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## Determinants of Food Insecurity Among Smallholder Farming Households in Southwest Area of Nigeria

Authors: Adesomoju O.A., E.A Onemolease, G.O. Igene

Abstract: The study analyzed the determinants of food insecurity among smallholder farming households in the Southwestern part of Nigeria with Ondo and Osun States in focus. Multi-stage sampling procedures were employed to gather data from 389 farming households (194 from Ondo State and 195 from Osun State) spread across 4 agricultural zones, 8 local governments, and 24 communities. The data was analyzed using descriptive statistics, Ordinal regression, and Friedman test. Results revealed the average age of the respondents was 47 years with majority being male 63.75% and married 82.26% and having an household size of 6. Most household heads were educated (94.09%), engaged in farming for about 19 years, and do not belong to cooperatives (73.26%). Respondents derived income from both farming and non-farm activities with the average farm income being N216,066.8/annum and non-farm income being about N360,000/annum. Multiple technologies were adopted by respondents such as application of herbicides (77.63%), pesticides (73.26%) and fertilizers (66.58%). Using the FANTA Cornel model, food insecurity was prevalent in the study area with the majority (61.44%) of the households being severely food insecure, and 35.73% being moderately food insecure. In comparison, 1.80% and 1.03% were food-secured and mildly food insecure. The most significant constraints to food security among the farming households were the inability to access credit (mean rank = 8.78), poor storage infrastructure (8.57), inadequate capital (8.56), and high cost of farm chemicals (8.35). Significant factors related to food insecurity among the farming households were age (b = -0.059), education (b = -0.376), family size (b = 0.197), adoption of technology (b = -0.198), farm income (b = -0.335), association membership (b = -0.999), engagement in non-farm activities (b = -1.538), and access to credit (b = -0.853). Linking farmers' groups to credit institutions and input suppliers was proposed.

**Keywords:** food insecurity, FANTA Cornel, Ondo, Osun, Nigeria, Southwest, Livelihood **Conference Title:** ICAB 2024: International Conference on Agriculture and Biotechnology

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