

FARMER-HERDER CONFLICT DYNAMICS AND THEIR IMPLICATIONS FOR AGRICULTURAL EXTENSION SERVICE DELIVERY IN BENUE STATE, NIGERIA

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Abstract

This study examined the dynamics of farmer-herder conflict and their implications for agricultural extension service delivery in Benue State, Nigeria. Data were collected from extension agents through questionnaires, focus group discussions, and interviews, and analyzed using descriptive statistics. Findings revealed that major causes of conflict include destruction of crops by cattle ($\bar{x} = 3.82$), struggle over land ($\bar{x} = 3.80$), competition for water resources ($\bar{x} = 3.70$), and free grazing ($\bar{x} = 3.70$). Other contributing factors were climate change, arms proliferation, poor governance, and political influence. Religious and ethnic differences were rated relatively low, indicating that the conflict is primarily resource-based rather than ethno-religious. The conflict significantly disrupts extension service delivery by limiting agents' mobility, endangering lives, reducing farmer access, and delaying service provision. These disruptions weaken technology dissemination and farmer participation. The study recommends strengthening local conflict-resolution mechanisms, promoting controlled grazing and sustainable land use, enhancing extension agents' capacity in peace building, and ensuring their safety in conflict-prone areas to improve service delivery and foster peaceful coexistence in Benue State, Nigeria.

Key words: *farmer-herder conflict; conflict dynamics; extension service delivery*

Introduction

Agriculture remains the mainstay of Nigeria's economy, employing the majority of the rural population and serving as the primary source of livelihood for millions of households (FAO, 2020; NBS, 2022). However, the sector has in recent years faced serious challenges arising from recurrent farmer-herder conflicts, particularly in agrarian states such as Benue. The competition between sedentary farmers and nomadic or semi-nomadic pastoralists over access to land, water, and other natural resources has become increasingly intense, resulting in violent clashes that threaten food security, rural development, and social cohesion (Blench, 2017; Okoli & Atelhe, 2014; Audu, 2019).

Farmer-herder conflicts in Nigeria are driven by multiple, interrelated factors. Climate change and environmental degradation in the northern regions have led to desertification and the depletion of grazing resources, compelling pastoralists to migrate southwards in search of pasture and water (Rashid, 2021; Adisa & Adekunle, 2010). This migration brings them into contact, and often into conflict with farming communities whose farmlands encroach on traditional grazing routes. The main cause of conflicts is destruction of crops by cattle. Other contributing factors include weak land tenure systems, population pressure, the collapse of traditional conflict resolution mechanisms, political influence, poor governance and the proliferation of small arms (International Crisis Group, 2018; Ofem & Inyang, 2014). In Benue State, where agriculture is the primary livelihood activity, these conflicts have become particularly severe, leading to massive displacement of people, destruction of crops and livestock, disruption of rural livelihoods, rural urban migration, rise

in criminality, increase in school dropouts, abuse of women and girls and the abandonment of ancestral lands (Tonah, 2017; Benue State Government, 2021).

Beyond the immediate social and economic losses, the persistence of farmer–herder conflicts has profound implications for agricultural development systems, especially agricultural extension service delivery. Agricultural extension is a vital component of rural development, designed to transfer innovations, build farmers’ capacity, and improve productivity (Akinbile, 2007; Swanson & Rajalahti, 2010). Extension agents serve as a critical link between research, policy, and the farming population. However, in conflict-affected areas such as Benue State, their ability to perform these roles is severely constrained. Insecurity limits their mobility, reduces access to farming communities, disrupts extension programmes and weakens the trust and cooperation needed for effective communication and technology dissemination (Audu & Bako, 2018; Ekong et al., 2020). Moreover, displacement and fear among farmers further undermine participation in extension activities, thereby reducing the overall effectiveness of agricultural programs. Understanding the dynamics of farmer–herder conflict and how they affect extension service delivery is therefore crucial for designing responsive agricultural and peace building policies. It is not enough to view the conflict merely as a competition over resources; rather, it must be understood as a complex interaction of ecological, socio-economic, cultural and institutional factors that collectively shape rural relations and development outcomes (Theisen, 2017; Abbass, 2014). Farmer–herder conflicts in Nigeria, particularly in Benue State, stem from a complex interaction of environmental, socio-economic, political, and cultural factors. The major causes include competition over scarce land and water resources, pastoral mismanagement, poor relationships, ethnic and religious bias, and weak governance structures (Gulsah, 2020; Ofuoku, 2010; International Crisis Group, 2018). Environmental degradation, desertification, and shrinking grazing lands in northern Nigeria have forced herders southward in search of pasture, increasing tensions with sedentary farmers (Canice, 2022). Farmers’ expansion into grazing routes and herders’ encroachment on farmlands have further escalated the situation (Terungwa et al., 2020). The conflict is aggravated by climate change, population pressure, the proliferation of small arms, and the collapse of traditional negotiation mechanisms. The enactment of the Open Grazing Prohibition and Ranch Establishment Law (2017) in Benue State also heightened tensions, forcing migration of herders to neighboring states like Nasarawa and causing spillover conflicts (Adejo & Gbough, 2019). Ethnic and religious factors have added to the crisis, as some communities perceive the violence as part of broader sectarian struggles (Juliana & Walee, 2022; Oludayo, 2021). Furthermore, cattle rustling, rural banditry, political interference, and government inaction have deepened insecurity and mistrust between both groups (Adelakun et al., 2019; Robert & Onu, 2020).

Geographically, Benue’s fertile land and favorable climate make it attractive to pastoralists, but its dense farming population increases the likelihood of clashes over land use (Ogwola, 2017). Similar studies across Nigeria have identified destruction of crops, pollution of water sources, bush burning, and harassment of farmers or herders as recurrent sources of tension (Negdu, 2005; Echemata et al., 2021; Omokugbo & Anthony, 2022).

The conflict has severe effects on agricultural extension service delivery. It disrupts field activities, training programs, and farmer-extension interactions. Insecurity limits extension agents’ mobility, reduces access to farming communities, and weakens the transmission of agricultural knowledge (Adelakun et al., 2015; Ajaero & Aminu, 2021). Agents also face psychological stress and divided loyalties when their home communities are involved in the conflict (Sadaf et al., 2021).

Studies in Benue and Nasarawa States reveal that conflicts significantly reduce the accessibility, timeliness, effectiveness, and usefulness of extension services (Ior et al., 2019).

The socioeconomic consequences include reduced crop yields and incomes, displacement of farmers, destruction of infrastructure, and disruption of food supply chains (Ofuoku, 2010; Ajibefun, 2018; Aniche, 2019). The resulting insecurity, gender-based violence, and loss of livelihood contribute to widespread poverty and undermine national stability (Omokugbo & Anthony, 2022). In summary, the farmer–herder conflict in Benue State is driven by resource scarcity, weak governance, ethnic tensions, and climate pressures, and its persistence poses a serious threat to agricultural productivity and the effective delivery of extension services crucial for rural development.

Study Area

The study was conducted in Benue State, located in North Central Nigeria. The state covers about 30,782 km² with a population of approximately 6.14 million and a density of 199.5 persons/km². Major ethnic groups include Tiv, Idoma, and Iggede, alongside minority groups such as Etulo, Igbo, Jukun, and Iyon. Geographically, Benue lies between longitudes 7°47'–10°00'E and latitudes 6°20'–8°00'N. It shares boundaries with Nasarawa, Taraba, Kogi, Enugu, Ebonyi, and Cross River States, and with Cameroon to the southeast. The state comprises 23 Local Government Areas and derives its name from River Benue (Adamu & Ben, 2017). Benue experiences two distinct seasons: the rainy season (April–October) and the dry season (November–March). Vegetation ranges from rainforest and oil palm belt in the south and west to Guinea savannah in the north and east. Annual rainfall averages 1,500 mm, with temperatures ranging from 21°C–31°C in the rainy season and 16°C–37°C in the dry season, and relative humidity around 75%. The state is known for crop and livestock farming, producing yams, rice, cassava, soybeans, citrus fruits, and rearing cattle, goats, pigs, and poultry.

Data Collection

Data were collected using a structured questionnaire containing both open- and closed-ended questions organized into three sections: respondents' socioeconomic characteristics, causes of farmer–herder conflict and effects on agricultural extension service delivery. In addition, two Focus Group Discussions (FGDs) were conducted, one in Katsina-Ala (6 extension agents) and another in Gbajimba (8 extension agents) using an unstructured guide. A few interviews were also conducted.

Result and Discussions

Causes of farmer-herder conflict

The causes of farmer-herder conflict as assessed by extension agents are presented in Table 1. Destruction of crops by cattle ($\bar{x}$ = 3.82) was identified as the major cause of conflict, reflecting the high value farmers place on crops as their primary source of livelihood. This finding aligns with Adebayo and Olaniyi (2008), who described 'intentional grazing on farm crops' as a fundamental cause of such conflicts. "Struggle over land" ($\bar{x}$ = 3.80), "struggle over water resources" ($\bar{x}$ = 3.70), and "free livestock grazing" ($\bar{x}$ = 3.70) followed closely, indicating the importance of land and water to the predominantly agrarian communities of Benue State—aptly called the "Food Basket of the Nation."

Although "religious differences," "poor government response," and "arms trafficking" (each $\bar{x}$ = 3.26) were significant, they ranked lower than the resource-related causes. This contrasts with popular perceptions that religion is a dominant driver of conflict in North Central Nigeria. All identified causes had mean values above 2.5, indicating they were considered critical. These findings are consistent with those of Adejo and Gbough (2019), who linked the conflict to climatic factors, political tension, and ethnic strife, and with Canice (2022), who noted that desertification in northern Nigeria forces herders southward, increasing land-use

competition. Similarly, Juliana and Walee (2022) emphasized political and ethnic factors as underlying causes. The present results therefore corroborate earlier studies while highlighting that the ranking of causes may vary among extension agents, farmers, herders, and other stakeholders in the study area.

Table 1: Perceived Causes of Farmer-Herder Conflict in the Study Area
Source: Field data, 2025

S/N	Factors that cause farmer-herder conflict	SA	A	D	SD	$\bar{x}$	Rank
	Destruction of crops by cattle	43(86%)	5(10%)	2(4%)	0(0%)	3.82*	1st
	Struggle over land	44(88%)	3(6%)	2(4%)	1(2%)	3.80*	2nd
	Struggle over water resources	37(74%)	11(22%)	2(4%)	0(0%)	3.70*	3rd
	Free livestock grazing	37(74%)	11(22%)	2(4%)	0(0%)	3.70*	3rd
	Increase in human settlement	31(62%)	18(26%)	0(0%)	1(2%)	3.58*	5th
	Climate change	31(62%)	16(32%)	3(6%)	0(0%)	3.56*	6th
	Arms proliferation	25(50%)	23(46%)	0(0%)	2(2%)	3.42*	7th
	Political influence	28(56%)	17(34%)	3(6%)	2(4%)	3.42*	7th
	Desertification in the north	29(58%)	14(28%)	4(8%)	3(6%)	3.38*	9th
	Boko Haram activities in the north	28(56%)	14(28%)	5(10%)	3(6%)	3.34*	10th
	Cattle rustling	21(42%)	24(48%)	4(8%)	1(2%)	3.30*	11th
	Cattle theft	25(50%)	16(32%)	8(16%)	1(2%)	3.30*	11th
	Religious differences	23(26%)	19(38%)	6(12%)	2(4%)	3.26*	13th
	Poor government response	25(50%)	17(34%)	4(8%)	4(8%)	3.26*	13th
	Arms trafficking	26(52%)	15(30%)	5(10%)	4(8%)	3.26*	13th
	Poor agricultural practices in crop production	25(50%)	15(30%)	7(14%)	3(6%)	3.24*	16th
	Ethnic differences	23(46%)	18(36%)	7(14%)	2(4%)	3.24*	16th

Table 2 presents the effects of farmer-herder conflict on agricultural extension service delivery. The results reveal severe disruptions, with all mean scores exceeding the critical threshold of 2.5, underscoring the urgent need for effective conflict management strategies. The most serious effect was the loss of extension agents' lives ($\bar{x} = 3.66$), reflecting the high level of insecurity in affected areas. This was followed by disruption in the timeliness of service delivery. Lower-ranked effects included reduced farmers' access to agents ($\bar{x} = 3.30$), job losses among private-sector agents ($\bar{x} = 3.32$), and declining staff morale ($\bar{x} = 3.36$). Although ranked lower, these still indicate significant operational challenges. Overall, the findings highlight that farmer-herder conflicts substantially weaken extension service delivery systems, reducing their effectiveness and reach in affected communities. Although respondents did not rate some of these effects as very severe, they remain critical, as limited access to extension agents compels farmers to depend on friends and other unreliable information sources. These findings align with those of Ajaero and Aminu (2021), who reported that farmer-herder conflicts in South-East Nigeria disrupt extension practices by limiting farmers' cooperative activities, hindering training, destroying knowledge transmission channels, delaying programme implementation, and causing the abduction of extension workers. Similarly, Ior et al. (2019) observed that conflict adversely affects the accessibility, timeliness, and effectiveness of extension services. Adelakun et al. (2015) also found that resource-based conflicts in Oyo State undermine the delivery and sustainability of

agricultural extension services by reducing service availability and hampering the adoption of improved technologies. Collectively, these studies corroborate the present findings that farmer-herder conflicts significantly weaken agricultural extension systems in Nigeria. Even though respondents did not consider these effects to be very serious on extension service delivery, they are critical effects because when farmers do not have access to extension agents they try to rely on friends and other unreliable sources for information.

also corroborates with the findings of Ior et al, (2019) who found that conflict has high effects on the accessibility, timeliness, effectiveness, relevance, and usefulness of extension services. The results are also in tandem with the findings of Adelakun, et al, (2015) who studied the socioeconomic effects of farmer-pastoralist conflict in Oyo State and concluded that resource-based conflicts undermine the impact of agricultural extension service delivery resulting in adverse effects on the availability of services, adoption and continued use of improved technologies.

Table 2: Distribution of Respondents Based on Effects of Farmer-Herder Conflict on Extension Service Delivery

S/N	Variables	SA	A	D	SD	$\bar{x}$	Rank
1	Agents lose their lives	36 (72%)	12(24%)	1(2%)	1(2%)	3.66*	1st
2	Disrupts the timeliness of extension service delivery	33(66%)	15(30%)	0(0%)	2(4%)	3.58*	2nd
3	Movement is disrupted	34(68%)	12(24%)	1(2%)	3(6%)	3.54*	3rd
4	Agents are kidnapped	31(62%)	14(28%)	3(6%)	%(2)	3.48*	4th
5	Limits cooperative activities of farmers and herders	31(62%)	15(30%)	1(2%)	3(6%)	3.48*	4th
6	Causes poor monitoring of extension programmes	32(64%)	13(26%)	2(4%)	3(6%)	3.48*	4th
7	Extension programmes are abandoned	30(60%)	15(30%)	2(4%)	3(6%)	3.44*	7th
8	Disrupts farmers' and herders' use of adopted technology	32 (128)	12 (36)	2 (4)	4 (4)	3.44*	7th
9	Reduces profits of farmers and herders	30 (120)	16 (48)	0 (0)	4 (4)	3.44*	7th
10	Agents are displaced	25 (100)	23 (69)	0 (0)	2 (2)	3.42*	10th
11	Extension programmes are not monitored	28(56%)	16(32%)	4(8%)	2(4%)	3.40*	11th
12	Lowers morale of extension agents	30(60%)	13(26%)	2(4%)	5(10%)	3.36*	12th
13	Agents lose their jobs (in private sector)	27(34%)	16(32%)	3(6%)	4(8%)	3.32*	13th
14	Reduces farmers' access to extension agents	26(52%)	17(34%)	3(6%)	4(8%)	3.30*	14th

Mean values above the critical value of 2.5

Source: Field data, 2023

Recommendations

1. The study recommends strengthening community-based conflict resolution mechanisms, through promoting controlled grazing and sustainable land use planning.
2. Building the capacity of extension agents in peace building and conflict management.
3. Ensuring the safety and mobility of extension workers in conflict-prone areas.

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