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Effectiveness of institutional conflict resolution strategies on farmer-herder disputes: Implications for sustainable livelihoods in Oyo State, Nigeria

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Abstract

Conflicts between crop farmers and herders are common in nearly every part of Nigeria. This menace poses a formidable challenge to socioeconomic development and a serious threat to food security and the sustainable livelihood of the agrarian communities. While various institutions are involved in conflict resolution, there is a dearth of empirical information on their operational efficacy based on the strategies employed. Therefore, this study assessed the effectiveness of conflict resolution strategies employed by institutions in crop farmers-herders disputes in Oyo State, Nigeria. A multistage sampling technique was used in selecting 107 farmers, while snowball sampling was used to select 53 herders in Oyo State. Data were collected through a validated structured interview schedule and were analysed using descriptive and inferential statistical tools. The findings revealed that the mean age of farmers was 43 years, while that of herders was 32 years. The causes of conflicts between farmers and herders include crop damage by herders (89.7% and 60.4%), competition for available land (67.3% and 62.3%), sexual harassment (82.2% and 34.0%), droughts and climate change (desertification) (87.9% and 73.6%), respectively. The Western Nigeria Security Network (Amotekun) was the most involved institution in conflict resolution between farmers and herders in the study area. The most effective strategies employed by the institutions include peace building initiatives that promote social cohesion, payment of fines, police arrest, and reconciliation programmes for promoting forgiveness and reintegration. The results of Pearson Product Moment Correlation (PPMC) revealed that there exist positive and significant relationships between age ($r=0.204$, $p < 0.05$), years of herding experience ($r=0.171$, $p < 0.05$), and the effectiveness of various conflict resolution strategies. The observed effectiveness of social cohesion initiatives supports a shift toward restorative justice frameworks rather than purely punitive measures. The study recommends that there is a need to scale up peacebuilding initiatives and restorative local programmes to complement formal security measures in safeguarding agrarian livelihoods.

Keywords: Conflict, conflict resolution strategies, effectiveness, farmers-herders, institutions

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Introduction

Farmer-herder conflicts have emerged as one of the most pervasive threats to human security, rural stability, agricultural productivity, and livelihood sustainability in contemporary Nigeria. Historically characterised by seasonal and complementary exchanges involving crop residues, manure, and access to water, these interactions have increasingly escalated into violent confrontations across the North-East, North-Central, Middle Belt, and southern geopolitical zones of Nigeria (Adams et al., 2023; Muazu, 2026). This escalation reflects the convergence of climate-induced environmental stress, desertification, land degradation, population growth, and southward pastoral migration, intensifying competition over shrinking arable land, water points, and grazing routes (Adams et al., 2023; Bello, 2025). These pressures are compounded by land-tenure insecurity, the decline of gazetted grazing reserves, weak governance, and the proliferation of small arms (Adams et al., 2023; Ohadiugha & Gado, 2025). The socioeconomic consequences are profound, encompassing loss of life, displacement, destruction of crops, livestock, and agricultural infrastructure, disrupted markets, and heightened food insecurity (Muazu, 2026; Nnaji et al., 2022). For rural households dependent on crop and livestock production, recurrent conflict erodes income, productive assets, agricultural investment, and livelihood resilience, thereby undermining progress towards Sustainable Development Goals 1 (No Poverty) and 2 (Zero Hunger) (Ogungbenro & Mahmud, 2025; Abodunrin, 2025).

In response, governments, traditional institutions, community organisations, and civil society have deployed diverse conflict resolution strategies, including security operations, anti-open grazing laws, grazing reserves, ranching initiatives, peace committees, judicial processes, mediation, arbitration, and negotiated compensation (Danladi, 2025). Despite these interventions, their effectiveness remains contested. Evidence indicates that top-down and

militarised approaches are frequently constrained by weak inter-agency coordination, limited community participation, policy non-inclusivity, and inadequate attention to structural drivers such as resource competition and land-tenure insecurity (Bello, 2025; Ilesanmi et al., 2023; Muhammed et al., 2023). The persistence of conflict despite multiple interventions highlights a critical gap in the assessment of institutional effectiveness. Success should extend beyond temporary cessation of violence to encompass restoration of productive assets, access to livelihood resources, social cohesion, and household resilience. Constructive approaches that integrate formal governance, traditional mediation, inclusive dialogue, and collaborative resource governance may provide stronger foundations for sustainable peace and livelihood recovery (Adams et al., 2023; Bello, 2025). This study therefore examines the effectiveness of formal and informal institutional conflict resolution strategies in addressing farmer–herder disputes in Oyo State, Nigeria, and assesses their implications for sustainable livelihoods. Specifically, described the personal characteristics of the respondents; identified the causes of conflicts between farmers and herders; identified the institutions involved in conflict resolution; and determined the perceived effective strategies adopted by the various institutions.

Material and Methods

The study was conducted in Oyo State, Nigeria, within the South-West geopolitical zone. The State has a predominantly agrarian economy, with crop production and livestock rearing constituting major livelihood activities. The study focused on selected conflict-prone areas within the Ogbomoso and Oyo Agricultural Zones, where farmer–herder disputes have been reported. A descriptive cross-sectional survey design was adopted to examine farmers’ and herders’ experiences and perceptions of institutional conflict resolution strategies. A multistage sampling procedure was used in the selection of 160 respondents comprising 107 crop farmers and 53 herders, respectively. Primary data were collected through a structured interview schedule covering personal characteristics, causes of conflict, institutional resolution mechanisms, and their perceived effectiveness of strategies. Data were analysed using descriptive statistics, including frequencies, percentages, means, and PPMC to test the relationship between the variables. The dependent variable was the perceived effectiveness of institutional conflict resolution strategies; respondents rated strategies on a four-point scale ranging from Very Effective (3) to Ineffective (0). Also, the institution's involvement was measured on a 4-point rating scale ranging from Highly Involved (3) to Not Involved (0).

Results and Discussion

The findings revealed that the mean age of farmers was 43 years, while that of herders was 32 years. Most of the farmers (73.8%) and herders (72.0%) were male, while females constituted 26.2% of the respondents. Farming households had an average of five members, whereas herding households had an average of six members. More than half of both the farmers and herders had less than 20 years of experience in their respective livelihoods. The farmers cultivated an average farm size of 5 hectares, while the herders owned an average of 12 cattle.

Table 1 reveals that farmer–herder conflicts in the study area are multidimensional rather than attributable to a single source of disagreement. Farmers identified breakdown in traditional conflict-dispute resolution mechanisms, proliferation of small arms and weapons, and crop damage by herders as the most prominent causes, each reported by 89.7% of farmers. Drought and climate change/desertification (87.9%) also constituted a major driver. The responses of herders reveal a somewhat different ordering of conflict drivers. Cultural and traditional practices and differences ((81.1%)) recorded the highest proportion , followed by perceived hatred by the community (77.4%), drought and climate change/desertification and cattle rustling/theft and killing by miscreants (73.6% each), and competition for water resources and traditional grazing-route/land-ownership disputes (71.7% each). The differences between the two groups are particularly important. Farmers tend to perceive the conflict more strongly in terms of direct livelihood losses, insecurity, institutional breakdown and inappropriate behaviour, whereas herders place greater emphasis on social exclusion, cultural differences, community hostility, livestock insecurity and environmental pressures.

Table 1: Distribution of respondents according to causes of conflicts between farmers and herders in the study area.

Causes of conflicts	Farmers F(%)	Herders F(%)
Competition for water resource	83(78.0)	38(71.7)
Competition for available land	72(67.3)	33(62.3)
Traditional grazing routes and land ownership disputes.	90(84.1)	38(71.7)
Sexual harassment and rape	88(82.2)	18(34.0)
Droughts and Climate change(desertification)	94(87.9)	39(73.6)
Breakdown in traditional conflict dispute resolution mechanisms	96(89.7)	34(64.2)
Decline in internal discipline and social cohesion	81(75.7)	35(66.0)

Ethnic and religious differences	86(80.4)	31(58.5)
Proliferation of small arms and weapons	96(89.7)	32(60.4)
Crop damage by herders	96(89.7)	32(60.4)
Cattle rustling, theft and killing by miscreants	49(45.8)	39(73.6)
Killing of farmers/kidnapping	71(66.4)	8(15.1)
Historical grievances	78(72.9)	30(56.6)
Policy biases for or against certain groups	90(84.1)	34(64.2)
Perceived Hatred by the community	52(48.6)	41(77.4)
Cultural and traditional practices and differences	78(72.9)	43(81.1)

Table 2 indicates substantial differences in the level of involvement of formal and informal institutions. Among formal institutions, Western Nigerian Security Network (Amotekun) recorded the highest involvement among both farmers (WMS = 2.87) and herders (WMS = 2.74). Agro rangers ranked first among farmers (WMS = 2.87) and second among herders (WMS = 2.72), heads of farmers and herders associations (WMS = 2.79 and 2.74); the police ranked third for both groups (WMS = 2.52 and 2.53, respectively). Courts/tribunals ranked fourth for both groups. This indicates that community-based actors and other formal security institutions constitute an important institutional infrastructure for conflict management.

Table 2: Distribution of respondents according to institutions involved in conflict resolution between farmers and herders

Institutions	Farmers		Herders	
	WMS	RANK	WMS	RANK
Formal Institutions				
Court of law/ tribunals	2.42	5 th	2.28	4 th
Police	2.52	4 th	2.53	3 rd
Western Nigerian Security Network (Amotekun)	2.87	1 st	2.74	1 st
Agro rangers	2.87	1 st	2.72	2 nd
Peace corps	1.31	6 th	1.26	6 th
Extension agent	1.49	5 th	1.36	5 th
Head of farmers' association	2.79	2 nd	2.74	1 st
Head of herders' association	2.77	3 rd	2.72	2 nd
Informal Institutions				
Community leaders	2.58	1 st	2.47	1 st
Traditional spiritual leaders	2.20	2 nd	2.17	2 nd
Religious leaders in the community	2.04	3 rd	2.08	3 rd
Local council of elders in the community	2.00	4 th	1.94	4 th

Table 3 reveals that respondents generally favoured practical, restorative and locally enforceable strategies over symbolic or purely traditional/spiritual mechanisms. Among farmers, the most effective strategy was warning offenders against repeat performance (WMS = 2.55), followed by payment of fines (2.41), police arrest (2.20), reconciliation programmes advancing forgiveness and reintegration (2.16), and tightening farms through fencing (2.14). Among herders, warning against repeat performance also ranked first (WMS = 2.79), followed by reconciliation programmes advancing forgiveness and reintegration (2.60), payment of fines (2.32), peace-building initiatives promoting social cohesion (2.30), and monitoring farms against intruders (2.23). These results suggest substantial convergence between the two groups regarding the value of accountability combined with reconciliation. The results also show that the two groups do not evaluate all strategies identically. Police arrest ranked third among farmers but seventh among herders, whereas reconciliation ranked second among herders but fourth among farmers. This difference is important because it suggests that perceptions of justice and effectiveness are influenced by stakeholder position. A strategy regarded as protective by one group was perceived as punitive by another.

Table 3: Distribution of respondents according to perceived effectiveness of conflict-resolution strategies

Perceived Conflict-resolution strategy	Farmers		Herders	
	WMS	Rank	WMS	Rank
Reconciliation programme advancing forgiveness and reintegration	2.16	4	2.60	2
Police arrest	2.20	3	2.09	7
Payment of fines	2.41	2	2.32	3
Compensation from the culprit	0.64	12	1.15	10

Perceived Conflict-resolution strategy	Farmers		Herders	
	WMS	Rank	WMS	Rank
Warning not to allow a repeat performance	2.55	1	2.79	1
Peace-building initiatives promoting social cohesion	2.13	6	2.30	4
Establishing community-based mediation centres	2.02	9	2.00	9
Tightening farms through fencing	2.14	5	2.11	6
Monitoring farms against intruders	2.16	4	2.23	5
Combined effort of villagers, heads of associations and village heads	2.10	8	2.06	8
Use of charms/oath taking	0.70	10	0.36	12
Spiritual consultation	0.68	11	0.40	11

Conclusions and Outlook

The study shows that farmer-herder conflicts in Oyo State are driven by a complex interaction of environmental, economic, institutional, social and security-related factors. The findings further establish that formal security institutions, particularly Amotekun, Agro rangers, farmers' and herders' association leaders, and the police, play a prominent role in conflict resolution. However, informal institutions, especially community leaders, also occupy an important position in the local conflict-management ecosystem. With respect to effectiveness, warning offenders against repeat violations, payment of fines, reconciliation and reintegration, police arrest, peace-building initiatives promoting social cohesion, and monitoring or protecting farms were among the strategies receiving relatively strong ratings. The study consequently recommends that sustainable management of farmer-herder disputes requires a shift from predominantly reactive responses towards integrated, preventive, and restorative conflict management and strengthening these institutional linkages can contribute not only to conflict reduction but also to the restoration of productive assets, social cohesion, agricultural productivity and sustainable rural livelihoods.

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