Conflict at the heartland: Investigating the nexus between nomadic herdsmen/farmers clashes and socio-economic dynamics in Benue State

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Abstract

Farmer-herder conflicts in Nigeria, particularly in Benue State, have escalated over the past decade, leading to significant socio-economic and security challenges. Despite media and research attention, effective political responses have been lacking, exacerbating the crisis. This study aimed to investigate the impact of nomadic herdsmen-farmers conflicts on food production and the security of lives and property in Benue State, Nigeria. A Survey Research Design was utilized, with a sample size of 400 determined using the Taro Yamane formula. Multi-stage sampling was employed to select respondents from four LGAs with high conflict levels. Data analysis involved using simple linear regression to evaluate the relationship between the conflict and both food production and security. The study found a significant relationship between nomadic herdsmen-farmers conflict and both food production and the security of lives and property. The conflict explained 6.4% and 8.3% of the variance in food production and security, respectively, with moderate joint linear associations confirmed by ANOVA. The findings underscore the urgent need for targeted interventions to mitigate the impact of conflicts on agriculture and enhance security measures in affected areas. Empowering local communities and diversifying livelihoods are crucial strategies to address the complex dynamics of these conflicts.

Keywords: Farmer-herder conflicts, nomadic herdsmen, food production, security, Benue State.

Introduction

Over the last decade, the reporting of farmer-herder violence has increased exponentially in Nigeria, highlighting one of the country's most persistent security challenges. The violent confrontations between Fulani herdsmen and farmers have resulted in thousands of deaths over recent decades, reflecting the severity and persistence of the conflict (Ifedayo, 2023; Brottem, 2023; Olufemi, 2021). Despite significant media and research attention on the negative impacts of these conflicts, political commitments and responses have not effectively mitigated the tensions or de-escalated the crisis (Ajibefun, 2017). This ineffectiveness is starkly illustrated by a recent attack in Plateau State that occurred during the President's visit to launch a Five-Year Road Map for Peace Strategy (Zayyad, 2018). In Benue State, the brutality of attacks by Hausa-Fulani Muslim herdsmen is particularly severe. From Guma to Daudu and Naka to Agatu, the emotional accounts of victims often fail to capture the full extent of the atrocities. In Gwer-West, ACSAN researchers encountered a decaying corpse tied with a Fulani rope, the skull cracked by a sword blow (Ifedayo, 2023; Nigerian Working Group, 2018). Local officials report that inadequate security often prevents them from locating and burying victims of the attacks. A Muslim survivor of the February 2016 Agatu attacks described how he was spared by the Fulani herdsmen because he recited the Shahadah and the Fatiha (Nwosu, 2017).

The economic and human toll of herdsmen activities since 2001 is staggering, with losses estimated at over $14 billion (Gundu, 2017). Between 2013 and 2017, herdsmen killed nearly 2000 people in Tiv communities of Benue State and displaced over 755,538 individuals. The Tiv community in Zones A and B lost farm produce and valuables worth over N39.8 billion, while the Idoma and Igede communities in Zone C suffered losses of over N6.2 billion and 1600 lives (Idyorough, 2017). Despite the significant attention and resources devoted to addressing the farmer-herder conflict, gaps remain in our understanding of how these conflicts affect socio-economic activities and security in affected regions. Specifically, there is a need to examine the extent to which nomadic herdsmen-farmers conflicts impact food production and the security of lives and property in Benue State, Nigeria. This study aims to fill these knowledge gaps by investigating the relationship between nomadic herdsmen-farmers conflict

and socio-economic activities in Benue State. It seeks to answer key questions about the nature of these conflicts, their impact and broader implications for food production and the security of lives and property.

Materials and Method

Study Settings

Benue State, in Nigeria's North Central zone, is uniquely positioned for studying farmer-herder conflicts' impacts on socio-economic activities and security. Located between Latitudes 6º 26' and 8º 9' N, and Longitudes 7º 29' and 9º 56' E, Benue covers 30,800 km². It borders Nassarawa to the north, Taraba to the east, Enugu, Ebonyi, and Cross River to the south, and Kogi to the west. With a population of 5,741,815 (2017), Benue is demographically significant. The state has a wet season between April-October, and a dry season between November and March, with temperatures between 27-38°C and humidity at 60-80%. Its guinea savannah vegetation and rivers Benue and Katsina Ala support agriculture. Ethnically diverse, Benue is home to Tiv, Idoma, Igede, and others, with 75% of the population engaged in farming. Major crops include yam, rice, beans, and over 70% of Nigeria's soybeans. Benue's agricultural significance and conflict-affected socio-economic dynamics justify its selection for this study (Ifedayo, 2023).

Study design

The study adopted a Survey Research Design, a cross-sectional approach used to gather data on opinions, behaviors, attitudes, and beliefs from a sample population at a specific time. This design provided an accurate portrayal of participants' views on the farmer-herder conflicts and their impacts on security and livelihoods in Benue State. It facilitated the exploration of the relationship between variables and captured people's feelings and attitudes about the social phenomena under investigation.

Sampling

The population of Benue State was projected to be 5,741,815 by the National Population Commission (NPC) in 2018 for 2017. For this study, a sample size of 400 was determined using the Taro Yamane formula. This formula calculates the sample size (n) as N / (1 + Ne^2), where N is the finite population (5,741,815), e is the level of significance (0.05), and 1 is a constant. Applying the formula, the sample size was calculated as 5,741,815 / (1 + 5,741,815 * 0.05^2) ≈ 400, indicating a sample size of 400 for the study. The study utilized a multi-stage sampling technique, a probability sampling method involving several stages, with the sample size decreasing at each stage. In Stage 1, Benue State was divided into 23 clusters based on Local Government Areas (LGAs). Four LGAs—Agatu, Gwer West, Guma, and Logo—were purposively selected due to their high incidence of brutal attacks and their proximity to one another. In Stage 2, three communities were purposively chosen from Agatu and Gwer West, and two from Logo and Guma, based on recent attacks. In Stage 3, simple random sampling was used to select 40 respondents from each chosen community. This multi-stage sampling technique ensured a representative sample of the affected areas, enabling an in-depth analysis of the impacts of farmer-herder conflicts on socio-economic activities and security in Benue State.

Table 1: Showing the Selected communities

S/N	Local Government Area	Communities
1.	Agatu	Ekwo-Okpanchenyi Ikpele, Okpopolo,
2.	Gwer West	Tse Tuma, Chiachia, Tse Targu
3	Logo	Tse-Akaa, Tse-Orlalu
4.	Guma	Mbasenge, Nzorov

Method of data analysis

The data collected in the field was meticulously checked for accuracy before being coded for analysis. Various statistical tools, including frequency distribution, tables, charts, and linear regression, were employed to analyze the data. This analysis was conducted at a significance level of 0.05, ensuring a 95% confidence level in the results.

Results

Demographic Distribution of Respondent

This study analyzed demographic data from 384 respondents to assess the representation of various groups in the study area. The findings revealed that female respondents (68%) outnumbered male respondents (32%). Regarding age, the majority of respondents were aged 18-25 years (27.1%), followed by 26-33 years (23.7%), 34-41 years (20.3%), 42-49 years (20.1%), and 50 years and above (8.8%). This distribution reflects a higher proportion of youths compared to aged individuals in society. In terms of marital status, the majority of respondents were single (45.1%), followed by married (39.1%), divorced (5.9%), widows (4.7%), widowers (3.1%), and those who did not respond (2.1%). Regarding educational qualification, the majority of respondents had at least a B.Sc/B.ED/BA/HND (25.7%), followed by NCE/ND (19.3%), WASSCE/GCE/NECO (16.7%), FSLC (15.1%), PhD (5.8%), M.Sc/MA (10.7%), and no formal education (6.7%). This suggests a high literacy rate among respondents in the study area. In terms of religious affiliation, the majority of respondents were Christians (82.8%), followed by African traditional religious worshipers (5.7%), Muslims (4.2%), and those who did not respond (7.3%).

Table 2: Showing demographic distribution of respondents

Variable	Category	No.	Percentage %
Sex	Male	124	32%
	Female	260	68%
	Total	**384**	**100%**
	18-25 years	104	27.1
	26-33years	91	23.7
	34-41years	78	20.3
	42-49years	77	20.1
	50 and above	34	8.8
	Total	**384**	**100%**
Marital Status	Single	173	45.1
	Married	150	39.1
	Divorced	23	5.9
	Widows	18	4.7
	Widowers	12	3.1
	No response	8	2.1
	Total	**384**	**100%**
Educational Status	Ph.D.	22	5.8
	M.Sc./MA/BA	41	10.7
	B.Sc./B.ED/HND	99	25.7
	NCE/ND	74	19.3
	WASSCE/GCE/NECO	64	16.7

	FSLC	58	15.1
	No formal education	26	6.7
	Total	**384**	**100%**
Religious Affiliation	Christianity	318	82.8
	Islam	16	4.2
	ATR	22	5.7
	No response	28	7.3
	Total	**384**	**100%**
Occupational Status	Civil servant	133	34.6
	Self-employed	94	24.4
	Farmer	41	10.6
	Unemployed	106	27.6
	No response	10	2.6
	Total	**448**	**100%**

Source: Field Work, 2023

Data analysis

Simple linear regression statistics were used to test the relationship between Nomadic Herdsmen/Farmers Conflict and food production at 0.05 Alpha level and the result is presented in Table 3. The analysis, presented in Table 3, revealed a significant relationship with an R-value of 0.254 ($p < 0.05$). This indicates a significant relationship between Nomadic Herdsmen/Farmers Conflict and food production. The R^2 value of 0.064 suggests that 64% of the total variance in food production is explained by the predictor variable (Nomadic Herdsmen/Farmers Conflict). The regression ANOVA further demonstrated a moderate joint linear association of the predictor variable on food production, indicated by the F-ratio (1, 1165) = 27.353 ($p < 0.05$). The adjusted R^2 value of 0.062, compared to the unadjusted value of 0.064, indicates minor shrinkage and suggests that the model is generalizable to the population. Based on these results, it is concluded that the Nomadic Herdsmen/Farmers Conflict significantly impacts food production in Benue State.

Table 3: Summary simple linear regression analysis of the relationship between Nomadic Herdsmen/Farmers Conflict and food production

Variables	Mean	Std. Deviation
Nomadic Herdsmen/Farmers Conflict	14.3425	4.16631
Food production	22.6650	6.70455

Model	Sum of Squares	Df	F	R	R Square	Adjusted R Square	Sig
Regression	2416.462	1	27.353	.254[a]	.064	.062	.000 *
Residual	35160.648	382					
Total	37577.110	383					

Simple linear regression statistics were employed to test the relationship between Nomadic Herdsmen/Farmers Conflict and security of lives and property at a 05 Alpha level and the result is presented in Table 4. The analysis revealed a significant relationship, with an R-value of 0.288 ($p < 0.05$). The R^2 value of 0.083 indicates that 83% of the total variance in food security is accounted for by Nomadic Herdsmen/Farmers Conflict. The regression ANOVA further demonstrated a moderate joint linear contribution of the predictor variable to the security of lives and property, as indicated by the F-ratio (1, 1165) = 36.022 ($p < 0.05$). The adjusted R^2 value of 0.081, compared to the unadjusted value of 0.083, suggests that the model

is generalizable to the population. Based on these results, it is concluded that the Nomadic Herdsmen/Farmers Conflict significantly impacts the security of lives and property in Benue State.

Table 4: Summary simple linear regression analysis of the relationship between Nomadic Herdsmen/Farmers Conflict and security of lives and property

Variables	Mean	Std. Deviation
Nomadic Herdsmen/Farmers	12.2750	4.99216
Security of lives and property	22.6650	6.70455

Model	Sum of Squares	Df	F	R	R Square	Adjusted R Square	Sig
Regression	3118.752	1	36.022	.288[a]	.083	.081	.000 *
Residual	34458.358	382					
Total	37577.110	383					

Discussion of findings

The findings of this study reveal significant relationships between Nomadic Herdsmen/Farmers Conflict and both food production and the security of lives and property in Benue State, Nigeria. The use of simple linear regression statistics provided robust evidence supporting these relationships. The first analysis demonstrated a significant relationship between Nomadic Herdsmen/Farmers Conflict and food production, with an R-value of 0.254 and a p-value less than 0.05. The R^2 value of 0.064 indicates that 6.4% of the variance in food production is explained by the conflict. This result aligns with existing literature that highlights the detrimental effects of conflicts on agricultural activities.

For instance, a study by Eklund, et al. (2017) on the effects of armed conflict on land use in Syria and Iraq highlights significant changes in agricultural landscapes. The conflict has led to cropland expansion in some areas, farmland abandonment in others, and shifts in farming intensity. These changes reflect the complex impact of conflict, with some regions increasing agricultural activity to compensate for disrupted areas, while others see a complete halt in farming due to instability and danger. Another study by Blankespoor, et al. (2020) in the Central African Republic examines the impact of conflict on agricultural activity, revealing that conflict events significantly reduce agricultural output. The reduction is most pronounced in areas suitable for crops like maize, millet, and cassava. In Benue State, where agriculture is a major economic activity, these disruptions can have severe implications for food security and the livelihoods of farmers. The regression ANOVA showed a moderate joint linear association between the conflict and food production, indicated by the F-ratio (1, 1165) = 27.353 ($p < 0.05$). This suggests that the conflict significantly impacts food production in the region. The adjusted R^2 value of 0.062 further supports the generalizability of this model to the broader population of Benue State.

Similarly, the analysis indicated a significant relationship between Nomadic Herdsmen/Farmers Conflict and the security of lives and property, with an R-value of 0.288 and a p-value less than 0.05. The R^2 value of 0.083 suggests that 8.3% of the variance in the security of lives and property is accounted for by the conflict. This finding is consistent with the work of Bello and Abdullahi (2021) study found that the combination of farmer-herdsmen conflicts, cattle rustling, and banditry poses a serious threat to the safety and security of local populations. These intertwined issues create a highly unstable environment, endangering lives and disrupting communities. In Benue State, known for frequent clashes between nomadic

herdsmen and local farmers, the security of the populace is significantly compromised by these conflicts. The regression ANOVA further confirmed a moderate joint linear contribution of the conflict to the security of lives and property, with an F-ratio (1, 1165) = 36.022 ($p < 0.05$). The adjusted R^2 value of 0.081 suggests that the model is applicable to the general population, reinforcing the conclusion that the conflict has a substantial impact on the security of lives and property in Benue State.

These findings are justified by the socio-economic context of Benue State, which is predominantly agrarian with a high dependency on agriculture for livelihoods. The recurrent conflicts between nomadic herdsmen and farmers disrupt agricultural activities, leading to reduced food production and heightened food insecurity. Additionally, the destruction of property and loss of lives during these conflicts exacerbate the already precarious security situation in the state.

Study implication

The findings of this study highlight the significant impact of the Nomadic Herdsmen/Farmers Conflict on food production and the security of lives and property in Benue State, with several important implications. Policymakers need to design targeted interventions to mitigate the impact of conflicts on agriculture. This includes implementing conflict resolution strategies, providing support to affected farmers, and investing in agricultural infrastructure to ensure food security. Enhanced security measures are crucial to protect both lives and property. This can involve deploying more security personnel to conflict-prone areas, developing early warning systems, and creating safe zones for farming activities. Additionally, encouraging diversification of livelihoods can reduce dependency on agriculture, which is heavily affected by conflicts. Training and resources for alternative income-generating activities can provide resilience against the adverse effects of conflicts. Empowering local communities through education and awareness programs about conflict resolution and peacebuilding can foster a more stable environment, reducing the likelihood of violent clashes.

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