Topics (T)
The Social, Communications, Economic and Cultural Dimensions of Environmental Change (9)

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CLIMATE CHANGE, AGRICULTURE AND POVERTY IN NORTHERN NIGERIA

Abstract

Climate change refers to long-term shifts in temperature and weather patterns. Records show that the African continent, and by extension Nigeria, as of today, is warmer than it was 100 years ago. Northern Nigeria, a third world, hot tropical region, already facing socio-economic poverty, depends on nature, which is now being affected by climate change. Like most of sub-Saharan Africa, agriculture is the main source of livelihood and income generation for the region and this is being threatened by extreme climatic events such as droughts, erosion, floods, desertification and disease/pest's infestation; not to mention farmer herdsmen clashes/insurgency, which all have both direct and indirect links to anomalies in the physical environment. These interactions have left the region in more poverty as agricultural activities have dwindled over the years, especially, in the last two decades. Several researches have been able to prove that the climate is changing, while several others still have checked its impact on various dimensions of the physical environment. But so far, very few works have focused on examining the potential devastating effects of climate change on the socio-economic lives of people already living below the poverty lines, hence, the present study. Six major agricultural states in the region; Bauchi, Sokoto, Borno, Kebbi, Jigawa and Katsina were chosen for this study. A structured questionnaire, together with available data from the Nigerian General Household Survey, available from the National Bureau of Statistics (NBS), for a seven- year period (2015 – 2022) was used and also, high resolution Google Earth imageries were downloaded from the Google earth engine as supporting information for Land use/Land cover classification to ascertain agricultural communities. ERDAS IMAGINE, a GIS software was used for image analysis while the statistical software; SPSS was also employed. Statistical analysis of all variables shows a strong relationship between the changing climate, agriculture and poverty in the region. Keywords: Climate Change, Poverty, ERDAS IMAGINE , Northern Nigeria