

A Critical Evaluation of Herders-Farmer Conflict on Food Insecurity in Nigeria

KAVE Iveren Martha, OGUNMEFUN Folorunsho Muyideen and OLAWUNMI Adekunle Toyin

Criminology and Security Studies, Chrisland University, Abeokuta, Ogun State, Nigeria

Abstract: This study is centred on investigating the impact of herders-farmers conflict on food insecurity in Nigeria with relevance to six geo-political zones in Nigeria. Extant secondary publications were reviewed and supported with three different theories namely broken windows theory, Frustration-aggression theory and situational crime prevention theory. Mixed methods and descriptive research design was adopted to collect 10 in-depth interviews through the use of snowball sampling technique from participants with semistructured instrument while the quantitative data were collected through the use of structured questionnaire from 240 participants in six geo-political zones in Nigeria using purposive sampling technique and multistage sampling techniques. The study concluded that the current stage of food insecurity is a resultant effect herders-farmers clashes in six geo-political zones in Nigeria. Therefore, the recommended that the Nigeria government should create cattle routes in places where cattle rearing is prominent in the country. In addition, Nigeria government should enact anti-open grazing laws and they should be properly implemented. Also, the traditional rulers, group's leaders and stakeholders in the country should be engaged in the enduring resolution of conflicts between herders and farmers.

Keywords: Conflict, Food-Insecurity, Herders-Farmer Conflict, Insecurity.

INTRODUCTION

Globally, according to the Farm Advisory Service (FAS) and the US Department of Agriculture (USDA) for 2021, India has the largest stocks of beef in the world as of 2021, followed by Brazil and China. Indian cattle stock is 355.5 million head, accounting for about 30% of the world's stock, Brazil's 226 million head, accounting for about 23% of the world's stock, and China 100 million head, accounting for About 10% of the world's stocks in 2021. In 2021, India, Brazil, and China accounted for about 65% of the world's cattle stock. From the above, the countries can be seen as the largest producer of beef (Cows), and also the number of farmers and agricultural activities been the largest. According to the Food and Agriculture Organization (FAO 2020), 58% of India is engaged in agricultural practices, 18% of the Gross Domestic Product (GDP) is provided by agriculture, and about 41% of the total land is occupied in Brazil for Agriculture and of the 2.1 billion acres, 7% of the 867.4 a million acres are used for food products such as sweet potatoes, corn, tobacco, and peanuts. While 13% of China's land is suitable for agriculture, China also owns 7% of arable land, which feeds 22% of the world's population. As yet, there are no reports of herder's farmers' clashes in any of the countries. Various research studies in magazines, articles, journals, and other electronic media show that Brazil, India, and China practice cattle ranching rather than open grazing, which helps to reduce and prevent conflicts between the farmers and herders.

Evidence gathered from extant literature reviewed for the study indicated that, Nigerian cattle numbers range from less than 22 million heads,

which can easily be ranched (USDA 2021), with an arable land area of 34 million hectares, and agriculture that accounts for more than 20% of Nigeria's GDP (Varrella, 2020). Nevertheless, the country is still experiencing conflict between the herders and farmers. Several laws were made that gave room for open grazing, and this practice is observed as one of the reasons for the present herder's farmers' conflicts. As a result of the various fighting, different governors have issued bans on open grazing. It was reported that Nigeria was an agricultural country until the discovery of crude oil in 1956, and Egobueze (2020) also mentioned that most of the national income came from agriculture. Today, Nigeria's crude oil is an important resource that the country relies heavily upon. Successive governments have stated that Nigeria needs to return to agricultural culture through mechanized farming which remains the only way to support an ever-growing population

The aforementioned is due to a clash between the farmers and herders in the country. In early Nigeria, before the conflict, herders and farmers coexisted peacefully without fear or intimidation. Ayinyetu (2018) argues that farmers and herders had warm relationships in the past before the relationship deteriorated. However, as the population of herders and farmers increased, the demand for farmland increased accordingly, and conflicts between the herders and farmers occurred (Aliyu, Ikedinma, and Akinwande, 2018). Akinbode (2020) also noted that the clash between the farmers and herders is the farmer's habit of expanding the boundaries of their farm to the cattle path and the herder's habit of letting their

cattle into the farmer's farm to feed on their plants, litter the farms and pedestrian paths with excrement. The confrontation between the herders and farmers poses a threat to the country's food security, which has affected the speed at which farmers can produce and export food to other parts of the country.

Food is a fundamental necessity of mankind and has shaped the process of man's efforts all through human history. Food is always one of the most important goals of human beings has been the question of how to get food for the whole family, the community, the nation, and, in fact, the entire world (Fadare, Akerele, Mourokis, and Ogunniyi, 2019). The US Department of Agriculture (2010) estimates that more than 53 million people are starving in Nigeria, representing approximately 30% of the 150 million people in Nigeria, and 52% of them live on the poverty line. However, Nigeria achieved self-sufficiency in food production, according to reports in the 1950s and 1960s, and became a net exporter of food in other parts of the continent. Decreased food production has resulted in increased food imports to balance food oversupply and demand in other countries to ensure food security.

However, food insecurity eventually increases generating to other social vices due to constant herders-farmers conflicts which evidenced from publications shows that the situation will only get worse, and the death toll and property destruction likely worsen, further exacerbating national unrest, food crises, and stability. The above is the underlying reason why the study was carried out to determine the adverse effect the farmers and herdsman conflict has affected food security in the country.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Three theories were adopted for the study According to Ahearnt (2018), it is still very difficult to theorize the conflict between herders and farmers because the participants, causes, and motivations are complex and diverse. They trust that to vividly explain the escalating conflicts between farmers and herdsman, a combination of multiple theories is needed. Therefore, on this basis, the study explores the problems of the herder's farmers' conflict from the perspective of triple theories to have a deeper understanding of the problems. Thus, the theories adopted are:

1. Broken windows theory

2. Frustration-aggression Theory and
3. Situational Crime Preventive Theory

This theory was propounded by James Wilson and George Keilling (1982). It states that when minor crimes are not reported, it will lead to a bigger crime. This theory explains the growth of herdsman attacks in the country, most especially the herders-farmers conflict. In the sense that, when the crime began it was ignored and not stopped immediately. This act prompted the spread of the herdsman attacks to the majority of the states in the country. Hence, as time went by more people were affected by the attacks most especially farmers in different states mainly in the north-central precisely Benue state, and in the process, it has grown as an immense problem, which is affecting the economy of the nation. The theory failed to proffer solutions to the problem and the theory also failed to explain the causes of herdsman-farmers conflict but instead focused on the prevalence of the form of crime or conflict and that is what leads to the evolvement of frustration-aggression theory. According to Egobueze (2020), after experiencing the overwhelming attack of herdsman like Benue, Taraba, Nassarawa, Plateau, Kaduna, Katsina, it was recently reported to have been hit hard. Other states such as Kogi, Delta, Imo, Ebonyi, and Enugu have also experienced sporadic attacks by the unrestricted herdsman, which has not stopped blood-drinking and eating. The brutality and impunity of attackers carrying out operations without considering the dignity of law are most disturbing, along with the helplessness of police and military who fails to defend victims ruthlessly slaughtered in their homeland. Conflicts between herders and farmers are generally valuable, as herders cover community farmland with their cattle and graze without restrictions on cultivated and non-cultivated land, by that means damaging food and cash crops. Ahmadu (2011), who commented that there are now 417 grazing reserves and they are failing in terms of the purpose of their establishment. Ofem and Bassey (2014) argue that most grazing reserves have little potential for agriculture on poor lands. The lack of enforceable sanctions discourages farmers from appealing to farmers to extend their farm cattle way.

The frustration-aggression theory is also called the 'frustration-aggression-displacement theory. The theory was propounded by John Dollard, Neal Miller, Leonard Doob, Orval Mowrer, and Robert Sears in 1939 and later developed by Neal Miller and Leonard Berkowitz in 1941. The theory says

that aggression is the result of blocking or frustrating, a person's attempt to achieve a goal. (Friedman Schustack, 2014). When the hypothesis was built for the first time, it says that frustration is always before aggression, and aggression is a safe consequence of frustration. Two years later, Millerand-Sears reformed the hypotheses to suggest that, while frustration generates a need to react, some forms of aggression are a possible result. Therefore, the reform hypothesis says that while frustration promotes a potential or non-active behaviour, positive behaviour is the result of the frustration that is insufficient, which is a necessary condition for aggression (Zillmann Dolf, 1979). It tries to explain the cause of violence or conflict. Frustration is "the condition that exists when a goal against one's side is hindered while aggression is an action in which the opponent scores a goal that injures a living being (or other living creature). The theory says aggression is caused by frustration, and if the origin of frustration cannot be challenged, the aggression is moved into an innocent target (scapegoat). This theory is also used to explain the riots and revolutions, which is assumed to be instigated by the deprivation and poorer sanctions of the society who may express their frustration and anger through violence (WordPress.com, 2012).

Oluadeyemi (2017) states that some other variables influence the use of violence, such as culture, society, and political environment. The culture must at least accept, if not approved, be violent to end. Violence is also more when the current leadership or social-economic and political system are not responsive. Oluadeyemi also confirmed that the central topics of the theory are the scarcity that the product is insufficient (the effects of climate reduction spread) or the distribution of unequal resources, as the final deficiency leads to aggression. In terms of frustration, this means that a person's means of livelihood (cultivation or grazing, as possible), maybe hindered by certain cases, and the reaction of a person to this is anger. Oluadeyemi also added that the absence is not based on the desire or the needs alone, but about the wishes and needs that we feel we should have or deserved. More often, the herders are disappointed with desertification, so the fact that they face forced movement, and when they move, several challenges are being encountered, makes them frustrated. Similarly, farmers, which have cultivated their farmlands with struggle are frustrated when the cattle feed on their crops. The herder's terror is a struggle for

values and fights for scarce resources in which their goals are to hinder, and eliminating the communities in other to fend for their animals. Violent activities of herder's farmers' conflicts occur due to the accumulation of frustration. Terrorist activities by herders are traceable to desertification, that have weakened grazing opportunities or scarcity of food for their animals in the long run, which affects the well-being of their economy. If a herder loses their cattle, to drought and scarcity of water, he can be disappointed because of the loss of his livelihood. From this fact, he can be aggressive, and since he cannot transfer it to the natural cause, he then in the long run channels the frustration to any person who hinders his migration to a safe area. On the farmers and the host community in Nigeria, the disappointment also occurs when the cattle of the herders destroy their crops in the process to feed, and since they feel frustrated, they become aggressive and channel their aggression towards the cattle and the herders. Due to this fact, the conflicts and confrontation between the herders and farmers have continued to exist, and therefore is inevitable until the causes for the conflicts are resolved. This theory went further to explain the causes of the herders-farmers conflict as well as their attacks on even the people but fails to state solutions to the problem and the prevalence of how herdsmen attack began up till the point where is of great concern to the society and country.

Situational crime prevention theory was propounded by Donald Clark in 1992. The theory focuses on the background of criminal activity rather than the criminal characteristics. It offers a practical approach to challenging criminological theories based on criminal mischief and improving security. According to Situational Crime Prevention, crime is the result of the interaction of temperament and situation. Criminals choose to commit a crime based on their awareness of possible opportunities. As a result, contextual factors can stimulate crime and reduce crime that resolves these factors. Situational crime prevention focuses on very specific categories of crime and disorder, with a particular focus on crime concentration. Understanding how crime occurs is very important for situational crime prevention. It needs to consider several possible alternative solutions using the action of the research model. Situational crime prevention is widely used worldwide and applies to minor deviations (e.g. dumping garbage), standard crimes (e.g. theft and robbery) and very serious crimes (e.g. international

terrorism and maritime pirates). Evidence of a situational crime prevention effect is considerable. Studies clearly show that crime does not necessarily replace crime. It often reduces crime near preventive sites. There are four techniques to prevent crime and this includes:

- Target hardening
- Control access
- Deflating offender
- Control of facilitators

Concerning the study, herders-farmers conflict can be prevented by utilizing these four techniques mentioned above. For instance, if the environment or community with these farmlands make the environment less attractive by creating a blockage to prevent any access to the communities, it could be through creating laws to prevent herdsmen attack, neighbourhood watch known as the vigilante among others. Also, there should be strong access control, this could be accomplished by building more police stations closer to the place where this incidence is on a high occurrence, good surveillance of the community; this could be done through the use of drones, CCTV cameras, effective patrol etc. deflating the offenders is a very key technique in preventing the attacks and conflicts experienced in communities or states. This simply means punishing the offenders severely to deter others from perpetrating the act, this was neglected right from when the herdsmen attack began. If the government and the security personnel heeded to the complaints of the people and went ahead to find measures to curb the attacks as well as arrest those found perpetrating the attacks, surely the drastic effects it has had on the nation would have been averted. Lastly, the law enforcement agencies should be thoroughly checked because there are instances where the agencies are meant to apprehend the offenders, which are the herdsmen launching the attacks on the people in order to allow their cattle to feed on their farmlands in the process destroying the crops, are found allying with these herders as a result of their gains because these herders are believed to have backings from either some politicians or government bodies due to the weapons they possess and also the lackadaisical behaviour to prevent further occurrences of the conflicts and attacks that has led to displacement of those affected, loss of lives and properties in the process ruining the country's economy. This theory focuses on the settings for criminal acts rather than on the characteristics of offenders like every other theory explains. Thus, this fails to give an insight

on the prevalence and causes of crime but only proffer solutions.

In conclusion, three theories were adopted with different theoretical postulations. Thus, the first theory is on broken window theory by Wilson and Keilling that explains that crime develops from minor to major stages. Therefore, it is easy for the community member to repair the crime or herdsmen attack at the minor stage by reporting the crime cases or attacks by the herdsmen to the state security personnel or government, in the other way around for the government to take quick action to tackle to the crime reported while at the minor stage before the crime scene or scenario gets to the stage beyond the hands of the government, this is presently the state of the herdsmen-farmers conflict and herdsmen attack in the various states affected. When it began in Benue state even when the community members cried to both the government and the security personnel to help stop the attack, but they were no response and this led to numerous losses of lives and the fights between the farmers and the herdsmen, which gave them the right to attack other states. Although, the failure or gap discovered in broken window theory was filled by frustration-aggression theory by John Dollard, Neal Miller, Leonard Doob, Orval Mowrer and Robert Sears in 1939. John Dollard, *et al.*, laid emphasis more on the causes of the explanation of causes of herdsmen attack from the macro level. To them the prevalence of herdsmen attack or herders-farmers conflict is rooted in the Herdsmen are frustrated due to desertification, thus, the reality is that they face forced migration and as they migrate, series of challenges are encountered which in turn brings frustration. Similarly, farmers who have struggled to cultivate farmlands also get frustrated whenever herds of cattle destroy their farmlands. John, *et al.*, (2013). explains the cause of the herdsmen attack as the failure of the government to provide basic amenities for the people which has led to frustration which generates into the herder-farmers conflict, destruction of the economy and creation of insecurity. The third theory is centred on situational crime prevention by Donald Clark (1992). He believed that people commit crime because of the opportunities made open to them, concerning the work the theory explains how the herdsmen attacks and farmer-herders conflict can be subdued and prevented if the four techniques are applied such as; target hardening, control access, deflating offender and control of facilitators. Several reasons have been alluded to

as the cause of the conflict among herders and farmers in Nigeria. Certain scholars regard colonial policy as a reason of the historical clash between farmers and herders in some parts of Africa, which is caused by the environment. Abbass (2012) argues that the minor cause of tension between farmers and herders is primarily economic and that land-related issues account for the majority of the conflicts. However, it could be in the broader political economy context of the land struggles, followed by burgeoning demographics with fierce competition around permanent space to meet the needs of a growing population (Oladele and Oladele, 2011). Odunsi (2017) states that the destruction of crops by cattle and other property by herders, incineration of pasture, obstruction of stock routes, and water supply sites by crop intrusion is the main direct cause for the conflicts. Alike, inadequate social equipment, such as piped water, was also observed as a source of herder's farmers' conflict. For example, Ahmadu (2011) noted in the Orkpe Plateau State that the conflict between herders and farmers was caused by the pollution of herders in the dam, which is the only source of water for the farmers. The population of semi-arid areas is always larger than that of key areas such as the central zone, and the initial cultivation expansion occurred in this area. As pressure on cultivated land in semi-arid zones increased, soil fertility decreased, forcing farmers to move to vegetation areas or increase the size of cultivated land. As a result, more farmers began to settle more and more south in the slightly established moist region. This research work primarily dwells on the effect the conflict has had on food production, distribution and consumption in Nigeria such as the emergence of hunger, civil unrest, psychological trauma, criminalities like theft among others. This is an area not many scholars have dwelt on and focused their research energy or hence the study helps to answer the many questions surrounding food insecurity.

MATERIAL AND METHODS

The study adopted mixed methods of research with descriptive research design to, covers six different states in the six geo-political zones in Nigeria (Benue State, Rivers State, Kaduna State, Abia State, Delta State, and Oyo State). Qualitative data were collected from 12 participants through in-depth Interviews from herders and farmers identified in the selected states geopolitical zones While 240 quantitative data were collected from the participants in the above-mentioned states in

all the six geo-political zones in Nigeria. For the quantitative data collected multistage (Probability), snowballing and Purposive (Non-probability) were adopted while the qualitative data were collected using Non-probability (Snowballing and purposive) sampling techniques were adopted. The purpose of collecting qualitative and quantitative data is to use the strengths of one method to cover the weaknesses of other methods. All ethical approval were sorted and highly maintained such as informed consent, anonymity and keeping confidentiality to the topmost level. Data collected through mixed methods were analysed using descriptive and inferential statistical methods while the qualitative data collected was analysed using content systematic analysis methods to complement the usefulness of mixed methods. Cross-sectional survey method was adapted to purposively

RESULT AND DISCUSSION OF FINDINGS

Based on the responses received from the questionnaires administered and the interviews, the following findings were gathered from the study that shows there is a significant relationship between the herders-farmers clashes on food insecurity in Nigeria. This indicates that the mixed method (quantitative and qualitative) was utilized to arrive at the final results being discussed below.

The socio-demographic information of the respondents is contained in Section one. A total of 240 respondents consisting of males representing 46.7% and females representing 53.3% were sampled for this research. Age analysis revealed 19.6% were aged between 18- 20 years, 20.8% were aged between 21-25 years, 30.4% were aged between 26-30, and 29.2% were aged between 30 years and above. Nationality analysis showed that the 240 respondents were from Nigeria. The total response of the respondent for each geo-political zones indicated 16.66%. The total response of the respondents for each state indicated in the research inquiry showed 8.33%. Year of residence in the state of each respondent revealed that 11 respondents representing 4.58% are between 0-5 years of residency in the state, 15 respondents representing 6.25% are between 6-10 years of residence in the state, 30.42% representing 73 of the respondents are between 11-15 years of resident in the state, while 141 respondents representing 58.75% are 16 years and above of resident in the state.

The herdsmen attack in Nigeria has a great effect on food insecurity. Section two shows that the attacks by the herders on farmers have limited the level of food production, it has also increased the prices of food produce whereby making it difficult for people to purchase and this is due to scarcity of food. Also, many people in the country most especially the community members and farmers whose communities have been invaded by the herdsmen are now experiencing hunger as a result of no access to food, in addition, the people no longer engage in any form of agricultural activity in the conflicts areas as stated in the research inquiry because of the fear to death that has been instilled by the herdsmen attacks and invasion. The findings in this section gathered from the quantitative aspect of the data analysis was supported by the information gathered from the interviewees, likewise, the literature reviewed corroborates with the findings above when Tolu, Adalakin and Akindiyo (2018), said that "The herder's farmers' crisis affects different aspects of the economy and In addition to the destruction of crops, houses were destroyed and burned, leading to homelessness, displacement and unemployment, there is also political and social instability and food insecurity, especially in affected areas.

Section three (question reveals that the destruction of farmlands, contamination of river bodies and food products by cattle instigates a clash between the farmers and the herders. Also, when the farmlands are destroyed by herders bringing in their cattle to feed on the crops of the farmers, in return the farmers tend to take laws into their hands especially when nothing is done to stop the herdsmen from invading their farms with their cattle to feed the farmers begins to block routes and engage in cattle rustling. In the process, the herders and farmers engage in a clash that has affected food security in Nigeria because the herders to are relevant in the society, they are viewed to be the producers of 90% of the beef meat consumed in the country. Ethnic and religious differences, as well as the Decrease of soil fertility/erosion and the need to increase the scale of operation by both groups, were agreed to be the causes of herdsmen farmers' clashes. Both groups keep increasing in their scale of operation and due to scarcity of land which is a major component linking both groups, the struggle for the land has resulted in the clashes between the herdsmen and the farmers in Nigeria. Also, the decrease in soil fertility and desertification most especially in the north has led to the migration of

the herders to the south and north-central states for grazing of their cattle and in the process of the intrusion, both groups are clashing. In addition to the findings from the quantitative data, the qualitative data from the 8 interviewees supports that of the quantitative in regards to the causes of the herdsmen-farmers 'conflicts in Nigeria. Besides, the literature review based on the causes corroborates with both the qualitative and quantitative data when Sandford & Habtu, 2000 stated that, the complication of grassland resource management depends on the precarious claims and counterarguments for grazing, water and other resources. This complication is based on certain principles of interrelationship and flexibility. The land is the primary resource base for herders, but there are no distinct fixed assets with specific uses and potential uses.

The research study of Section four reveals that provision of adequate security for farmers, Provision of Support funds to both groups in other to adopt an improved farming system, Establishment of cattle ranching over open grazing, Cattle routes in places where cattle rearing is prominent and the Use of artificial intelligence to carry out most farming practices are some strategies that can be adopted by the government to ameliorate herders farmers' clashes in the country which has brought about food insecurity in the country so has to ensure food security. The findings from the quantitative data above corroborate with the qualitative data gathered. Also, the literature reviewed in chapter Two in regards to the strategies where various agricultural programs such as the Agricultural Development Project (1974), Operation Feed the Nation (1976), the Green Revolution (1976), and Fadama I, II, III, etc. were established with the main goals of reducing food insecurity and alleviating poverty supports the findings from the quantitative and qualitative information.

Section five shows some recommendations for the government they believe can ensure food security in Nigeria. These include; the Arrest, trial and prosecutors of violence in the conflict zones, several reports have shown the negligence of the government to do anything in other to prevent the clashes and the attacks by the herdsmen on innocent farmers and members of the community. Therefore, if these herders are brought to book, it will deter others from perpetrating the acts. Also engaging the traditional rulers/group leaders/stakeholders in the enduring resolution of conflicts between herders and conflict, the attacks

occur more at the grassroots levels, which is the villages because the farmers are found there, in other words, the rulers of both groups could be engaged to talk to their people and settle the crises amicably. In addition, strengthening of porous borders and restriction of immigrants' herders, educating both occupational groups on sustainable ways of resource sharing and peaceful co-existence is very vital in stouping the clashes because most of the herders who engage in the act do not know they are wrong for forcefully driving the farmers away from their farms and in the process killing them. However, both groups can share the resources and co-exist peacefully if the right manner of approach is utilized. More so, enacting anti-grazing laws just like the governors of the states in the north and south have done is an important way of tackling the issue of food insecurity in Nigeria. The final results from the quantitative information were supported by the qualitative data derived from the 8 participants interviewed across the study location. They saw the need for the recommendations stated above to help prevent the menace of the herder's farmers' clash in Nigeria, so the issue of food insecurity can be resolved. This research was conducted in the selected communities in Nigeria. The response of respondents to all questions was very similar as they all experienced the same kind of effects of the herdsmen attack. This calls for urgent intervention of the government and other stakeholders to devise means that will help in mitigating the clashes between the herdsmen and farmers, which has resulted in food insecurity in Nigeria.

This section focuses on the presentation of data that was obtained through qualitative research instruments. The instrument used to collect the data was an In-depth interview among the farmers who have been affected by the herdsmen attacks in the communities selected for the research inquiry. In-depth interview is the collection of raw data verbally from the respondent. Thus verbal information was collected from farmers in the communities that were purposively selected as mentioned in subsection (3.7) in section 3(methodology). The information collected was analyzed as follows.

Question 1: The first question was centred on the effects of herdsmen attack on food insecurity in Nigeria

The herdsmen attack has rendered a lot of farmers and villagers helpless because the majority of these villagers engage in agricultural activities as a means of livelihood. Presently in Benue, most

farmers cannot go to the farm anymore due to the fear of death and the attacks occurring on the farmlands. The herdsmen bring their cattle in numbers that outnumbers us to the farmlands to eat up our crops and kill our people if we decide to stop them from destroying our crops. Also, these herdsmen come to our houses and destroy our barns, sometimes burn our houses. The herdsmen have scattered families, people of the community, made the villagers run away and brought hunger to us. We cannot eat any longer because we cannot go to the farms. After all, the herdsmen keep attacking, saying the crops are good for their cattle.

IDI/Farmer/Odugbeho/Agatu L.G.A/Benue State/14/08/2021

Another interviewee submitted that *I have stopped going to the farm because of the herdsmen. I have not had physical contact with them before but anytime I go to my farm to harvest my crops in other to sell, I discover them eaten and destroyed, so I stopped and this is leading to food shortage in the country because other farmers around are scared to go to the farmlands due to the attacks of the herdsmen they have experienced.*

IDI/ Farmer/ Liman Katagum/ Bauchi L.G.A/Bauchi State/12/08/2021

The submission of the community members interview submitted that; *I have experienced the attacks of herdsmen in the community. Due to the attacks in the community, most especially on farmers majority of the people have left the community to other communities without the attacks and for those still there, they live in fear and because of the fear a lot of the farmers do not farm any longer and to me, this is the reason for low access to food in the country*

IDI/ Community member/ Nimbo/Uzo-Uwani L.G.A/ Enugu State/08/08/2021

One of the interviewees also explains that *I have not had a major encounter with the herdsmen before but there was a particular day I went to my farm and saw cows brought by a herder to eat on my crops. Although I chased the herder away, it was too late because the cows have eaten all my cassava and yams and I was left with nothing to harvest and sell*

IDI/ Farmer/Irele Ekiti/ Ikole L.G.A/ Ekiti State/ 5/08/2021

Question 2: The second question is centered on what are the causes of herdsmen farmers' clashes. The outcomes of the second questions from the in-depth interviews shows that

I cannot tell why the herdsmen are attacking us the farmers but I believe if they want to feed their cows, instead of killing and scaring us and the community people, they can ask nicely and peacefully. This will prevent the fight between us the farmers and them because we cannot continue to watch the herdsmen destroy their farm

IDI/ Farmer/Odugbeho/Agatu L.G.A/Benue State/14/08/2021

The result from another participants indicated that

The cause of herdsmen-farmers 'conflict is inadequate cattle route network and scarcity of grazing land. The herders don't have cattle routes and grazing land, which is the reason for them invading farmlands

IDI/ Farmer/ Liman Katagum/ Bauchi L.G.A/Bauchi State/12/08/2021

Also, another participant opines that *I believe the clash between the herdsmen and the farmers is due to land scarcity in the country. When there is not enough land for the herders to carry their cows to eat, they will come to the farms to feed their cows and this will cause fights between them*

IDI/ Community member/ Nimbo/Uzo-Uwani L.G.A/ Enugu State/08/08/2021

The fourth participant explains that *The failure of the government not banning the herdsmen from going anywhere to graze their cows is the reason for the clash we are experiencing between them and us the farmers.*

IDI/ Farmer/Irele Ekiti/ Ikole L.G.A/ Ekiti State/ 5/08/2021

The submission of another participants *I do not know why the herders are fighting the farmers but I feel the government is encouraging the clash both of them are having because the government haven't said anything on the issue of the herdsmen attacking farmers and innocent people. This is beyond them looking for farms for their cows to feed because the herders carry big weapons around and, in some places, they just kill people to create fear*

IDI/Community member/Jankasa community/Zango Kataf L.G.A/Kaduna State/ 12/08/2021

Question 3: The third question is centered on the strategies to be adopted to ensure food security in Nigeria

The submission of the first participants indicated that;

The government should provide support funds for us the farmers who have lost our farmlands and farm produce to the herdsmen attacks.

IDI/Farmer/Odugbeho/Agatu L.G.A/Benue State/14/08/2021

Within the purview of the inquiry, another interviewee submitted that;

Laws should be created to prohibit the herders from entering our farmlands as they do freely

IDI/Farmer/ Liman Katagum/ Bauchi L.G.A/Bauchi State/12/08/2021

The report of the third participant explains that *The government should set boundaries to limit the violent activities of the herders and the creation of security polls in each community especially the ones that have been attacked. In other to protect us from the attacks.*

IDI/Community member/ Nimbo/Uzo-Uwani L.G.A/ Enugu State/08/08/2021

The view of the fifth participants explains that; *The government should provide adequate security in our communities, most especially for us the farmers.*

IDI/Farmer/Irele Ekiti/ Ikole L.G.A/ Ekiti State/ 5/08/2021

While another participant submitted that; *I believe the government should create security for the farmers and us the members of the community. Also, ranches should be made available for the herders to graze their cows, so they would not be entering our farmlands to eat the crops of the farmers.*

IDI/Community member/Jankasa community/Zango Kataf L.G.A/Kaduna State/ 12/08/2

Question 4: The fourth question is centred on their recommendations to prevent the herdsmen farmers' clashes and ensure food security in Nigeria.

The first participant submitted that

The government should help remove the herdsmen away from Benue state by creating places for them to feed their cows, so people can go back to farming and they will be peace in the country

IDI/Farmer/Odugbeho/Agatu L.G.A/Benue State/14/08/2021

The submission of another participants opines that; *The government should create ranches in other to prevent the herdsmen from wandering all over the place with their cattle to feed on our farms. This will restore peace in our community and we the farmers can go to the farms to cultivate and wait for the harvest period. This will increase the level of food production in the country and ensure there is enough food for everyone.*

IDI/Farmer/ Liman Katagum/ Bauchi L.G.A/Bauchi State/12/08/2021

The submission collected from the third participant shows that *The government should create a dialogue system that involves the rulers and traditional leaders of the herder's states as well as the farmers in other for them to debate and solve the conflicts without it escalating to a bigger problem like war because hunger can create so many other issues.*

IDI/Community member/ Nimbo/Uzo-Uwani L.G.A/ Enugu State/08/08/2021

The submission of the fourth participant opines that *The government should punish those herdsmen who have attacked us and should ban them from taking*

their cattle to people's farms to eat. In order to allow us to have a peaceful and healthy farming activity

/Farmer/Irele Ekiti/ Ikole L.G.A/ Ekiti State/ 5/08/2021

The submission of the fifth participants indicated that *We have waited for so long for the government to take the necessary actions but nothing has been done, so in the process, the community members have contributed to getting weapons for the youths in the community to watch over the community and fight these herdsmen because they cannot keep watching them destroy their properties and kill them. However, the government should strengthen the borders because most of the herdsmen who attack us do not look like Nigerians.*

IDI/Community member/Jankasa community/Zango Kataf L.G.A/Kaduna State/ 12/08/2021

The result of the quantitative analysis on the effect of herdsmen-farmers conflict on food insecurity in Nigeria Shows that the Null Hypothesis (H₀): There is no significant relationship between herdsmen attacks and food insecurity in Nigeria. While the Alternate Hypothesis (H₁): There is a significant relationship between herdsmen attacks and food insecurity in Nigeria.

Table 1: The effect of herdsmen attacks on food insecurity in Nigeria.

Questions	SA	A	N	D	SD	Total
7	131	93	15	1	-	240
8	122	94	19	2	3	240
9	127	74	31	6	2	240
10	121	88	28	2	1	240
11	127	81	28	4	-	240
Total	628	430	121	15	6	1200

Using chi-square (X²) formula=

$$X^2 = \frac{(o_i - e_i)^2}{e_i} + \frac{(o_i - e_i)^2}{e_i} + \frac{(o_i - e_i)^2}{e_i}$$

a. $\frac{(628 \times 240)}{1200} = 125.6$

b. $\frac{(430 \times 240)}{1200} = 86$

c. $\frac{(121 \times 240)}{1200} = 24.2$

d. $\frac{(15 \times 240)}{1200} = 3$

e. $\frac{(6 \times 240)}{1200} = 1.2$

Table 2: The table below shows the relationship between the expected and observed variable

	O	E	o - e	o-e ²	(o-e) ² E
A	628	125.6	502.4	252,405.76	2,009.6
B	430	86	344	118,336	1,376
C	121	24.2	96.8	9,370.24	387.2
D	15	3	12	144	48
E	6	1.2	4.8	23.04	19.2
					3,840

Degree of freedom = 8

Level of significance = 0.5

Calculated value = 3,840

Table value = 15.507

The calculated value is greater than the table value, so the null hypothesis is rejected and the alternative hypothesis is accepted. This means that there is a significant relationship between herdsmen attacks and food insecurity in Nigeria. According to the qualitative information gathered on the effects of herdsmen attack on food insecurity, the findings support the quantitative information gathered. The findings indicate several interviews:

The herdsmen attack has rendered a lot of farmers and villagers helpless because the majority of these villagers engage in agricultural activities as a means of livelihood. Presently in Benue, most farmers cannot go to the farm anymore due to the fear of death and the attacks occurring on the farmlands. The herdsmen bring their cattle in numbers that outnumbers us to the farmlands to eat up our crops and kill our people if we decide to stop them from destroying our crops. Also, these herdsmen come to our houses and destroy our barns, sometimes burn our houses. The herdsmen have scattered families, people of the community, made the villagers run away and brought hunger to us. We cannot eat any longer because we cannot go to the farms. After all, the herdsmen keep attacking, saying the crops are good for their cattle.

IDI/Farmer/Odugbeho/Agatu L.G.A/Benue State/14/08/2021

The second participant also supported the view of the above respondents and the response says that: *I have stopped going to the farm because of the herdsmen. I have not had physical contact with them before but anytime I go to my farm to harvest my crops in other to sell, I discover them eaten and destroyed, so I stopped and this is leading to food shortage in the country because*

other farmers around are scared to go to the farmlands due to the attacks of the herdsmen they have experienced.

IDI/Farmer/ Liman Katagum/ Bauchi L.G.A/Bauchi State/12/08/2021

The third participant response on the effects of the herdsmen attacks on food insecurity in Nigeria supports the findings of the participants above:

I have experienced the attacks of herdsmen in the community. Due to the attacks in the community, most especially on farmers majority of the people have left the community to other communities without the attacks and for those still there, they live in fear and because of the fear a lot of the farmers do not farm any longer and to me, this is the reason for low access to food in the country.

IDI/ Community member/ Nimbo/Uzo-Uwani L.G.A/ Enugu State/08/08/2021

In conclusion, 8 out of 8 participants were interviewed and the information gathered supported the quantitative information. These findings also corroborate the literature review when Tolu, Adelokun and Akindiyo (2018), said that "The herder's farmers' crisis affects different aspects of the economy and In addition to the destruction of crops, houses were destroyed and burned, leading to homelessness, displacement and unemployment, there is also political and social instability and food insecurity, especially in affected areas.

CONCLUSION AND RECOMMENDATIONS

The summary of the findings of the research inquiry titled Herders-farmer conflict on Food Insecurity. Thus, the outcome of the study was designed to shed comprehensive meaning to the outcome of the inquiry In line with the findings of this study, the following conclusions are made. The previous papers have emphasized that other nations in the world like Brazil, China and India produce the highest number of beef and also

possess the highest number of farmers but do not experience herder's farmers' clash. On the other hand, Nigeria produces less beef and has a smaller number of farmers but still herders' farmers' clashes exist and this is as a result of several factors ranging from the environmental to political but at their core is the problem of land scarcity. Hence, the researcher used insights from other standard publications to shed light on herdsmen attacks and food insecurity in Nigeria. It resultant are; food scarcity, low level of food production, increase in prices of food products, low food utilization (safe food for human consumption) and low access to food. Strategies were also proffered to curb the challenge of food insecurity in Nigeria; this includes the provision of adequate security for farmers, Provision of Support funds to both groups in order to adopt an improved farming system, Establishment of cattle ranching over open grazing, Cattle routes in places where cattle rearing is prominent and the Use of artificial intelligence to carry out most farming practices.

Based on the findings of the research of this study it was concluded that there is a significant effect of herdsmen attack on food insecurity in Nigeria. Therefore following are recommended:

- i). The Nigeria government should create cattle routes in places where cattle rearing is prominent in the country
- ii). The Nigeria government should enact anti-open grazing laws and they should be properly implemented.
- iii). The traditional rulers, group's leaders and stakeholders in the country should be engaged in the enduring resolution of conflicts between herders and farmers
- iv). The government should arrest, trial and prosecute the herdsmen perpetrating the violence in the conflict zones in Nigeria.
- v). Both occupational groups, which is the herdsmen and farmers should be educated and sensitized on sustainable ways of resource sharing and peaceful co-existence.
- vi). In this age of technological advancements, the Nigerian government should derive a means of artificial intelligence for farmers to help carry out most of their farming practices in the country.

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