Nigeria: Composite Indicator of Food Insecurity in Its Conflict Affected Regions and Its Determinants. A Heteroscedasticity Consistent Tobit Model

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Abstract: Conflicts constitute some negative influences on households' economic activities. In Nigeria, the past few years have witnessed progressive crises in some states and the growing level of insecurity is affecting households' economic livelihoods. This paper analyzed the determinants of food insecurity indicator in conflict-affected regions in Nigeria. The data were collected in 2017 from 582 respondents in the North East, North-central, and South-South zones. The data were analyzed with Principal Component Analysis (PCA) and heteroscedasticity consistent Tobit regression. The results showed that in the combined data, the average number of days per week that respondents relied on less preferred food, limited food portions, and reduced the number of meal per day were 3.42, 2.68 and 2.33, respectively. The PCA was used to generate indicator of food insecurity, with North-East, North-central, and South-South zones having average indices of 0.16, -0.09 and -0.02, respectively. The Tobit regression results revealed that in the combined data, food insecurity was promoted by household size, urban residence and receipt of remittances, but reduced by unchanged income, credit purchase and reliance on food aid. In north central, food insecurity was promoted by receipt of remittances, but reduced by ability to grow own crops. In the north eastern zone, food insecurity was promoted by urban residence, income increased, and increase in food prices, but declined by income unchanged, and pension income. In the South-South zone, food

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insecurity was promoted by household size, urban residence and receipt of remittance income, but declined by credit purchase and unchanged income. It was concluded that addressing food insecurity among residents in conflict-affected areas requires preferential assistances to large families, urban residents, and those with high dependence on remittances. However, the promotion of initiatives for credit purchase, food aid the and ability to grow own crops are potentially able to reduce food insecurity.

Keywords: Food insecurity, conflict, remittances, food aid, credit, Nigeria.

Introduction

Conflict remains a major development hurdle in many African countries (Fang *et al.*, 2020). Beyond the splashes of civil unrest that were witnessed in the late 20th century, conflicts are now redefining some development pathways in some African countries (Fang *et al.*, 2020; Baranyi, 2011; Bircan *et al.*, 2017). The past few decades have witnessed disturbances to economic activities by banditry, communal clashes, and politically motivated insurgencies. The impacts of economic policies are now preconditioned on the successful initiation of peace pacts with some rebel groups, which is a prerequisite for the promotion of a favorable environment for economic growth and development (Mueller *et al.,* 2017; Novta & Pugacheva, 2021). Therefore, given the perpetual displacement of human populations due to perennial conflicts, and some existing barriers to international asylum-seeking, the role of peace in fostering a policy environment for achieving many of the Sustainable Development Goals (SDGs) cannot be overemphasized (Fang *et al.*, 2020).

In Africa, some regions have in the past few decades witnessed a significant increase in the number of farmer-herder conflicts, many of which have resulted in complete distortion of some economic activities, loss of lives, and destruction of properties (Brottem, 2021). Specifically, fatalities that are associated with such conflicts are highest in Nigeria, where about 2,000 people were reportedly killed in 2018 (Brottem, 2021). The geographical spread of these conflicts across the African continent has gradually widened due to structural and seasonal scarcity of natural resources, which has been aggravated by climate change and rising population pressure on scarce land, water, and forest resources (United Nations Environment Programme [UNEP], 2012). In addition, insurgencies in the African region, being largely motivated by economic marginalization, poverty, and religious intolerance are now of serious concern among policy makers (Muazu, 2022). Sometimes, the inability to timely curb the activities of some local rebels and militant groups often propels large-scale terrorists, after seeking some financial assistance and professional trainings from some established international terrorist groups (Okunade *et al.*, 2021).

In Nigeria, a state of anarchy and pestering insecurity had been created by the Boko Haram insurgency, which is largely concentrated in some northern states (Anyadike, 2013). The intention of this rebel group is to destroy the different governance structures of the state apparatus in an attempt to create a formidable structure that is governed by the ideologies for promoting the operations of Islamic fundamentalists (Muazu, 2022). Over the years, Boko Haram's activities have been displayed through militia groups of the Fulani herders and forest bandits that often cause havoc among unarmed farmers and engage in human kidnapping for some monetary ransoms (Amusan & Ejoke, 2017; Walker, 2012). Therefore, the impact of Boko Haram insurgencies on agricultural activities in affected regions bemoans existing vulnerability and poverty depth among affected farmers. The nutrition and food security impacts cannot be overemphasized due to the complete distortion of agricultural activities (Anyadike, 2013). In some cases, displaced people have left their sources of economic livelihoods, to take refuge in some designated camps.

Conceptually, food insecurity emanates from population explosions, inadequate food supply, inadequate income, rising food prices, and inadequate utilization of food (Matuschke, 2009). However, conflicts often act as facilitators of many of these factors. Therefore, insecurity will thwart households' food security through persistent distortion of the pillars of food security, which are food access, availability, utilization, and stability (FAO, 2017). Although, Sustainable Development Goal 2 (SGD2) seeks to attain a global zero hunger by 2030, the COVID-19 pandemic and persistent insecurity are hindering progress in some developing countries. Specifically, the distortions in the supply channels and other associated income shocks are driving food prices, thereby worsening the global state of hunger and malnutrition (World Bank, 2023).

The Nigerian case is pathetic because as at March 2023, the country's food situation worsened with food price inflation increasing to 24.35% (Bailey, 2023; Central Bank of Nigeria, 2023). More importantly, the COVID-19 pandemic worsened food security situation in Nigeria and made some households to face acute food insecurity in 2020 and 2021 (Amusan & Agunyai, 2021; Balana *et al.*, 2023). Therefore, with about 17 million households being at risk of food insecurity in 2022, it had been projected that this number may increase to about 25 million between June and August 2023 due to conflicts, climate shocks, inflation, and progressive increases in the prices of food (UNICEF, 2023). Moreover, UNICEF (2023) further emphasized that of the 17 million food-insecure Nigerians in 2022, 6 million were under-5 children in northern Nigeria. Although a proper understanding of the food security situation in conflict-affected areas is of vital relevance to food policy, data paucity often constitutes a significant barrier. This paper attempts to bridge existing gaps in the literature by exploring a robust econometric approach for the analysis of food insecurity indicators using a nationally representative dataset.

Materials and Methods

Data and Sampling Procedures

The data were collected telephonically between 15th August and 8th September 2017 by the National Bureau of Statistics (NBS) from a subset of respondents in the General Households Survey (GHS). The purpose of the survey was to understand the severity of food insecurity among conflict-affected households. North East, North Central, and South-South regions were selected purposively, being the most conflict-affected in Nigeria. Using the records in the Armed Conflict Location & Event Data Project (ACLED) database, local government areas from the 16 states in these regions with more than 10 incidents of conflicts between 2012 and 2014 were selected. In the first phase of the survey, 742 households were reached telephonically by the GHS panel but 529 completed the interviews. The need to increase the sample size compels the inclusion of 288 households to serve as replacements for those that were unable to be reached. However, 188 households of these replacements were successfully interviewed. It therefore implies that in phase 1, out of the 1030 households that were reached, 717 households completed the survey. This study used the second round of the survey comprising of 582 randomly sampled respondents from the 717 households that sampled in the first round. Specifically, the 582 households are spatially distributed with 147 being from the North East, 219 from North Central, and 216 from South-South. However, the non-response rates during the round two survey were 16% for North East, 21% for North Central, and 19% for South-South. Sample weights were calculated for each respondent to enhance the representativeness of the data.

Computation of Food Insecurity Index

The food insecurity index was computed with Principal Component Analysis (PCA). The responses of the farmers to the questions on relying on less preferred and less expensive foods, borrowing food, or relying on help from a friend or relative, limiting portion size at mealtimes, restrict consumption by adults in order for small children to eat, and reduce the number of meals eaten in a day. The index was computed using the PCA command of STATA 13 software.

Estimated Model

The data were analyzed with heteroscedasticity consistent Tobit regression model. This model integrates and verifies the homoscedasticity classical regression assumption as one of the critical conditions for estimating a linear regression. This assumption implies that the variance of error does not depend on any of the covariates. Violation of this assumption requires the use of a conditional heteroscedasticity model as proposed by Nelder and Pregibon (1987) and Smyth (1989).

The Tobit model is stated as:

$$y_{1i}^{*} = x_{1i}\gamma + u_i \quad (1)$$

$$y_{1i}^{*} = \begin{cases} a & y_{1i}^{*} < a \\ y_{1i}^{*} & a \leq y_{1i}^{*} \leq b \\ b & y_{1i}^{*} > b \end{cases} \quad (2)$$

where x_{1i} is a matrix of exogenous variables. These are drought in the village (yes = 1, 0 otherwise), household size, age of head, gender of head, urban resident (yes = 1, 0 otherwise), paid farm labor (yes = 1, 0 otherwise), farming (yes = 1, 0 otherwise), non-farm (yes = 1, 0 otherwise), other income sources (yes = 1, 0 otherwise), subsistence farming (yes = 1, 0 otherwise), North East zone (yes = 1, 0 otherwise), South-South zone (yes = 1, 0 otherwise), income increased (yes = 1, 0 otherwise), income the same (yes = 1, 0 otherwise), inadequate food availability (yes = 1, 0 otherwise), market very safe (yes = 1, 0 otherwise), market somewhat safe (yes = 1, 0 otherwise), low food availability (yes = 1, 0 otherwise), low food quality (yes = 1, 0 otherwise), far market (yes = 1, 0 otherwise), unsafe market road (yes = 1, 0 otherwise), store food at home (yes = 1, 0 otherwise), buy food/exchange (yes = 1, 0 otherwise), food aid (yes = 1, 0 otherwise), none (yes = 1, 0 otherwise), others methods (yes = 1, 0 otherwise), self produce (yes = 1, 0 otherwise), food aid when food is unaffordable (yes = 1, 0 otherwise), borrow money from friends when food is unaffordable (yes = 1, 0 otherwise), borrow money from bank when food is unavailable (yes = 1, 0 otherwise)

Results and Discussion

Farmers' Demographic Characteristics and Livelihoods

Table 1 shows the selected demographic characteristics of the farmers. It shows that in the combined dataset, the average household size is 8.19 while North East zone had 10.54. Fertility is generally high in northern Nigeria (Kehinde *et al.*, 2021), and some women indicated that it is a form of security against divorce and polygamy (Izugbara & Ezeh, 2010). The Table further shows that the average age of the combined farmers is 51.96 years, with South-South having the highest value (53.12 years). Although the farmers are not too old, it can be said that the majority are not in their youthful productive years. It should also be realized that persistent conflicts may have compelled youth farmers to seek alternative livelihood strategies in some other areas (Shettima & Tar, 2008; Audu, 2013). The results showed that the majority of the households were headed by males. This is expected by prevailing traditional norms which often ascribe men or male children the right to household headship (Olawoye *et al.*, 2004; Nwoko, 2012). However, women are eligible to take over the household's headship when men migrate to the city or are dead.

Table 1: Selected demographic characteristics of the respondents

	North Central	North East	South-South	Combined Data
Drought	4.57	4.08	0.46	2.92
Household size	7.75	10.54	7.05	8.19
Age of head	51.85	50.44	53.12	51.96
Gender of head (male)	86.76	89.80	77.78	84.19
Sector (urban)	43.38	36.05	30.09	36.60
Paid farm labor	2.28	0.68	5.09	2.92
Farming	4.11	3.40	3.24	3.61
Non-farm	21.92	18.37	28.70	23.54
Other income sources	2.28	0.00	3.24	2.06
Subsistence farming	0.46	2.72	0.93	1.20

Income sources are of notable relevance in households' ability to cope with income shocks that promote food insecurity (Gambo Boukary *et al.*, 2016). The results in Table 1 further reveal that in the combined data, 23.54% relied on non-farm incomes, while the South-South Zone had the highest percentage with 28.70%.

Impacts of Conflicts on Rural Livelihoods and Coping Mechanisms

One of the major impacts of conflicts is the distortion of farmers' sources of livelihood, thereby resulting in a progressive decline in households' incomes and food availability (Maystadt & Ecker, 2014; Justino, 2011). Table 2 shows that South-South recorded the highest percentage (8.89) of farmers with decreased incomes over the past few years. Moreover, Table 2 further shows that the majority of the respondents indicated an inadequate supply of food, with 91.07% in the combined dataset. Similarly, food quality was reported to be affected by 58.59% of the respondents. Also, conflicts can affect market

Table 2: Impacts of Conflicts on Farming Households

	North Central	North East	South-South	Combined Data
Income decreased	26.03	27.21	38.89	31.10
Income Increased	30.14	21.77	18.52	23.71
Income The Same	43.84	51.02	42.59	45.19
Inadequate food availability	91.32	93.88	88.89	91.07
Low food availability	6.85	8.16	6.48	7.04
Low food quality	62.56	63.27	51.39	58.59
Market very safe	6.39	10.20	10.19	8.76
Market somewhat safe	6.85	14.29	14.81	11.68
Far market	0.46	0.00	2.78	1.20
Unsafe market road	5.02	6.12	13.89	8.59

safety, thereby preventing potential sellers and buyers from adequate patronage. The results in Table 2 showed that in the combined data, only 8.76% and 11.68% of the respondents indicated that markets were very safe and somewhat safe, respectively. It should also be noted that the North Central zone recorded the lowest percentages for markets being safe and somewhat safe with 6.39% and 6.65%, respectively. The Table also reveals that unsafe market roads were reported by 8.59% of the respondents in the combined data. However, non-safety of market roads was mostly reported by respondents from South-South with 13.89%.

Adopted Coping Methods against Food Problems

In the event of income shocks in the form of conflicts, the effectiveness of households' coping strategies ultimately defines the magnitude of the impacts to be felt (Skoufias, 2003). Table 3 shows the adopted coping methods against food problems by conflict affected households. It reveals that when food is not available, 36.60% of all the respondents were producing their own food, while 20.27% would exchange or buy food. However, across the regions, 38.36% of the respondents from North Central would rely on self-produced food when food is not available, as against 31.97% for the North East region. This is further highlighting the critical role of subsistence agriculture as a foremost source of livelihood among the respondents. Specifically, the core manifestation of conflicts is through distortion of agricultural production activities, thereby resulting in the loss of rural potential income (Malley *et al.*, 2008). Also, self-producing may not facilitate food security if the classes of commodities are not able to guarantee sufficient daily required calories and are unbalanced in nutrient composition (Adekoya, 2009).

International interventions in conflict-affected areas are always in the form of social assistance and food aid. Although some studies have suggested that aid promotes conflicts

Table 3: Adopted Coping Methods against Food Problems Motivated by Conflicts

	North Central	North East	South South	All
Coping When Food is Non-available				
Store food at home	4.57	3.40	1.85	3.26
Buy food/exchange	21.46	25.17	15.74	20.27
Food aid	12.79	9.52	15.74	13.06
None	2.74	0.00	1.85	1.72
Others methods	1.37	2.04	3.70	2.41
Self produce	38.36	31.97	37.96	36.60
Coping When Food in Unaffordable				
Food aid	8.22	10.20	14.81	11.17
Borrow money for friends	3.20	2.04	2.78	2.75
Borrow money for bank	28.31	21.09	20.37	23.54

(Nielsen *et al.*, 2011; Mousseau, 2021), others did not show any significant correlation (Nunn and Qian, 2014). Food aid was the main source of food supplies for 13.06% and 11.17% of the combined households when food was non-available and unaffordable, respectively. Moreover, while only 2.75% of all the respondents would borrow money from friends when food is not affordable, 23.54% would borrow from banks. This also reemphasizes the crucial roles of formal financial institutions in assisting shock exposed households to overcome their food security challenges (Demont, 2022; Sohel *et al.*, 2022; Dasgupta *et al.*, 2016)

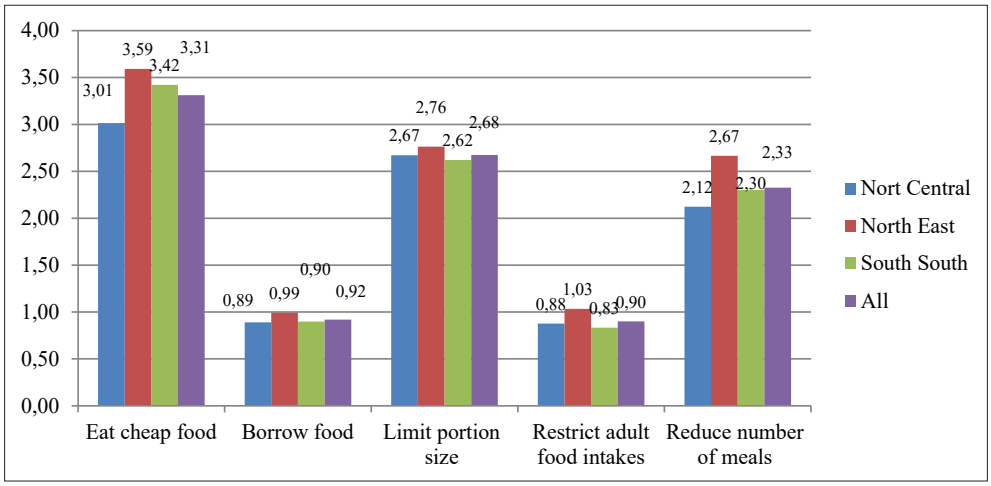

Figure 1: Average number of days households experienced food problems

The study also explored the other dimensions of coping with food insecurity based on adjustment of food intake and skipping of meals. This approach is in line with some previous studies that explored some indicators of food insecurity coping strategies (Kimani-Murage *et al.*, 2014; Gupta *et al.*, 2015; Masese & Muia, 2016), which obviously reveals the tenacity of food problems facing a household. Figure 1 further reveals the food insecurity coping methods that households adopted within the past seven days of the survey. It reveals that consumption of cheap food, limiting portion size, and reduction in the number of meals were the most adopted coping strategies. Specifically, Respondents from North East region utilized cheaper food in an average of 3.59 days. This can be compared with 3.01 days for the North Central region and 3.42 days for South-South. North East region has the highest average number of days when respondents limited food portion sizes and reduced the number of meals with 2.76 and 2.67 days respectively.

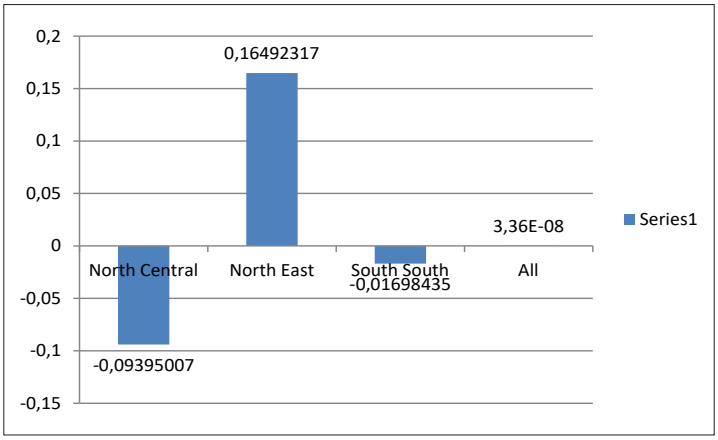

Figure 2: Average food insecurity indicators across the regions

Determinants of Food Insecurity Indicator

Figure 2 presents the distribution of the food insecurity indicator that was computed with Principal Component Analysis (PCA). It reveals that respondents from the North-East had the highest average food insecurity indicator. However, the South-South region has the next highest, while North Central has the lowest value. The computed indicator was used as the dependent variable in the results presented in Table 3. The Table shows the Tobit regression results of the determinants of the food insecurity indicator. It reveals that the models produced good fits for the data given the statistical significance of the Likelihood Ratio Chi Square statistics ($p<0.01$). The results further revealed that household size parameters are a positive sign and statistically significant ($p<0.05$) for the combined and South-South models. This is in line with some previous authors who found that an increase in household size promotes food insecurity (Rubhara *et al.*, 2020; Kabbani & Wehelie, 2005). Conventionally, in the absence of a conducive environment to effectively allocate excess or redundant family labor, an increase in household size is expected to increase food insecurity due to increased serving and demand for food by household members (Taren *et al.*, 1990).

Except in the North East model, the results further revealed a positive relationship between residence in urban areas and food insecurity indicators. This is in line with some previous studies which found urban households to be more food insecure than their rural counterparts (Sidhu *et al.,* 2008). However, due to increased food availability, it has been emphasized that rural households may have higher per capita energy consumption than urban households irrespective of their levels of income or expenditures (Hamad & Khashroum, 2016). The results also imply that conflict-affected households who may have migrated to urban areas may not easily fit into the largely formalized urban labor market due to a lack of some requisite skills and training. These people

may therefore rely on some low-paying casual and informal jobs that may automatically propel them into food insecurity.

The parameters of income realized from paid farm labor and farming showed statistical significance ($p<0.05$) with a negative sign in the Northeast model. Also, Furthermore, except in the North East model, the respondents who obtained income from other sources had significantly higher food insecurity indicators ($p<0.05$). This signifies the inability of other income sources to ensure a reduction in food insecurity among conflict-affected households. These results imply that households who were able to generate income from farming and paid farm labor had lower food insecurity indicators. This is expected because low farm productivity is a precursor of conflicts due to perpetual or temporary distortion of farming and other households' economic activities (George *et al.*, 2020; Lin *et al.*, 2022).

Although conflicts are expected to promote a rapid reduction in households' incomes, some households may witness some increases in income due to their main sources of livelihood. The results showed that households that reported an increase in income in the South-South model had a significantly lower indicator of food insecurity ($p<0.01$), as against those in the Northeast model, where a significantly positive parameter was estimated ($p<0.05$). However, except in the North Central model, the households who indicated that their incomes remained unchanged had significantly lower indicators of food insecurity ($p<0.05$). Food insecurity is going to be automatically promoted by income reduction (George *et al.*, 2020), while the ability to maintain or increase income would lead to a reduction in food insecurity. Depending on the geographical spread of conflicts and their frequencies, the spectrum of economic activities that will be affected can be very enormous. This can bear a perpetual cycle of poverty with significant impacts on food security.

In the Northeast model, the respondents who indicated low food quality had significantly higher food insecurity indicators ($p<0.05$). This is expected because the inability to plant crops or rear a good number of livestock will affect the overall quality of available food. Similarly, conflicts can affect other agricultural activities like harvesting and processing, which will ultimately impact food quality (Nasir *et al.*, 2022). In some other instance, circumstances such as droughts, land degradation, and land fragmentation, which can lead to conflicts among farming households are bound to reduce food quality (van Weezel; 2019; Hendrix & Brinkman, 2013).

Among the adopted coping strategies, food aid parameters in the Combined Data model, North East model, and South-South model are statistically significant ($p<0.05$). Aid in the form of food and other basic domestic needs constitutes the frontline supplies from government and international organizations to conflict-affected households. The findings are expected because when conflict results in temporary or permanent displacement of people, the role of aid cannot be overemphasized. This finding is also in agreement with those of some previous studies (Tusiime *et al.*, 2013; Lin *et al.*, 2022; Brinkman and Hendrix, 2011).

Table 4: Tobit Regression Results of the Determinants of Food Insecurity Indicator

	Combined Data		North Central		North East		South-South	
Food index	Coef.	z stat	Coef.	z stat	Coef.	z stat	Coef.	z stat
Drought	0.1627	0.42	0.6822	1.54	-0.4400	-0.54	-1.3719	-1.34
Household size	0.0388	2.31	0.0383	1.13	0.0215	1.06	0.0954	2.39
Age of head	-0.0024	-0.56	-0.0010	-0.13	-0.0020	-0.24	-0.0021	-0.32
Gender of head	0.1133	0.65	0.4401	1.37	0.3021	0.90	-0.1084	-0.44
Sector (Urban)	0.3754	2.74	0.2379	1.12	0.5507	2.61	0.5061	2.00
North East	-0.1500	-0.91						
South-South	-0.0162	-0.11						
Paid non-farm labor								
Paid farm labor	0.3733	1.16	0.8048	1.40	-3.7518	-3.31	-0.0054	-0.01
Farming	0.1505	0.44	0.5773	1.37	-1.3079	-2.00	-1.7012	-1.71
Non-farm	-0.1230	-0.77	-0.2166	-0.78	-0.0985	-0.36	-0.2501	-0.97
Other income sources	1.8124	3.85	2.0374	3.51			1.7021	2.11
Subsistence farming	-0.0912	-0.18	-1.8311	-1.89	0.0287	0.05	-0.1544	-0.16
Income decreased reference								
Income Increased	-0.1401	-0.73	0.3804	1.34	0.6357	1.96	-0.9671	-2.72
Income The Same	-0.3065	-2.18	-0.0661	-0.27	-0.4681	-2.24	-0.5816	-2.38
Inadequate food availability	-0.0835	-0.38	-0.6383	-1.75	0.1113	0.22	-0.1657	-0.42
Market very safe	0.0734	0.34	0.1300	0.30	0.1445	0.46	-0.2722	-0.80
Market somewhat safe	0.1792	0.99	0.1031	0.25	0.3449	1.26	0.3629	1.30
Major food challenges								
Low food availability	-0.2280	-0.87	-0.2443	-0.60	-0.0805	-0.19	0.1784	0.38
Low food quality	0.2796	1.52	0.0667	0.24	0.8031	2.42	0.5979	1.89
Far market	-0.2993	-0.56	0.0000				-0.5006	-0.83
Unsafe market road	-0.2805	-1.03	-0.9885	-1.66	0.0998	0.20	-0.0344	-0.08
Coping: food is unavailable								
Store food at home	-0.6910	-1.55	-0.5774	-0.77	-0.6128	-1.00	-1.0876	-1.30
Buy food/exchange	-0.0411	-0.21	-0.5363	-1.45	-0.3040	-1.14	0.3344	0.90
Food aid	-0.1869	-0.81	0.1451	0.38	-1.2847	-3.23	-0.0145	-0.04
None	-0.1245	-0.28	0.5560	0.81			-0.8824	-1.06
Others methods	-0.0677	-0.15	0.0300	0.04	-0.0230	-0.03	-0.1940	-0.27
Self produce	0.2845	1.75	0.2011	0.66	-0.1979	-0.82	0.4545	1.74
Coping: food is unaffordable								
Food aid	-0.4357	-2.31	-0.4331	-1.17	-0.2142	-0.66	-0.7923	-2.62
Borrow money for friends	-0.9267	-2.47	-1.1122	-1.92	0.9757	1.20	-0.6823	-0.80
Borrow money for bank	-0.2892	-1.66	-0.6200	-2.07	0.1356	0.47	-0.4417	-1.44
Constant	1.2099	3.04	1.4659	2.15	0.5625	0.85	0.9821	1.38
Sig	-0.9493	-23.07	-0.8587	-13.49	0.6983	12.17	-0.9089	-14.21
Number of jobs	582		219		147		216	
LR chi2(1)	1386.1800		564.5900		48.7200		484.1200	
Prob > chi2	0.0000		0.0000		0.0000		0.0000	

Conclusion

Conflicts are essential precursors of several socioeconomic vulnerabilities and challenges of which food insecurity is notable. The underlying notion of the role of peace in socioeconomic development cannot be overemphasized. This study has presented the magnitude of food insecurity indicators among conflict-affected households in Nigeria with emphasis on the coping methods and households' demographic characteristics as correlates. The findings have highlighted the need to reemphasize the reduction of food insecurity among Nigerian conflict-affected households with a focus on the promotion of family planning and education on the benefits of low family size. In addition, conflict-affected households in urban areas need some marginal reforms to ensure their proper settlements and facilitate their integration into the landscape of urban economic activities. In addition, there is the need for cognizance promotion and development of non-farming skills to facilitate proper diversification of income sources into other productive livelihoods. The roles of food insecurity coping strategies like aid and access to credits have also been emphasized. This is therefore reiterating the need for proper targeting of conflict-affected households with food aid and other social assistances. In addition, access to some form of loans to address immediate income shocks due to conflicts will facilitate reduction in food insecurity.

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