4,195.6 sq.km with 23.40%, stable but stressed productivity represent 18.7sq.km account for 0.10%, early sign of decline productivity occupied 5203.1sq.km with 29%, declining productivity account for 7019.7sq.km, represent 39.2%, water bodies occupied 718.7sq.km traced to 4% of the state's area.

Keywords : above-ground biomass, dynamics, land productivity, man-environment relationship
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