



Herders and Farmers Crises in Nigeria: Implications on Food Security in South East Nigeria

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ABSTRACT:

Insecurity has infringed a lot on many Nigerians, especially the farmers, whose livelihoods have been hampered by the incessant attacks of herdsmen on these helpless farmers, which has resulted in food shortages in the country. In line with the above narrative, this study investigated the farmers and herders crises in Nigeria and their implication for food security in south-east Nigeria (2015–2020) using descriptive statistics on a sample of 348 respondents. The study was anchored on the conflict theory of Karl Marx. Data collected were analyzed using a frequency table, percentages, mean, and standard deviation. Findings of the study show that open grazing and cattle rustling have a significant effect on food security in south-east Nigeria. Based on the findings, the study recommends that the government introduce measures that can reduce or eliminate the negative impacts of open grazing on food security and rustling. And that measures to curb cattle rustling, such as bolstering law enforcement to deter theft and illegal trade and assisting communities in developing alternative livelihoods to diminish incentives for rustling.

Keywords: Herders, Farmers, Food Security, South East, Fulani, cattle grazing and cattle rustling

1. Introduction

In Nigeria, food security has been a pressing concern. The Nigerian government has implemented several agricultural development programmes to improve productivity, increase food security, and reduce poverty. These innovative programs include the Agricultural Transformation Agenda (ATA), the River Basin Development Programme, the Sustainable Farming Initiative (SFI), the Agro-Entrepreneurship Development Program (AEDP), and the Rural Youth Empowerment Scheme (R-YES). These programs prioritize the use of sustainable and modern agricultural practices while providing financial and technical support to farmers and entrepreneurs alike. In addition to creating job opportunities, these initiatives also seek to empower families and communities through increased economic stability and self-sufficiency.

The production of crops, livestock, and fisheries has been supported by the Millennium Development Goals (MDGs) and Sustainability Development Goals (SDGs), among others, in order to feed and hydrate the nation's thronging population. Out of around 98.3 million hectares of total land area, the country has 74 million hectares of arable land. Approximately 70% of the population of the nation is involved in farming, and the agricultural sector has historically been a significant source of funding for economic investment as well as a significant contributor to the country's gross domestic product (GDP).

The farmers and herders' crises in Nigeria, which are potentially attributable to crop damage by cattle, land and water use, cattle rustling, drought, and desertification, among other things, are one of the main factors leading to the gap in the national domestic food supply. Any one of these factors, or a combination of them, might have triggered the ongoing crisis, escalating the impact of the conflict between farmers and herdsmen over land use on agricultural households' livelihoods and, ultimately, the nation's food security. According to Okoro (2018), conflicts between herdsmen and farmers in many communities in Nigeria seem to be sparked by the struggle for survival and the defense of economic life. The acquisition of modern weapons and communication tools has given the struggle in recent years a more hazardous dimension. Massive losses in both life and property have been the outcome of this. Over 100 villagers were reportedly killed in separate attacks in Kaduna State, 69 in Katsina State, and 37 in Benue State in 2014 by bands of heavily armed Fulani herdsmen. In a single devastating episode that occurred in early 2017, more than a hundred individuals lost their lives in violent confrontations in southern Kaduna. Tragically, such alarming levels of casualties are still a recurrent pattern in the region, as clashes persist unabated. Over 100,000 people have been displaced by the conflict between herdsmen and farmers in the states of Benue and Enugu, and many are still attempting to rebuild their lives while others are being cared for by family members or living in improvised IDP camps (Idowu, 2017; Okoro, 2018).

In recent times, the southeast region of Nigeria has been grappling with the invasion of herdsmen, leading to devastating consequences including the loss of lives and properties. A notorious incident occurred in April 2016, when Fulani herdsmen attacked Ukpabi Nimbo in Uzo-Uwani, Enugu State, resulting in the deaths of 40 defenseless people (Nwankwo, Ike, Offich et al., 2019). The raid at Ndiagu Attakwu, Akegbe Community in Nkanu-West LGA, Enugu State, on April 25, 2016, was equally heinous, as herdsmen entered the community and killed eight people, including a pregnant woman whose stomach

was cut open and a Catholic Church seminarian. The raid also saw the destruction of several homes. Another similar attack occurred on August 25, 2016, at the Ndiagu Attakwu Akegbe community, resulting in the death of a seminarian and injuries to five others. A reprisal attack at Nimbo Community in Uzo-Uwani LGA, Enugu State, on November 25, 2016, also left eight people dead, comprising seven men and a woman. In Umuobasikwu, Ozuitem community in Bende LGA, Abia State, a clash between herdsmen and the people led to the death of one person and several injuries on March 14, 2018. In another attack on March 12, 2018, at Enyanwu Igwe Village in Igbeagu Community, Izzi LGA, Ebonyi State, four people were killed and properties, including economic trees, were destroyed. Aku town and environs in Igbo Etiti Local Government Area of Enugu State also experienced an attack by Fulani herdsmen (Amadi & Amadi, 2017). In Imo State, the Ohaji/Egbema community, Owerri Municipal/North/West, Mbaitolu, Ngor-Okpala, Oguta, Aboh Mbaise, and Ehime-Mbano have all witnessed Fulani herdsmen attacks (The Fund for Peace, 2014). This study aims to examine the impact of cattle on food security and the effect of open cattle grazing on food security in south-east Nigeria.

Research Questions

- i. Does open cattle grazing affect food security in South East Nigeria?
- ii. Does cattle rustling affect food security in South East Nigeria?

Hypotheses

- i. **H₀:** Open cattle grazing has a negative impact on food security in South East Nigeria.
- ii. **H₀:** Open cattle grazing have no significant effect on food security in South East Nigeria.

2. Conceptual Clarification

Herder, Farmer and Food Security

According to Chukwu and Okechukwu (2018), a herder is someone who takes care of or caters to a group of domestic animals, like sheep, cattle, or goats, by moving them from one location to another in search of food and water. Depending on the kind of animal they take care of and the area they are from, herders may also be referred to as shepherds, cowboys, or pastoralists. Ezeonwuka and Orizu (2018) see a farmer as a person who works on the land to grow crops, raise animals, or manage a farm for the purpose of producing food or other agricultural products. A farmer is also someone who engages in the business of agriculture, which involves cultivating land, breeding and raising livestock, and producing crops for sale or personal use. According to Idowu (2016), a farmer is a rural landowner who is in charge of running the entire farm, including the land, cattle, and crops. A farmer is a person who has chosen to pursue a career in agriculture with the goal of producing food, fiber, and other products for consumption or sale. A farmer must have a deep understanding of the natural environment and work in harmony with it to sustainably produce crops and raise livestock. On the other hand, food security can be defined as the condition where every person is assured of obtaining adequate and nourishing sustenance that meets their dietary requirements for maintaining a fit and robust lifestyle without compromising on quality and safety.

Food security encompasses the availability, accessibility, and utilization of food by individuals and communities, ensuring that everyone has access to a balanced and healthy diet that meets their nutritional needs (Okoro, 2018).

Empirical Review and Theoretical Framework

In their 2014 study, Okoli and Okpaleke utilized descriptive statistics to investigate the issue of cattle rustling and its relationship with security in northern Nigeria. Their analysis yielded crucial insights, indicating that cattle rustling represents a significant component of public insecurity in present-day Nigeria. This nefarious practice has grave consequences and far-reaching implications for the country's national security. Notably, the emergence of cattle rustling as a form of violent communal raids and its alleged ties to the Boko Haram insurgency introduce a fresh layer of complexity to Nigeria's ongoing security dilemma. Ogboru and Adejowo-Osho (2018) relied on an extensive review of extant literature to examine an effective cattle grazing and rearing legal framework as an imperative for environmental protection. According to the findings of the research, the practice of cattle grazing has had a negative impact on the environment, leading to degradation of the land, posing a threat to the ecosystem's resources and services that support biodiversity, and undermining the attainment of the Sustainable Development Goals, particularly SDG 15. Moreover, the increased engagement in this activity has escalated apprehensions regarding ecological well-being and sparked confrontations concerning the allocation of natural resources. Interestingly, Nigeria's municipal laws do not offer any legal protection for the environment against the adverse effects of cattle grazing, with the exception of some anti-open grazing laws that some states have recently enacted. The management of grazing lands seems to be heading towards an unsustainable path, with a combination of various factors contributing to the issue. The current conflicts, loss of life, and destruction of property between farmers and herdsmen in Nigeria can be attributed to the inadequate management of access to natural resources, specifically land, and the absence of an effective regulatory framework to address the environmental degradation caused by unregulated grazing practices, which are compounded by climate change.

Ahmed et al. (2020) examined cattle rustling and the sustainability of nomadic grazing in Nigeria: a case study of Taraba State, Nigeria, using descriptive statistics. The findings of the study reveal that about 1,758 cows were lost in the state to cattle rustling between 2012 and 2019, based on interactions with cattle herders, and an additional 1,462 cattle losses were reported to the Ministry of Agriculture in Jalingo. Other reported incidences estimated that 64,750 cattle were stolen in 2013 and at least 2,991 herdsmen were killed in the North Central States of Nigeria. Findings of the study reveal that there is a general dearth of available statistical data that can be used to ascertain the extent of the menace of cattle rustling, the number of casualties among herdsmen, and the number of cattle lost to cattle rustlers over the years. The study findings reveal that most of the cow theft cases took place in remote rural

communities and forests with no security presence and poor transport and communication networks. Hence, many were never reported or captured by media reports. Only a handful of cases were reported, mostly to the Nigerian Police Force station and noted by the State Ministry of Agriculture. The study reveals that cattle rustling is the main trigger for attacks by herders and crop farmers. Many nomads have been completely stripped of their cattle. Many affected heads of households have abandoned their families, leaving women and children behind to cater for themselves. The study concludes that cattle rustling is a great threat to pastoral nomadism in Nigeria.

Chukwuemeka et al. (2018) examined the logic of open grazing in Nigeria, interrogating its effect on sustainable development using descriptive and inferential statistics. The study findings demonstrate a noteworthy divergence in how the different types of livestock animals affect crop production. Based on the average responses, cattle are perceived to have a more severe impact on crop production compared to goats, sheep, and domestic fowl, with the latter being the least destructive. The results suggest that cattle may pose a significant threat to crop farmers, while domestic fowl may be more manageable. It is intriguing to note that the research findings revealed a stark contrast between the impact of grazing animals on crop farming in the eastern and western agricultural regions of Abuja compared to the other two zones. Specifically, the former regions were observed to bear a more significant brunt from the presence of grazing animals. In a separate study, Okoro (2018) employed a qualitative research approach to analyze the effects of herdsman-farmer conflict on socio-economic development in Nigeria, using secondary sources such as journals, textbooks, newspapers, and online publications. The research discovered that the conflicts resulted in significant losses of lives, displacement, destruction of properties, and fostered distrust. Additionally, the conflicts created various socio-economic problems like food insecurity and unemployment.

This research was founded on Karl Marx's (1818–1883) conflict theory. Marx, who advocated for Conflict Theory, was a marginalized figure due to his radical beliefs, and he experienced alienation, as depicted in his two most renowned works: *The Capital and Communist Manifesto* (Marcus & Menzies, 2005). The *Communist Manifesto*, recognized as one of the world's most influential political documents, portrays the history of class struggles and summarizes the nature of society and politics. In Marxian economics, capital is money used to purchase something only to sell it at a profit, and it is extracted from workers by the capitalist class, leaving the workers without any capital despite producing more value than their employers. Ritzer & Stepnisky (2014) argue that Marx's conflict theory provides a critical lens for examining the unequal power dynamics inherent in capitalist systems and advocates for a radical approach to addressing these disparities. Capitalism creates an inherent conflict of interest between the two opposing classes, with material resources being the primary trigger of these conflicts.

This work is closely linked to conflict theory, which highlights the perpetual struggle for scarce resources between opposing groups in society. An example of this can be observed between farmers and herders, who are constantly competing to gain access to limited resources. As each group strives to secure more resources, their selfish behavior becomes a barrier to the progress of the other. In Nigeria, land resources, such as farmland, crops, grass or pasture, and fresh water, are scarce and crucial for the sustenance of both farmers and herdsman. Tensions may escalate when one group encroaches upon or takes advantage of the resources belonging to the other, leading to a state of conflict. For instance, conflicts may arise when farmers encroach on grazing reserves or when criminals in host communities attempt to steal cattle for economic gain. It's important to note that conflicts are not limited to farmers and herders alone but also occur between any groups that compete for scarce resources.

3. Materials and Method

The investigation utilized a descriptive survey approach and took place in the southeastern part of Nigeria, which encompasses five distinct states: Anambra, Enugu, Ebonyi, Abia, and Imo. The research population comprised of active members of the FADAMA Federation Cooperative Association in these five states, which collectively make up the South-Eastern region of Nigeria. A total of 6698 registered active members of cooperatives in the affected communities were included in the study. The standard deviation was also calculated as part of the data analysis.

Table 1: Distribution of firms by Population and Sample

States	Population
Anambra State	1957
Abia	1351
Enugu State	1327
Imo State	1149
Ebonyi State	914
Total	6698

Source: Field Survey, 2023

To determine the sample size, Taro Yamani (1967) formula was used which came up to a total of 384 sample size. In order to stratify the sample allocation, the researchers chose to implement the formula developed by R. Kumaison as a means of achieving greater accuracy in their sampling method. Below is the R. Kumaisons formula for sample size distribution:

$$nh = \frac{nNh}{N}$$

Table 2: Distribution of firms by Population and Sample

States	Population	Sample
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Anambra State	1957	115
Abia	1351	81
Enugu State	1327	68
Imo State	1149	69
Ebonyi State	914	51
Total	6698	384

Source: Field Survey, 2023

The research conducted a thorough examination of both primary and secondary data sources. However, the primary data proved to be more valuable and was gathered through the distribution of a structured questionnaire to respondents in the study areas. The primary data collected pertained to the ongoing conflicts between farmers and herders in Nigeria and their impact on food security in south-east Nigeria. The questionnaire featured both open-ended and closed-ended questions and was administered by research assistants selected by the researcher. These assistants delivered the questionnaire to selected societies during their meetings, and the respondents completed the survey on the spot. The completed questionnaires were immediately returned to the research assistants. Among the total of 384 questionnaires that were distributed, a response rate of 90.6% was achieved as 348 questionnaires were completed and returned. To gain insights from the data, the collected information was subjected to an analysis that encompassed descriptive statistical measures such as frequencies, percentages, means, and standard deviations.

4. Results

Research Question 1

Table 3: Effect of open grazing on food security in south East Nigeria

Effect of open cattle grazing	Very extent	great Great extent	Undecided	Some extent	No extent	Total
Open cattle grazing 1						
Frequency	181	81	4	80	2	348
Percentage (%)	52.0	23.3	1.1	23.0	0.6	100
Open cattle grazing 2						
Frequency	121	208	-	19	-	348
Percentage (%)	34.8	59.7	-	5.5	-	100
Open cattle grazing 3						
Frequency	111	188	6	43	-	348
Percentage (%)	31.9	54.0	1.7	12.4	-	100
Open cattle grazing 4						
Frequency	201	141	4	2	-	348
Percentage (%)	57.8	40.5	1.1	0.6	-	100
Open cattle grazing 5						
Frequency	146	186	-	16	-	348
Percentage (%)	42.0	53.4	-	4.6	-	100
Open cattle grazing 6						
Frequency	100	190	8	50	-	348
Percentage (%)	28.7	54.6	2.3	14.5	-	100

Source: Field Survey, 2023

Table 3: Effect of open cattle grazing on food security in south-east Nigeria using frequency, percentage, mean rating, and standard deviation. In open cattle grazing 1, a greater percentage (52.0%) indicated that open cattle grazing can lower carbon sequestration or lead to carbon loss from soils, with the effects being inconsistent to a very great extent. A significant majority (59.7%) of respondents in the survey on open cattle grazing 2 expressed a strong belief that open grazing has a highly negative impact on Nigeria's food security. In open cattle grazing 3, a greater percentage (54.0%) indicated that open cattle grazing can damage habitats, destroy native plants, and cause soil erosion to a great extent. In open cattle grazing 4, a greater percentage (57.8%) indicated that open cattle grazing reduces food supply in ecosystems because the animals start competing with non-invasive plants for food to a very great extent. In open cattle grazing 5, a greater percentage (53.4%) indicated that open cattle grazing can lead to water contamination to a great extent. In open cattle grazing 6, a greater percentage (54.6%) indicated that open cattle grazing can lead to [deforestation](#), [biodiversity loss](#), [soil erosion](#), compaction, and degradation to a great extent.

Table 4: Effect of open cattle grazing on food security in South East Nigeria

Variables	N	Mean	Std Dev	Remark
Open cattle grazing can lower carbon sequestration or lead to carbon loss from soils with the effects inconsistent	348	4.03	1.177	Accepted
Open grazing is detrimental to food security in Nigeria.	348	4.30	0.716	Accepted
Open cattle grazing can damage habitats, destroy native plants and cause soil erosion.	348	4.13	0.911	Accepted
Open cattle grazing reduces food supply in ecosystems because the animals start competing for non-invasive plants for food	348	4.51	0.551	Accepted
Open cattle grazing can lead to water contamination	348	4.38	0.701	Accepted
Open cattle grazing can lead to deforestation , biodiversity loss , increases soil erosion , compaction and degradation	348	4.06	0.945	Accepted
Grand Mean		4.24	0.834	Accepted

Source: Field Survey, 2023

The established mean cut-off for all the variables was 3.0, and all of them met the theoretical threshold. Thus, the descriptive statistics suggest that open cattle grazing has adversely affected food security in southeast Nigeria, with a grand mean of 4.24.

Research Question 2

Table 5: Effect of cattle rustling on food security in South East Nigeria

Effect of cattle rustling	Very great extent	great extent	Undecided	Some extent	No extent	Total
Cattle rustling 1						
Frequency	211	116	6	15	-	348
Percentage (%)	60.6	33.3	1.7	4.4	-	100
Cattle rustling 2						
Frequency	69	172	11	48	48	348
Percentage (%)	19.8	49.4	3.2	13.8	13.8	100
Cattle rustling 3						
Frequency	61	180	-	98	9	348
Percentage (%)	17.5	51.7	-	28.2	2.6	100
Cattle rustling 4						
Frequency	76	217	-	79	6	348
Percentage (%)	20.1	57.4	-	20.9	1.6	100
Cattle rustling 5						
Frequency	56	195	16	111	-	348
Percentage (%)	14.8	51.6	4.2	29.4	-	100
Cattle rustling 6						
Frequency	219	101	-	50	8	348
Percentage (%)	58.0	26.7	-	13.2	2.1	100

Source: Field Survey, 2023

Table 5 shows the effect of cattle rustling on food security in southeast Nigeria as perceived by farmers in the region. Their responses were processed using frequency, percentage, mean rating, and standard deviation. In cattle rustling 1, a greater percentage (60.6%) indicated that cattle rustling has negatively impacted the livelihood of farmers, and herders blame farmers and take revenge to a very great extent. In cattle rustling 2, a greater percentage (49.4%) indicated that cattle rustling causes colossal damage to lives and properties as well as the displacement of farming communities to a great extent. In cattle rustling 3, a greater percentage (51.7%) indicated that cattle rustling created a situation where people, particularly herdsmen, farmers, and fishermen, had to lose their source of livelihood and abandon their traditional ecological zones to a great extent. In cattle rustling 4, a greater percentage (57.4%) indicated that modern cattle rustling has gradually turned militarized, weapons-driven, and violent, characterized by killings, kidnapping, maiming, rape, arson, and several other criminal impunities against farmers to a great extent. In cattle rustling 5, a greater percentage (51.6%) indicated

that the phenomenon of cattle rustling is no longer restricted to herdsmen as a tradition but has assumed a wider dimension involving criminality perpetrated by non-pastoral syndicates to a great extent. In cattle rustling 6, a greater percentage (58.0%) indicated that the phenomenon of cattle rustling is no longer restricted to herdsmen as a tradition but has assumed a wider dimension involving criminality perpetrated by non-pastoral syndicates to a very great extent.

Table 6: Effect of cattle rustling on food security in South East Nigeria

Variables	N	Mean	Std Dev	Remark
Cattle rustling has impacted negatively on the livelihood of farmers and herders blame farmers and take revenge	348	4.46	0.721	Accepted
Cattle rustling causes colossal damage to lives and properties as well as displacement of farming communities.	348	3.48	1.382	Accepted
Cattle rustling create a situation where people particularly herdsmen, farmers and fishermen had to lose their source of livelihood and abandon their traditional ecological zones	348	3.65	1.172	Accepted
Modern cattle rustling has gradually turned to be militarized, weapons-driven and violent characterized by killings, kidnapping, maiming, rape, arson and several other criminal impunity against farmers	348	3.74	1.055	Accepted
The phenomenon of cattle rustling is no longer restricted to herdsmen as a tradition but has assumed a wider dimension involving criminality perpetrated by non-pastoral syndicates.	348	3.52	1.066	Accepted
The menace of modern cattle rustling, especially with the involvement of fulani Militia insurgents has completely stalled economic and agricultural activities	348	4.25	1.113	Accepted
Grand Mean		3.85	1.085	Accepted

Source: Field Survey, 2023

Table 6 reveals that all the variables examined in the assessment of the impact of cattle rustling on food security construct have met or exceeded the theoretical mean threshold of 3.0. We, therefore, conclude that the cattle rustling phenomenon has negatively affected food security in southeast Nigeria with a grand mean of 3.85.

5. Discussion of Findings

Findings on the effect of open cattle grazing on food security in south-east Nigeria show that a greater percentage (52.0%) of respondents indicated that open cattle grazing can lower carbon sequestration or lead to carbon loss from soils, with the effects being inconsistent to a very great extent. According to the findings of Ogboru and Adejonwo-Osho (2018), the negative impact of cattle grazing on the environment is undeniable. Their research highlights the direct correlation between this activity and land degradation, as well as the threat it poses to the resources and ecosystem services that support biodiversity. Furthermore, their study emphasizes how cattle grazing jeopardizes the achievement of Sustainable Development Goals (SDGs), particularly SDG 15. In addition, a greater percentage (59.7%) of them indicated that open grazing is detrimental to food security in Nigeria to a great extent. According to the data in Item 3, a significant majority (54.0%) of those surveyed expressed that open cattle grazing has a profound impact on habitats, native plants, and soil erosion, leading to significant damage while item 4 shows that a greater percentage (57.8%) of respondents indicated that open cattle grazing reduces food supply in ecosystems because the animals start competing with non-invasive plants for food to a very great extent. Equally, item 5 shows that a greater percentage (53.4%) of them indicated that open cattle grazing can lead to water contamination to a great extent, while a greater percentage (54.6%) indicated that open cattle grazing can lead to [deforestation](#), [biodiversity loss](#), increased [soil erosion](#), [compaction](#), and degradation to a great extent. Generally, open cattle grazing has adversely affected food security in southeast Nigeria. This outcome corroborated Okoro's (2018) study, which found that herdsmen-farmers conflict created food insecurity, distrust, and unemployment.

According to the results of question two in item 1, a majority of the survey respondents (60.6%) reported that the detrimental effects of cattle rustling have significantly affected the livelihoods of farmers. Moreover, the survey revealed that herdsmen often hold farmers responsible for the theft of their livestock and seek retribution to a significant degree. In item 2, a greater percentage (49.4%) indicated that cattle rustling causes colossal damage to lives and properties as well as the displacement of farming communities to a great extent. In item 3, a greater percentage (51.7%) indicated that cattle rustling created a situation where people, particularly herdsmen, farmers, and fishermen, had to lose their source of livelihood and abandon their traditional ecological zones to a great extent. Also, item 4 shows that a greater percentage (57.4%) of the respondents indicated that modern cattle rustling has gradually turned militarized, weapons-driven, and violent, characterized by killings, kidnapping, maiming, rape, arson, and several other criminal impunities against farmers to a great extent. In item 5, a greater percentage (51.6%) indicated that the phenomenon of cattle rustling is no longer restricted to herdsmen as a tradition but has assumed a wider dimension involving criminality perpetrated by non-pastoral syndicates to a great extent. In item 6, a greater percentage (58.0%) of the respondents indicated that the phenomenon of cattle rustling is no longer restricted to herdsmen as a tradition but has assumed a wider dimension involving criminality perpetrated by non-pastoral syndicates to a very great extent. By implication, cattle rustling has a significant effect on food security in South-East Nigeria, and it has an inverse relationship with food security in South-East Nigeria. Okoli and Okpaleke

(2014) as well as Ahmed et al. (2020) have both concluded that cattle rustling presents a significant challenge to Nigeria's national security due to its severe consequences and repercussions. Moreover, these studies also highlight the negative impact of cattle rustling on pastoral nomadism in Nigeria.

6. Conclusion

In the final analysis, this study has investigated the farmer and herder crises in Nigeria and their implications for food security in South-East Nigeria (2015–2020). Specifically, the study ascertained the effect of open cattle grazing on food security in southeast Nigeria, and examined the effect of cattle rustling on food security in South-East Nigeria. The study found that open cattle grazing have an inverse relationship with food security in southeast Nigeria. This implies that open cattle grazing and food security in southeast Nigeria move in opposite directions. That is to say, open cattle grazing have a negative relationship with food security in southeast Nigeria. In addition, cattle rustling have an inverse relationship with food security in southeast Nigeria.

7. Recommendations

In light of the results obtained from this research, the subsequent suggestions are put forth:

1. Government should introduce measures that can reduce or eliminate the negative impacts of open grazing on food security. This could involve promoting alternative forms of livestock management, such as ranching or feedlot systems, that are less likely to cause damage to crops and other food sources. It may also be necessary to regulate or restrict open grazing in certain areas to prevent overgrazing and land degradation.
2. The researchers recommend implementation of measures to address the issue of cattle rustling in the region. This could involve strengthening law enforcement efforts to prevent theft and illegal sale of cattle, as well as supporting local communities in developing alternative livelihoods to reduce the incentive for engaging in cattle rustling.

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