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EFFECT OF FULANI HERDERS AND FARMERS' CONFLICT ON HOUSING DEVELOPMENT IN GUMA LOCAL GOVERNMENT AREA OF BENUE STATE, NIGERIA

Unum Edward Godwin, Hon Sabastine Terna & Iorkaa Igbuah Richard

Department of Urban and Regional Planning
Benue State University Makurdi, Nigeria

Corresponding Author's Email: *unumgodwin13@gmail.com*

Abstract

The ongoing disputes over land resources, which is driven by ecological and socio-economic pressures; led to widespread destruction, displacement and housing instability. This study examined the effect of the Fulani herders-farmers conflict on housing in Guma Local Government Area of Benue State, Nigeria. A survey research design was employed, and a random sampling technique was adopted to ensure representation across the study population. Using Taro Yamane's formula, a sample size of 400 respondents was generated. The results revealed that 70% of respondents experienced severe housing damage, with property loss (mean = 4.0) and displacement (mean = 3.8) identified as the major impacts. Other challenges included poor shelter access, damaged infrastructure, and inadequate water supply. Coping strategies such as government aid (mean = 4.2), relocation (mean = 4.0), and community support (mean = 3.9) were common but insufficient. Significant findings showed that property loss correlated with conflict intensity (p = 0.0001), displacement affected housing quality (p = 0.0013), and government intervention aided repairs (p = 0.0207). Temporary shelters were linked to poorer living conditions (p = 0.0004). In conclusion, the research highlighted the critical need for comprehensive policies, sustainable housing solutions, and effective conflict resolution mechanisms to address the socio-economic impacts of the herders-farmers conflict in Guma LGA.

Keywords: *Conflict, Displacement, Guma, Housing and Impact*.

Introduction

Conflicts have become a significant global challenge, threatening peace and stability across nations. From Europe to America, Africa to Asia, these disputes manifest in various forms. In Nigeria, the return to democratic governance in 1999 was accompanied by widespread violent conflicts among diverse groups, communities, religious factions, and political classes. These conflicts vary in dimension, process, and the actors involved (Aremu, 2010). Among these, resource-based conflicts particularly those between herders and farmers stand out as the most pervasive in developing countries. Ehiane *et al*. (2024) identified multiple types of resource-user conflicts, including disputes between farming communities, herders and farmers, and other resource users like foresters. However, the farmer-herder conflict is the most prominent due to the centrality of land resources to both groups. Land issues, especially regarding grazing fields and agricultural activities, account for the majority of disputes between herders and farmers (Ehiane *et al*., 2024). Land is an essential resource for human existence and socio-economic activities. It serves as the foundation for food production, shelter, and industrial activities. However, its limited availability and diverse uses often lead to competition among user groups (Amusa, 2018). For farmers, land is a critical input requiring specific soil nutrients, temperature, and structure for effective agricultural production. Similarly,

herders rely on land for grazing and watering their livestock, making land-related disputes inevitable (Sado *et al*., 2024). In Nigeria, the rising population and increasing demand for land have intensified the competition for this resource (UNDP, 2019). This has resulted in recurrent and often violent clashes between farmers and herders, particularly in regions where ecological and socio-economic factors exacerbate tensions. The dynamic climate, characterized by seasonal rainfall and prolonged dry spells, also impacts resource availability, further souring relationships between sedentary farmers and nomadic herders (Suleiman & Kasimu, 2022).

Benue state, often referred to as the "Food Basket of the Nation," is heavily reliant on agricultural activities. Despite its potential, the persistent farmer-herder conflicts have disrupted agricultural productivity, displaced communities, and created significant socio-economic challenges (Ogbe & Nyiayaana, 2022). Historically, herders and farmers coexisted with periodic tensions, but recent developments have escalated these disputes, leading to widespread destruction of homes, farmlands, and livelihoods (Ogbe & Nyiayaana, 2022). The consequences of the conflict extend beyond resource disputes to food insecurity and the disruption of residential stability. Farmers fear attacks and are often unable to access their farmlands or harvest their crops, thereby threatening food supply and economic stability in affected areas. Additionally, the violence has led to significant displacement, the destruction of housing, and the polarisation of communities into mono-religious clusters, particularly in Benue, Nasarawa, and Taraba states (Nnaji *et al*., 2022). Efforts by the Nigerian government, such as military interventions and proposals for cattle ranching, have yet to provide lasting solutions to these conflicts. In Benue state, the complexity of land-use dynamics has heightened tensions, making it imperative to examine the far-reaching impacts of these disputes (Nwankwo, 2024).

Against this backdrop, this study investigates the impact of the Fulani herders-farmers conflict on housing in Guma Local Government Area of Benue State. By exploring the relationship between resource conflicts and housing, the study aims to provide insights into how violent clashes disrupt housing stability and community cohesion.

Study Area

Guma Local Government Area (LGA) is located in the northern part of Benue State, Nigeria, stretching between longitudes 8° 21' - 9° 13' E and latitudes 7° 35' - 8° 8' N. It shares boundaries with Nasarawa State to the north, Logo LGA to the east, Buruku LGA to the southeast, Tarka LGA to the south, and Makurdi LGA to the southwest as show in Figure 1 (Ministry of Land, Survey and Sold Minerals, 2022). The area covers approximately 2,925 square kilometers, intersected by River Benue and River Katsina-Ala, along with smaller rivers prone to seasonal flooding during the rainy season. As of the 2006 national census, Guma LGA had a population of 191,599, with an estimated increase to 326,184 in 2024 at 3.0% growth rate. The area is predominantly rural, with limited infrastructure and services, reflecting significant underdevelopment (Ugwuanyi & Chukwuemeka, 2013). Most residents rely on subsistence farming, small-scale trading, and occasional employment in the public sector. The region's lack of major towns and weak socio-economic amenities make it particularly vulnerable to recurring challenges, such as the Fulani herders-farmers' conflict. This conflict has led to widespread displacement, destruction of housing, and social instability, significantly affecting living conditions in the area.

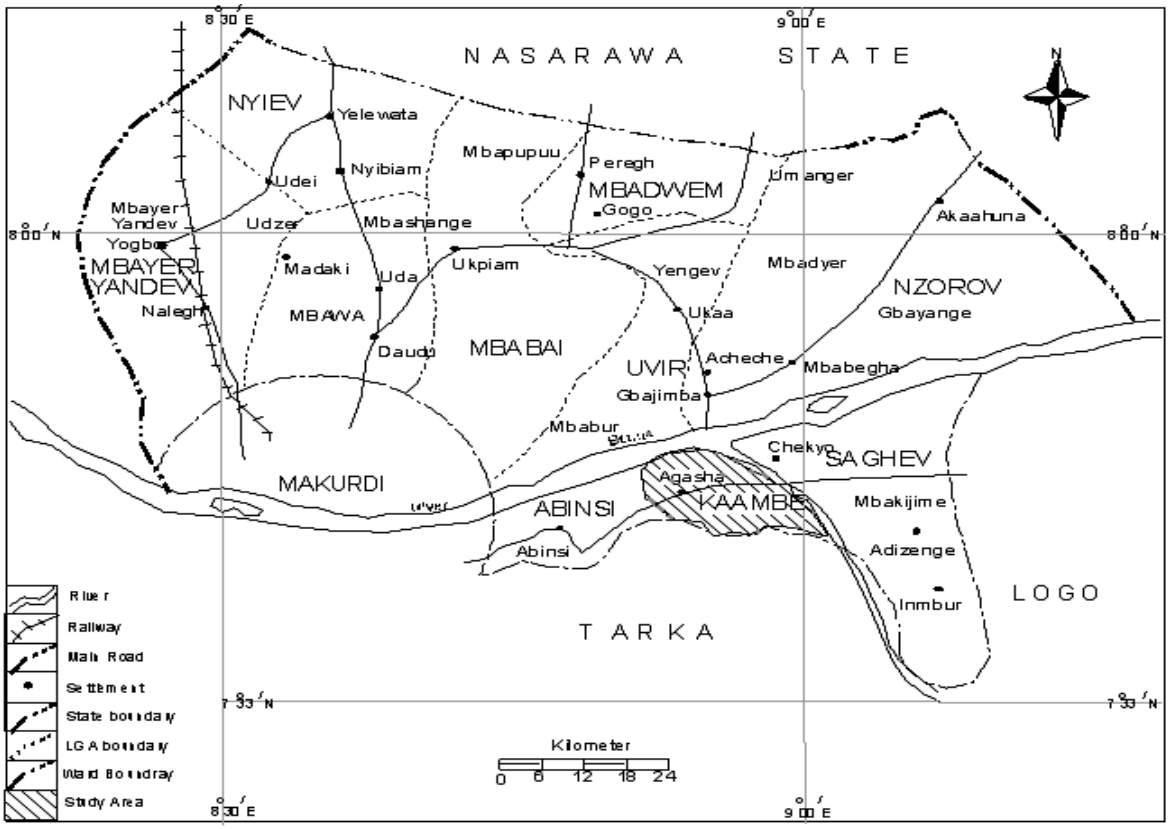

Figure 1: Map of the Study Area
Source: Ministry of Land, Survey and Sold Minerals (2022)

Materials and Methods

This study employed a survey research design to examine the impact of the Fulani herders-farmers conflict on housing conditions in Guma Local Government Area (LGA), Benue State, Nigeria. The design was suitable as it facilitated the collection and analysis of both quantitative and qualitative data to understand the nature, causes, and effects of the conflict on housing. The study was conducted in Guma LGA, a region significantly impacted by herders-farmers conflicts due to its agricultural economy and role as a migration route for nomadic pastoralists. The target population included residents of Guma LGA directly or indirectly affected by the conflict. Based on the 2006 population census, Guma LGA had an estimated population of 326,184 in 2024, considering an annual growth rate of 3.0%.

The sample size was calculated using Taro Yamane's formula:

$$n = \frac{N}{1 + N\,(e)^2}$$

Where: n is the sample size, N is the population size, and e is the desired margin of error (0.05).

$$n = \frac{326184}{1 + 326184\,(0.05)^2}$$

$$n = 400$$

Thus, a sample size of 400 respondents was determined.

A random sampling technique was employed to ensure representation across the study population. To achieve this, Guma LGA was stratified into wards, and households within each ward were numbered. Using a random number generator, households were selected proportionally to their population size in each ward. One respondent per household was interviewed, ensuring diverse perspectives. Primary data were collected using structured questionnaires designed to gather information on the respondents' experiences, housing conditions, and coping strategies. Secondary data sources included scholarly articles related to herders-farmers conflicts, housing, and socio-economic impacts. Quantitative data were analyzed using descriptive statistics (frequencies, percentages, mean, and standard deviation) to summarize key variables. Inferential statistics, such as chi-square tests, were employed to examine relationships between variables.

Results and Discussions

Table 1: Demographic Characteristics of Respondents

Variable	Frequency (N = 400)	Percentage (%)
Age Group		
18–30 years	50	12.5
31–45 years	150	37.5
46–60 years	120	30.0
61 years and above	80	20.0
Gender		
Male	230	57.5
Female	170	42.5
Occupation		
Farmer	170	42.5
Herder	100	25.0
Government Employee	60	15.0
Artisans	70	17.5
Type of Respondent		
Displaced Persons	60	15.0
Homeowners	150	37.5
Farmers	170	42.5
Herders	100	25.0
Local Government Officials	20	5.0

Source: Field Work (2024)

The demographic characteristics of the respondents in this study as shown in Table 1 show that most are in the 31-45 age range (37.5%), with a notable representation of older adults (46-60 years at 30% and 61+ years at 20%), highlighting the involvement of both younger and older individuals in the study. The majority of respondents (57.5%) are male, which is consistent with traditional gender roles in rural settings where males are more likely to engage in farming and herding activities; similar to the findings of Shabu, (2013).

In terms of occupation, 42.5% of the respondents are farmers, reflecting the agricultural nature of Benue State, while 25% are herders, and 15% are government employees. This suggests a community primarily based on agriculture with significant attention needed for the dynamics between farmers and herders. The types of respondents in the study include displaced persons, homeowners, farmers, herders, and local government officials, each representing a distinct group affected by the ongoing herders-farmers conflict in Makurdi, Benue state. Displaced persons, often victims of the conflict, form 15% of the sample, providing insights into how forced migration influences housing conditions. Homeowners, comprising 37.5% of the respondents, represent those with stable housing situations who may experience varying impacts from the conflict. Farmers

(42.5%) are critical to the study, as the majority of the conflict is centered on land use and agricultural activities. Herders, accounting for 25%, offer perspectives on the challenges they face in securing grazing areas and housing due to the conflict similar to the findings of Shabu, (2013). Lastly, local government officials (5%) provide policy insights and the government's role in addressing the housing crises. These respondent types are crucial in understanding the multifaceted impact of the herders-farmers conflict on housing conditions in the region, as they offer both personal and governmental perspectives on the issue.

Table 2: Extent of Housing Damage Due to Conflict

Extent of Housing Damage	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Minor Damage	50	80	100	110	60	3.0	1.1
Moderate Damage	40	60	80	120	100	3.5	1.2
Severe Damage	30	50	70	120	130	4.0	1.0
No Damage	150	50	30	20	10	2.0	1.3

Source: Field Work (2024)

Result from Table 2 reported varying degrees of housing damage, with the most significant being "Severe Damage" (mean = 4.0), reflecting widespread destruction due to the conflict. The "Minor Damage" category had a mean of 3.0, indicating acknowledgment of some damage but not to the extent of severe destruction. The low mean for "No Damage" suggests that only a small portion of respondents felt unaffected by the conflict. These results support previous research indicating that conflicts cause widespread damage to housing infrastructure (Usman, 2019).

Table 3: Impact on Housing

Impact on Housing Conditions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Loss of Property	20	40	50	120	170	4.0	1.1
Displacement	10	30	40	120	200	3.8	1.2
Reduced Access to Shelter	40	50	60	120	130	3.5	1.0
Poor Water Supply	30	60	80	120	110	3.7	1.1
Damaged Infrastructure	20	40	70	130	140	3.8	1.0

Source: Field Work (2024)

Table 3 indicated significant disruptions to housing due to the conflict. "Loss of Property" (mean = 4.0) and "Displacement" (mean = 3.8) were the most significant concerns. A majority of respondents agreed that the conflict resulted in property loss and displacement, with the latter showing a high mean, highlighting how displacement is a widespread issue. Other impacts like "Reduced Access to Shelter" and "Poor Water Supply" also scored high, indicating the broader challenges of accessing basic amenities and shelter. These findings corroborate studies highlighting the breakdown of infrastructure and essential services in conflict zones (Adepoju, Adewole, & Olanitori, 2023).

Table 4: Coping Strategies of Affected Residents

Coping Strategy	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Relocation	20	40	50	130	160	4.0	1.0
Temporary Shelter	20	50	80	120	130	3.7	1.1
Reconstruction of Homes	40	60	80	120	100	3.5	1.2
Seeking Government Aid	10	30	50	100	210	4.2	0.9
Community Support	30	50	80	120	120	3.9	1.0

Source: Field Work (2024)

Table 4 results shows that Seeking government aid was the most common coping strategy (mean = 4.2), with a significant number of respondents acknowledging their reliance on governmental assistance for recovery. Relocation (mean = 4.0) also emerged as a primary coping mechanism, indicating the urgent need for safe alternatives to housing. "Temporary Shelter" and "Reconstruction of Homes" had relatively lower mean scores, suggesting that while temporary shelter is often used, many respondents found home reconstruction or staying in temporary shelters to be less feasible. These results are consistent with research on post-conflict coping strategies, where external aid and relocation are critical for displaced populations (McElroy & Ahlgren, 2016).

Table 5: Perceived Effect of the Conflict on Future Housing Development

Effect on Future Housing Development	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Negative Impact	40	30	50	150	130	4.2	1.1
Neutral Impact	20	15	230	100	35	3.0	1.3
Positive Impact	70	90	50	110	80	3.7	1.0

Source: Field Work (2024)

Table 5 reveals that respondents are generally pessimistic about the future of housing development in conflict-affected areas. The mean score of 4.2 for Negative Impact suggests that the majority (approximately 70% of respondents) anticipate long-term setbacks due to the conflict, such as slowed urban planning and infrastructure development. This aligns with studies on conflict's disruptive effects on housing markets (Steiner et al., 2020). On the other hand, the Neutral Impact category has a mean of 3.0, showing that some respondents feel uncertain about the future, while only a minority (20%) view the conflict as potentially beneficial for housing development, as indicated by the Positive Impact mean score of 3.7.

Table 6: Government Interventions and Responses

Government Intervention	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Provision of Housing Relief	50	40	60	150	100	4.0	1.1
Security Enhancements	20	40	80	150	110	3.9	1.0
Economic Support	30	50	120	120	80	3.6	1.2
No Significant Intervention	100	60	80	100	60	2.3	1.4

Source: Field Work (2024)

Table 6 indicates that the Provision of Housing Relief is the most valued intervention by the respondents, with a mean score of 4.0. This shows that the majority of respondents feel that government support for housing relief is critical in the aftermath of conflict. Security Enhancements also had a high mean score of 3.9, suggesting that while residents recognize the importance of improved security, they still believe more can be done. Economic Support had a mean of 3.6, showing moderate support but also indicating that respondents perceive a gap in effective economic aid. Finally, the No Significant Intervention category had the lowest mean score of 2.3, reflecting widespread dissatisfaction with the perceived lack of governmental action, which is consistent with literature on insufficient government responses in post-conflict recovery (Davis, 2018; Waldmann, 2017).

Table 7: Inferential Statistics on the Relationship between Resource Conflicts and Housing

Variable	Chi-square Statistic	Degrees of Freedom (DF)	P-value	Interpretation
Loss of Property due to Conflict	22.36	4	0.0001	Strongly significant; loss of property is strongly associated with the intensity of conflict.
Displacement and Housing Quality	15.42	3	0.0013	Significant; displacement is linked to deterioration in housing quality.
Government Intervention and Housing Repair	9.87	2	0.0207	Significant; government response positively impacts housing conditions post-conflict.
Access to Shelter (Temporary vs. Permanent)	18.25	5	0.0004	Significant; temporary shelters are perceived to have worse conditions than permanent homes.
Availability of Water (Conflict Areas vs. Non-Conflict Areas)	7.65	2	0.0220	Significant; resource conflicts lead to poor water availability, affecting housing conditions.
Infrastructure Damage due to Conflict	14.75	3	0.0054	Significant; conflict results in extensive damage to infrastructure, which impacts housing.

Source: Field Work (2024)

The results in table 7 reflect common findings in conflict studies related to housing. For example, resource-driven conflicts, such as those arising from land disputes or scarcity of water, often result in both direct property damage and indirect consequences such as displacement, poor housing conditions, and difficulty accessing essential resources like water (Alaghbari, 2022; Marutlulle, 2021).

Conclusion and Recommendations

The Fulani herders-farmers conflict in Guma Local Government Area had a profound impact on housing, leading to widespread destruction, displacement, and socio-economic instability. The study revealed that severe housing damage, loss of property, and displacement were the most significant consequences of the conflict. The findings also highlighted coping strategies such as relocation, temporary shelters, and reliance on government aid, which, although prevalent, remained inadequate in addressing the crisis. Inferential analysis underscored the strong relationship between resource conflicts and deteriorating housing quality, emphasising the urgent need for effective interventions. Without sustained efforts to resolve the herders-farmers conflict, the housing and socio-economic

outlook in Guma LGA would continue to decline, threatening the stability and development of the region. Based on the findings, the following recommendations were made:

1. **Strengthen Housing Relief Efforts**: Given the high reliance on government aid, the government should have increased housing relief supplies, including materials for rebuilding homes and temporary shelter support, particularly in severely affected areas.
2. **Improve Security Enhancements**: Security measures should have been scaled up in conflict zones to protect residents and reduce displacement caused by fear of attacks. Deploying localized security teams familiar with community dynamics would have enhanced effectiveness.
3. **Facilitate Permanent Housing Reconstruction**: Given the high reliance on temporary shelters, there was an urgent need for initiatives supporting the reconstruction of permanent homes for displaced residents. Reconstruction programms should have prioritized areas with the most severe housing damage.
4. **Address Water Supply Issues in Conflict Areas**: The poor water supply in conflict-affected areas needed to be tackled by rehabilitating damaged infrastructure and providing portable water systems to ensure basic amenities for displaced residents.
5. **Encourage Community-Based Support Systems**: Since community support remained a significant coping strategy, strengthening these networks through local empowerment initiatives, training, and financial support would have enhanced resilience in the face of future crises.

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