



FUDMA International Journal of Social Sciences (FUDIJOSS)

Vol. 5, No. 2, September, 2025

ISSN: 2735-9522 (Print) ISSN :2735-9530 (Online)



FUDMA International Journal of Social Sciences (FUDIJOSS), Volume 5, No. 2, September, 2025

**A Publication of
The Faculty of Social
Sciences, Federal
University Dutsin-Ma,
Katsina State,
Nigeria**

ISSN: 2735-9522 (Print)
2735-9530 (Online)



EDITORIAL BOARD

Editor-in-Chief:

Editor:

Managing Editor:

Business Editor:

Associate Editor:

Associate Editor:

Associate Editor:

Editorial Secretary:

Prof. Martins Iyoboyi

Dr. Abdulsalam A. Sikiru

Dr. Isaac I. Akuva

Dr. Badiru Abdulahi

Prof. Saifullahi Ibrahim Sani

Dr. Anifat Abdurraheem

Dr. Bem Elijah Tativ

Dr. Simon O. Obadahun

ADVISORY BOARD

Prof. Dejo Abdulrahman (Usmanu Danfodiyo University, Sokoto, Nigeria)

Prof. A.O. Olutayo (University of Ibadan, Nigeria)

Prof. Jacob I. Yecho (Federal University Dutsin-Ma Katsina State Nigeria)

Prof. Daud Mustafa (Federal University Dutsin-Ma Katsina State Nigeria)

Prof. Mary Agbo (Federal University Dutsin-Ma Katsina State Nigeria)

Prof. Adagba Okpaga (Benue State University, Nigeria)

Prof. Adejo Odo (Ahmadu Bello University, Zaria, Nigeria)

Prof. Rhoda Mundi (University of Abuja, Nigeria)

Prof. Marlize Rabe (University of South Africa, Pretoria, South Africa)

Prof. Alo Olubunmi (Federal University Wukari, Nigeria)

Prof. Chika Umar Aliyu (Usmanu Danfodiyo University, Sokoto, Nigeria)

Prof. Muhammad Sani Badayi (Bayero University, Kano, Nigeria)

Prof. Muhammad M. Usman (Ahmadu Bello University, Zaria, Nigeria)

Prof. P.A.O. Odjugo (University of Benin, Nigeria)

Prof. M. Mamman (Ahmadu Bello University, Zaria, Nigeria)

Prof. E.O. Igusi (Ahmadu Bello University Zaria, Nigeria)

Prof. Aloysius Okolie (University of Nigeria, Nsuka, Nigeria)

Prof. Dung Pam Sha (University of Jos, Nigeria)

Prof. A/Razak Nor Azam (Universiti Utara, Malaysia)

Prof. A/Razak Na'Allah (University of Abuja, Nigeria)

Prof. B. Tanimu (Ahmadu Bello University, Zaria, Nigeria)

Prof. A. Jacob (Ahmadu Bello University, Zaria, Nigeria)



EDITORIAL AIM

FUDMA International Journal of Social Sciences (FUDIJOSS) is a bi-annual journal published by the Faculty of Social Sciences, Federal University Dutsin-Ma, Katsina State, Nigeria. FUDIJOSS is intended for scholars who wish to report results of completed or ongoing research, book review, review of the literature and discussions of theoretical issues or policy in all areas of Economics, Geography, Regional Planning, Political Sciences, Sociology, Demography, Gender Studies, and Management Sciences. Therefore, the primary objective of this journal is to provide a forum for the exchange of ideas across disciplines and academic orientations in the social sciences, and other related disciplines.

EDITORIAL POLICY

Manuscripts submitted for publication in FUDIJOSS are considered on the understanding that they are not under consideration for publication elsewhere, and have not already been published. The publishers of FUDIJOSS do not accept responsibility for the accuracy of the data presented in the articles or any consequences that may arise from their use. Opinions expressed in articles published by FUDIJOSS are solely those of the authors.

AUTHOR GUIDELINES

Submission to FUDMA International Journal of Social Sciences (FUDIJOSS)

Articles submitted to FUDIJOSS should be written in English Language (a consistent use of US or UK grammar and spelling) and should normally be between three thousand (3,000) to eight thousand (8,000) words (including all elements, abstract, references). If English is not the author's mother tongue, please arrange proofreading by a native English speaker before submission. Submitted manuscripts should contain a concise and informative title; the name(s) of the author(s); the affiliation(s) and address(es) of the author(s); the e-mail address and telephone number(s) of the corresponding author. Contributions are received with the understanding that they comprise of original, unpublished material and have not been submitted/considered for publication elsewhere. All submissions should be sent electronically as email attachment to fudijoss@gmail.com. Submissions must be accompanied with evidence of payment of an assessment fee of ₦10,000 or 25 (USD). Manuscripts are accepted throughout the year.

Abstract

A concise abstract of not more than two hundred and fifty (250) words and to be followed immediately by four to six (4-6) keywords which should not be a repetition of the title. The abstract should not contain any undefined abbreviations or unspecified references.

Text

Manuscripts should be typed, double spaced in MS Word for Windows format, font size 12, Times New Roman with 2.5cm margins, and organized under appropriate section headings. All headings should be placed on the left-hand side of the text. All figures, tables, etc. should be inserted at the appropriate locations in the text. Only three levels of headings are accepted in the text. All measurements should be given in metric units. Acknowledgements may be made briefly just before the list of references only on the revised final manuscript.



Tables and Figures

- a. All illustrations other than tables are to be numbered consecutively as Figures (e.g. graphs, drawing and photographs) using Arabic numerals.
- b. Photographs and other illustrations will be reproduced in black and white unless otherwise agreed with the editors. Only online versions of the article will appear in colour.
- c. All Figures and Tables are to be referred to in the text by their number.

Citations in Text

Cited references in the text are to be cited in the text using the surname(s) of the author(s) followed by the year of publication of the work referred to, for example: Mustafa (2019), (Ati, 2016), (Dimas & Akuva, 2020) or for references to page (Mustafa, 2020, p. 15). In case of more than two authors use name of first author followed by "et al." (Yecho *et al.*, 2017). If several works are cited, they should be organized chronologically, starting with the oldest work.

References: Use the American Psychological Association (APA) Style General Guide

The items in the reference list should be presented alphabetically with the last name of the author, followed by the author's initials.

Books

Abdulsalam A. Sikiru (2022) Research methods in Economic and Social Science, Lexington Printing Press, California, USA.

Obadahun O. Simon (2024) The Basics of Administration and Politics, ABU Press, Zaria, Kaduna State.

Badiru Abdulahi (2024) Introduction to Economics, Longman, London, UK.

Edited Book

McDowell, L. & Sharp, J. P. (Eds.) (1999). *A feminist glossary of human geography*. New York, NY: Oxford University Press.

Book Chapter

Abaje, I. B., Ati, O. F. & Iguisi, E. O. (2012). Changing Climatic Scenarios and Strategies for Drought Adaptation and Mitigation in the Sudano-Sahelian Ecological Zone of Nigeria. In Iliya, M. A., & Dankani, I. M. (Eds). *Climate Change and Sustainable Development in Nigeria* (pp 99– 121). Ibadan: Crown F. Publishers.

Journal Articles

Dimas, G. & Akuva, I. I. (2020). Leadership styles of Nelson Mandela as a pattern for African leaders. *Covenant University International Journal of Politics and International Affairs*, 8(1), 49-64.



Journal Article Accessed Online

Bayer, J. (2010). Customer segmentation in the telecommunications industry. *Journal of Database Marketing & Customer Strategy Management*, 17, 247 – 256. doi: 10.1057/dbm.2010.21

Corporate Author

Institute of Chartered Accountants in Australia. (2004). *AASB standards for 2005: equivalents to IFRSs as at August 2004*. Sydney, Australia: Pearson Education.

All correspondences and enquiries should be directed to: The Editor-in-Chief
FUDMA International Journal of Social Sciences Faculty of Social Sciences
Federal University Dutsin-Ma, Katsina State, Nigeria Email: fudijoss@gmail.com

Publication Fee

Publication fee is ₦30,000 or 150 (USD).

Subscriptions and Marketing

Three issues of FUDIJOSS would be published per year, in April, September and December, by the Faculty of Social Sciences, Federal University Dutsin-Ma, Katsina State, Nigeria.

Annual subscriptions (2023): Nigeria, ₦10,000 (Individuals), ₦15,000 (Institutions).

Outside, 35 (USD) (Individuals); 100 (USD) (Institutions).

Single Issues (2023): Nigeria ₦5,000 (Individuals) ₦8,000 (Institutions). Outside, 25 (USD) (Individuals); 65 (USD) (Institutions).

For advertising and other marketing details, contact:

The Business Editor

FUDMA International Journal of Social Sciences Faculty of Social Sciences

Federal University Dutsin-Ma, Katsina State, Nigeria Email: fudijoss@gmail.com



**EVALUATION OF THE CAUSE AND EFFECT OF FARMER- HERDERS
CONFLICT ON FOOD SECURITY IN ZANGON KATAF LOCAL
GOVERNMENT AREA, KADUNA STATE**

Umar Danmashi,
Department of Sociology
Federal University Dutsinma, Katsina State.

Prof. Jacob Yecho
Department of Sociology
Federal University Dutsinma, Katsina State.

&
Dr. Suleiman Amali
Department of Sociology
Federal University Dutsinma, Katsina State

Abstract

The persistent conflict between farmers and herders in Zangon Local Government Area of Kaduna State has significantly disrupted agricultural activities and jeopardized rural livelihoods. This study investigates the underlying causes and consequences of the conflict, with particular emphasis on its impact on food production and food security. The study was guided by two research objectives and corresponding research questions. The study employed a survey research design. A total population of 250 farmers and herders was identified, from which a sample size of 154 respondents was selected using Slovin's formula. Data were collected through a mixed-methods approach involving structured questionnaires and semi-structured interviews. The instruments were validated by subject experts and questionnaire was tested for reliability using the Cronbach's Alpha which yield a reliability coefficient of 0.74. Data were analyzed using descriptive statistics, including frequencies and percentages. The study applied Eco-Violence and Conflict theories to explain violence from resource competition and unmet socio-economic needs. Findings indicate that the primary driver of the conflict is cattle encroachment on farmlands, leading to crop destruction and economic hardship. Other contributing factors include historical grievances, political manipulation, and the lack of defined grazing routes or ranches. The conflict has led to decreased agricultural productivity, food shortages, increased food prices, displacement of farming communities, and widespread abandonment of farmlands. The study concludes that resolving the conflict requires a multi-faceted approach, including the enactment of anti-open grazing legislation, development of ranching systems, and the establishment of inclusive community-based peace and security structures. Theoretically, the study contributes to the discourse on resource-based conflict by highlighting the interplay between environmental stress, weak governance, and socio-political tensions in agrarian contexts. The findings underscore the urgent need for integrated policy responses to ensure food security and sustainable rural development in conflict-affected regions..

Keywords: Evaluation, Farmers-Herders Conflict and Food Security

Introduction

The persistent farmer-herder conflict in Nigeria has emerged as a major threat to national food security, particularly in rural agrarian communities such as those in Zangon Kataf Local Government Area (LGA) of Kaduna State. According to Okoli and Atelhe, (2022) the conflict is driven by intensifying competition over land, water, and grazing resources, which escalated into cycles of violence that destroy farmlands, displace populations, and destabilize livelihoods. In a country where agriculture remains the primary livelihood for the rural majority, such disruptions compromise food production, limit household income, and weaken nutritional resilience. These localized crises ultimately challenge broader national goals of food security, economic growth, and sustainable development.

Situating the Nigerian case within a global context reveals similar patterns of resource-based conflict undermining food systems. The relationship between environmental scarcity and violent conflict has gained prominence in both academic and policy circles, particularly in light of climate change, demographic shifts, and environmental degradation (FAO, 2022). Across sub-Saharan Africa—especially in the Sahel and West Africa—violent clashes often occur where traditional pastoralist routes intersect with expanding agricultural frontiers. These encounters tend to reduce agricultural output, disrupt markets, and weaken rural economies (ECOWAS, 2023). In Nigeria's Middle Belt—comprising areas such as Benue, Plateau, Nasarawa, and parts of Kaduna—land tenure disputes, migration pressures, and governance challenges have made the region especially vulnerable. Iro (2024) highlights how such conditions have fueled widespread displacement and declining arable land availability, aggravating food insecurity in already fragile communities.

Despite growing scholarly attention to national and regional dynamics, there remains a critical gap in understanding how the conflict plays out at the local level. Macro-level analyses often obscure the community-specific social, environmental, and political realities that shape conflict dynamics. Zangon Kataf offers an instructive case, where resource scarcity converges with historical grievances, ethnic tensions, and the collapse of customary conflict resolution mechanisms (Ibrahim & Bala, 2023). These overlapping stressors have created a highly volatile environment where violence becomes cyclical, deeply impacting local food systems. Without a nuanced understanding of such localized dynamics, policy responses risk being overly generic and ultimately ineffective.

Recent empirical evidence reveals the extent of agricultural disruption in Zangon Kataf. According to Adejumo, Oladipo, and Yusuf (2024), recurring violence has upended seasonal farming cycles, destroyed farmland, and displaced households. These disruptions affect all four dimensions of food security: availability, access, utilization, and stability. Loss of crops and productive assets, along with the breakdown of local markets, has led to increased dependence on humanitarian food assistance. While Okoli and Atelhe (2022) recognize similar patterns, their broader analysis lacks the contextual specificity needed to inform targeted interventions in places like Zangon Kataf. This underscores the importance of localized research that considers environmental, socio-political, and cultural dynamics.

A further limitation in the existing literature is the under-examination of socio-cultural factors that intensify resource conflicts. Yahaya and Usman (2024) argue that in southern Kaduna, ethno-religious identity and historical marginalization are central to the conflict. In Zangon Kataf, competition over land is frequently entangled with long-standing perceptions of

exclusion and communal mistrust. These deep-rooted social divisions fuel retaliatory violence and undermine reconciliation efforts. As such, technocratic or economic solutions that overlook these issues are unlikely to produce lasting peace or food system recovery. Addressing food insecurity in such contexts requires rebuilding social cohesion and fostering inclusive governance alongside material interventions.

Environmental stressors further compound the crisis. Unpredictable rainfall, desertification, and shrinking water bodies—exacerbated by climate variability—have reduced available agricultural and grazing land. Concurrently, rapid population growth and land fragmentation intensify competition for dwindling natural resources. These pressures often reach a critical point during key agricultural periods, such as planting and harvest seasons, when competition is highest (Ibrahim & Bala, 2023). The economic consequences are severe: rising rural poverty, increased youth migration to urban centers, and declining agricultural output further erode household and community resilience.

This study however, adopted Eco-Violence Theory to explain how environmental scarcity fuels violent clashes over resources in rural Nigeria, while Conflict Theory highlights how deeper issues of inequality, power struggles, and historical grievances sustain the farmer-herder conflict in Zangon Kataf, suggesting that effective resolution must address both resource management and systemic social injustices. Together, these theoretical approaches provide a comprehensive framework for analyzing the farmer-herder conflict in Zangon Kataf. While environmental pressures may act as immediate triggers, the conflict's endurance is rooted in institutional weakness, social fragmentation, and historical marginalization. Recognizing this complexity is essential for formulating effective, sustainable responses. Rather than relying solely on short-term security measures or humanitarian aid, durable solutions must prioritize inclusive governance, land reform, environmental rehabilitation, and investment in rural development.

This study, therefore, seeks to fill a crucial gap in the literature by offering a localized, empirically grounded analysis of the farmer-herder conflict's impacts on food security in Zangon Kataf. By focusing on the area's unique socio-political and environmental dynamics, the research contributes to a deeper understanding of how localized conflicts disrupt rural food systems.

Statement of the Problem

The escalating conflict between farming and herding communities in Nigeria has emerged as a critical factor undermining food security, particularly in rural regions where agriculture constitutes both a primary livelihood and a vital means of sustenance. According to Okoli and Atelhe, (2022) and Adejumo et al., (2024) existing national-level studies predominantly attribute these conflicts to intensifying competition over natural resources, climate variability, and population pressures, all of which have disrupted agricultural production and diminished rural incomes. Although multiple state and federal interventions have been implemented to curb the violence, the recurrence and severity of these clashes suggest significant limitations in current conflict resolution mechanisms.

Despite the growing body of literature on farmer-herder conflicts, much of the existing studies adopts generalized frameworks that fail to adequately account for the socio-political, cultural, and environmental specificities of conflict-affected communities (Ibrahim & Bala, 2023). In southern Kaduna, and more specifically Zangon Kataf Local Government Area (LGA), the

conflict transcends resource competition and is further compounded by entrenched ethno-religious tensions. These localized dynamics distinguish the conflict in Zangon Kataf from similar incidents in other regions of Nigeria (Yahaya & Usman, 2024). Recurrent outbreaks of violence in this area have led to widespread destruction of farmland, mass displacement of rural populations, and the systematic disruption of local food systems. As a result, critical dimensions of food security namely availability, access, and stability—have been severely compromised at the community level.

However, there remains a notable gap in localized, empirical research that examines how these multifaceted conflicts influence food security outcomes within specific contexts. Most extant studies like (Olanrewaju & Balana, 2023 and Vahyala 2021) lack the granularity needed to inform contextually appropriate policy and programmatic responses. This study therefore seeks to address this gap by focusing on Zangon Kataf LGA, providing an in-depth analysis of the unique drivers and consequences of the farmer-herder conflict in this locality. By investigating the impacts of conflict on food security across its core dimensions, the study offers evidence-based insights to inform more targeted and effective interventions—moving beyond generalized national narratives to prioritize locally grounded solutions.

Objective of the Study

The objective of this study is to examine the causes and effects of farmer-herders conflict on food security in Zangon kataf local government area, Kaduna state

Research Questions

Two research questions were asked:

- i. What are the causes of farmer-herders conflict in Zangon kataf local government area, Kaduna state?
- ii. What is the effect of farmer-herders conflict on food security in Zangon kataf local government area, Kaduna state?

LITERATURE REVIEW

CONCEPTUAL FRAMEWORK

Concept of Farmer-Herders Conflict: A farmer is an individual who primarily engages in cultivating the land and/or rearing animals for the purpose of producing food and other agricultural goods. According to Adams, (2018) a farmer is an individual whose primary occupation involves cultivating land and planting crops for both personal and commercial purposes. Farmers play a crucial role in feeding the world's population and providing essential resources that are necessary for human survival.

On the other hand, a herder, also known as a herdsman, is a person whose primary occupation involves the care and management of domesticated animals such as cattle, sheep, and goats. Herdsmen typically engage in animal husbandry for commercial, subsistence, or cultural purposes, and they are responsible for feeding, watering, sheltering, breeding, and protecting their livestock (Okoro, 2018; Pérez-Escamilla, 2017).

The farmer-herder conflict refers to recurring and often violent clashes between sedentary farmers and nomadic or semi-nomadic herders over access to land, water, and natural resources, driven by overlapping land-use practices. Blench,(2004); Ofuoku and Isife, (2009) and Adisa, (2012) observed that areas like Nigeria's Middle Belt, including Zangon Kataf, increasing competition for resources due to factors such as population growth and climate

change has intensified these conflicts, leading to loss of lives, property destruction, and threats to agricultural productivity and food security

Concept of Food Security: Food security means having enough food that is both healthy and accessible for everyone, at all times, without the risk of running out or going hungry. According to **Pottier (1999)**, food security is linked to broader issues such as agriculture, income, health, environment, and public policy, highlighting its interconnected nature. In the context of this study, **food security** is defined as the consistent ability of individuals and households in **Zangon Kataf Local Government Area** to access adequate and nutritious food.

Causes of Farmer-Herders Conflict: The causes of farmers-herders conflict stem mainly from struggles over land, water, and grazing resources, compounded by environmental changes and human activities. As observed by Zarma, (2018); Lawal, (2020) and Kusimo, (2018) the farmer-herder conflict in Nigeria, particularly in the northern region, has escalated into a major security and socio-economic crisis, driven by competition over land and resources, historical grievances, climate change, and weak governance, resulting in violence, displacement, and destruction of livelihoods. Also, Adisa, (2012) and FAO, (2020) noted that the ongoing conflict between the farmers and herders has significantly undermines food security by reducing agricultural productivity, disrupting supply chains, and inflating food prices, especially in conflict-affected areas like Zangon Kataf LGA, where empirical evidence shows sharp declines in crop output and rising costs of staple foods. Thus, the major causes of farmers-herders conflict are competition over land and resources, historical grievances, environmental degradation, population pressure, weak governance, and climatic changes that continue to strain peaceful coexistence between the two groups.

Effect of Farmer-Herders Conflict on Food Security: The effect of farmers-herders conflict have multiple consequences on food production and security. According to Mbow et al., (2020) the conflict between herders and farmers in Nigeria has severely impacted agricultural productivity, rural livelihoods, and national food security, with economic losses estimated at \$14 billion between 2013 and 2016. Supporting the above view, Babarinde, (2021); Ogunwale, (2018) and FAO, (2020) observed that violent clashes over land and grazing resources, has led to farmland destruction, displacement, and disruptions in food production and trade, resulting in reduced crop yields, increased food prices, and widespread food insecurity, particularly in conflict-prone areas like Zangon Kataf LGA. Other studies like (Aliyu & Bako, 2021; Akinyemi & Olaniyan, 2020) have shown that insecurity discourages farming investment and labor participation, leading to exacerbating food shortages and economic decline. Fatoye, (2017) and Ibrahim, (2017) acknowledged that the violence, often fueled by ethnic and religious tensions, leads to criminal activities and social instability, intensifying the humanitarian crisis. Although, the effect of the farmers-herders conflict is endless, it has been noted that addressing these conflicts through inclusive policies and peace building efforts is essential to restoring agricultural productivity and ensuring sustainable food security for vulnerable rural communities.

However, to better understand these intersecting drivers and consequences of the conflict, this study adopted two theoretical frameworks: **Eco-Violence Theory** and **Conflict Theory**. Eco-Violence Theory posits that environmental scarcity particularly of essential resources like land and water can catalyze violence in resource-dependent societies. This is particularly relevant in rural Nigeria, where weak governance structures, environmental degradation, and limited institutional capacity heighten the risk of conflict. In such contexts, resource scarcity often

triggers violent confrontations, especially when unmediated by effective state or customary institutions.

Complementing this ecological perspective, **Conflict Theory**, rooted in classical Marxist thought, situates the farmer-herder conflict within broader structures of inequality and political economy. According to this view, the crisis is not simply about resource access, but about deeper struggles over power, recognition, and socio-economic inclusion. In Zangon Kataf, historical land dispossession, unequal access to state resources, and perceptions of political bias have reinforced longstanding grievances. These structural inequalities intensify identity-based tensions and contribute to the persistence of violence. Thus, resolving the conflict requires not only managing resource use but also addressing systemic injustice and exclusion

Methodological approach

This study employed a survey research design to investigate the causes and effects of the farmer-herder conflict on food security in Zangon Kataf Local Government Area, Kaduna State, Nigeria. A sample of 154 respondents was selected from a total population of 250 using simple random sampling techniques. Purposive sampling was also used to select Zangon Kataf as the study area, given its high incidence of farmer-herder conflicts. Within the selected area, simple random sampling was then applied to draw participants from the two primary groups affected by the conflict: farmers and herders. Of the 154 respondents, 100 were farmers and 54 were herders, reflecting the relative population proportions of the two groups in the area. This distribution enhances the representativeness of the sample and allows for meaningful comparative analysis between the groups.

The study employed a **mixed-methods approach**, combining **self-administered questionnaires** for quantitative data and **key informant interviews (KIIs)** for qualitative insights. The questionnaire and interview guides were validated by two experts from the Department of Sociology, Federal University Dutsin-Ma, Katsina State. Reliability of the questionnaire was assessed using Cronbach's Alpha, which yielded a coefficient of 0.74, indicating acceptable internal consistency.

The questionnaire targeted two primary groups: **farmers and herders**. For the qualitative component, eight (8) key informants were purposively selected and categorized into four main groups: two (2) farmers, two (2) herders, community leaders (2) and two (2) youth leaders. Interviews were conducted individually at times at locations convenient for the respondents by two trained research assistants.

The rationale for employing a mixed-methods approach lies in its capacity to provide both **statistical evidence** such as the percentage of affected farmers, crop loss figures, and income reduction and **contextual understanding** through narratives of personal experiences, perceptions, and socio-cultural impacts. As Creswell and Plano Clark (2018) assert, the complex and multidimensional nature of farmer-herder conflicts—encompassing social, economic, environmental, and cultural dimensions—necessitates the use of multiple data collection tools to generate a comprehensive understanding

RESULTS AND DISCUSSION

Table 1.1 Socio-Demographic Characteristics of the Respondents

Construct	Frequency (n= 384)	Percent (%)
Sex		
Male	81	52.6
Female	73	47.4
Total	154	100.0
Age		
18-27years	29	18.8
28-37years	45	29.2
38 Years and Above	80	32.0
Total	154	100.0
Religion		
Christianity	113	73.4
Islam	41	26.6
Total	154	100.0
Marital Status		
Married	137	89.0
not married	17	11.0
Total	154	100.0
Occupation		
Farming	111	72.1
Herding	34	22.1
Others	09	5.8
Total	154	100.0
Educational qualification		
Tertiary	125	81.2
Secondary/primary	29	18.8
Total	154	100.0

Source: Field survey, 2024.

The socio-demographic data from Table 1.1 showed that 52.3% of the 154 respondents were male, while 47.4% were female, indicating a male-dominated farming population. Age-wise, the majority (52.0%) were aged 38 and above, followed by 29.2% in the 28–37 age range, and 18.8% between 18–27 years, suggesting that most respondents were in their most economically active years. Regarding religion, 73.4% of the respondents were Christians and 26.6% were Muslims, reflecting the dominant religious affiliations involved in farming activities in the area. Marital status data show that 89% of respondents were married, highlighting the role. Occupationally, 72.1% were farmers, 22.1% herdsman, and 5.8% involved in other food-related activities like trading and processing. Lastly, 81.2% of the respondents had tertiary education, indicating a high level of formal education among participants.

- i. **Objective One:** to examine the causes of farmer-herders conflict in Zangon kataf local government area, Kaduna state.

Table 1.2 Causes of Fulani herdsmen and Farmers' conflict in Zangon kataf local government

Construct	Strongly agreed		Agreed		Undecided		Disagreed		Strongly disagreed		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Harsh Climate	46	29.9	18	11.9	12	7.8	78	47.4	2	1.3	154	
											100	
Economic Hardship	51	33.1	73	47.4	12	7.8	10	6.5	08	5.2	154	
											100	
High Cost of Feeding Cattle	10	6.5	30	19.5	15	9.7	27	17.5	72	46.8	154	
											100	
Cattle Grazing on Farmers Crops	65	42.2	38	24.7	25	16.2	16	10.4	10	6.5	154	
											100	
Armed Banditry in the North	72	46.8	44	28.6	10	6.5	18	11.7	10	6.5	154	
											100	
Depletion of North Vegetation	40	26.0	35	22.7	12	7.8	31	20.1	36	23.4	154	
											100	

Source: Field survey, 2024.

The study investigated six constructs to determine their influence on the farmer–herder conflict in Zangon Kataf Local Government Area. Findings revealed that **harsh climatic conditions** were not perceived as a significant driver of conflict, as most respondents (49.4%) disagreed, and qualitative data supported that both groups have long adapted to the regional weather. This aligns with study by Tonah (2016), who found that while environmental stressors such as drought can influence migration patterns, long-term adaptation strategies among pastoralists often mitigate their impact on direct conflict. Similarly, Okoli and Atelhe (2014) argue that although climate variability affects resource availability, it is often the failure of governance structures and competition over land use not climate alone that escalate farmer–herder tensions. However, supporting the above findings, a **herder** identified as (H1) stated that:

“We’ve lived with this weather for generations; it’s nothing new to us.”

Economic hardship, however, emerged as a major contributor, with 33.1% of respondents affirming its role in intensifying competition over land and resources. This finding is consistent with the study by Abbass (2022), which identified poverty and economic marginalization as key drivers of farmer–herder conflicts in Nigeria, noting that dwindling rural livelihoods often push both groups into direct competition for increasingly scarce resources. Also, qualitative responses supported the above findings. A **farmer identified as (F1)** noted,

“When everyone is struggling to survive, even a small patch of land becomes a reason to fight.”

In contrast, the **high cost of feeding cattle in ranches** was not considered a causal factor, as traditional nomadic practices are still largely preferred by herders. The most significant cause identified was **cattle grazing on farmlands**, with 42.2% agreeing or strongly agreeing that it directly contributes to conflict, a view echoed by key informant interviews describing destruction of crops and hostile encounters. The above findings aligns with the study by **Kassie**

Ndiritu and Stage (2017), who reported that crop damage by livestock grazing on farmland significantly escalates tensions between farmers and herders in Ethiopia. More so, **Mwangi and Dohrn (2018)** found that encroachment of grazing cattle into cultivated fields was a primary driver of conflicts in Kenya, leading to frequent disputes and retaliatory actions. The above findings aligned with the qualitative data gathered from the field. A **community leader** identified as (C1) reflected this concern, by stating that:

“The real problem begins when crops are destroyed—no farmer can stay calm in such situations.”

Armed banditry in the region was also recognized as a key driver, with 46.8% of respondents linking it to escalating tensions, particularly where herdsman engage in criminal activities under economic or retaliatory motives. On the other hand, **depletion of vegetation** was largely dismissed as a cause, with over half of respondents disagreeing, and informants noting that agricultural practices have already adapted to such conditions. The data collectively highlight that **economic hardship, cattle encroachment on farmland, and armed banditry** are the principal drivers of conflict in the area. Environmental conditions like climate change and vegetation loss, though commonly cited in broader literature, appear less relevant in this specific local context. This is supported by **Oba and Kaitira (2016)**, who found that in northern Tanzania, conflicts between pastoralists and farmers were more strongly linked to social and economic factors—including cattle rustling and criminal acts—than to environmental degradation

Similarly, the qualitative data collaborate with the above findings. A **youth leader identified as (Y1)** explained that:

Some of these attacks aren’t just random—they’re payback for past disputes, and sometimes it’s not even clear who started it.”

Objective Two: determine effect of farmer-herders conflict on food security in Zangon kataf local government area, Kaduna state

Table 1.3 Effect of Herdsmen and Farmers’ Conflict on Food Security in Zangon kataf local government

Construct	Very Severe		Severe		Mild		Low		Very Low		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Increase in Price of Food Items	69	44.8	40	26.6	26	16.9	11	9.1	8	5.2	154	
Food Unaffordability	39	25.3	80	51.9	21	13.6	14	9.1	-	-	154	
Food Scarcity	126	81.8	23	14.9	2	1.3	3	1.9	-	-	154	
Loss of Farmers	40	26.0	47	30.5	21	13.6	43	27.9	3	1.9	154	
Loss of Farmlands and Produce	126	81.8	24	15.6	-	-	2	1.3	2	1.3	154	

Source: Field survey, 2024.

Table 1.2 presents the perceptions of respondents regarding the impact of herdsman/farmers conflict on food security in Zangon Kataf Local Government Area. Key findings indicated that 44.8% of respondents agreed that food prices have significantly increased due to the conflict, a claim supported by key informants who linked the trend to rising input costs and insecurity. Additionally, 51.9% of respondents reported that food had become unaffordable and inaccessible, corroborated by traders experiencing sharp declines in grain sales. Food scarcity was also prominently reported, with 81.8% of respondents acknowledging reduced food availability, largely attributed to the disruption of farming activities. This aligns with the findings of **Salami, Kamara and Brixiova, (2018)**, who documented that conflicts between herders and farmers in Nigeria led to significant food insecurity by disrupting agricultural production, increasing food prices, and reducing market access

However, the impact of the conflict between herders and farmers has been profound, particularly on rural livelihoods and food security. In interviews conducted across affected communities in Zango local government area, numerous participants expressed deep concern over the loss of their means of survival. One farmer identified as (F2) lamented:

“We can no longer go to our farms. The fear of being attacked is too much. Even those who manage to go, come back with nothing. Our crops are dying, and our incomes have vanished.”

A herder identified as (H2) similarly described the losses from his perspective:

“Many of our cattle have been stolen or killed during the clashes. We are being chased from grazing areas. It’s not only the farmers who are suffering — we have lost everything too.”

Also, a community leaders identified as (C2) highlighted the broader socioeconomic implications of the conflict by stating that:

“This conflict has pushed our people into poverty. When farmers cannot plant and herders lose their animals, what is left? Hunger is becoming normal here.”

Furthermore, a youth leader identified as (Y2) also reflected on the consequences for younger generations, noting the loss of opportunities and increasing instability:

“The youth are idle because there is no farming or trade like before. Prices of food have gone up, and everyone is struggling. The conflict has destroyed our future.”

These narratives align with widespread reports of destruction and displacement, emphasizing that farmlands have become inaccessible and that agricultural assets — both crops and livestock — have been lost on a large scale. Overall, the testimonies underscore how the farmer-herder conflict has deeply compromised food security, increased the cost and scarcity of food, and dismantled rural livelihoods.

Discussion of Findings

This study examined the causes and effects of farmer-herder conflict in Zangon Kataf LGA, Kaduna State, using empirical data and guided by Eco-Violence Theory and Conflict Theories. Findings revealed that the conflict has significantly undermined food security through reduced agricultural productivity, widespread food scarcity, inflated food prices, and disruption of local livelihoods, patterns also observed in studies by Okoli and Atelhe (2014) and Ofem & Inyang

(2014). Destruction of farmlands and repeated clashes during farming seasons led to mass abandonment of farms, aligning with Homer-Dixon’s (1999) argument that environmental and

resource-based conflicts reduce food availability. Increased food prices, particularly for grains such as maize and yam, were attributed to limited supply and high insecurity, consistent with Adeoye et al. (2017), who found similar outcomes in North-Central Nigeria. Many farmers were forced into informal and less stable occupations, contributing to rural displacement, dependency, and diminished local food sufficiency—an outcome reflecting the systemic disruptions posited by Ludwig von Bertalanffy's Systems Theory. The primary drivers of the conflict were identified as unregulated cattle grazing, economic hardship, and increasing armed attacks, which echo the findings of Moritz (2010) on farmer-pastoralist tensions in West Africa. Herders cited lack of grazing reserves, while farmers reported crop destruction without compensation, reinforcing the resource-based conflict perspective outlined by Coser (1957). Unlike broader regional studies that emphasize climate change as a major factor (e.g., Bukari et al., 2021), respondents in Zangon Kataf pointed more to socio-political and economic issues, highlighting the context-specific nature of farmer-herder conflicts.

Conclusion

The study critically evaluated the causes and effects of the farmer-herder conflict on food security in Zangon Kataf Local Government Area, revealing significant disruptions to agricultural productivity, food availability, and rural livelihoods. Empirical evidence from both quantitative and qualitative data indicates that the conflict has led to widespread farmland abandonment, rising food prices, and increased food insecurity among households. The primary causes identified—such as crop destruction by cattle, absence of designated grazing routes, economic hardship, and rising criminality—align only partially with **Eco-Violence Theory**, as respondents in this study downplayed environmental factors like climate change or vegetation loss as key drivers of conflict. Instead, the findings more strongly support **Conflict Theory**, highlighting how competition over land and resources is shaped by socio-economic inequality, weak governance, and perceived marginalization, which fuel social tensions and violence in areas like Zangon Kataf. While national narratives often emphasize climate change, this study underscores the localized socio-political and economic dimensions of the conflict in Zangon Kataf. Addressing the crisis requires integrated solutions such as enforcing grazing policies, improving rural security, and promoting inclusive dialogue between farmers and herders.

Recommendations

Based on the findings of this study, the following recommendations were made;

1. **Establish inclusive community peacebuilding committees** made up of local farmers, herders, traditional leaders, and government representatives. These committees would mediate disputes before they escalate, facilitate regular dialogue between communities, and ensure equitable access to land and water resources. This approach will help reduce conflicts, promote stable food production, and minimize displacement.
2. **The government should implement clearly defined grazing corridors and encourage modern ranching practices.** This effort should be supported with training programs for herders on sustainable animal husbandry, provision of credit facilities to support ranch development, and the use of satellite mapping to delineate farmland and grazing areas. Such measures will reduce encroachment on farmland, decrease conflicts, and boost agricultural productivity.
3. **Develop and finance early warning systems that leverage local intelligence and digital reporting tools.** These systems should detect and report rising tensions or the movements of armed groups, facilitate the deployment of rapid conflict response teams, and support food security planning. This will enable timely prevention of conflicts, protect critical planting and harvesting periods, and sustain local food systems.



Reference

- Adams, M. E. (2018). Media Representations of Fulani Herdsmen-Farmers Conflicts in Nigeria: A Content Analysis of Newspapers. *Journal of Media Studies*, 14(1), 45-58.
- Adejumo, R. A., Oladipo, S. E. and Yusuf, A. T. (2024). *Impact of Rural Insecurity on Agricultural Productivity and Food Security in Nigeria*. Nigerian Journal of Development Studies, 18(3), 88–104.
- Babarinde, S. A. (2021). Assessing the Effects of Fulani Herdsmen Violence on Farmer's Productivity in Nigeria: A mixed method analogy.
- Creswell, J. W. and Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed.). SAGE Publications
- ECOWAS. (2023). *Pastoralism and Conflicts in West Africa: Trends and Responses*. Economic Community of West African States.
- FAO. (2022). *The State of Food Security and Nutrition in the World 2022*. Food and Agriculture Organization of the United Nations.
- Fatoye, O. J. (2017). Anti-grazing Laws and the Regulation of Fulani Herdsmen-Farmers Conflicts in Nigeria: A case study of Ekiti state. *Journal of Law and Regulation*, 9(1), 78-92.
- Ibrahim, H. (2017). The Cultural Dimensions of Fulani Herdsmen-Farmers Conflicts in Nigeria: A case study of Sokoto state. *Journal of Cultural Studies*, 8(3), 78-92.
- Ibrahim, M., and Bala, K. (2023). *Climate-Induced Migration and Communal Conflict in Northern Nigeria*. African Journal of Environmental and Conflict Studies, 9(2), 103–120.
- Iro, I. (2024). *Farmer-Herder Conflicts and Food Insecurity in Nigeria: A Review*. Nigerian Journal of Peace and Development Studies, 20(1), 55–72
- Kassie, M., Ndiritu, S. W. and Stage, J. (2017). Agricultural Technology Adoption, Crop Income, and Poverty Alleviation in Kenya. *World Development*, 101, 126-139. <https://doi.org/10.1016/j.worlddev.2017.05.004>
- Kusimo, T. O. (2018). Fulani Herdsmen-Farmers Conflicts in Nigeria: Exploring The Role of Traditional Conflict Resolution Mechanisms. *Journal of Peace and Conflict Resolution*, 14(1), 78-92.
- Lawal, O. A. (2020). The Economic Implications of Fulani Herdsmen-Farmers Conflicts in Nigeria. *Journal of Development Economics*, 6(2), 112-128.
- Mbow, C., Rosenzweig, C. E., Barioni, L. G., Benton, T. G., Herrero, M., Krishnapillai, M., and Diouf, A. A. (2020). *Food security* (No. GSFC-E-DAA-TN78913). IPCC.



- Mwangi, E and Dohrn, S. (2018). Conflict and Collaboration in Natural Resource Management: The case of the Maasai and Agricultural Communities in Kenya. *Development Policy Review*, 26(4), 349-368. <https://doi.org/10.1111/j.1467-7679.2008.00415.x>
- Oba, G. and Kaitira, L. M. (2016). Maasai Perceptions of the Role of Fire in the Serengeti Ecosystem. *African Journal of Ecology*, 44(2), 138-146. <https://doi.org/10.1111/j.1365-2028.2005.00618.x>
- Ogunwale, B. O. (2018). Local Government Responses to Mitigating Fulani Herdsmen-Farmers Conflicts in Nigeria: A case study of Kogi state. *Journal of Local Governance Studies*, 14(1), 45-58
- Okoli, A. C. and Atelhe, G. A. (2014). *Nomads against Natives: A Political Ecology of Herder/Farmer Conflicts in Nasarawa State, Nigeria*. **American International Journal of Contemporary Research**, 4(2), 76–88.
- Okoli, A. C. and Atelhe, G. A. (2022). *Resource Conflict and the Crisis of Food Security in Nigeria: A Study of Farmer-Herder Clashes*. *Journal of Peace and Conflict Studies*, 14(1), 45–59.
- Okoro, J. P. (2018). Herdsmen–Farmers’ Conflict: Implication on National Development (Nigeria in perspective). In *1st International Conference of Social Sciences (ICOSS'2018). Africa and the Contemporary World–Issues in Security, Governance and Sustainable Development” National Open University of Nigeria. 25th–27th June*.
- Pérez-Escamilla, R. (2017). Food Security and the 2015–2030 Sustainable Development Goals: from Human to Planetary Health. *Current developments in nutrition*, 1(7), e000513
- Salami, A. O., Kamara, A. B. and Brixiova, Z. (2018). Smallholder Agriculture, Food Security, and Climate Change in Nigeria: Issues and policy directions. *African Development Review*, 30(S1), 1-13. <https://doi.org/10.1111/1467-8268.12342>
- Tonah, S. (2016). *Managing Farmer–Herder Conflicts in Ghana’s Volta Basin*. **Ibadan Journal of Social Sciences**, 4(1), 33–45.
- Yahaya, M. A., and Usman, H. (2024). *Ethno-Religious Dimensions of Farmer-Herder Conflict in Southern Kaduna*. *Journal of African Peace and Security*, 12(2), 77–93.
- Zarma, H. (2018). The Ecological Impacts of Fulani Herdsmen-Farmers Conflicts on Grazing Lands in Nigeria. *Journal of Environmental Management and Sustainability*, 14(1), 145-160.