

Effect of Fulani-Herdsman and Farmers Crisis on Food Security in Yewa North, Ogun State, Nigeria

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DOI: <https://dx.doi.org/10.47772/IJRISS.2024.916SCO0031>

Received: 18 December 2025; Accepted: 24 December 2025; Published: 29 December 2025

ABSTRACT

This study examined the effects of the Fulani herdsman and farmers' crisis on food security in Yewa North Local Government Area. A descriptive methodology was employed in this study. Purposeful sampling techniques were used to select all five villages that were majorly affected by the crisis. A sample of two hundred (n=200) questionnaires was purposively administered among these five communities at twenty (40) residents per community, with a total of two hundred (200) residents. Quantitative and qualitative analyses were done using frequency count and percentage, pie chart, and bar chart for the analysis of the research objectives, while hypotheses was analysed with One-way ANOVA and a 0.05 level of significance. Results from the study contended that the herder-farmer conflict was attributable to competition over the use of land (100%) and destruction of farm products by the cattle (100%). This resulted in crop destruction, rape, killing, and maiming of natives (62.5%). Besides, Agriculture, which is the mainstay of the economy, was being disrupted, leading to a reduction in production and income, with the result showing that 1 is the degree of freedom and .248 for the ANOVA significant is greater than the significant level of 0.05. In the end, the livelihood of the people and the development of the communities were affected negatively, with the result showing that 1 is the degree of freedom, and it can be seen that .376 for the ANOVA is greater than the significant level of 0.05. Movement of Fulani herders to Yewa North has led to the destruction of farmers' crops and loss of lives, which has affected food production and income of the people. This unresolved crisis has serious implications for the policy of the government in providing development for these communities. If these conflicts are not resolved in a timely manner, the sustainability of both the economy and the environment would become problematic. A joint police-military task force should immediately take decisive and effective action to drive all the alien herders and their cattle away.

Keywords: Farmers, Herdsmen, Conflict, Crisis, Food Security

INTRODUCTION

The resource that supports human activity most directly is likely land. A parcel of land can be used for farming, hunting, mining, trading, building roads, and other activities. According to Tonah (2001), fertile ground provided an opportunity for crop and animal development. Adisa (2012) argued that in a specific geographic setting, the socio-economic life of both farmers and herders revolved around land in light of this. As a result, competition between crop farmers and livestock farmers for access to and control over productive land in a

given area is unavoidable and can easily turn into violent clashes. This supports Blench's (2010) assertion that disputes over who controls and owns economically productive land fuel tensions and violent conflicts between communities.

It is well known that rural farmers and livestock owners are the main producers of food in Africa, mostly for the urban populations of the majority of African nations, including Nigeria. An internal conflict between farmers and herders over the usage of resources has recently surfaced in many places of Nigeria. Crop devastation, water contamination, and harassment of either group are the repercussions of this. In the central belt and the southern region, respectively, Olabode and Ajibade (2010) and Okeke (2014) wrote about the violent conflicts between farmers and herders caused by rivalry over land and crop destruction. This puts the nation's overall food security and peace and stability at risk. Due to these, interethnic warfare, religious strife, banditry, boko-haram with Fulani herders, and farmer disputes have emerged as some of Nigeria's most pressing problems. The economy and resources of a nation may suffer greatly as a result of these devastating conflicts.

For many years Nigeria has been seriously threatened by herdsmen and farmers clashes which have been exacerbated in recent years. It has therefore been considered to be a major potential threat affecting Nigerians mostly on the part of socio-economic activities of the country as the herdsmen invade farms and destroy farm crop and kidnap farmers. The herdsmen and farmers' crisis is detrimental to the national economy which could be regarded as a serious obstacle to a successful national economy. It has become a major threat to the national security and development of Nigeria due to the fact that its increased operation has caused distraction for government to focus which has resulted to diversion and removed government attention on some key areas of the economy, as huge amount of human and material resources are channeled into curbing the menace. In the case of Nigeria, the frequent occurrence of herdsmen and farmers (Crop Producer) crisis has left adverse effects on food security and socio-economic development of the people. The murderous campaigns and vicious onslaughts on individuals and institutions provide highly unfavorable business environment for internal and foreign investment, which is a major factor in the achievement of sustainable development.

In view of past researches, according to a study of the barriers to cassava production in Kwara State by Vanthoof et al. (2005), almost 90% of the farmers surveyed said that the incursion of cattle rearers into their farms is their biggest issue with cassava cultivation. Conflicts over land use have also been named as the "most critical" issue the Fulani livestock herders encounter in their line of work on their own. Numerous other studies have shown that these two groups, both inside and outside of Nigeria, are becoming more and more frustrated by war.

Recent conflicts between Fulani ranchers and farmers have resulted in several fatalities and injuries. Most people blame ethnic and religious divisions between Muslims or Islamists and Christians, as well as Hausa and Yoruba, for the conflict between Fulani Herdsmen and Farmers (Ogo-Oluwa, 2017). Conflict between farmers and ranchers has led to the destruction of several farmlands. While the farmers saw the herdsmen as a threat to their crops and agricultural output because they permit their cows to graze on the farmers crops, the herdsmen ascribe the origins of the problem to religious and ethnic divides that led to the death of their cows. Evidence suggests that conflicts between herdsmen and farmers in some regions of Nigeria may be caused by the herders and farmers' varying ethnicities and religious backgrounds. Therefore, the purpose of the current study is to examine the effects of Fulani herdsmen and farmers' crisis on food security in Yewa North Local Government Area, and to identify the level and intensity of farm destruction in the area, examine the crisis management strategies adopted by the local farmers, and assess immediate and remote effects of the crises on food production.

METHODS

Descriptive research is a plan or blueprint that specifies how data relating to a given problem was collected and analyzed. The design seeks to find out the conditions that exist between Fulani herdsmen and farmers' crisis and food security. The target population for this study was the entire population of Yewa North. Purposeful

sampling techniques were used to select towns for the sample and all the five villages that majorly encountered the crisis were selected namely; Ibeku, Agbon-Ojodu, Igan-Alade, Imoto Yewa, and Owode Ketu. A sample of two hundred ($n=200$) questionnaires was purposively administered among these five communities at forty (40) residents per community with a total of two hundred (200) residents. Due to the population size of the communities, every individual available was administered a questionnaire.

Study Area

Yewa North Local Government Area (formerly Egbado North) is located in the western part of Ogun State, Nigeria, sharing a boundary with the Benin Republic to the west and surrounded by Imeko Afon, Yewa South, Ipokia, Abeokuta North, and Ewekoro LGAs (See figure 1). It lies approximately on latitude $7^{\circ}14'N$ and longitude $3^{\circ}02'E$, covering about 2,087 km^2 with a population of 392,887 (Bureau of Statistics, 2020). The study was conducted across five villages: Ibeku, Agbon-Ojodu, Igan-Alade, Imoto-Yewa, and Owode-Ketu.

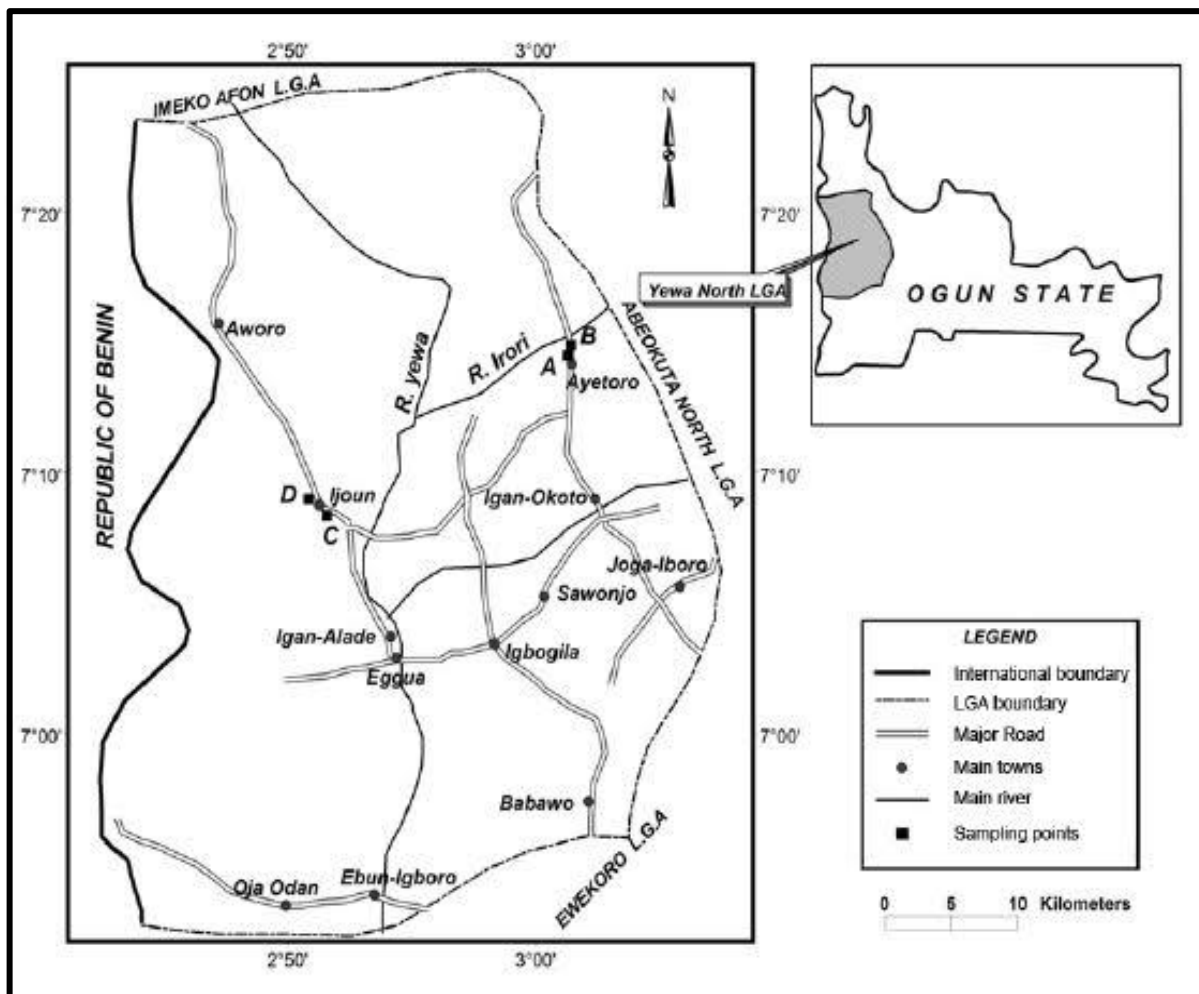


Figure 1: Map of the Study Area

Source: Adopted from Bamidele et. al., 2018

The region experiences a humid tropical climate typical of southwestern Nigeria, marked by distinct wet (April–October) and dry (November–March) seasons influenced by tropical maritime and continental air masses. The relief consists of sandy, clayey, and loamy soils that support farming and fishing activities. Yewa North is well drained by several streams and rivers, including the major River Yewa. Settlement patterns are predominantly linear, with a few nucleated towns such as Aiyetoro, Igbogila, Igan-Alade, and Ijoun. As seen in figure 2, land use is largely agricultural and residential, with vegetation dominating the south and wetlands found in the northern and eastern zones.

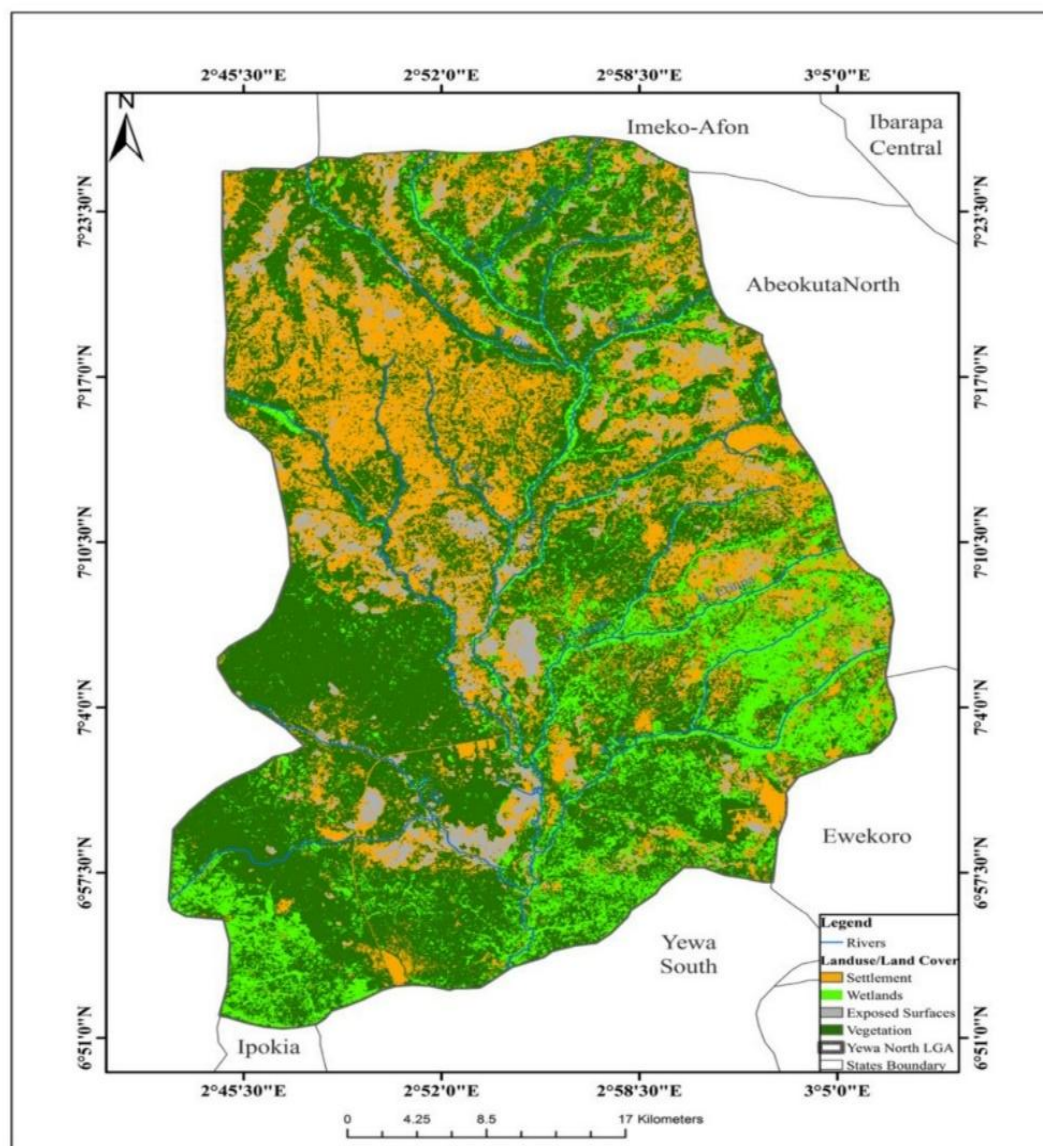


Figure 2: Satellite Imagery of Yewa North Showing Settlement pattern, Vegetation, Cultivated land etc.

Source: Oso and Odaibo (2021)

Economic and infrastructural characteristics of Yewa North include agriculture as the main occupation, with major crops such as cocoa, cotton, and cassava, alongside fishing, trading, crafting, and molding. The area is linked by approximately 380 km of mostly single-lane tarred roads, while many community roads remain untarred and hinder socio-economic growth. Its strategic location and vast land also attract Fulani herdsmen for grazing, contributing to occasional conflicts between farmers and herders in several communities within the Ketu region.

Measures

Data for the study were gathered using an open-ended questionnaire and an observation checklist. The instrument contained three sections (sections A, B, and C). Section A contained items requiring demographic data of the residents, such as age, sex, and educational level, among others. Section B contained items on 'Causes of Fulani herdsmen and farmers' Crisis, and Section C contained items on 'Consequences of Herdsmen and Farmers Crisis in the Area'. Self-visitation to each location and house was done to administer the questions to the respondent with the help of two research assistants. The majority of the residents were illiterate; thus, the researcher asked the questions in the questionnaire orally with the use of the local language (Yoruba) and local dialect (Ketu) and then helped the residents to fill out the questionnaire with the information provided by the residents.

Data Analysis

The data collected in the study were analyzed using descriptive measures such as tabulation, frequency count, percentage, pie, and bar charts and the hypotheses were tested using ANOVA at 0.05 level of significance.

RESULT

The analyses of the results indicate that out of 200 respondents surveyed, 62.5% were males, while 37.5% were females, implying additional responsibilities. The highest percentage of the respondents was those within the age range of 65 years and above (34%). Also, the second highest percentage of the respondents was those within the age range of 45 and 54 years (27.5%), then, followed by those within the age range of 55 and 64 years (23.5%). Surprisingly, 9.5% of the farmers were between the age range of 35 and 44 years, and 4% were between the age range of 25 and 34. The results also showed that just 1.5% of them fell between 15 and 24 years.

Table 1 provides information on the major causes of the herdsmen-farmers' crisis in the surveyed areas. All the surveyed respondents lamented that the crisis broke out as a result of the inhuman acts by the Fulani herdsmen by the destruction of farmland (100%), killing of farmers (100%), and raping of women (100%), both young and adult. During the group interview scheduled with the farmers, some lamented that these Fulani herdsmen trying to claim their lands from them, and their relationship from onset has been parasitic. They always want rule over the indigenes of the communities, which every human being will never accept.

Table 1: Major causes of herdsmen-farmers' crisis in Yewa North

	Frequency	Percent	Decision
Destruction of farmland and crops	200	100.0	Major Causes
Killing of farmers	200	100.0	Major Cause
Raping	200	100.0	Major Cause

Report in figure 3 shows that farmland was totally messed (62.5%) up by the herdsmen and their cattle even to the extent that some farmland are good for cultivation again (30%) and some have turned to arid land (7.5%).

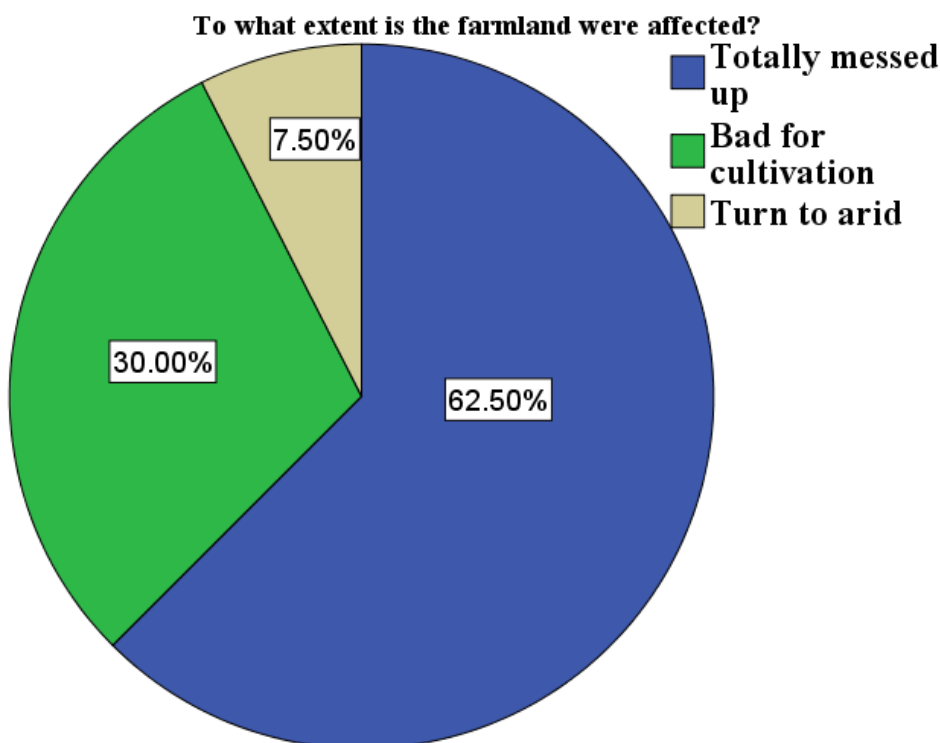


Figure 3: Distribution of farmland affected

In addition to the above, pictorial evidence was obtained from the Baale of Imoto and some youth at Igan-Alade, Agbon-Ojodu and Ibeku during the survey. Baale of Imoto recounted how this menace was in the past four to six months ago without any compensation from government. Figure 4 presents a picture of the aftermath of a farm invaded cattle and herdsman on April, 2021. He claimed that the Fulani herdsman allowed his cattle to feed on the crops.



Figure 4: Cattle invaded farm and destroy farm production
Source: Farmer, Field Survey



Figure 5: Interview Section with Baale Imoto
Source: Field Survey, 2021

Yewa North is composed of clay, loamy and sandy soil respectively and they are well spread throughout the area. The general soil type that dominates the area are sandy and clay soil which favours agricultural activities (especially farming and fishing) in the area. Thus, almost all type of crops is grown in the area. The result in figure 6 corroborates this assertion as the 72.5% of the surveyed farmers claimed of producing all types of crops such as cassava, maize, vegetables, rice, tomatoes, yam, melon, beans etc.

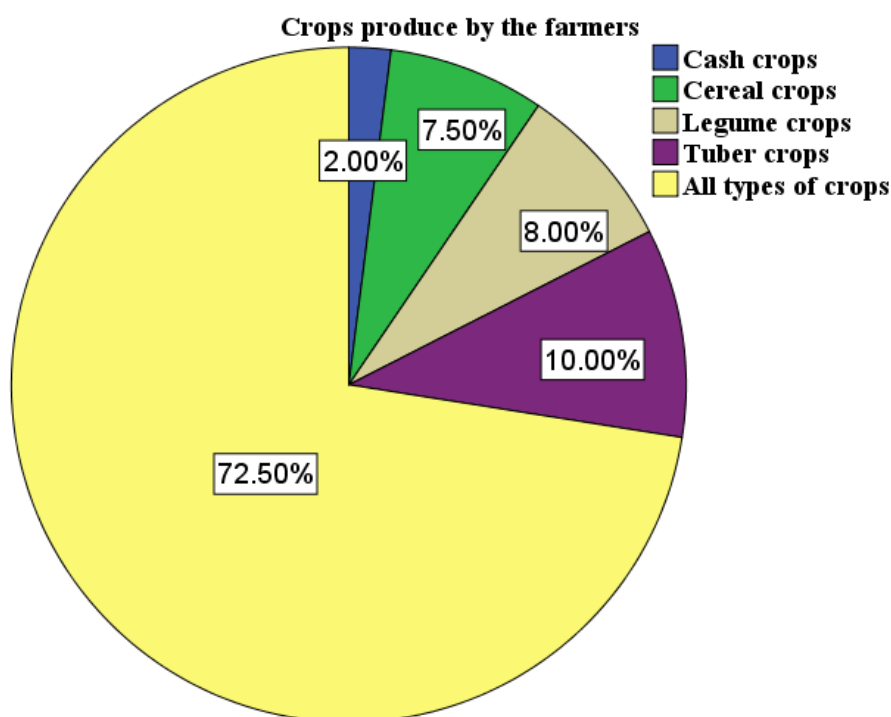


Figure 6: Types of Crops Produce by the Farmers

The result in table 2 shows that all the farmers surveyed indicated the losses they suffered from the destruction of their products. The destruction by cattle feeding on crops 90.5% and fired 9.5% has led to losses of farm products. About 35% of the farmers who used to harvest mostly truckloads of cassava, yam, rice, plantain and vegetables at every harvest could hardly get something tangible as results of the activities of cattle. All farmers (100%) surveyed affirmed that there was critically low quantity of crops produced during the herdsmen-farmers' crisis in the area.

Table 2: Extent at Which Farm Products Were Affected

Items	Frequency	Percent
Cows feed on crops	181	90.5
Burning of crops	19	9.5
Total	200	100.0
Quantity Produced During Crisis		
Low	200	100.0

Table 3 shows the significant relationship between Fulani herders-farmers crisis and food security in Yewa North, Ogun State. The table shows that 1 is the degree of freedom and it can be seen that .248 for the ANOVA significant is greater than the significant level of 0.05. Based on the guiding rule, the null hypothesis which states that “there is no significant relationship between crisis between Fulani herdsmen and farmers on food security in Yewa North, Ogun State” is rejected, while the alternative which says “there is a significant relationship between crisis between Fulani herdsmen and farmers on food security in Yewa North, Ogun State” is accepted. This implies that the efficiency of the insecurity on food security is high.

Ground Rule: The null hypothesis is accepted when:

- the ANOVA result sig. is less than significant level of 0.05

Table 3: One-Way ANOVA table of significant relationship between crisis between Fulani herdsmen and farmers on food security in Yewa North, Ogun State.

		Sum of Squares	Df	Mean Square	F	Sig.
Food Security	Between Groups	3.235	1	3.235	1.345	.248
	Within Groups	404.088	198	2.405		
	Total	407.324	199			

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Management Strategy Adopted by the Local Farmers in Yewa North

The strategies used in conflict resolution depended on the nature and magnitude of the conflict. Again, the age and sex of the victim, the extent of damage, identification of the herdsmen and the willingness on the part of the herder to accept his guilt and compromise determined the adoptive strategy. Generally, when the conflict

was occasioned by crop destruction and the offending herdsman was identified, he was approached and interpersonal agreement was reached. This was usually in the form of compensation. This depended on the admission of guilt and the extent of damage. The herder was sometimes pardoned if he showed signs of remorse.

However, the various strategies adopted by the groups in the five surveyed communities namely; Igan-Alade, Agbon Ojodu, Owode-Ketu, Ibeku and Imoto respectively as presented in table 4.3.4 is line with Castro and Nielson's (2003) conflict management strategies. The strategies also integrate some of the management styles of Rahim (2000) such as domination, avoidance and compromise.

Data from the study indicate that majority of farmers (61.5%) were avoiding the herdsmen most of times during the conflict. On the other hand, 17% of them preferred the case to be charged to court, 11.5% preferred open confrontation with the aid of ammunitions while 10% fancied the involvement of a third party. With this result, majority of the farmers preferred avoidance and for this reason, they report every case of crisis between them and Fulani to the Office of the Nigeria Police Force around the communities and also the traditional ruler as the result shows in figure 4.4 and 4.5 below. During the interview period with the farmers, they also reported that whenever they report to their monarch, the instruction given them is that they should not retaliate, rather they should report the law enforcement agency (Police).

Table 4: Conflict Management Strategy Adopted by Farmers

Management Strategy	Frequency	Percent
Avoidance	123	61.5
Arbitration	34	17.0
Mediation	20	10.0
Open confrontation	23	11.5
Total	200	100.0

This is consistent with the approaches they adopted when they got frustrated by their opponent. The adoption of these strategies was informed by the trust they had in those strategies. In fact the choice of open confrontation was due to the mistrust the farmers had in the herdsmen to abide by the agreement reached.

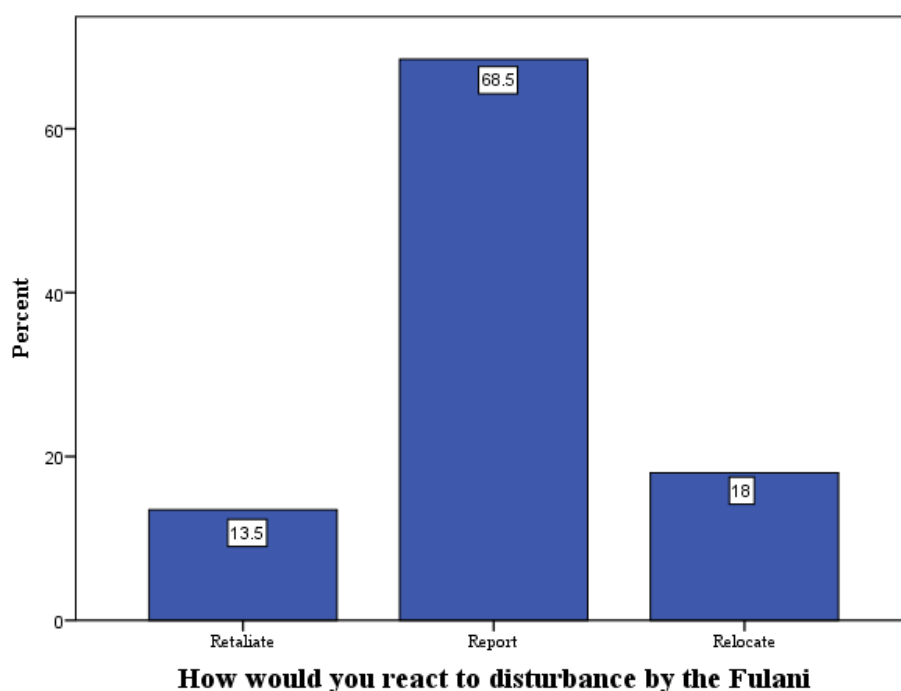


Figure 7: Reaction to the disturbance by the Fulani Herdsmen

On the few occasions where the farmers decided to go for arbitration, their preferred destination was the court. The farmers alleged that the police often failed to act on the reports they lodged with them. Police were only consulted as a form of arbitrary only to make official their complaints to the government, and also hoped for little help they might get from the police. According to the traditional ruler and some community leaders, ever since the police commissioner came to inspect two months ago, they had not seen or heard anything from him. Although they heard that the state government deployed some forces to some areas but none were deployed to their communities. These frustrations shared by the Assemblyman and the Imam were what informed the farmers, especially the young male ones, to adopt this strategy. They admitted the bureaucracy involved in court issues and how it affected their work, but the loss of confidence in the police left them with no other choice.

Where do you report the conflict when they occur?

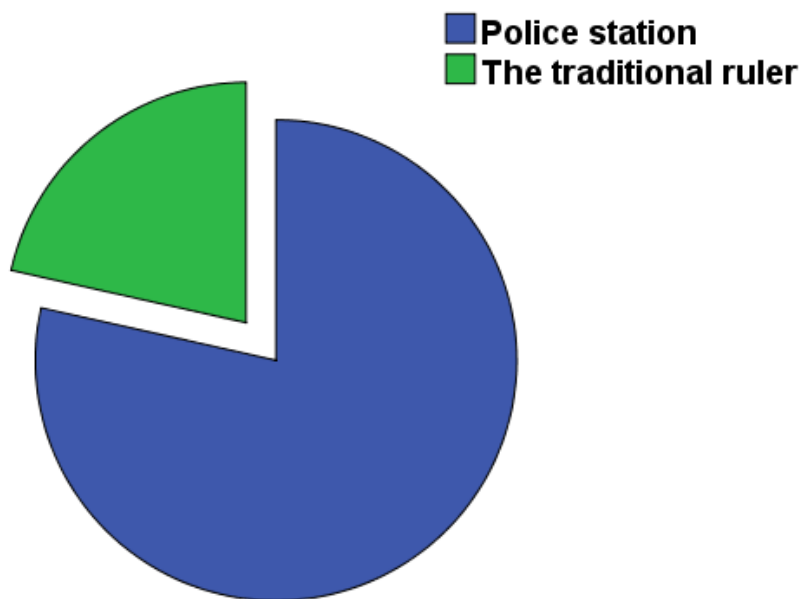


Figure 8: Reaction to the disturbance by the Fulani Herdsmen

Discussion of Findings

This study examined the effects of the Fulani herdsmen and farmers' crisis on food security in Yewa North Local Government Area. The findings indicated that the farmers-herders crisis broke out as a result of the inhuman acts by the Fulani herdsmen, including the destruction of farmland (100%), killing of farmers (100%), and raping of women (100%), both young and adult. During the group interview scheduled with the farmers, some lamented that these Fulani herdsmen are trying to claim their lands from them, and their relationship from the onset has been parasitic. They always want to rule over the indigenes of the communities, which every human being will never accept. This result agrees with Miles and Huberman (1994) stated that climate change, crop destruction, murder, armed robbery, rape, and non-adherence to traditional rules are found to contribute to conflict escalation.

Farm destruction in all the communities was of high intensity (84%). It was further noted that there was a high level of destruction of farm products and destruction of farmland. This corroborates Boateng (2015) argument that the first cause of conflict between farmers with herdsmen is the destruction of farm products and farmland. The major issue many respondents cited was the destruction of their crops by cattle. This finding is in line with the REGSEC report (MLGRD, 2012), which identified crop destruction as the major factor that set off conflicts

between the herders and farmers. In addition to this, the secondary stakeholders interviewed all corroborated this claim. Undoubtedly, the farmers accused the Fulani herdsmen of deliberately driving their cattle into people's farms and leaving them unattended. They alleged that there were times the gun-wielding herders drove the farmers away from their farms to allow the cattle to graze. The movement of cattle in a nomadic fashion was found to be the reason for the crop destruction. This agrees with Okeke (2014) assertion that crop destruction happens when the cattle move about in a nomadic fashion without proper supervision by their herders. As a consequence, crop destruction becomes inevitable.

The finding further revealed that 72.5% of the surveyed farmers claimed to produce all types of crops, such as cassava, maize, vegetables, rice, tomatoes, yams, melon, beans, etc. This result reflects the food security status in the area before the herdsmen-farmers' crisis, that there was enough farm production at a large scale in the area. This result affirmed the argument of Bello (2013) that the invading areas of herdsmen are mostly large-scale farming areas because of their favourable climate that encourages the growth of different types of crops and also encourages nomadic activities. Also, during the interview with the farmers surveyed, they stated that they supply many of their farm products to the neighbouring towns and cities like Abeokuta, Lagos, Ilaro, Ifo, Sango, etc. Stated further that traders in these cities will travel down to buy the farm products in stuck and transport them down to the city. This shows that the region serves as one of the food basket regions of the state. However, the reverse was the case during and even after the herdsmen-farmers' crisis.

Furthermore, the result also detected that the conflict has brought poverty to the farmers, due to low crop yield and a reduction in income. Large farms were often victims of cattle invasion and destruction, which resulted in low agricultural production. By extension, this had a direct impact on the people's income levels. Again, the inability of the farmers to go to the farm during conflicts and the low sales all led to a reduction in the quantity produced. Even though low crop yield can lead to loss of income, what emerged in the study area was the result of crop destruction by Fulani herdsmen.

the results above affirmed that the herdsmen-farmers' crisis has great implications on the food security of the communities and the entire state at large, even to some neighbouring states. Farmers were unable to visit their farm, cultivate crops, and some farmers who claimed to have visited their farm during the crisis period were unable to do more cultivation because they worked with fear of herdsmen attack. As a result, there was a very low level of farm products. This supports the assertion by Abdullahi et. al. (2014) that when herder-farmer conflicts occur during the farming season, there is a tendency that most farmers, especially women, would not go to farm for fear of being attacked by herders. It also agreed with (Suthakar, et. al., 2008; Eklund, et al., 2016; Adelaja et al., 2019) stated that farmers abandoned their lands because farmers or workers were killed, people were forced to leave, fled voluntarily, or were involved in the fighting. This can lead to a labor shortage and, therefore, fewer people harvesting, which then can lead to crop yield loss and food insecurity.

Conclusively, the analysis of the result of the relationship between crisis between Fulani herdsmen and farmers on food security in Yewa North, Ogun State confirmed that herdsmen-farmers' crisis has done a great damage to the food security in Yewa North as the result confirmed that there is a significant relationship between crisis between Fulani herdsmen and farmers on food security in Yewa North, Ogun State. Also, it has a great negative effect on the standard of living of the residents of the communities surveyed. There is low income couple with a shortage of food resources in the area.

CONCLUSION

It has emerged from the study that farming is the major contributor to household income in the study area. However, the movement of Fulani herders to Yewa North has led to the destruction of farmers' crops and loss of lives. The herders provoke the farmers to act, such as insulting the herders and attempting to chase out the herders from their territory. In response, the herders wage deadly attacks on the farmers. This situation has affected food production and the income of the people. This unresolved crisis has serious implications for the policy of the government in providing development for these communities. If these conflicts are not resolved in a timely manner, the sustainability of both the economy and the environment would become problematic. Agriculture, which is the mainstay of the economy of the people, is being disrupted by these conflicts, making

livelihood difficult at both the immediate locality as well as the larger communities that are dependent on the produce from these communities.

DECLARATION

Acknowledgement

We are grateful to the village chiefs in each study region who gave their permission to conduct this study and allowed access to their residents. We would like to thank everyone who participated in the study.

AUTHOR CONTRIBUTIONS

Conceptualization, J.S.A., Methodology, J.S.A. and I.B.O., Field Investigation, O.M.J., Statistical Analysis, J.S.A. and F.O.A., Writing Original Draft Preparation, J.S.A. and F.O.A., Writing Review and Editing, M.O.B. and I.B.O., Visualization, J.S.A., All authors have read and agreed to the published version of the manuscript.

FUNDING

This research received no external funding.

CONFLICTS OF INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analysis, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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