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Effect of Insurgency on Economic Activities of Rural Farming Households in Munya Local Government Area of Niger State, Nigeria

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Abstract: The study aims to assess the effects of insurgency on economic activities of the rural farming households in Munya Local Government Area of Niger state, Nigeria. A purposive sampling technique was adopted, and data were collected from 142 respondents using a semi-structured questionnaire and analyzed using descriptive statistics, and OLS regression model. The study showed that majority of the respondents (64.1%) were married, and their predominant age mean of 42 years. In terms of educational attainment, (86.6%) of the respondents had formal education. The results shows that kidnapping residents (82.4%), collecting taxes from residents (81.0%) and setting fire to livestock (73.2%) were the major types of insurgency activities in the study area. While male farmers, female farmers and youths are the most vulnerable groups to insurgencies activities in the study area. However, arable farming (97.2%) and livestock farming (69.7%) were the major economic activities participated by rural farming household before insurgency. The OLS regression model result shows that farming experience, frequency of insurgency, migration of farming households, destruction of farmlands, restriction on marketplaces and killing/ kidnapping of farming households were the significant effects of insurgency on economic activities of the farming households in the study area. The result concludes that there are low economic activities of the faming households after the incidence of insurgency activities in the study area. Recommendations made based on the findings of this study include that government at all levels should put in place functional security system like community policing to supplement the operations of other security agencies.
Keywords: Insurgency, Economic activity, Farming households, Bandit and Production

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1. Introduction

Nigeria is struggling with a continuous rising occurrence of insecurity, repeated pattern of attacks on individuals and agitations from ethic cleavages. The indicators of the prevailing insecurity cases in Nigeria include armed robbery, kidnapping of innocent citizens, human trafficking, religious motivated killings, inter-tribal or communal wars, terrorism, banditry, insurgency and nefarious activities of gangster/cultist (Daniel, 2022). Insurgency has been a great source of disturbance in certain countries around the world and Nigeria is not excluded. The northwestern and north-central parts of Nigeria have been ravaged by the scourge of insurgency.

Insurgency is a rebellious act that is not up to the proportion of an organized revolution. It is one of the characteristics of irregular warfare (Irregular warfare is a violent trouble among state and non-state individuals for legitimacy and influence over a population. According to Merriam Webster dictionary, Insurgency normally lacks the organization of revolution, even though it has the same aims. Revolution often begins within a country's armed forces, on the contrary, insurgencies often arise in remote areas, where they gain strength slowly by winning the confidence of rural populations (Daniel, 2022). An insurgency may be based on ethnic or religious identity, or its root may be basically political or economic. Since insurgencies are rarely strong enough to face a national army head-on, insurgents (also known as guerrillas) tend to use such tactics as kidnapping, hostage taking, hijacking and bombing. Three critical elements that build and sustain insurgent movements are vulnerable population, leadership direction and lack of government control.

Farming system is an integrated set of activities that farmers execute in their farms under their resources and circumstances to maximize the productivity and net farm income on a sustainable basis. Farming system is an approach for developing farm- household systems, built on the principles of productivity, profitability, stability and sustainability. The farming system approach emphasizes understanding of farm household, community inter linkages, reviews constraints and assesses potentials. However, the increased rise of banditry attacks on farming communities by the herdsmen has become a vital issue of economic concern. First occurrence of insurgency attempt in Nigeria may be credited to the movement to liberate the Niger Delta people led by Major Isaac Jasper Adaka Boro (Allswell, 2014).

Niger state is one of the north-central parts of Nigeria affected by the menace of insurgent activities. The evil of insurgency has threatened the peace of law-abiding citizens in rural communities in Niger state, Nigeria. The people

of Niger State are the worst hit, and the area is under-reported by the media in Nigeria. The people have not received enough support from the government in terms of protection and humanitarian intervention. Insurgent activities are being noticed from 2015 to 2022 and the challenges have made rural dwellers to leave their ancestral home to search for places of abode for the main time (Kamar *et al*., 2022).

2. Methodology

This study was conducted in Munya Local Government Area of Niger State, Nigeria. Niger State was created out of the former Northwestern State and became a fully autonomous State on 3rd February 1976, with headquarters at Minna. Niger State is in the North-central part of Nigeria and lies in between longitude 3^0 30^1 and 7^0 20^1 East of the Greenwich Meridian and latitude 8^0 20^1 and 11^0 30^1 North of the equator. The State presently comprises 25 Local Government Areas (LGAs) and it is made up of three major ethnic groups which are the Nupe, Gbagyi and Hausa. However, the total inhabitants in the State are over 3,954,772 people during the 2006 population census. But, going by the annual population growth rate of 2.5% in Nigeria, the population of Niger State was projected to be 5,556,200 in the year 2016 (National Bureau of Statistics, 2018). Purposive sampling technique was used for this study. The first stage involved selection of Sarkin Pawa of Munya local government area of Niger state, where there are prominent activities of insurgency. In the second stage, eight (8) villages were randomly selected from the selected district (Sarkin Pawa). The third stage involved the use of Yamanne formula to select sample size from the sample frame of each village as obtained from Niger State Agricultural and Mechanization Development Authority (NAMDA). Thus, a total of 142 farming households was randomly selected as respondents for this study.

Data were collected using semi-structured questionnaire and analysis was conducted using descriptive statistics (mean, frequency distribution, and percentage) and inferential statistics (OLS regression model) to the analyse the effects of banditry activities on farmers outputs in the study area was specified as follows:

2.1. Ordinary Least Square Regression

OLS Regression model was used to determine the effects of insurgency on the economic activities of the farming households in the study area. The model is expressed in implicit form as shown in the equation below:

$$Y = f(X_1, X_2, X_3, X_4, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}U) \quad (1)$$

Yi = Total income from economic activities of the farmers (in Naira)

$\beta_1 - \beta_{10}$ = Parameters to be estimated

$X_1 - X_{15}$= Independent variables. Where;

X_1= Age of the farmer (years).

X_2= Sex (male=1, female=o).

X_3= Level of education (number of years spent in school);

X_4= Farming experience (years).

X_5= Frequency of insurgency.

X_6= Farm output (kg);

X_7= Access to extension (yes=1, no=0);

X_8= Cooperative membership (yes=1, no=0);

X_9= Migration of the farming households (yes=1, no=0);

X_{10}= Cost of farm produce (Naira);

X_{11}= Farmers participation on economic activities (high=1, low=0);

X_{12}= Destruction of the farmlands due to insurgency (yes=1, no=0);

X_{13}= Credit (access to credit=1, otherwise=0);

X_{14}= Restrictions on marketplaces (yes=1, no=0)

X_{15}= Killing and kidnaping of farming households (yes=1, no=0)

a = Constant,

e = Error term

3. Results and Discussion

3.1. Socio-economic Characteristics of the Respondents

3.1.1. Age of the respondents: The result in Table 1 shows that the majority 50.7% of the respondents were between the age brackets of 31-50 years. The mean age of the farmers is 42 years which implies that the availability of able-bodied labour force by rural households for primary production could cushion the effects of insurgency in the study area. This result is in line with the result of Bello *et al*, (2020) who reveals that the majority (72.4%) of the farmers are between the ages of 30-50 years which showed that the respondents were still in their active productive age with a mean age of 40 years.

3.1.2. Marital status of the respondents: According to Table 1, the majority of respondents (64.1%) were married, with 21.1% being widowed. Married rural households are expected to have access to, control over, and ownership over agricultural productive resources, including family labor for farming operations. This is because they bear the responsibility of procreating the next generation, which can significantly increase farm income and improve the lives of rural farmers in the study area. This result is consistent with the findings of Amurtiya (2015), who found that married respondents were more likely than single respondents to be participating in income-generating activities.

Table 1: Socio-economic characteristics of respondents

Variable	*Frequency*	*Percentage*	*Mean*
Age			
21-30 years	30	21.1	42 years
31-40 years	47	33.1	
41-50 years	25	17.6	
Above 50 years	40	28.2	
Marital status			
Widow	30	21.1	
Divorced	11	7.7	
Single	10	7.0	
Married	91	64.1	
Household size			
1-5 persons	76	53.5	6 members
6-10	53	37.3	
Above 10	13	9.2	
Level of education			
Non-formal education	19	13.4	7 years
Primary education	81	57.0	
Secondary education	27	19.0	
Tertiary education	15	10.6	

Source: Field survey, 2024.

3.1.3. Household size of the respondents: Similarly, the results in Table 1 shows that farmers with household size ranging within 1-5 persons in the study area accounted for 53.5% while the mean household size of the sampled farmers was six (6) persons. Implying a large household size among the respondents as a result of majority of the farmers are married and required family labour to carry out the farming activities. This finding corroborates with the result of Alonge *et al,* (2021) who reported that majority (51.9%) of the respondents

have a household size mean of 8 people which could be used as family labour in farming activities.

3.1.4. Formal education of the respondents: Table 1 further reveals that majority (86.6%) of the respondents had formal type of education involving attending primary, secondary and tertiary institutions with an average number of years spent in school to be 7 years while only very few 22.4% had non-formal type of education. Given that there is a high level of literacy, it is expected that farmers should be able to adopt coping strategies to insurgency activities in the study area. This finding agrees with Chukwurah and Eme's (2015) who reported that the majority of the respondents (68.5%) had a formal type of education with few of the respondents in adult education and religious entity.

3.2. Nature of insurgent activities

The type of insurgent activity in the research region was described. The study found that the main types of insurgent activities in the study area were kidnapping residents (82.4%), collecting taxes from residents (81.0%), setting fire to livestock (73.2%), collecting ransom to free kidnapped farmers (71.1%), seizing farmlands and properties (68.3%), and evicting farmers from their homes and farms (60.6%).

Kidnapping is often driven by economic motives, as insurgent groups seek to secure ransom payments. Insurgent groups exploit the vulnerability of residents, particularly targeting those perceived as having the means to pay significant ransoms. This may reduce the level of household participation in farming.

Table 2: Nature of insurgent activities

Insurgency activities	*Frequency*	*Percentage*
Kidnapping of resident	117	82.4
Collection of tax from residence	115	81.0
Arson	106	74.6
Killing of livestock	104	73.2
Collection of ransom to free resident	101	71.1
Seizing of farmlands and properties	97	68.3
Displacing farmers from their homes and farms	86	60.6

Source: Field survey, 2024.

The collection of taxes by insurgent groups is a strategy to fund their operations and establish economic control. By imposing levies on residents, the insurgents extract resources to sustain their activities. The high percentage

indicates the extent to which these groups exploit the economic resources of the local population for their own gains. These activities have resulted in many household members relocating to a safe nearby village. This follows the study of Onwuaroh *et al.* (2017) who reported that collection of annual taxes from villagers is one of the strategies adopted by insurgent in Zafara State to fund their activities.

Arson serves as a means of intimidation and coercion. Insurgent groups may burn structures, including homes and businesses, to create fear and assert control. This tactic disrupts normal life, instills insecurity, and forces compliance with the insurgents' objectives. Furthermore, the killing of livestock is likely both an economic and intimidation strategy. Livestock represents a valuable asset for many rural communities, and its destruction not only causes economic losses but also undermines the agricultural livelihoods of the residents. Additionally, killing livestock can be a tactic to instill fear and assert dominance.

Similar to the kidnapping of residents, the collection of ransom is a direct source of revenue for insurgent groups. Farmers, often seen as economically viable targets, become victims of kidnapping, and their release is contingent upon the payment of ransom. This tactic perpetuates a cycle of economic exploitation. In addition, the seizure of farmlands and properties aligns with the insurgents' aim to control territory and resources. By taking possession of agricultural land, insurgent groups exert influence over local economies, potentially using these resources for their economic benefit or as a means of territorial control. Lastly, displacement serves both strategic and coercive purposes. By displacing farmers, insurgent groups disrupt agricultural activities, leading to economic losses and food insecurity. Simultaneously, forced migration contributes to the insurgents' control over territory and the local population. This is similar to the study of Ibekwe and Ewoh, (2017) who reported that insurgency significantly disrupts the key economic activities of the area affected.

3.2.1. Vulnerable group of insurgencies

The result in table 3 reveals various vulnerable groups to insurgencies in the rural communities assessed by farmers in the study area and farmers were asked to tick appropriately. The result show that, male farmers, female farmers and youths are the most vulnerable groups to insurgencies activities in the study area. Male farmers are identified as highly vulnerable, with a mean score of 3.38. The primary reason is the deprivation of access to their land. Given that

farming is their main source of livelihood, this vulnerability underscores the economic impact of insurgencies, disrupting not only individual lives but also the agricultural productivity of the community.

Children, with a mean score of 3.30, are vulnerable due to the disturbing trend of being kidnapped. Insurgents target children, causing not only physical harm but also instilling fear and trauma in families. The abduction of children disrupts the normalcy of childhood and compromises their safety and well-being. Similarly, female youth face significant vulnerability, likely due to multiple factors, including the risk of abduction, displacement, and economic exploitation. The insurgency activities negatively impact their safety, education, and overall life opportunities. More so, traders experience vulnerability likely due to economic disruptions caused by insurgent activities. With markets being targeted or disrupted, traders face financial losses and uncertainties, impacting their livelihoods and economic stability. The vulnerability of male youths may stem from being targeted for recruitment, violence, or displacement. Male youths often find themselves caught in the crossfire of conflict, impacting their safety, education and future prospects. Lastly, herders are vulnerable due to the rustling of their livestock. This agrees with the research of Olaniyan and Yahaya (2016) who reveal that the most vulnerable groups of rural banditry attack are the farmers and the youth's residence of the study area.

Table 3: Vulnerable groups of insurgencies assessed by the farmers

vulnerable groups	*Mean (X)*	*Remark*
Male farmers	3.38	Vulnerable
Female farmers	3.30	Vulnerable
Male youths	3.17	Vulnerable
Female youths	3.09	Vulnerable
Market men	3.08	Vulnerable
Market women	3.04	Vulnerable
Schools	2.60	Less vulnerable
Churches	2.49	Less vulnerable
Herders	2.13	Less vulnerable
Mosques	1.75	Less vulnerable
Others	1.66	Less vulnerable

Source: Field survey, 2024.

3.2.2. Types of economic activities of the farmers before and after insurgency

The result in Table 4, revealed that arable farming (97.2%) and livestock farming (69.7%) were the major economic activities participated by rural farming household before insurgency. Regarding off farm activities its was noted

that; Farm labor (87.3%), agro-Processing (78.2%) and Input supplier (60.6%) were the major off-farming activities of the respondents. The main non-farm activities in which rural households engaged were transportation (84.5%), carpentry (73.2%) and tailoring (68.3%). Based on the households' economic activities before to the conflict, this indicates that there was a notable level of livelihood diversification among rural households.

Comparing economic activities before and after the insurgency reveals a significant reduction in farming engagement and a shift towards non-farm activities. The decline in arable farming and poultry farming indicates the tangible impact of the insurgency on agricultural practices. Reduced participation in traditional off-farm activities, such as input supply and agro-processing, reflects disruptions in the agricultural value chain. However, an increase in non-farm activities like tailoring, blacksmithing and carpentry suggests adaptive responses to the challenges faced by rural households. The considerable decrease in economic activity following the insurgency suggests that rural residents' income, food security, and general well-being may all potentially suffer. The resilience and lasting recovery of the community will be contingent upon its capacity to adjust to these changes. This is similar to the study of Ojogho and Egware, (2015) who reported that insurgency significantly disrupts the key economic activities of the area affected.

Table 4: Types of economic activities of farmers before insurgency

Activities	*Before insurgency (%)*	*After insurgency (%)*
On-farm activities		
Arable farming	97.2	35.9
Livestock farming	69.7	4.2
poultry farming	67.6	28.2
Off farm activities		
Agro-Processing	78.2	18.3
Input supplier	60.6	34.5
Farm labor	87.3	26.8
Marketing	73.9	4.9
None-farm activities		
Carpentry	73.2	33.8
Shoe making	59.2	12.7
Teaching	66.9	44.2
Blacksmith	63.4	39.4
Tailoring	68.3	52.1
Transportation	84.5	31.0

Source: Field survey, 2024.

3.2.3. Effects of insurgency on economic activities

Ordinary Least Square regression model was used to determine the effects of insurgency on the economic activities of the farming households in the study area. Thus, the result from Table 5; shows that shows R^2 of (0.8665), implying that about (87%) of variations that occur in the economic activties of the farmers were explained by the independent variables included in the models. while the remaining (17%) were due to error in measurement of some variables. The Prob> F is significant at 1%. This implies the model is fit for the objectives. The coefficient of farming experience was postively significant at 1% level of probability. This implies that increase in farmers experience and access to production resurces leads increase in economic participation of the farming households. This agrees with Obah-Akpowoghaha, (2019) who showed that limited production resources and inexperience decrease farmers level of engagement in production activities in the study area.

The coefficient of incident frequency of insurgency occurrence was negative and significant at 5% level of probability. Implying that increase in incidents of insurgency among the rural farming households leads to decrease in participation of farmers in variious economic activities. This could be due to fear and limited participation in agricultural activities by the farming households. The coefficient of migration of farming households was negatively significant at 5% probability level; this implies that increase in the migration of the farming households leads to decrease in economic activities in the given rural areas, as many farmers would go into urban centers in search of other occupation for higher income. Mustapha and Hamid, (2019) showed that high migration status was due to incidents of insurgency activities in the study area. The coefficient of destruction of farmland due to insurgency and restriction on market places were found to be negative and significant at 1% level of probability respectively. Indicating that an increase in any of these variables leads to decrease in the economic activities of the farming households in the study area. This result is in consonance with Onyebu, (2016) who agreed that increase in destruction of farmlands and livestock lead to fear and lack of access to agricultural production resources which will affect farmer's productivity and output.

The negative coefficient for Killing and Kidnapping Farmers underscores the severe consequences of direct threats to the farming population. The killing or kidnapping of farmers not only results in the loss of skilled individuals crucial to agricultural activities but also instills fear within the farming community. This fear can lead to a decline in agricultural investments, as

Table 5: Ordinary least square regression on effects of insurgency on economic activities

Variables	*Coefficient*	*Standard error*	*Z-value*	*p>|T|*
Age of the farmer	13.6037	15.630	0.87	0.384
Farming experience	1070.53	43.225	24.77***	0.000
Member of households kidnapped	-59.8653	82.834	-0.72	0.471
Frequency of insurgency occurrence	-168.86	84.298	-2.00**	0.046
Migration of farming households	-15.944	7.7387	-2.06**	0.040
Destruction of farmland due to insurgency	-28.235	7.6194	-3.71***	0.000
Restriction on market places	-350.311	129.947	-2.70***	0.008
Cost of farm produce	8.5601	19.6866	0.43	0.664
Payment of farming tax to bandit	-40.930	70.509	-0.58	0.562
Killing and kidnaping of farming households	-1257.42	394.40	-3.19***	0.002
Constant	753.86	397.74	1.90*	0.059
Number of observations	142			
F(14, 230)	106.59			
Prob > F	0.0000***			
R-squared	0.8665			
Adj R-squared	0.8583			

Source: Field survey, 2024

farmers may be reluctant to cultivate their land or engage in activities that expose them to potential harm. Additionally, the loss of human capital disrupts intergenerational knowledge transfer, impacting the continuity and sustainability of farming practices within the community.

4. Conclusion and Recommendations

Based on a comparison of pre- and post-insurgency economic activity, it can be said that there was a decline in rural households' economic activity following the insurgency. The main factors that determined the farmers' production as a result of insurgency were the frequency of insurgencies, the destruction of farmland, restrictions on market locations, the murder and kidnapping of farmers. A primary obstacle encountered by rural households in the research area was the diversion of resources intended for infrastructure provision to security-related matters. It was therefore recommended that policy makers, programme designer, NGOs, extension agencies and other relevant stakeholder should come up with policy formulation that will help to educate and develop skills of the rural household. This could be achieved through training and capacity building that will expose them to knowledge to overcome effects of insurgency on their farming activities.

References

Alonge S and Osimen GU. 2021. Boko Haram insurgency/terrorist and its impact on Nigeria's economy. *International Journal of Scientific and Research Publications*, 11(12), 495-502.

Amurtiya M. 2015. Effect of Livelihood Income Activities on Food Security Status of Rural Farming Households in Yola South Local Government Area (Doctoral dissertation, M. Sc thesis in Agricultural Economics).

Bello MM, Sani H, Bukar A and Rabiu MM. 2017. The economic effect of insurgency on smoked fish sellers in Maiduguri metropolis of Borno State Nigeria. *Journal of Agricultural Extension,* 21(3), 37-45.

Chukwurah DC, Eme O and Ogbeje EN. 2015. Implication of Boko Haram terrorism on northern Nigeria. *Mediterranean Journal of Social Sciences*, 6(3), 371.

Hamza K, Akote AY and Abubakar BB. Resilience Against Banditry and Insurgency in Niger State, Nigeria (2015 TO 2022). *Journal of Terrorism Studies*, 4(2), 2.

Ibekwe C. and Ewoh AI. 2012. Resource control and the rise of militia in the Nigerian Delta region. *African Social Science Review*, 5(1), 1.

Igbini MD. 2022. Banditory and Security Threats: An Analysis of Insecurity in Nigeria. *Journal of Public Administration, Finance and Law*, 11(23), 53-62.

Mustapha M and Hamid AFA. 2019. Governance as the bane of Boko Haram insurgency in Nigeria. *International Journal of Recent Technology and Engineering (IJRTE),* 8(2S9).

Muzan AO. 2014. Insurgency in Nigeria: Addressing the causes as part of the solution. *African Human Rights Law Journal*, 14(1), 217-243.

Obah-Akpowoghaha NG. 2013. Theoretical understanding of conflicts and violence in Nigeria: The Niger Delta militant and Northern Islamic sect Boko Haram in perspective. *Public Policy and Administration Research*, 3(10), 69-78.

Ojogho O and Egware RA. 2015. Impact of insurgency on the agricultural development in Nigeria. *The Journal of Agricultural Sciences,* 1(11), 35-41.

Olaniyan A & Yahaya A. 2016. Cows, bandits, and violent conflicts: Understanding cattle rustling in Northern Nigeria. Africa Spectrum, 51(3), 93-105.

Onwuaroh AS, Yusuf RO, Yusuf O and Akpu B. 2017. Impact of insurgency on income of farmers in Northeastern Nigeria. *Dutse Journal of Pure and Applied Sciences* (DUJOPAS), 3(2), 101-113.

Onyebu CM. 2016. Assessment of income generating activities among rural women in Enugu State, Nigeria. *European Journal of Business, Economics and Accountancy*, 4(8), 74-81.