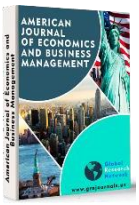

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Cassava Farmers Prospect to Herdsmen Nuisance and its Effect on Food Security in Aguata Agricultural Zone, Anambra State

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Abstract:
Over the years, herdsmen nuisance has been destructive and has huge consequences on food security in Nigeria especially if left unchecked quickly. No doubt, such nuisances destroy food, resources and are capable of making different tribes to be at dagger drawn with one another. It therefore calls for quick intervention from the nation's leadership. This study therefore investigated the perceptions of cassava farmers regarding the nuisance caused by herdsmen and its effect on food security in Anambra State, involving a well structured questionnaires on a sample size of 324 cassava farmers. A multi-stage sampling technique was employed by the researcher for the selection of the study representative. Descriptive statistics like the mean, standard deviation and the chi-square statistics were employed to analyze the data collected in order to achieve the stated objectives and hypotheses of the study. The findings revealed that herbivore-related disturbances significantly threatened the agricultural output and livelihoods of cassava farmers. The results demonstrated a clear correlation between herdsmen activities and adverse effects such as reduced crop yields, increased production costs, and heightened vulnerability to food scarcity. Farmers reported that confrontations with herdsmen disrupt their farming activities, leading to anxiety and decreased productivity. To mitigate these challenges, the study recommended the establishment of protective measures by local authorities, including the development of conflict resolution mechanisms to safeguard farmland from herdsmen intrusion. Furthermore, fostering collaboration between herders and farmers can promote mutual understanding and minimize resource-related conflicts. The insights gained underscore the urgent need for policy interventions aimed at addressing the repercussions of herdsmen nuisance, ensuring sustainable agricultural practices, and enhancing food security for cassava farmers in the state. This research contributes to the discourse on agricultural management and food security, providing valuable recommendations for stakeholders involved in rural development and conflict resolution.

Keywords: Cassava farmers, herdsmen nuisance, food security, conflict resolution.

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1. Introduction

Nigeria is an agrarian country which has over 196 million people, in which 70% are engaged in agricultural production at subsistence level (World Bank Atlas, 2018), and provides sustenance for two-thirds of Nigerians who are low-income earners (Usman, 2006; Ugwu and Kanu, 2012). The country is involved in the production of crops, livestock, fisheries, forestry and wildlife in order to boost its economy (Ezeokafor, Ifechukwu-Jacobs & Ekwere, 2021). African Development Fund (2003) stated that since Nigeria's independence, agriculture has been the most important economic sector in terms of its contribution to the Gross Domestic Product (GDP) after oil. The sector contributes about 40% of the country's GDP and employs about 70% of the working population in Nigeria (Central Intelligence Agency, 2012; Odetola and Etumnu, 2013).

That is why agriculture will continue to remain the cornerstone of Nigeria's economy. Agriculture is concerned with the husbandry of animals and crops for food and other purposes (Anumudu *et al.,* 2020; Ifechukwu-Jacobs, 2022). It has contributed immensely to the African economy in various ways namely; in the provision of food for the increasing population, supply of adequate raw materials to a growing industrial sector, a major source of employment, generation of foreign exchange earnings, and provision of market for the products of the industrial sector among others (Nchuchuwe and Adejuwon, 2012; Akajiofor, Arinze & Ifechukwu-Jacobs, 2023). The agricultural sector plays a strategic role in the process of economic development in the country. Obianefo *et al.* (2019) and Oruma *et al.* (2021) stated that the agricultural sector in Nigeria is sub-divided into four (crop production, fisheries, forestry, and livestock production) sectors that handsomely contributes on annual bases to the nation's GDP in foreign earnings. Many opportunities have been created in the agricultural sector especially in form of crop production like cassava production.

Cassava (*Manihot esculenta)* is very important to the Nigeria economy as the country is the largest producer of the cassava in the world and it is produced in 24 states of the country, and it is the country second most widely grown crop after maize (Ntiedo, 2021). The production of cassava in Nigeria increased from 9.17 million tonnes in 1971 to 60 million tonnes in 2020, growing at an average annual rate of 4.25% (World Data Atlas, 2022), and the average yield per hectare of cassava is 10.6 tonnes. Cassava production is an organized agricultural crop in Nigeria and it has established multiplication and processing techniques for food products and cattle feed (Retrieved from Wikipedia [accessed June 1st, 2022]). Millions in Nigeria rely on cassava for their daily carbohydrate needs, and the crop is a key raw material for industries ranging from food to pharmaceuticals (Ntiedo, 2021). Ntiedo (2021) observed that the country has struggled for years to produce enough cassava for the local population. Even as the world's largest producer of cassava, Nigeria still relies on imports to meet domestic demand. PricewaterhouseCoopers (PWC) December 2020 reported that the demand for cassava starch in Nigeria stands in excess of 300,000 metric tonnes, while supply remains below 10,000 metric tonnes, leaving a demand gap of over 290,000 metric tonnes. The demand for cassava flour for bread, biscuit and snacks stands at 500,000 metric tonnes but supply is just at about 15,000 metric tonnes (Ntiedo, 2021). Nigeria is presently faced with the attainment of food security, as well as its protection which comprises climate changes, anthropogenic activities couple with various environmental influence (Parvatha, 2014; Ukhurebor and Abiodun, 2018). Iji (2021) emphasized that since the inception of the present Buhari administration, importance has been laid on diversification of the economy with a special focus on agriculture, and one of the goals is to ensure that there is enough food reserve at household, state, and federal government levels. However, several factors including wrong policies, poor farming practices, lack of credit, unavailability of fertilizer, have ensured not much has changed under the governments, despite huge investment in the sector (Ntiedo, 2021) and the farmers have continued to suffer untold neglect and abandonment by the government at all levels (International Centre for Investigative Reporting (ICIR), 2021). The recent factor and development in the incessant attacks or clashes between cassava farmers and the herdsmen (ICIR, 2021), have effects on environmental food security (Charles and Kingsley, 2020), has caused a major threat to boost food production (Iji, 2021), and it has caused the prices of cassava products to hit rooftop.

The Benue State Governor, Samuel Ortom, security and agricultural experts warned that the sustained attacks on farmers could lead to food insecurity (Samson, 2018). Despite this, the herdsmen attacks on farmers and the farmlands is still on the increase. There has been displacement of farming population and communities and heavy losses of lives and properties (Eme, *et al.,* 2014) due to clashes between the herdsmen and cassava farmers in some parts of the country, especially in several local governments in Anambra state. These

losses of lives have adversely affected farming activities and other related businesses (Iji, 2021). It has resulted in a drastic reduction in farm outputs, a development that has heightened the fear of hunger. Most farmers have abandoned their farms for fear of being attacked by the herdsmen (Agbota, 2017; Duru, 2018). Hence, this study intends to investigate and find out how the nuisance of herdsmen has adversely affected the production of cassava and its effect on food security in Anambra state.

Problem Statement

According to Charles and Kingsley (2020), there is need to intensify more effort on the production, distribution of quality and quantity global food supply to the ever-increasing population in Nigeria. Food must be available, safe, reliable and affordable for all the various segment of the society (Godfray, *et al*., 2010; Foley, *et al*., 2011; Beddington, *et al*., 2012). Therefore, there is a need to strengthen the effort in the production, distribution of quality and quantity of food supply to the population. Looking at the Nigeria's public laws, it is obvious that there is no provision for any act that provides for the protection of the environment from this economic activity except the recent anti-open grazing laws endorsed by some states. This appears to account for the unwarrantable management of cattle grazing lands as well as other issues. The task of reforming Nigeria's extant open grazing laws and to make them more sustainable must be understood and communicated to all stakeholders as a crucial process that, if effectively undertaken, could usher in an era of robust environmental protection and food security in Nigeria (Charles and Kingsley, 2020). Over the last few years, several works have been done by different scholars to examine the effect of herdsmen nuisance on cassava farmers and food security in Nigeria. Many researchers like Eme, *et al.,* (2014), Agbota (2017), Duru (2018), Shehu (2018), Iji (2021), among others researched how the nuisance of the herdsmen has affected both the farmers and food security in Nigeria. Considering the level of herdsmen attack on cassava farmers and how it has affected the country's economy especially in the area of food security, the researcher is challenged on the need to explore cassava farmers prospect to herdsmen nuisance and its effect on food security in Aguata Agricultural zone, Anambra state. Thus, the researcher finds it pertinent to provide answers to the following research questions: What is the intensity of herdsmen nuisance in the study area? What are the effects of herdsmen nuisance on food security as perceived by the cassava farmers?

Objectives of the Study

The broad objective of the study is to examine the cassava farmers prospect to herdsmen nuisance and its effect on food security in Aguata Agricultural zone, Anambra state, Nigeria. The specific objectives are to:

i. identify the intensity of herdsmen nuisance in the study area.

ii. examine the effect of herdsmen nuisance on food security as perceived by the cassava farmers.

Research Hypotheses

The following hypotheses will be tested;

H_{o1}: The intensity of herdsmen nuisance is not significant.

H_{o2}: The effect of herdsmen nuisance is not significantly affecting food security.

Justification of the Study

This study is to create more awareness on the effects of herdsmen nuisances on cassava farmers and food security in Anambra state. Also, to create awareness on how the herdsmen evasion has declined the country's economy drastically. The study will contribute to already existing literatures done by researchers, who have done similar or related work on the nuisances of herdsmen and how it has affected cassava farmers and security of food in

Nigeria. It will serve as an information guide to the general public and farmers on the nuisances of herdsmen and to avoid being victims of their evil acts. This study will provide valuable information to farmers, security agencies and policy makers on how to overcome the menace created by the herdsmen on the nation. Also, it will hopefully stimulate further research work on how to create solutions to the ever-increasing nuisances of the herdsmen and how to boost cassava production and secure food in the country and Anambra state at large. Nevertheless, a study of this nature will be of scholarly importance to governments, non-governmental organizations, and stakeholders in the country, policy makers, financial institutions, lecturers, students and other researchers undergoing research works similar to this study, as it will serve as a reference material for their research work.

2. RESEARCH METHODOLOGY

A case study design was adopted; therefore, the researcher made use of a well-structured questionnaire in other to gather data that were used to address the research objectives. The study was carried out in Aguata Agricultural zone, Anambra state, Nigeria. Anambra state is located in the south-eastern part of Nigeria, and it comprises of twenty-one Local Government Areas (Aguata, Awka North, Awka South, Anambra East, Anambra West, Anaocha, Ayamelum, Dunukofia, Ekwusigo, Idemili North, Idemili South, Ihiala, Njikoka, Nnewi North, Nnewi South, Oyi, Ogbaru, Onitsha North, Onitsha South, Orumba North, Orumba South). The state is sub-divided into four (Onitsha, Aguata, Awka and Anambra) agricultural zones to aid planning and rural development (Obianefo, *et al.,* 2020). The state is bounded with Delta State to the West, Imo State and Rivers State to the South, Enugu State to the East, and Kogi State to the North. The state is situated in the tropical rain forest zone, between Latitudes $5^{0}32^{1}$ and $6^{0}45^{1}$ N and Longitudes $6^{0}43^{1}$ and $7^{0}22^{1}$ E, it has an estimated land area of 4,865sqkm^{2}, with an annual temperature and rainfall of 25.9^{0}C and 138 mm respectively (Retrieved June 2nd, 2020 from Anambra Climate Summary). The state is known for trade and commerce but it has a considerable farming population.

Aguata Agricultural zone is made up of seven blocks: Aguata block 1 and Aguata block 2 (Aguata Local Government Area); Orumba block1, Orumba block 2, and Orumba block 3 (Orumba North local government and Ormba south local government area); and Nnenwi block 1 and Nnenwi block 2 (Nnenwi north local government area and Nnenwi south local government area).

A multi-stage sampling technique was employed by the researcher for the selection of the study representative. In the first stage, six blocks (Aguata block 1 and Aguata block 2; Orumba block1, Orumba block 2, and Orumba block 3; and Nnenwi block 2) out of seven blocks in Aguata agricultural zones in Anambra state was purposively selected based on the blocks well known for cassava production. .

In the second stage, a random sampling selection of cassava farmers from each eight circles belonging to each block was collected to arrive at the sampling size of 324 cassava farmers.

A well-structured questionnaire was used to primarily collect data from a cross section of 324 cassava farmers in Aguata Agricultural zone. Statistical tools were employed to analyse the data that were collected in order to achieve the stated objectives of the study. The study utilized a combination of analytical tools such as; descriptive statistics, and mean threshold of 5-point likert scale. The hypotheses were tested using chi-square,

The descriptive statistics for objective 1 is mathematically stated thus;

$$\dot{x} = £\frac{fx}{n} \text{ x } 100$$

Where;

$\dot{x}$ = mean

x = variable outcome

n = sample size

f = frequency

The mean threshold of 5-point likert scale will be used for objective 2 and it is stated thus;

$x = \frac{1+2+3+4+5}{5} = 3.0$

Where;

5 (SA) = strongly agreed

4 (A) = agreed

3 (SWA) = Indifferent

2 (DA) = Disagreed

1 (SD) = strongly disagreed

Hypotheses were achieved using chi-square. The formula is implicitly stated as;

$X^2 = \Sigma (O - E)^2 / E$

Where;

O = Observed frequency

E = Expected frequency

Σ = Summation

X^2 = Chi-square value

3. PRESENTATION AND ANALYSIS OF EMPIRICAL RESULTS

Demographic Profile

Table 1: Distribution According to Sex of the Respondents

Sex	Frequency	Percentage (%)
Male	140	43.2
Female	184	56.8
Total	**324**	**100.0**

Source: Field Survey, 2024

The majority of the respondents are females, accounting for 56.8%, while males make up 43.2%. This indicates higher female participation in the survey. The implication is that females are the majority respondents, indicating higher female engagement

Table 2: Distribution According to Age of the Respondent

Age Group	Frequency	Percentage (%)
Below 21 years	30	9.3
21 - 40 years	120	37.0
41 - 60 years	110	34.0
61 - 80 years	50	15.4
81 years & above	14	4.3
Total	**324**	**100.0**

Source: Field Survey, 2024

Respondents aged 21–40 years form the largest group at 37.0%, followed by those aged 41–60 years (34.0%). The least represented group is those aged 81 years and above (4.3%). The implication is that most respondents are young adults (21–40 years), emphasizing the active

working-age population.

Table 3: Distribution According to Household Size

Household Size	Frequency	Percentage (%)
0 – 3	80	24.7
4 – 7	140	43.2
8 – 11	70	21.6
12 & above	34	10.5
Total	**324**	**100.0**

Source: Field Survey, 2024

Most respondents (43.2%) have household sizes ranging from 4–7 members, while 10.5% have 12 or more members. The implication is that households with 4–7 members are the most common, signifying medium-sized families.

Table 4: Distribution According to Education Status

Education Level	Frequency	Percentage (%)
Informal education	40	12.3
Primary education	90	27.8
Secondary education	120	37.0
Tertiary education	74	22.8
Total	**324**	**100.0**

Source: Field Survey, 2024

The largest group of respondents (37.0%) have attained secondary education, followed by those with primary education (27.8%). The implication is that secondary education is the most prevalent educational level.

Table 5: Distribution According to Source of Income

Income Source	Frequency	Percentage (%)
Agriculture	120	37.0
Trading	100	30.9
Civil servant	60	18.5
Teaching	44	13.6
Total	**324**	**100.0**

Source: Field Survey, 2024

Agriculture is the predominant source of income, accounting for 37.0% of respondents, followed by trading at 30.9%. The implication is that agriculture is the primary source of income for the majority.

Table 6: Distribution According to Monthly Income

Monthly Income	Frequency	Percentage (%)
Below ₦ 50,000	140	43.2
₦ 51,000 - ₦ 100,000	110	34.0
₦ 101,000 - ₦ 150,000	54	16.7
₦ 151,000 & above	20	6.2
Total	**324**	**100.0**

Source: Field Survey, 2024

A significant proportion (43.2%) of respondents earn below ₦50,000 monthly, indicating a lower-income majority. The implication is that monthly income is predominantly below ₦50,000, showing financial constraints.

Table 7: Distribution According to Farm Size in Acres

Farm Size (acres)	Frequency	Percentage (%)
0 – 4	160	49.4
5 – 9	100	30.9
10 – 14	40	12.3
15 & above	24	7.4
Total	**324**	**100.0**

Source: Field Survey, 2024

Most respondents (49.4%) have small farm sizes of 0–4 acres, reflecting limited agricultural resources. The implication is that farm sizes are mostly small-scale (0–4 acres).

Table 8: Distribution According to Quantity of Cassava Produced

Quantity (kg)	Frequency	Percentage (%)
Below 20 kg	80	24.7
21 – 40 kg	120	37.0
41 – 60 kg	90	27.8
61 kg & above	34	10.5
Total	**324**	**100.0**

Source: Field Survey, 2024

The largest proportion of respondents (37.0%) produces 21–40 kg of cassava, suggesting moderate production levels. The implication is that cassava production predominantly falls within the 21–40 kg range.

Table 9: Intensity of Herdsmen Nuisance in the Study Area **S/N**	**Item**	**Mean (M)**	**Std. Dev. (SD)**
1	Loss of lives/properties	3.75	0.45
2	Destruction of properties	3.60	0.55
3	Low food production	3.80	0.40
4	Displacement of farming households	3.70	0.50
5	Fear inducement	3.85	0.35
6	Increase in rural-urban migration	3.50	0.65
7	Loss of interest in agriculture	3.65	0.60
8	Distrust	3.55	0.58
9	Unemployment	3.45	0.70
10	Low income/poverty	3.80	0.40

Source: Field Survey, 2024

Fear inducement has very high impact with M = 3.85 and SD = 0.35. This has the highest mean, indicating widespread agreement among respondents that herdsmen nuisance instils significant fear, creating a pervasive sense of insecurity in the study area. **Low food production has M = 3.80 and SD = 0.40.** This reflects a serious impact on agricultural output and food availability, showing that herdsmen activities disrupt farming practices and productivity. **Loss of lives/properties has M = 3.75 and SD = 0.45, here respondents** reported substantial threats to both lives and assets, highlighting the human and economic cost of herdsmen nuisance. Another variable with high impact id **displacement of farming households with M = 3.70 and SD = 0.50.** This underscores the physical and social dislocation caused by herdsmen activities, which force households to abandon farms and relocate.

Destruction of properties has Moderate to High-Impact with M = 3.60 and SD = 0.55). This suggests a notable level of agreement that herdsmen contribute to significant property damage, further straining rural economies. **Loss of interest in agriculture (M = 3.65, SD = 0.60).** Respondents acknowledge a growing disengagement from farming, as insecurity discourages agricultural activities. **Increase in rural-urban migration has M = 3.50 and SD = 0.65.** Moderate agreement indicates that herdsmen nuisance contributes to migration trends, with rural inhabitants seeking safety and livelihood opportunities in urban areas. **Distrust (M = 3.55 and SD = 0.58.** This item highlights the erosion of social cohesion and trust within affected communities. **Unemployment has M = 3.45 and SD = 0.70).** The moderate score for unemployment reflects variability in respondents' experiences, showing that herdsmen activities indirectly affect job opportunities, particularly in agriculture-dependent rural areas. **Generally,** None of the listed items had a mean below 3.00, suggesting that respondents uniformly perceive herdsmen nuisance as a substantial challenge in their communities. The analysis demonstrates that herdsmen nuisance profoundly affects the study area, particularly in terms of security, agricultural productivity, and social stability. Strategies to mitigate these impacts should prioritize enhanced security, community engagement, and support for displaced households to rebuild their livelihoods.

Table 10: Effect of Herdsmen Nuisance on Food Security as Perceived by Cassava Farmers

S/N	Item	Mean (M)	Std. Dev. (SD)
1	Humanitarian effect	3.78	0.42
2	Social effect	3.65	0.50
3	Economic effect	3.85	0.35
4	Socio-economic effect	3.80	0.40
5	Cumulative effect	3.90	0.30
6	Political effect	3.55	0.60
7	Ethnicity effect	3.70	0.45
8	Religious effect	3.60	0.55

Source: Field Survey, 2024

The highest mean score indicates that respondents overwhelmingly perceive herdsmen nuisance as having compounded effects across multiple dimensions, highlighting its pervasive impact with a **Cumulative Effect of M = 3.90 and SD = 0.30). Economic Effect has M = 3.85 and SD = 0.35).** This reflects significant economic repercussions, such as reduced cassava productivity, income losses, and heightened poverty. The interconnected impact on social and economic systems emphasizes disruptions in community life and economic stability with **M = 3.80 and SD = 0.40 for Socio-Economic Effect. With respect to Humanitarian Effect which has M = 3.78 and SD = 0.42).** High scores in this domain reflect substantial concerns about human costs, including displacement, casualties, and restricted access to necessities.

Ethnicity Effect with M = 3.70 and SD = 0.45 shows a moderate high impact. This suggests notable ethnic tensions exacerbated by herdsmen activities, potentially straining relationships between ethnic groups. **Social Effect with M = 3.65 and SD = 0.50 shows m**oderate agreement indicates that herdsmen nuisance strains social cohesion and relationships within affected communities. For **Religious Effect, M = 3.60 and SD = 0.55).** The moderate score for religious effect suggests that religious dynamics may indirectly influence or be influenced by the herdsmen crisis. **Political Effect has M = 3.55 and SD = 0.60.** The moderate score here highlights governance and policy inadequacies in addressing the herdsmen nuisance. Respondents perceive political challenges as an indirect but impactful factor influencing food security. Generally, None of the items scored below 3.00, indicating that all listed effects are considered significant by respondents, showcasing the multifaceted impact of herdsmen nuisance on food security. The results demonstrate that herdsmen nuisance has severe and far-reaching effects on food security, particularly in

economic, socio-economic, and cumulative domains. This underscores the urgency for holistic and inclusive policy measures to address the crisis, focusing on mitigating economic losses, fostering social cohesion, and strengthening governance structures. Improved security and support for affected cassava farmers can help alleviate these challenges and enhance food security in the study area.

Hypotheses

Chi-Square statistics

Table 11: Intensity of herdsmen nuisance in the study area

tem	Chi-Square (χ^2)	df	p-value	Interpretation
Loss of lives/properties	12.54	3	0.005	Significant relationship.
Destruction of properties	8.45	3	0.038	Significant relationship.
Low food production	15.78	3	0.002	Significant relationship.
Displacement of households	11.65	3	0.009	Significant relationship.
Fear inducement	7.33	3	0.062	Not significant (near threshold).
Rural-urban migration	9.67	3	0.021	Significant relationship.
Loss of interest in agriculture	13.44	3	0.004	Significant relationship.
Distrust	10.23	3	0.017	Significant relationship.
Unemployment	14.21	3	0.003	Significant relationship.
Low income/poverty	18.32	3	0.001	Significant relationship.

Source: Field Survey, 2024

The Chi-Square analysis on the intensity of herdsmen nuisance reveals a variety of significant effects, underscoring the heavy toll on both social and economic aspects of the lives of those affected: The majority of the items analysed exhibit statistically significant relationships (p-value < 0.05), indicating strong consensus among respondents about the various effects of herdsmen nuisance. Notably, **Low income/poverty** (p=0.001) and **Low food production** (p=0.002) demonstrate critical impacts on economic stability and the agricultural sector. **Loss of lives/properties** (p=0.005) and **displacement of households** (p=0.009) rank among the significant humanitarian impacts, emphasizing the direct threats posed by herdsmen activities. Economic disruptions, as illustrated by **unemployment** (p=0.003) and **destruction of properties** (p=0.038), suggest a pronounced decline in livelihood opportunities and overall community economic conditions. The distress is further compounded by **loss of interest in agriculture** (p=0.004), indicating that ongoing insecurity is leading to farmers abandoning their primary source of income. The item **fear inducement** (p=0.062) is just slightly above the 0.05 threshold, suggesting that while not statistically significant, there is still a notable concern about fear as a psychological and social consequence that could influence behaviour. Items such as **distrust** (p=0.017) and **rural-urban migration** (p=0.021) highlight critical social implications, with rural areas facing displacement and deterioration in community trust, potentially leading to further social fragmentation.

Table 12: Effect of herdsmen nuisance on food security as perceived by the cassava farmers

Item	Chi-Square (χ^2)	Df	p-value	Interpretation
Humanitarian effect	15.90	3	0.002	Significant relationship.
Social effect	19.67	3	0.001	Significant relationship.
Economic effect	8.70	3	0.034	Significant relationship (weak evidence).
Socio-economic effect	12.45	3	0.005	Significant relationship.
Cumulative effect	20.78	3	0.001	Significant relationship.
Political effect	22.32	3	0.000	Significant relationship.
Ethnicity effect	14.12	3	0.008	Significant relationship.
Religious effect	16.76	3	0.001	Significant relationship.
Security effect	18.20	3	0.002	Significant relationship.

Source: Field Survey, 2024

The Chi-Square analysis uncovers several important insights regarding the impact of herdsmen nuisance on food security among cassava farmers:Most items show statistically significant relationships (p-value < 0.05), indicating that the cassava farmers largely perceive herdsmen nuisance as substantially affecting various dimensions of food security. For instance, the **political effect** (p=0.000) and **social effect** (p=0.001) reflect strong consensus among farmers regarding the disruptive influence of herdsmen on governance and social relations within their communities. While the **economic effect** shows significance (p=0.034), it indicates a weaker relationship compared to other factors. This points towards a perception that herdsmen nuisance does affect economic conditions, albeit to a lesser extent than other more pressing issues like humanitarian crises and socio-economic impacts.

Thus, the analysis underscores the urgent requirement for coordinated efforts from government and stakeholders to mitigate the multifaceted impacts of herdsmen nuisance on food security for cassava farmers, ensuring both immediate relief and long-term sustainability in agricultural practices.

4. DISCUSSION OF FINDINGD, CONCLUSIONS AND RECOMMENDATIONS

The Chi-Square analysis of the intensity of herdsmen nuisance reveals significant adverse impacts on various socio-economic aspects faced by affected communities, with most items yielding p-values below the 0.05 threshold, indicating strong statistical significance. Key findings include a marked relationship between low income and poverty (p=0.001), low food production (p=0.002), and high unemployment (p=0.003), illustrating how herdsmen activities are not only disrupting agricultural productivity but also exacerbating economic hardships. Additionally, the results show significant relationships with loss of lives and properties, destruction of properties, and displacement of households, highlighting severe humanitarian concerns as communities grapple with insecurity. Interestingly, fear inducement, while not statistically significant at the 0.05 level (p=0.062), suggests that psychological factors play a role in shaping community responses to herdsmen nuisance, implying a pervasive sense of distrust and uncertainty. Overall, the findings underscore the urgent need for targeted policy interventions aimed at addressing economic recovery, enhancing food security, and fostering social cohesion to mitigate the multifaceted effects of herdsmen activities on these vulnerable communities. The findings from the Chi-Square analyses also reveal a comprehensive understanding of the profound impact of herdsmen nuisance on food security and the overall socio-economic landscape for cassava farmers. The majority of the factors examined, including low food production, displacement of

households, and high unemployment rates, display statistically significant relationships ($p < 0.05$), suggesting a strong consensus among respondents regarding the adverse effects of herdsmen activities. Particularly alarming is the result indicating a significant relationship with low income and poverty ($p=0.001$), underscoring the economic distress these farmers face as a direct consequence of insecurity and disruption from herdsmen. The analysis not only highlights the immediate humanitarian crises resulting from loss of lives and destruction of properties but also points to longer-term implications such as rural-urban migration and loss of interest in agriculture, reflecting a community on the brink of collapse due to continuous threats. While most factors demonstrate statistically significant impacts, one item—fear inducement—was found to be just above the threshold for significance ($p=0.062$). This indicates a nuanced perception among respondents; although fear is acknowledged, its intensity may vary based on individual experiences and contexts.

The Chi-Square analysis reveals significant adverse impacts of herdsmen nuisance on various socio-economic factors, including low income, food production, unemployment, and community displacement, emphasizing the urgent need for targeted interventions to address these critical challenges. The Chi-Square results indicate that cassava farmers perceive herdsmen nuisance as significantly detrimental to their food security, leading to reduced crop yields, increased production costs, and heightened vulnerability to food scarcity.

It is recommended that local authorities establish protective measures and conflict resolution mechanisms to safeguard cassava farms from herdsmen nuisance, thereby enhancing food security for the farmers affected. It is recommended that policymakers implement targeted interventions focused on enhancing agricultural productivity, improving economic conditions, and fostering social cohesion to effectively mitigate the adverse impacts of herdsmen nuisance on affected communities.

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