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Do food access and food utilization jointly predict urban household food security?**Adesola Adebola Ikudayisi***University of Ibadan, Nigeria*

Statement of Problem: Undernourishment and severe food insecurity is still increasing. The feedback on household incomes, dietary preferences, and subsequent food security status requires a comprehensive investigation of food security dynamics which will aid effective policy design and evaluation. This quest for improved household welfare has necessitated the need for appropriate indicators that capture the dimensions of food security. This paper employed two quantitative measures simultaneously to estimate urban household food security by level of urbanization using cross-sectional household data in southwest Nigeria. One measure, termed food expenditure, assessed the weighted per capita expenditure of a household on food. Two, the dietary diversity indicator assesses the number of food groups consumed by a household.

Methodology & theoretical orientation: 445 household data from stratified urban residential areas in a geopolitical zone were analysed. Per capita food expenditure was calculated using household food expenditure over a seven-day period. Dietary diversity was calculated using a 24-hour recall period using 12 food groups. The urban city index, a measure of urbanization, divides households into three categories using principal component analysis: low urban category (LUC), (n = 153); middle urban category (MUC), (n = 185) and high urban category (HUC), (n = 107). The multinomial logistic regression model estimates identified food security levels in comparison to a control group and provides information on the factors influencing each category.

Findings: From the two-by-two analysis, about 39% of households had diverse diets (DD), and 75% spent above the required food expenditure plan (FEXP). On both measures, the two indicators rule out over-characterization of households' food security status and allow classification of households into four groups: those with high food expenditure and low dietary diversity represented termed the food insecure (FIS=13.7%). Food secure (FS=50.1%) households, were those with a low food expenditure plan and a diverse diet. About 10.6% of households avoided having a low dietary diversity while on a high food expenditure plan represented the adequate dietary diversity only (DDI) group. The adequate food expenditure only (FEXP=25.6%) group's food expenditure was quite adequate (relative to the threshold food plan), but was associated with low dietary value. Harmonization of indicators reveals differences in urban food security status and the impact of what each level represents within the urban geographic zone. Food-insecure (FIS) households lived in the LUC (34%), while food-secure (50.1%) households lived in the MUC. Multinomial legit regression analysis showed that the household head's income and the urban city index determine the likelihood of a household falling into one of the food security groups. Moreover, the frequency with which they exert influence is critical for comprehending urban food security.

Conclusion: This study stands out as it quantifies the effect of urbanization on household food security among Nigerian households. The outcome provides a baseline for evaluating the incidence of urban-specific household food insecurity as defined by the simultaneous integration of two components of food security. This will aid in the development of site-specific interventions to improve urban food security outcomes.

Biography

Adesola Adebola Ikudayisi obtained her PhD degree from the University of Ibadan, Nigeria, in 2019. Her research interests revolve around the urban food system and food security. Ikudayisi has authored and co-authored numerous journal articles and presented at international conferences on urbanization, sustainable food systems, food access, and the green economy. She is proficient in quantitative methods and statistical analysis (STATA, SPSS and Biblioshiny R-tool). She has actively participated in a number of research grant awards as part of an interdisciplinary team. Ikudayisi also engages in consultancy services for institutions and organizations on sustainable food security, green and digital technologies.