



**PERCEPTION OF THE EFFECT OF HUMAN INSECURITY ON AGRICULTURAL ENTERPRISES AMONG RURAL DWELLERS IN SELECTED LOCAL GOVERNMENT AREAS OF OYO STATE, NIGERIA**

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**ABSTRACT**

The study focused on perception of the effect of human insecurity on agricultural enterprises of rural dwellers in selected Local Government Areas of Oyo State, Nigeria. Multistage sampling was used to select 195 rural dwellers from the study area. Data were analyzed using descriptive statistics while Chi-square and Pearson Product Moment Correlation were used as inferential tools. Results showed that, majority (84.10%) of the respondents were married with mean age of, household size and farming experience estimated at 48 years, 7 persons and 13 years, respectively. Major agricultural enterprises engaged in by the respondents were vegetables production (88.21%), arable crop production (69.74%) and marketing of agricultural products%. Also, respondents perceived destruction of crops by animals (79.49%), encroachment of other person's farmland without permission (68.72%) and clashes between rival cult (52.00%) as causes of human insecurity in the study area. Perception of the effect of human insecurity on agricultural enterprises showed that loss of human lives ranked 1<sup>st</sup> ( $\bar{x}$  = 4.78), human insecurity led to loss of house and properties ranked ( $\bar{x}$  = 4.52), human insecurity leads to reduced crop yield/productivity due to theft or burning of farm produce ranked ( $\bar{x}$  = 4.48). Among mitigating strategies adopted, provision of small-scale credit facilities was ranked 1<sup>st</sup> ( $\bar{x}$  = 4.21) and provision of health facilities for the stakeholders ranked 2<sup>nd</sup> ( $\bar{x}$  = 4.18) while counseling services for the stakeholders ranked 3<sup>rd</sup> ( $\bar{x}$  = 3.96). There is a significant relationship between perception of the effect of human insecurity on agricultural enterprises of the rural dwellers and agricultural enterprises practiced by the respondents. The study recommends that, government in collaboration with business owners and companies operating in these crisis prone areas should engage stakeholders (community leaders, youth leaders and other leaders of Community Based Organizations) in a town hall meeting and collectively come up with lasting solutions to human insecurity in the study area.

**Keywords:** Perception, Human insecurity, Rural dwellers, Agricultural enterprises.

**INTRODUCTION**

Nigeria has long been facing severe human insecurity due to nomadic herding, increased spate of ethnic militia, clamour for resource control by ethnic nationalities among many other issues which brought about continuous attacks on government and citizens. It is noteworthy that a secured country leads to economic well being of the populace thereby transforming to socio-economic growth of the rural dwellers. The safety of the rural dwellers has become a



national priority for the country considering that a vast majority of agricultural produce are from them (FMARD, 2016). But Nigeria often witness prevalence of human insecurity despite its favorable agro-ecological endowments. It has a total landmass of 92.4 million hectares, out of which only about 32 million hectares or 34.63 percent are under cultivation. Nigeria, therefore, lacks both the capacity and capability to cater for the food (Berazneva & Lee, 2013) and sustainable livelihood of the populace. As such, livelihood activities of the rural dwellers and the prevalence of threat through insurgence and human insecurity in Nigeria are among the worst globally (Adedoyin, 2010; Fadare *et al.*, 2019).

Nigeria is not at war in the real sense of the word but the carnage resulting from various forms of insecurity qualifies it to be regarded as conflict-ridden and at war. Conventionally, the threshold required to classify an armed conflict as a civil war is to record 1,000 battle deaths (Guseh and Oritsejafor, 2019). Nigeria has consistently recorded deaths in excess of more than 1,000 from various conflicts unleashed by various groups across the country for decades (Campbell, 2018; Campbell and Harwood, 2018). Apart from the Boko Haram sect, there are other sources of violent deaths, which include intracommunity conflicts, herders-farmers' conflicts, clashes between security agencies and socio-cultural and religious groups and other criminal activities, especially ransom kidnappings. In 2018 alone, there were about 10,665 fatalities from various types of violence in Nigeria with the highest source of violent deaths resulting from criminal activities, which recorded 3,425 deaths in 1,191 incidents (Amnesty International, 2018; Fadare *et al.*, 2019).

In addition to the deadly activities of the Boko Haram sect in the northeastern geopolitical zone of the country, another major threat to national security with serious implications for livelihood activities of the rural dwellers is the menace of Fulani herdsman. The Fulani herders are mainly nomadic as they traverse the entire country in search of pastures for their herds (source). The transhumance tradition of the Fulani herders has often pitted them against sedentary farmers as a result of the destruction of the farms of the latter and mass invasion of their households. In the past, precisely before 1999, these conflicts were well managed by the herders and rural dwellers that they never escalated to the level of recording fatalities (source). However, since 1999, when Nigeria returned to democratic rule, conflicts between the Fulani herders and rural dwellers gradually assumed a different tone, frequency, ubiquity, complexity and lethality with the traditional dispute mechanisms becoming inadequate to contain them (source).

The lethality of violence unleashed by the Fulani herders led the Institute for Economics and Peace to capture them in the global terrorism index and classify them as a terrorist group as well as name them as the fourth deadliest group in 2014 after having been responsible for the death of 1,229 people. This classification was instructive considering that in the previous year, i.e., 2013, the group was responsible for only 63 deaths (Burton, 2016).

Nomadic and Fulani herdsman often create bush paths for cattle movement and this most times result to crossing farmlands, grazing indiscriminately on the farm products, causing problems on major roads; invasion of farms and carting away matured farm products, seeds, seedlings and sometimes farm equipment (Burton, 2016). Also, indiscriminate felling of trees by timber contractor and in the process the farm produce will be destroyed by the felled trees or the truck that will carry the trees which invariably leads to low yield of farm products or total loss to crop farmers (source). Severity threats confronting rural livelihoods in Nigeria led to social disorder. With social disorder, man, his environment, assets, food-supply and community life are severely affected. It is based on these backgrounds that the following research questions were raised:



- i. What are the socio-economic characteristics of the rural dwellers in the study area?
- ii. What are the various agricultural enterprises of the rural dwellers in the study area?
- iii. What are the causes of human insecurity among rural dwellers in the study area?
- iv. What are the perception of the effect of human insecurity on agricultural enterprises of rural dwellers in the study area?
- v. What are the strategies for mitigating effect of human insecurity on agricultural enterprises of rural dwellers in the study area?

The broad objective of the study was to asses perception of human insecurity among rural dwellers in selected Local Government Area of Oyo State, Nigeria.

Specific objectives were to:

- i. describe the socio-economic characteristics of the rural dwellers;
- ii. assess the various agricultural enterprises practised by the rural dwellers;
- iii. ascertain the causes of human insecurity among rural dwellers;
- iv. determine the perception of the effect of human insecurity on agricultural enterprises of rural dweller;
- v. ascertain the strategies for mitigating effect of human insecurity on agricultural enterprises of rural dwellers in the study area.

Hypotheses of the study was:

HO<sub>1</sub>: There is no significant relationship between perceived effect of human insecurity on agricultural enterprises of the rural dwellers and rural dwellers' socioeconomic characteristics in the study area.

HO<sub>2</sub>: There is no significant relationship between perceived effect of human insecurity on agricultural enterprises of the rural dwellers and agricultural enterprises practiced by the respondents in the study area.

HO<sub>3</sub>: There is no significant relationship between perceived effect of human insecurity on agricultural enterprises of the rural dwellers and sources of human insecurity in the study area.

HO<sub>4</sub>: There is no significant difference in perceived effect of human insecurity on agricultural activities of rural dwellers across the study area.

## **MATERIALS AND METHODS**

### **The Study Area**

Oyo State is located in the Nigeria's south-west geo-political zone. It was one of the three states carved out of the old Western State of Nigeria in 1976 (NPC, 2006). Oyo state consist of 33 Local Government Areas, Oyo state covers an area of 28,454 sq kilometer, it is bounded in the South by Ogun State, to the North by Kwara State, to the West partly by Ogun State and partly by the Republic of Benin, while to the East by Osun State.

The land scape consists of hard rocks and dome shaped hills, which rise gently from about 500 meters in the southern part and reaching a height of about 1,219 meters above sea level in the Northern part. The Topography of the state is gentle rolling low land in the south, rising to a plateau of about 40 meters (source).

The State is well drained with river flowing from the upland in the north –south direction. Oyo state has an equatorial climate with dry and wet seasons and relatively high humidity. The dry and wet seasons last from November to March while the wet season starts from April and ends in October. Average daily temperature ranges between 25°C (77.0 °f) to 35°C (95.0°f), almost throughout the year. The vegetation pattern of Oyo state is that of a rainforest in the south and guinea savannah in the north. Thick forest in the south gives grassland interspersed with trees in the north. Agriculture is the main occupation of people of



Oyo State. The climate of Oyo State favours the cultivation of crops like maize, yam cassava, millet, rice, plantain, cocoa, palm tree and cashew (source). Oyo State has a number of farm settlements in Ipapo, Sepeteri, Eruwa, Ogbomoso, Iresaadu, Ijaye, Akufo and Lalupon.

Oyo state was selected as the study area due to recent problems, killing and clashes between rural people of Ibarapa areas and Fulanis residing there. I will like to know the correlation between the state of human insecurity in these area and the impact on the various agricultural activities so as to formulate policies to help government profound a mitigating or lasting solutions to it. The population of the study comprised farming rural households in the study area

### **Sampling Procedure**

Multi-stage sampling procedure was used to select 195 respondents across the study area. Based on four ADP zones (Ibadan/Ibarapa, Ogbomoso, Saki and Oyo) in Oyo State, 50% of the ADP zones was randomly selected (Ibadan/Ibarapa and Oyo). Also, out of 15 blocks making up of these selected zones (Ibadan/Ibarapa and Oyo), 50% of the blocks from these zones was randomly selected which produced 8 blocks. Finally, the last stage involved random selection of 10% of all the registered farmers from the selected blocks. This produced a total of 195 rural farming households.

## **RESULTS AND DISCUSSION**

### **Socio-economic Characteristics of the Respondents**

The socio-economic characteristics of the respondents were presented in Table 1. The result shows that, 6.15% of the respondents are aged 25 years and below, 21.03% of the respondents fall within the age range of 26 – 45 years while about 10.77% of the respondents were above 55 years of age with mean age of the respondents estimated at 48 years. This revealed that, majority (73.31%) of the respondents are still in their active age. This result is in conformity with that of Downie (2017) who reported that majority of farmers in Nigeria are still in their active stage and are expected to be productive with the available resources.

In term of marital status, majority (84.10%) of the respondents are married while 15.90% of the respondents are still single. This implies that being married made the respondents to be more mature and responsible for as well as able to make prudent productive decision on the farm. This is in line with Ekong (2003) who reported that majority of rural farmers in Southwestern Nigeria are married.

The distribution of the respondents based on their religion shows that 48.72% are Muslims while 41.03% and 10.95% of the respondents are Christians and traditional worshipers respectively. This implies that the respondents in Oyo state belongs to different religious groups. This could offer a great opportunity for information sharing among the faithfuls in the societies, where agricultural information could be strategically discussed.

Gender distribution of the respondents revealed that majority (68.21%) of the respondents are male while 31.79% of them are female. This showed that male farmers dominate agricultural production in the study area. This is in line with Ekong (2003) who reported that, rural food crop farming is been dominated by male counterpart in Southwestern Nigeria.

The distribution of the respondents based of educational level revealed that, 18.97% of the respondents had no formal education while 81.03% of them had either of primary education, secondary education and/or tertiary education. High level of education among farmers would make them more responsive to many agricultural programmes and policies, thereby making them to be productive with the available resources.



**Table 1:** Socio-economic characteristic of the respondents

<b>Variables</b>	<b>Frequency</b>	<b>%</b>	<b>Mean</b>
<b>Age</b>			
15 - 25	12	6.15	48
26 - 35	21	10.77	
36 – 45	20	10.26	
46 – 55	121	62.05	
Above 55	21	10.77	
<b>Marital status</b>			
Married	164	84.10	
Single	31	15.90	
<b>Religion</b>			
Christianity	80	41.03	
Islam	95	48.72	
Traditional	20	10.26	
<b>Sex</b>			
Male	133	68.21	
Female	62	31.79	
<b>Educational level</b>			
No formal	37	18.97	
Primary	98	50.26	
Secondary	45	23.08	
Tertiary	15	7.69	
<b>Household size</b>			
Less than 5	92	47.18	7
5 – 10	69	35.38	
Above 10	34	17.44	
<b>Farm size (acres)</b>			
Less than 5	12	6.15	18.4
5 – 10	34	17.44	
11 – 15	32	16.41	
15 – 20	96	49.23	
Above 20	21	10.77	
<b>Farming experience (years)</b>			
Less than 5	12	6.15	13
5 – 10	55	28.21	
11 – 15	34	17.44	
Above 15	94	48.21	

Source: Field Survey, 2021





**Table 1:** Socio-economic characteristic of the respondents **Cont'd.**

Variables	Frequency	%	Mean
<b>Income</b>			
Less than 50,000	16	8.21	237,790.65
50,000 – 100,000	69	35.38	
100,001 – 500,000	93	47.69	
Above 500,000	17	8.72	
<b>Contact with extension agent</b>			
Yes	148	75.90	
No	47	24.10	
<b>Number of time</b>			
Frequently	22	11.28	
Weekly	21	10.77	
Forth nightly	69	35.38	
Monthly	67	34.36	
Occasionally	16	8.21	
Total	195	100	

Source: Field Survey, 2021

### **Agricultural Activities Engaged in by the Respondents**

The distribution of respondents based on agricultural activities engaged in the study area is presented in Table 2. Majority (69.74%) of the respondents always participated in arable crop production as against 23.59% and 6.67% that occasionally and never participated in arable crop farming, respectively. Other agricultural enterprises always participated in by the respondents include cash crop production (25.13%), poultry farming (30.26%), marketing of agricultural products (52.31%) and vegetables production (88.21%). This implies that food crop farming is the major farming activities engaged by the respondents in the study area. This finding corroborates the work of Ekong (2003) that agriculture is the main employer of labour in rural areas whereby food crop production is the main agricultural enterprise engaged in by farmers in rural areas of Nigeria.

The ranking of agricultural enterprise engaged by the respondents based on the WMS revealed that, vegetable production ranked 1<sup>st</sup> with WMS of 2.83, arable crop production ranked 2<sup>nd</sup> with WMS of 2.63 while marketing of agricultural products and poultry production ranked 3<sup>rd</sup> and 4<sup>th</sup> with WMS of 2.45 and 2.13, respectively. Furthermore, piggery production has a reduced ranked of 13<sup>th</sup> with WMS of 1.23, processing of agricultural products ranked 14<sup>th</sup> with WMS of 1.06 while rabbit production and production of flowers ranked 15<sup>th</sup> and 16<sup>th</sup> with WMS of 1.05 and 1.03, respectively. The implication of this is that, food crop production is the major agricultural enterprises ventured into by the respondents in the study area. The result was buttressed by Adeokun (2011) that, majority of farmers in Southwestern Nigeria are subsistence farmers and are majorly into arable crop production.

### **Perceived Causes of Insecurity**

Table 3 showed the distribution of respondents based on their perceived causes of insecurity in Oyo State. The finding indicated that 79.49%, 68.72%, 52.00% and 30.26% of the respondents perceived that destruction of crops by animals, encroachment of other person's farmland without permission, clashes between rival cult groups and conflicting political factions always caused insecurity in the study area, respectively. Also, 52.31%, 51.28%, 42.05%, and 30.26% of the respondents claimed that, conflicting political faction, loss of

respect for culture, election activities and conflicts between pastoralist and farmers occasionally causes insecurity in the study area respectively while 94.87%, 82.05% and 30.26% of the respondents claimed that increasing population, violent resistance to exploitation by government/natural resources exploitation by companies and poor distribution of resources within a community or among communities never causes human insecurity in the study area. The result showed that insecurity in the study area is majorly caused by destruction of farmland by animals, encroachment of other people's land with permission, overgrazing/indiscriminate grazing and clashes between rival cult groups. This finding supported that of Fadare *et al.* (2019) who observed that, conflicts between rival group leads to loss of lives, insecurity of life and properties.

**Table 2:** Agricultural Activities engaged in by the respondents (n = 195)

Agricultural Enterprises	Always participate		Occasionally participate		Never participate		WMS	Rank
	Freq	%	Freq	%	Freq	%		
Arable Crop Production	136	69.74	46	23.59	13	6.67	2.63	2 <sup>nd</sup>
Cash Crop Production	49	25.13	99	50.77	47	24.10	2.01	6 <sup>th</sup>
Poultry Production	59	30.26	102	52.31	34	17.44	2.13	5 <sup>th</sup>
Fishery Production	12	6.15	23	11.79	160	82.05	1.24	12 <sup>th</sup>
Piggery Production	5	2.56	37	18.97	153	78.46	1.23	13 <sup>th</sup>
Rabbit Production	2	1.03	8	4.10	185	94.87	1.05	15 <sup>th</sup>
Cattle production	34	17.44	59	30.26	102	52.31	1.65	8 <sup>th</sup>
Sheep and goat production	23	11.79	12	6.15	160	82.05	1.30	10 <sup>th</sup>
Processing of Crop Products	82	42.05	33	16.92	80	41.03	2.00	7 <sup>th</sup>
Marketing of Agricultural Products	102	52.31	79	40.51	14	7.18	2.45	3 <sup>rd</sup>
Snailary	23	11.79	12	6.15	160	82.05	1.30	11 <sup>th</sup>
Production of vegetables	172	88.21	13	6.67	10	5.13	2.83	1 <sup>st</sup>
Production of fruits	6	3.08	14	7.18	175	89.74	1.02	17 <sup>th</sup>
Production of flowers	1	0.51	3	1.54	191	97.95	1.03	16 <sup>th</sup>
Processing of animal products	2	1.03	8	4.10	185	94.87	1.06	14 <sup>th</sup>
Honey Bee Production	15	7.69	35	17.95	145	74.36	1.33	9 <sup>th</sup>
Food gathering	92	47.18	65	33.33	38	19.49	2.28	4 <sup>th</sup>

Weighted Mean Score (WMS)

Source: Field Survey, 2021

The ranking of the perceived causes of insecurity in the study area revealed that, destruction of crops by animals ranked 1st with WMS of 2.67, indiscriminate encroachment of other crop farmland by fellow farmers ranked 2nd with WMS of 2.63, clashes between rival cult groups ranked 3rd with WMS of 2.55 while overgrazing/indiscriminate grazing of farm land and scarcity of land for agricultural production ranked 5th and 6th with WMS of 2.32 and 2.13 (Table 3), respectively.

Causes of insecurity are as shown in Table 3. Results reveal that destruction of crops by animals (2.67) ranked first among causes of insecurity. This was followed by encroachment



of other crop farmland by fellow farmers (2.63), encroachment without permission (2.55), clashes between rival cult groups (2.45), overgrazing/indiscriminate grazing of farm land (2.32), conflicting political factions (2.13), scarcity of land for agricultural production (2.03) among other causes. Destruction of crops by animals is undoubtedly one of the causes of herders-farmer conflicts and insecurity.

**Table 3:** Respondents based on Perceived Causes of Human Insecurity (n = 195)

Causes of Insecurity	Always		Occasionally		Never		WMS	Rank
	Freq	%	Freq	%	Freq	%		
Clashes between rival cult groups is a major cause of insecurity in the study area	102	52.31	79	40.51	14	7.18	2.45	4th
Conflicting political factions also cause insecurity in the study area	59	30.26	102	52.31	34	17.44	2.13	6th
Poor distribution of resources within a community or among communities generates violent agitations that lead to insecurity in the communities.	34	17.44	102	52.31	59	30.26	1.87	8th
Violent resistance to exploitation by government and natural resources exploitation by companies is a cause of insecurity in my community.	12	6.15	23	11.79	160	82.05	1.24	14th
Election activities are major cause of insecurity in my community.	33	16.92	82	42.05	80	41.03	1.76	9th
Increasing population	2	1.03	8	4.10	185	94.87	1.06	15th
Loss of respect for culture	34	17.44	59	30.26	102	52.31	1.65	12th
Encroachment without permission	134	68.72	34	17.44	27	13.85	2.55	3rd
Scarcity of land for agricultural production	80	41.03	40	20.51	75	38.46	2.03	7th
Disobedience of tenancy rules	5	2.56	65	33.33	125	64.10	1.38	11th
Climate change	23	11.79	12	6.15	160	82.05	1.30	13th
Overgrazing/indiscriminate grazing of farm land	72	36.92	113	57.95	10	5.13	2.32	5th
Destruction of crops by animals	155	79.49	25	12.82	5	2.56	2.67	1st
Encroachment of other crop farmland by fellow farmers	134	68.72	50	25.64	11	5.64	2.63	2nd
Conflicts between pastoralist and farmers is a major cause of insecurity	15	7.69	100	51.28	80	41.03	1.67	10th

WMS = weighted Mean Score

Source: Field Survey, 2021

### **Perceived Effect of Insecurity on Agricultural Enterprises**

The distribution of respondents based on the perceived effect of insecurity on agricultural enterprises in the study area was presented in Table 4. The result showed that loss of human lives ranked 1st with WMS of 4.78, human insecurity led to loss of house and properties ranked 2nd with WMS of 4.52, human insecurity leads to reduced crop yield/productivity due to theft or burning of farm produce ranked 3rd with WMS of 4.48. In addition, human insecurity leads to missing of planting season has a reduced ranked 17th with WMS of 3.12, loss of food sources ranked 18th with WMS of 2.85 while reduced access to





farm land ranked 19th and raping of victims ranked 20th with WMS of 2.68 and 2.65, respectively.

**Table 4:** Perceived Effect of Insecurity on Agricultural enterprises (n=195)

Perceived effect on Agricultural Enterprise of the respondents	SA	A	UN	SD	DA	WMS	Rank
Human insecurity leads to reduced crop yield/productivity	131(67.18)	45(23.08)	5(2.56)	12 (6.15)	2(1.03)	4.48	3rd
It leads to Burning of crops in field	35(17.95)	79(40.51)	45(23.08)	26(13.33)	10(5.13)	3.53	16th
Aftermath effect of human insecurity can lead to stealing of farm produce	66 (33.85)	24 (12.31)	76 (38.97)	16 (8.21)	13 (6.67)	3.58	15th
It can lead to inadequate food for family	72 (36.92)	68 (34.87)	29 (14.87)	8 (4.10)	18 (9.23)	3.86	10th
Insecurity will lead to reduced farm income	120 (61.54)	57 (29.23)	4 (2.05)	8 (4.10)	6 (3.08)	4.42	4th
Land redundancy had nothing to do with human insecurity	18 (9.23)	15 (7.69)	60 (30.77)	67 (34.36)	35(17.95)	2.56	21th
Human insecurity lead to missing of planting season in the study area	61 (31.28)	32 (16.41)	18 (9.74)	35 (17.95)	48(24.62)	3.12	17th
Human insecurity caused poor harvest in the study area	55 (28.21)	75 (38.46)	18 (9.23)	36 (18.46)	11 (5.64)	3.65	13th
Loss of capital investment is not related to human insecurity	22 (11.28)	35 (17.95)	19 (9.74)	65 (33.33)	54(27.69)	2.52	22nd
Migration/loss of farm labour was caused by farmer-herders conflict	97 (49.74)	63 (32.31)	13 (6.67)	13 (6.67)	9 (4.62)	4.16	6th

WMS = weighted Mean Score

Source: Field Survey, 2021

The result (Table 4) showed that, effect of insecurity on agricultural enterprises as perceived by the respondents leads to loss of lives, missing of planting season, stealing of farm produce, reduced farm income as well as loss of houses and properties.

**Table 4: Perceived Effect of Insecurity on Agricultural enterprises (n=195) Cont'd.**

Perceived effect on Agricultural Enterprise of the respondents	SA	A	UN	SD	DA	WMS	Rank
Scarcity of food items in the study area was not associated to the communal conflicts	66 (33.85)	59 (30.26)	20 (10.26)	28 (14.36)	22(11.28)	3.61	14th
Loss of human lives are associated with insecurity in the area	169 (86.67)	17 (8.72)	4 (2.05)	2 (1.03)	3 (1.54)	4.78	1st
Human insecurity will lead to loss of house and properties	138 (70.77)	27 (13.85)	25 (12.82)	4 (2.05)	1 (0.51)	4.52	2nd
Reduction in the quality of farm produce/animal products is not related to human insecurity	68 (34.87)	29 (14.87)	72 (36.92)	18 (9.23)	8 (4.10)	3.67	12th
Loss of stored produce/livestock products are being caused by farmer-herders	76 (38.97)	66 (33.85)	13 (6.67)	16 (8.21)	24 (12.31)	3.79	11th
Reduced access to farm resources were not caused by farmer-herders conflict	17 (8.72)	36 (18.46)	52 (26.67)	48 (24.62)	42(21.54)	2.68	19th
Human insecurity is not associated with reduction in quality of food crop/animal product	3 (1.54)	2 (1.03)	17 (8.72)	86 (44.10)	87(44.62)	1.71	23rd
Engagements in non-farm activities	100 (51.28)	29 (20.00)	42 (21.54)	9 (4.62)	5 (2.56)	4.13	8th
Loss of food sources were not caused by insecurity in the area	42 (21.54)	5 (2.56)	29 (20.00)	100 51.28)	9 (4.62)	2.85	18th
Kidnapping is more rampant due to human insecurity	112 (57.44)	59 (30.26)	14 (7.18)	5 (2.56)	5 (2.56)	4.37	5th
Banditry is a major form of human insecurity in the area	101 (51.79)	47 (24.10)	12 (6.15)	32 (16.41)	3 (1.54)	4.08	9th
Raping is also problem associated to human insecurity	63 (32.31)	13 (6.67)	9 (4.62)	13 (6.67)	97(49.74)	2.65	20th

WMS = weighted Mean Score

Source: Field Survey, 2021

Furthermore, Table 5 presented the perception index of the effect of human insecurity on agricultural enterprises of the respondents in the study area. Table 5 showed that, 51.80% of the respondents falls under high perception index which signifies that more than half of the respondents' agricultural enterprises were really affected by human insecurity in the study area while 31.79% and 16.41% of the respondents falls under average and low perception index in the study area respectively. Lack of peace and internal conflicts posed a serious threat to



agricultural activities and thereby have a lasting effect on agricultural enterprise through poor income from farm, high cost of labour as a result of its unavailability and low farm output.

**Table 5:** Perception Index (PI) on Effect of Insecurity on Agricultural enterprises of the respondents (n = 195)

Perception Index ( $\bar{x} = 3.58, \sigma = 1.09$ )	Frequency	%age
HPI	101	51.80
API	62	31.79
LPI	32	16.41
<b>Total</b>	<b>195</b>	<b>100.0</b>

$\bar{x}$  = Mean,  $\sigma$  = standard deviation, HPI = High Perception Index, API= Average Perception Index, LPI= Lower Perception Index

Source: Field Survey Data, 2021

### Strategies Adopted in Mitigating Effect of Insecurity on Agricultural Enterprise

Table 6 revealed the distribution of the respondents based on strategies adopted in mitigating the effect of insecurity on agricultural enterprises of the respondents in the study area. Majority (64.10%) of the respondents strongly agreed to the fact that, provision of small-scale credit facilities goes a long way in mitigating the effect of insecurity on the agricultural enterprises in the study area. Also, 47.18%, 45.64% and 42.05% of the respondents strongly agreed to the fact that, provision of adequate health facilities to all stakeholders, giving financial assistance to victims through some kind of soft loan, resettlement package for victims such as creating housing scheme for internally displaced victims and counseling services for the stakeholders will go a long way in mitigating the effect of insecurity on agricultural enterprises of the respondents in the study area.

Among these mitigation strategies adopted, provision of small-scale credit facilities was ranked 1st with WMS of 4.21 and provision of health facilities for the stakeholder's ranked 2nd with WMS of 4.18 while counseling services for the stakeholder's ranked 3rd with WMS of 3.96. Furthermore, Resettlement package for victims has a reduced rank of 9th with WMS of 2.65 while provision of free drugs ranked 10th with WMS of 2.49 and Trauma healing therapy provision ranked 11th with WMS of 1.79. This implies that more efforts were required to be dissipated to assuage the effects of insecurity on the agricultural enterprises of the respondents in the study area.

**Table 6:** Strategies adopted in mitigating effect of insecurity on agricultural enterprise

Strategies against Human insecurity	SA	A	UN	SD	DA	WMS	Rank
Resettlement package for victims	40 (20.51)	35 (17.95)	35 (17.95)	36 (18.46)	49 (25.13)	2.65	9 <sup>th</sup>
Giving financial assistance to victims	82 (42.05)	25 (12.82)	30 (15.38)	27 (13.85)	31 (15.90)	3.51	6 <sup>th</sup>
Creating job opportunity to the internally displaced	21 (10.77)	41 (21.03)	55 (28.21)	34 (17.44)	44 (22.56)	2.80	8 <sup>th</sup>
Provision of small scale credit facilities	125 (64.10)	35 (17.95)	5 (2.56)	10 (5.13)	20 (10.26)	4.21	1 <sup>st</sup>
Counseling services for the stakeholders	89 (45.64)	43 (22.05)	36 (18.46)	21 (10.77)	6 (3.08)	3.96	3 <sup>rd</sup>
Land use planning	11 (5.64)	29 (14.87)	101 (51.79)	33 (16.92)	21 (10.77)	2.88	7 <sup>th</sup>
Livelihood development programmes	82 (42.05)	41 (21.03)	29 (14.87)	16 (8.21)	27 (13.85)	3.69	5 <sup>th</sup>
Health facilities for the stakeholders	92 (47.18)	71 (36.41)	15 (7.69)	9 (4.62)	8 (4.10)	4.18	2 <sup>nd</sup>
Provision of free drugs	15 (7.69)	21 (10.77)	44 (22.56)	79 (40.51)	36 (18.46)	2.49	10 <sup>th</sup>
Trauma healing therapy provision	5 (2.56)	3 (1.54)	12 (6.15)	102 (52.31)	73 (37.44)	1.79	11 <sup>th</sup>
Compensation for land owners	66 (33.85)	75 (38.46)	14 (7.18)	36 (18.46)	4 (2.05)	3.84	4 <sup>th</sup>

WMS= weighted Mean Score

Source: Field Survey, 2021

### Hypotheses Testing

The hypotheses of the study were tested and results presented in Table 7. It is to be noted that all the hypotheses were stated in null form. HO<sub>1</sub>: There is no significant relationship between perceived effect of human insecurity on agricultural enterprises of the rural dwellers and rural dwellers' socio-economic characteristics in the study area.

The test of significant relationship between selected socioeconomic characteristics (age, household size, income from agricultural enterprise, farm size and years of farming experience) of the respondents and perceived effect of insecurity on agricultural enterprises was presented in Table 7. Pearson Correlation analysis revealed that age ( $r = 0.102$ ,  $p > 0.05$ ), household size ( $r = 0.094$ ,  $p > 0.05$ ), farm size ( $r = 0.073$ ,  $p > 0.05$ ) and years of farming experience ( $r = 0.113$ ,  $p > 0.05$ ) had no significant relationship with their perceived effect of human insecurity on agricultural enterprises while only income from agricultural enterprise ( $r = 0.498$ ,  $p < 0.05$ ) exert a significant influence. This implies that, the age of the household head, household size, farm size and years of farming experience have no significant influence on perceived effect of human insecurity on agricultural enterprises of the rural dwellers in the study area. This shows the perceived effect of insecurity on agricultural enterprises of the rural dwellers in the study area is irrespective of socioeconomic characteristics of the respondents. Therefore, the null hypothesis was accepted.

**Table 7:** Summary of Pearson Correlation analysis showing Relationship perceived effect of insecurity on agricultural enterprises of the rural dwellers and rural dwellers' socioeconomic characteristics in the study area (n = 195)

Socio-economic characteristics	r-value	p-value	Remark
Age	0.102	0.132	NS
Household Size	0.094	0.146	NS
Income	0.498	0.011	S
Farm Size	0.073	0.135	NS
Farm Experience	0.113	0.161	NS

S = significant; NS = not significant

Source: Field Survey, 2021

HO<sub>2</sub>: There is no significant relationship between perceived effect of insecurity on agricultural enterprises of the rural dwellers and agricultural enterprises practised by the respondents in the study area. The result of chi-square test in Table 8 showed the relationship between perceived effect of insecurity on agricultural enterprises of the rural dwellers and agricultural enterprises practiced by the respondents in the study area. The result showed that there exists a significant relationship between perceived effect of insecurity on agricultural enterprises of the rural dwellers and agricultural enterprises of the respondents (arable crop production ( $\chi^2 = 44.43$ ;  $p < 0.05$ ), cash crop production ( $\chi^2 = 42.50$ ;  $p < 0.05$ ), poultry production ( $\chi^2 = 17.50$ ;  $p < 0.05$ ), sheep/goat production ( $\chi^2 = 22.51$ ;  $p < 0.05$ ), vegetables production ( $\chi^2 = 26.89$ ;  $p < 0.05$ ), flower production ( $\chi^2 = 26.10$ ;  $p < 0.05$ ), honey bee production ( $\chi^2 = 42.05$ ;  $p < 0.05$ )). This implies that the perceived effect of human insecurity on agricultural enterprise of the respondents in the study area influences the kind of agricultural enterprise engaged in by the respondents in the study area. Crises prone communities often witness unemployment rises, financial and banking systems become in-operative as investors have no confidence anymore and move to more secure areas which at the long run limit prospect of agricultural enterprises.

**Table 8:** Summary of chi-square test establishing Relationship between selected Agricultural Enterprises of the Respondents and perceived effect of insecurity on agricultural enterprises of the rural dwellers (n=195)

Agricultural Enterprises	$\chi^2$ -value	Df	p-value	Remark
Arable Crop Production	44.43	21	0.005	S
Cash Crop Production	42.50	19	0.005	S
Poultry Production	17.50	12	0.005	S
Fishery Production	27.41	30	0.000	S
Piggery Production	21.67	15	0.001	S
Cattle production	36.12	19	0.005	S
Sheep and goat production	22.51	17	0.005	S
Processing of Crop Products	7.54	15	0.112	NS
Snailary	10.11	12	0.152	NS
Production of vegetables	26.89	19	0.005	S
Production of fruits	35.72	17	0.005	S
Production of flowers	26.10	13	0.005	S
Honey Bee Production	42.05	23	0.000	S

Significance level:  $p < 0.01$

Source: Field survey, 2021





HO<sub>4</sub>: There is no significant difference in perceived effect of insecurity on agricultural enterprises of rural dwellers across the study area. The result in Table 9 was achieved using Analysis of Variance (ANOVA) at 0.05 significant level where  $f = 0.36$  and probability is greater than 0.05. It revealed that, there was no significant difference in the perceived effect of insecurity on agricultural enterprises of rural dwellers across the study area. This implies that rural dwellers across locations were of similar perception about the effect of insecurity on agricultural enterprises. This could be due to experiencing the same source of human insecurity and observed the same coping strategies in mitigating the effect of these insecurity on their agricultural enterprises.

**Table 9:** Analysis of variance showing difference perceived effect of insecurity on agricultural enterprises of rural dwellers across the study area (n = 195)

Variable	SS	Df	MS	F	Prob> F	Decision
Between groups	2381.34	2	1729.09	0.36	0.4892	NS
Within groups	13472.11	193	2167.23			
Total	15853.45	195	4409.35			

NS = Not significant, S= Significant

Source: Field Survey, 2021

## CONCLUSION AND RECOMMENDATIONS

Perceived effect of insecurity on agricultural enterprises of the rural dwellers depend on income, arable crop production, cash crop production, poultry production, sheep/goat production, vegetables production, flower production and honey bee production. Rural dwellers across locations were of similar perception about the effect of insecurity on agricultural enterprises. Over half of the respondents' agricultural enterprises were really affected by insecurity in the study area while the various strategies adopted to mitigate the effect of insecurity on agricultural enterprises were provision of small scale credit facilities, provision of health facilities for the stakeholders, counseling services for all people involved, resettlement package for victims, provision of free drugs as well as trauma healing therapy provision. Based on the findings of the study, it was recommended that:

1. Community leaders should shun factional politics and take unbiased stand in using some traditional institutions and methods in uniting the people they lead.
2. Government should deploy security agents to communities where there are frequent kidnapping, farmer-herders' conflicts.
3. Government in collaboration with companies operating in crisis prone areas should engage stakeholders (community leaders, youth leaders and other leaders of Community Based Organizations) in a town hall meeting to collectively come up with lasting solutions to insecurity issues in the study area.

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