Application of Logistics Regression Model to Ascertain the Determinants of Food Security among Households in Maiduguri, Metropolis, Borno State, Nigeria

Authors : Abdullahi Yahaya Musa, Harun Rann Bakari

Abstract : The study examined the determinants of food security among households in Maiduguri, Metropolis, Borno State, Nigeria. The objectives of the study are to: examine the determinants of food security among households; identify the coping strategies employed by food-insecure households in Maiduguri, Metropolis, Borno State, Nigeria. The population of the study is 843,964 respondents out of which 400 respondents were sampled. The study used a self-developed questionnaire to collect data from four hundred (400) respondents. Four hundred (400) copies of questionnaires were administered and all were retrieved, making 100% return rate. The study employed descriptive and inferential statistics for data analysis. Descriptive statistics (frequency counts and percentages) was used to analyze the socio-economic characteristics of the respondents and objective four, while inferential statistics (logit regression analysis) was used to analyze one. Four hundred (400) copies of questionnaires were administered and all the four hundred (400) were retrieved, making a 100% return rate. The results were presented in tables and discussed according to the research objectives. The study revealed that HHA, HHE, HHSZ, HHSX, HHAS, HHI, HHFS, HHFE, HHAC and HHCDR were the determinants of food security in Maiduguri Metropolis. Relying on less preferred foods, purchasing food on credit, limiting food intake to ensure children get enough, borrowing money to buy foodstuffs, relying on help from relatives or friends outside the household, adult family members skipping or reducing a meal because of insufficient finances and ration money to household members to buy street food were the coping strategies employed by food-insecure households in Maiduquri metropolis. The study recommended that Nigeria Government should intensify the fight against the Boko haram insurgency. This will put an end to Boko Haram Insurgency and enable farmers to return to farming in Borno state.

Keywords : internally displaced persons, food security, coping strategies, descriptive statistics, logistics regression model, odd ratio

Conference Title : ICASDA 2021 : International Conference on Applied Statistics and Data Analysis **Conference Location :** Bangkok, Thailand **Conference Dates :** December 16-17, 2021