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"Reconcile land system changes with planetary health"

Analysis of livelihood diversification strategies among settled agropastoralists in northeastern nigeria

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Abstract

Agropastoralism is one of the most important economies in the Sahel and the primary economic activity on the fringes of the Sahara (De-Haan, Etienne, Bernard & Catalina, 2016). This sector contributes between 10 and 44% of the Gross Domestic Product of African nations (Brottem & McDonnell, 2020). However, because of problems like climate change, political unrest, cattle rustling, insurgency, and terrorist operations, the sector has recently come under increased external threats (Ibrahim, Ozdeser, & Cavusoglu, 2020). This paper identified livelihood diversification strategies adopted by settled agropastoralists in the study area, their levels of income diversity, and factors influencing their choice of livelihood diversification strategies. The study was conducted in Gombe State, Nigeria. It is in the center of the Northeastern part of Nigeria, thereby bordering virtually all other states in the region. Data were collected from 316 randomly selected agropastoralists across 18 communities within the State using computer-based questionnaire via Open Data Kit. Descriptive Statistics, Simpsons Index of Diversification, and Multinomial Logistic Regression were used for data analysis. The agropastoralists in the study area were involved in three main livelihood strategies; on-farm, non-farm, and off-farm activities. About 52% of the agropastoralists were engaged in only on-farm activities, while 30 % and 10 % combined on-farm + off-farm and on-farm + non-farm activities respectively. Only 8% practised a combination of the three livelihood strategies (on-farm, off-farm, and non-farm). Ninetyseven percent of those who diversified their livelihood activities were men. The level of income diversity across on-farm activities was 35.1 %, while income diversities for on-farm + off-farm, and on-farm + non-farm were 43.4%, and 52.9% respectively. The combination of on-farm + off-farm + non-farm activities exhibited the highest level of income diversity (59.2%). The result of the Multinomial Logit analysis showed that sex, age, education, period of residence, dependency ratio, extension contacts, cooperative membership, and access to credit had a significant influence on agropastoralists' choice of livelihood diversification strategies. The findings suggest that motivating the agropstoralists to engage in multiple income-generating activities in addition to their involvement in on-farm activities can increase their overall household income and reduce their vulnerability to poverty.

Keywords: Agropastoralists, income diversity, livelihood strategies, northeast Nigeria

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