



Effect of Insecurity on Arable Crop Cultivation in Oriire Local Government Area of Oyo State, Nigeria

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Abstract

Arable crops are consumed largely on daily basis throughout the whole world and its sustained cultivation must be ensured. Therefore, this paper has assessed the effects of insecurity on arable crop cultivation in Oriire Local Government Area of Oyo State, Nigeria. Multistage sampling procedure was used in selecting 156 respondents. Interview schedule was used to elicit the needed information. The study revealed the mean age of the arable crop farmers was 43 years. The farmers in the area mostly engaged in small scale farming. The mean farming experience was 22.5 years. All (100%) the respondents affirmed that frequent cattle rustlers/herdsmen, frequent communal clashes (96.2%), banditry (93.6%), incessant kidnapping (52.6%) and continuous inter-boundary clashes (34.0%) were the causes of insecurity in the area. Wastage of crop on the farm; persistent threat to farming families; dislocation of timing for farming operations were all ranked first as the effects of insecurity on arable crop cultivation in the study area. There was significant relationship between educational level ($\chi^2 = 44.258$, $pv = 0.002$); household size ($r = 0.814$, $pv = 0.000$); years of farming experience ($r = 0.053$, $pv = 0.003$) and effects of insecurity on arable crop cultivation were all significant at 0.5 level. It was concluded that the respondents were mature enough to take decisions on what affect them and they possessed various levels of education. It was recommended that local vigilante groups should be formed and networks of operations should be synergized between all other formally established and well trained security agencies to reduce the level of insecurity in the study area.

Key words: insecurity; arable crop; effect

Introduction

Arable crop has gained prominence on the nutritional table of mankind. Arable crops such as vegetables, cassava, maize, rice, cowpeas, wheat, sorghum, millet, soybean, just to mention but a few, examples are crops that have short life cycle. They are consumed largely on daily basis throughout the whole world. Arable crops have become so important that cannot be ignored when it comes to sustained household food security and as source of revenue to the farmers throughout the world. Arable crops prominence as mainstay staple food that people all over the world eat to maintain their survival on daily basis must be produced sustainably. Hence, for the above reasons, its cultivation must be given the needed attention. Despite the nobility of arable crops, its cultivation is being disrupted and jeopardized by pervading insecurity which was rampant especially in the rural areas where arable crops cultivation is prevalent. These insecurity occurrences caused the farmers to abandon their farms and farming activities which led to reduced production.

Insecurity was described by Nwoke and Akabike (2022) as social ills which endangers the existence of man, create fear within the environment and inhibits the free movement. However, Ndubuisi-Okolo and Anigbuogu (2019) viewed insecurity as precarious situations, predicament, restlessness, trepidation, uncertainty, anxiety and unsettled mind. Insecurity exists in the forms of incessant murder, unrestricted conflicts, communal clashes, insurgencies, farmer-herder's conflicts, kidnappings, abductions, inter-ethnic/tribal clashes, boundary clashes/conflicts, armed robbery, and banditry. The insecurity situations take different forms and dimensions (Nwokafor, Cletus and Ejinwa, 2020; Abdullahi, 2019; Eneji, Babagario, and Agri, 2019). Simply put, insecurity is the feeling of lack of confidence when the feelings of uncertainties permeate. As a result of insecurity, farmers can no longer go to their farms to cultivate crops as usual. Feeling being insecure, farmers resulted to fleeing from one settlement to another, and this has led to tremendous reduction in their output/yields.



Relying on the aforementioned scenarios, serious business of arable crop production cannot take place. This is in line with Oduehie, *et. al.*, (2023) that rural households were into agricultural activities and insecurity situations had caused unpalatable consequences. Therefore, this study assessed the effects of insecurity on arable crops cultivation in the study area while the specific objectives were to: describe socio-economic characteristics; identify the type of land holding by respondents; determine sources/causes of insecurity the area; and determine the effects of insecurity on arable crop cultivation in the study area. The only hypothesis was stated in null form that there is no significant relationship between selected socioeconomic characteristics and effects of insecurity on arable crop cultivation in the study area.

Methodology

Population of this study comprised of all arable crop farmers in Oriire Local Government Area (LGA) of Oyo State, Nigeria. Multistage sampling procedure was used to select respondents for this study. Relying on Oyo State Agricultural Development Programme (OYSADEP) delineation, Oriire LGA is an agricultural block which comprised 8 cells. Therefore, stage one was the purposive selection of Oriire block because of high level of insecurity in the area. Stage two involved random selection of 50% of the cells which gave 4 cells. Stage three was the random selection of 10% of OYSADEP registered arable crop farmers in the selected cells. There were 1579 registered farmers in the four selected cell. Therefore, 156 respondents were used for this study.

Result and Discussions

Socio-economic Characteristics

Data in Table1 showed the socio-economic characteristics of the arable crop farmers in Oriire Local Government area of Oyo State. It was revealed that 39.1% of the respondents were between 41 – 50 years of age. The mean age was 43 years. This implies that the respondents were old enough to grapple with and discern the situations on their farms to take appropriate economic decisions. Also, 63.5% were male which implies that male dominated the cultivation of arable crops in the study area. Majority (89.7%) were married which indicates that family members would likely be available to work on the farms. About 71.8% had secondary school education

which could assist the respondents in innovation adoption process. The mean household size was 5. This further lends credence to the availability of family labour. It was discovered that 62.8% cultivated less than 2ha area of land, 32.7% cultivated 2-4ha and only 1.3% used to cultivate over 10ha of land. The mean area of land cultivated was 1.1ha. This implies that majority of the arable crop farmers were small scale farmers. Probably, the level of insecurity scared the large scale farmers from farming in the area. Furthermore, 46.1% of the respondents had 21-30 years of farming experience. Also, 25.0% had 10-20 years of farming experience while 10.3% had less than 10 years of experience. However, 8.23% had 31-40 years of experience while the mean years of farming experience was 22.5 years. This implies that arable crop farmers have various degrees of farming experience which is good for efficient crop production management.

Table 1: Distribution of respondents by socio-economic characteristics

Socio-economic characteristics	Frequency	Percentage	Mean
Age (in years):			
Less than 20	6	3.9	43
20 – 30	31	19.8	
31 – 40	51	32.7	
41 – 50	61	39.1	
Over 50	7	4.5	
Sex:			
Male	99	63.5	
Female	57	36.5	
Marital status:			
Single	9	5.8	
Married	140	89.7	
Widowed	5	3.2	
Divorced	2	1.3	
Educational level:			
No formal education	20	12.8	
Primary education	21	13.5	
Junior secondary school	52	33.3	
Senior secondary school	60	38.5	
Tertiary education	3	1.9	
Household size:			
1 – 3	49	31.4	5
4 – 6	73	46.8	
7 – 9	29	18.6	
10 and above	5	3.2	
Land cultivated (ha):			
Less than 2	98	62.8	1.1
2 – 4	50	32.1	



5 – 7	5	3.2	
8 – 10	1	0.6	
Over 10	2	1.3	
Farming experience (years):	16	10.3	
< 10			
10 – 20	39	25.0	22.5
21 – 30	72	46.1	
31 – 40	13	8.3	
41 – 50	9	5.8	
> 50	7	4.5	

Source: Field Survey, 2023

Type of Land Holding

Data in Table 2 has shown the type of land holding by the arable crop farmers in the study area. It was revealed that 44.8% of the arable crop farmers rented/leased their cropland, 40.4% made outright purchase of their cropland while 13.5% inherited their land and only 1.3% had free holding land. This implies that there were various systems of land tenure that were prevalent in the study area.

Table 2: Type of land holding by arable crop farmers

Type of land holding	Frequency	Percentage
Rent/lease	70	44.8
Inherited	21	13.5
Purchased	63	40.4
Free holding	2	1.3

Source: Field Survey, 2023

Sources/Causes of Insecurity

Data in Table 3 revealed that all (100%) the respondents affirmed that frequent cattle rustlers/herdsmen was the cause of insecurity to farming in their area. Also, 96.2% asserted that frequent communal clashes were the bane of insecurity in their area while 93.6% opined that banditry was often the causes of insecurity. However, 52.6% claimed that incessant kidnapping and 34.0% maintained that continuous inter-boundary clashes were the causes of insecurity in the area. This implies that farmers in the area encountered various forms of insecurity.

Table 3: Sources/causes of insecurity in the study area

Sources/causes *	Frequency	Percentage
Banditry	146	93.6
Incessant kidnappings	82	52.6
Cattle rustlers/herdsmen	156	100
Frequent communal clashes	150	96.2
Continuous inter-boundary clashes	53	34.0

*multiple responses

Source: Field Survey, 2023

Effects of Insecurity

Results in Table 4 conveyed the effects of insecurity on arable crops cultivation in Oriire local government of Oyo State, Nigeria. The data revealed that wastage of crop on the farm (WMS = 3.0); persistent threat to farming families (WMS = 3.0); dislocation of timing for farming operations (WMS = 3.0) were ranked first as the effects of insecurity on arable crop cultivation in the study area. Closely followed by other effects such as farm operations not accomplishable (WMS = 2.99); aggravated hunger in the community (WMS = 2.96); farm abandonment (WMS = 2.94); food scarcity in the community (WMS = 2.89); non-availability of farm labour (WMS = 2.84); reduced crop output (WMS = 2.75); prevalent malnutrition and exorbitant prices of available goods and services (WMS = 2.51) were sequentially ranked in the order of severity. However, non-availability of farm inputs (WMS = 2.14); and relocation to safer locations (WMS = 1.43) were ranked 12th and 13th, respectively. This implies that only the 12th and 13th effects of insecurity were not so serious at all. This was arrived at by the decision rule that the maximum weighted mean score (WMS) point attainable for each insecurity statement was 3, which signified severe level of insecurity on arable crop production in the area. The mid-score (1.5) is the minimum level of severity of the effects. Therefore, those effects that had scores above the mid-score were the most severe while those below the mid-score represented the variables that have low or no effects because of insecurity in the area. From the foregoing, only non-availability of farm inputs and relocation to safer locations were never severe effects as a result of insecurity on arable crop production in the study area.

Table 4: Effects of insecurity on arable crop production

Effects of insecurity	of	Severe	Mild	Never	WMS	Ranks
Wastage of crops on the farm		156	0	0	3.0	1 st
Persistent threat to farming families/communities		156	0	0	3.0	1 st
Dislocation of timing for farming operations		156	0	0	3.0	1 st
Farm operations not accomplishable		150	2	4	2.99	4 th
Aggravated		150	6	0	2.96	5 th



hunger in the community					
Farm abandonment	151	2	3	2.94	6 th
Food scarcity in the community	145	2	9	2.87	7 th
Non-availability of farm labour	141	5	10	2.84	8 th
Reduced crop output	121	31	4	2.75	9 th
Prevalent malnutrition	109	19	28	2.53	10 th
Exorbitant price of available goods and services	96	44	16	2.51	11 th
Non-availability of farm inputs	78	22	56	2.14	12 th
Relocation to safer locations	30	7	119	1.43	13 th

Source: Field Survey, 2023

Test of Hypothesis

Data in Table 5 were the results of Chi-square and Pearson Correlation analyses which showed the relationship between selected socioeconomic such as educational level ($\chi^2 = 44.258$, $p = 0.002$); household size ($r = 0.814$, $p = 0.000$); years of farming experience ($r = 0.053$, $p = 0.003$) and effects of insecurity on arable crop cultivation were all significant at 0.5 level. Education that was significant helps in aiding the farmers to seek, digest and comprehend information about what goes on within their environment. This is in line with Ninh (2021) that education helps people in acting correctly and to react intelligently while taking decision on both social and economic instances. Likewise, years of farming experience makes the farmers to gain expertise on farming activities.

Table 5: Results of Chi-square and Pearson Correlation analyses showing the relationship between selected socio-economic characteristics and effects of insecurity on arable crop production

Socio-economic characteristics	d f	χ^2	r-value	p-value	Decision
Sex	1	2.297		0.097	NS
Marital status	3	2.354		0.521	NS
Educational level	4	44.258		0.002	S
Age			0.183	0.158	NS
Household size			0.814	0.000	S
Years of farming experience			0.053	0.003	S

Source: Field Survey, 2023

Conclusions and recommendation

It was concluded that the respondents were mature enough to take decisions on what affect them and they possessed various levels of education. Different types of land holdings were prevalent in

the study area. Farmers in the area felt unsecured. It was therefore, recommended that local vigilante groups should be formed and networks of operations should be synergized between all other formally established and well trained security agencies. Also, all government security architecture should intensify unbridle efforts at maintaining peace and stability throughout the State.

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