

World Journal of Advanced Research and Reviews

eISSN: 2581-9615 CODEN (USA): WJARAI Cross Ref DOI: 10.30574/wjarr Journal homepage: https://wjarr.com/



(RESEARCH ARTICLE)



Determinants of Development Communication in Famers-Herders' Crisis in Kogi State, Nigeria

Stella Ojone Adejoh ¹, Patrick Emmanuel Adejo ^{2,*}, Ambrose A Eguma ², Eleojo Grace Adejo ² and Emmanuel Adejoh ³

- ¹ Department of Agricultural Economics and Extension, Faculty of Agriculture, Federal University of Lafia, Nasarawa State, Nigeria.
- ² Department of Agricultural Economics and Extension, Faculty of Agriculture, Prince Abubakar Audu University Anyigba, P.M.B. 1008, Anyigba, Kogi State, Nigeria.
- ³ Department of Management Sciences, Faculty of Management, Salem University, Lokoja, Kogi State, Nigeria.

World Journal of Advanced Research and Reviews, 2025, 25(03), 2129-2140

Publication history: Received on 18 February 2025; revised on 25 March 2025; accepted on 27 March 2025

Article DOI: https://doi.org/10.30574/wjarr.2025.25.3.0879

Abstract

This study analysed the use of development communication strategies in the intervention of the farmers/herders crisis in Kogi state, Nigeria. A multi-sampling procedure was used to select 200 farmers and 80 herders for the study. Primary data obtained through questionnaire administration were analysed using descriptive statistics and factor analysis. The results showed that 60% and 100% of the farmers and herders were male, respectively. The average age among the farmers and herders was 45 years and 48 years, respectively, while the pooled mean was 46.0 years. The majority of the crop farmers could read and write (85%), while 91.1% of the herders had Islamic/Quranic education. The mean hectares of land for crop production among the crop farmers was 5.8 hectares and 0.30 hectares for herders, while the average herd size was 6 and 125 among the crop farmers and herders, respectively. Mass media was the major form of development communication among the farmers (63.5%) and herders (55%). The major drivers of communication between and among stakeholders in the farmer/herder crisis include income level (-0.804), poor welfare status (0.635), land resources (0.445), cultural norms (0.692), diversity (0.701), ethnic and religious beliefs (0.589), differences in local leadership and political affairs (0.541), climatic conditions (0.702), scarce resources (0.691), and scarce productive soil (0.458). This study recommended that extension agents and communicators should incorporate the findings of this study when designing and conducting relevant interventions in resolving the farmers-herders crisis.

Keywords: Crisis; Communication; Co-existence; Diversity; Herdsmen; Farmers

1. Introduction

The conflict between herders and farmers in Nigeria is a long-standing issue that has evolved into a complex and multidimensional crisis with ethnic, economic, and religious undertones. Nomadic pastoralism has been a centuries-old tradition among the Fulani, requiring seasonal migration across thousands of kilometers in search of grazing land and water for their cattle. However, this movement frequently leads to clashes with sedentary farmers, whose farmlands are often encroached upon due to unregulated grazing practices. Conflict, broadly defined, implies differences, disputes, and incompatibilities between individuals, groups, or communities. Osisioma (2016) argues that conflicts arise when two or more parties pursue mutually exclusive or discordant goals, often linked to scarcity of resources, competing interests, and socio-political imbalances. In Nigeria, the causes of conflict include land competition, jurisdictional disputes, political and ethnic rivalries, and socio-economic inequalities. Additionally, population growth and climate-

^{*} Corresponding author: Patrick Emmanuel Adejo

induced pressures have intensified the struggle over farmland and grazing spaces, further exacerbating tensions between herders and farmers.

The impact of the herder-farmer conflict has been devastating. Between January and June 2018 alone, at least 1,500 people lost their lives, with over 1,300 fatalities directly attributed to the conflict—a number six times higher than civilian deaths caused by Boko Haram within the same period (Crisis Group Africa, 2018). The crisis has led to the massive displacement of rural populations, the destruction of farmlands, the loss of livelihoods, and severe food insecurity. It has also worsened political instability, discouraged local and foreign investments, and threatened national economic growth (Kwaghga et al., 2018). Agande (2017) emphasizes that competition for limited resources has further deepened divisions between farmers and herders, isolating both groups and fueling sectarian violence.

The shrinking availability of life-supporting natural resources per capita, driven by population growth, has reached a critical level, contributing to social tensions that often escalate into widespread conflict. In Fulani society, cattle ownership is a primary indicator of wealth and social status. However, the increasing competition for grazing land has led to frequent disputes between herders and local farmers, particularly due to encroachment on cattle routes and access to water sources. Unregulated cattle movements often result in crop destruction, further fueling tensions between the two groups (Shaibu, 2018; Olabode & Ajibade, 2010).

Conflicts over resource use, particularly between farmers and herders, are prevalent across West Africa. While no single explanatory factor fully accounts for the persistence of these conflicts, social and environmental factors interact in complex ways to perpetuate hostilities (Shatima & Usman, 2008). The root causes of farmer-herder conflicts remain contested, with both groups attributing blame to different factors. Several interrelated elements—including political, economic, cultural, and religious tensions—profoundly shape the dynamics of this conflict. Additionally, environmental factors, such as land degradation and climate change, contribute to resource scarcity, further exacerbating disputes.

Ramos (2007) defines conflict resolution as an umbrella term encompassing conflict management, crisis intervention, and social control mechanisms. Effective crisis resolution entails not only mitigating violence but also fostering long-term reconciliation through rehabilitation, reintegration, and early warning systems. Communication plays a critical role in this process by facilitating dialogue, promoting mutual understanding, and enhancing stakeholder participation (Rogers, 2010). Lasswell (2018) identifies communication as a key tool for environmental surveillance, risk assessment, and social coordination. In conflict-prone areas, development communication has been widely used to mobilize stakeholders, facilitate policy dialogue, and promote behavioural change (Flor, 2007; Mefalopulos, 2008). Through community engagement, media advocacy, and participatory communication, conflicts can be de-escalated, and collaborative solutions can be formulated.

Within the context of the herder-farmer crisis in Nigeria, communication serves as a bridge for fostering peaceful coexistence, resolving disputes, and creating awareness of sustainable land-use practices. Faqih and Aisyah (2019) define communication as a process of meaning-making that facilitates interactions between individuals and groups toward achieving common goals. Development communication approaches—such as social marketing, education, media campaigns, and community dialogues—can play a crucial role in reducing hostilities and fostering cooperation between herders and farmers. Effective communication is essential for conflict resolution, particularly in rural communities such as Kogi State, where misinformation and a lack of structured dialogue mechanisms have intensified hostilities. Conflict resolution efforts rely on accessible and targeted information dissemination to ensure that all stakeholders can engage meaningfully. However, the effectiveness of communication strategies in mitigating the herder-farmer crisis remains largely unexplored. This underscores the need for an assessment of communication systems and tools used in existing interventions and their effectiveness in conflict mitigation.

Ifidon and Ahiauzu (2005) conceptualize conflict resolution as a collaborative problem-solving process, requiring cooperation and mutual agreement on sustainable solutions. Within this framework, development communication and extension services play a pivotal role in fostering dialogue between stakeholders, promoting evidence-based solutions, and encouraging community participation in agricultural policymaking. Despite the importance of development communication in conflict resolution, empirical studies on its application in addressing the herder-farmer crisis in Kogi State remain scarce. This study, therefore, seeks to bridge this knowledge gap by examining the role of development communication in mitigating the crisis and fostering peaceful co-existence between farmers and herders. This study aims to:

- Describe the socioeconomic characteristics of respondents in the study area;
- Identify forms of communication systems used in interventions for the farmer-herder crisis;
- Examine factors affecting communication between and among stakeholders in the farmer-herder crisis.

2. Material and methods

2.1. Study Area

The study area is Kogi State, Nigeria. Kogi State was created on 27th August 1991 out of the Kwara and Benue States. The State is located in the central region of Nigeria. The headquarters of the State is Lokoja, which is situated at the Confluence of rivers Niger and Benue making the State to be popularly known as the Confluence State. The State is located between Latitude 6°30'N and 8°5'N and Longitude 5°51'E and 8°00'E. The State has boundaries with eight (8) States and the Federal Capital Territory (FCT) namely; the FCT to the north, Nasarawa State to the northeast, Benue State to the east, Enugu State to the southeast, Anambra State to the south, Edo State to the south-west, Ondo and Ekiti States to the west, Kwara State to the North West and Niger State to the North. Kogi State had a total population of about 4,710,211 people in 2018 (using the state projected growth rate) (NPC, 2007) and a land area of about 30,354,74 square kilometres.

Kogi State has four agricultural zones (A, B, C, and D) as delineated by the Kogi State Agricultural Development Project (Kogi ADP). Zone D comprises Idah, Ofu, Ibaji, Olamaboro, and Igala-Mela local government areas, with zonal headquarters at Aloma. The zone is well endowed with river valleys and swamp lands for dry-season farming. The major crops grown in the zone are maize, yam, cassava, sorghum, rice, millet, cowpea, pigeon pea, groundnut, Bambara nut, cocoyam, sweet potato, benniseed, melon, banana, plantain and cotton. Fruits and leafy vegetables such as okra, pepper, fluted pumpkin and spinach are also cultivated in the zone. Major animals reared are cattle, sheep, goats, and poultry. Fishing is prevalent along the riverine areas.

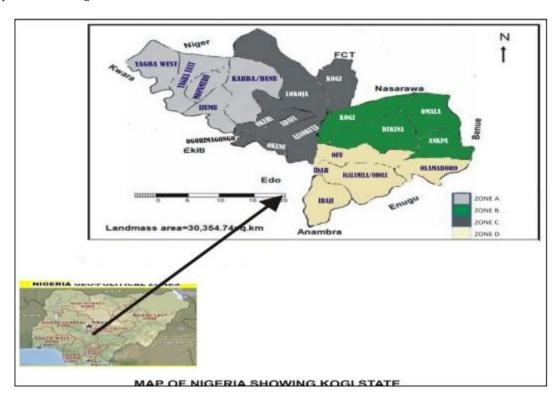


Figure 1 Map of Nigeria showing Kogi State

2.2. Research Design

The design of this study is a descriptive survey research design.

2.3. Population of the Study

The population of this study comprised stakeholders (farmers and herders) in the herder–farmer crisis in Kogi State, Nigeria. The State was chosen due to the prevalence of herders – farmers' crisis with its multiplier effect on agricultural production activities and food security.

2.4. Sample and Sampling Procedure

The study utilized a sample of 200 arable crop farmers and 80 herders, yielding a total of 280 respondents. A multistage sampling technique was employed to ensure the selection of respondents relevant to the study.

In Stage One, four Local Government Areas (LGAs)—Omala, Ofu, Igalamela/Odolu, and Ijumu—were purposively selected based on the prevalence and documented occurrences of farmer-herder conflicts in the state.

In Stage Two, two farming communities were purposively selected from each of the four LGAs, resulting in a total of eight farming communities.

In Stage Three, 25 arable crop farmers and 10 herders were purposively selected from each farming community. The selection process ensured the inclusion of key factors such as opinion leaders, community leaders, and other relevant stakeholders to enhance the reliability of the findings. This approach yielded a final sample of 280 respondents for the study.

2.5. Method of Data Collection

The study relied on primary data, which were collected using structured questionnaires and interviews designed to solicit information from arable crop farmers and herders in the study area. A total of 280 questionnaires were administered, and all 280 copies were retrieved on the spot, ensuring a 100% response rate. Each questionnaire was carefully designed to align with the research objectives, capturing key variables relevant to the study.

2.6. Method of Data Analysis

The analysis was structured to address the research objectives systematically:

- Objectives 1 and 2 were analyzed using descriptive statistics, including frequency distributions and percentages.
- Objective 3, which examines the factors influencing communication among and between stakeholders in the farmer-herder crisis, was analyzed using factor analysis.

2.7. Model Specification

2.7.1. Factor Analysis

Factor analysis is a dimension reduction technique commonly applied in social science research and survey studies(Johnson & Wichern, 2007). In this study, 18 Likert-type statements were formulated to identify the factors influencing communication among and between stakeholders in the farmer-herder crisis. The factor analysis model is specified as follows:

$$Xj = aj1F1 + aj2F2 + \dots ajmFm + ej$$

Where $e_j = 1,2,...p$; p denotes the number of variables $(X_1, X_2,....X_p)$ and m denotes the number of underlying factors $(F_1, F_2,...F_m)$. X_j is the variable represented in latent factors. The model assumes that there are m underlying factors whereby each observed variable is a linear function of these factors together with a residual variate.

Scores were assigned to the respondent based on a number of factors for a particular statement. From these statements (18 Likert-type questions), factorial constructs were generated.

3. Results and discussion

3.1. Socioeconomic Characteristics of Farmers and Herders in Kogi State

The socioeconomic characteristics of respondents examined included sex, age, marital status, household size, educational qualification, major occupation, farm size, number of livestock (cattle), and annual income from both crop and livestock production. The socioeconomic disparities between farmers and herders in the study area highlight key structural and cultural differences that shape their interactions, resource competition, and conflict dynamics. The findings reveal that herding remains a male-dominated occupation, reinforcing traditional Fulani cultural norms where livestock rearing is an exclusive responsibility of men. In contrast, the more balanced gender distribution among

farmers suggests that crop cultivation accommodates both men and women, possibly influencing land tenure patterns, decision-making, and household economic resilience.

Age distribution indicates that both groups are middle-aged, with farmers having a slightly lower mean age. The clustering of herders in older age groups suggests that younger generations may be less engaged in traditional pastoralism, possibly due to the changing economic landscape, urban migration, and shifting livelihood patterns. This generational shift could have long-term implications for the sustainability of pastoralism and the potential need for alternative livelihood options.

The significant education gap between farmers and herders underscores barriers to access and inclusion, particularly in governance, extension services, and market participation. The dominance of Islamic/Quranic education among herders, with minimal formal schooling, suggests a limited engagement with formal agricultural policies, credit schemes, and institutional interventions. This disparity may further complicate communication efforts, as interventions relying on formal literacy may fail to effectively engage pastoralist communities.

The stark contrast in land and livestock ownership reflects deep-rooted structural inequalities. Farmers control larger landholdings, reinforcing claims over fixed agricultural territories, while herders, despite their economic reliance on cattle, have limited formal land access. This imbalance fuels resource competition, particularly in the absence of clearly defined grazing routes, land tenure security, and effective dispute resolution mechanisms.

Economic disparities between the two groups are evident in income sources. Farmers generate higher incomes from crop production, while herders rely almost entirely on livestock earnings. The higher income from livestock suggests that herders may have greater capital liquidity. The low crop income among herders further highlights their limited agricultural engagement, reinforcing their dependence on mobility and seasonal grazing. patterns.

Table 1 Frequency Distribution on the Socioeconomic Characteristics of the Respondents

Socioeconomic Characteristics	Farm	ers n	= 200	Herders n = 80 Pool			Poole	ed n = 280		
	Freq.	%	Mean	Freq	%	Mean	Freq.	%	Mean	
Sex										
Male	120	60.0		80	100		200	71.4		
Female	80	40.0		0	0		80	28.6		
Age										
26 – 35	57	28.5	45 years	16	20.0	48 years	73	26.1	46 years	
36 – 45	41	20.5		12	15.0		53	18.9		
46 - 55	64	32.0		32	40.0		96	34.3		
56 – 65	22	11.0		16	20.0		38	13.6		
66 – 75	16	8.0		04	5.0		20	7.1		
Marital Status										
Single	33	16.5	12	15.0			45	16.1		
Married	145	72.5	64	80.0			209	74.6		
Divorced	10	5.0	04	5.0			14	5.0		
Widowed/widower	12	6.0	0	0			12	4.3		
Household Size										
1 - 5	91	45.5	6 persons	28	35.0	9 persons	119	42.5		
6 - 10	99	49.5		20	25.0		119	42.5	7 persons	
11 - 15	10	5.0		32	40.0		42	15.0		

Educational Qualification									
No formal education	20	10.0		01	1.3		21	7.5	
Islamic/Quranic education	10	5.0		73	91.1		83	29.6	
Primary education	29	14.5		01	1.3		30	10.7	
Secondary education	47	23.5		04	5.0		51	18.2	
Tertiary education	94	47.0		01	1.3		95	33.9	
Major Occupation		1			ı		ı	1	
Farming	74	37.0		44	55.0		118	42.1	
Trading	54	27.0		28	35.0		82	29.3	
Civil Service	71	35.5		0	0		71	25.4	
Artisanship	01	0.5		08	10.0		09	3.2	
Farm Size		1		I	1	I			I
0 – 2	25	12.5	5.8 ha	76	95.0	0.30 ha	101	36.1	4.2 ha
2.1 - 4.0	48	24.0		0	0		48	17.1	
4.1 - 6.0	62	31.0		04	5.0		66	23.6	
Above 6.0	65	32.5		0	0		65	23.2	
Number of Cattle	•	•	•		•		•	•	
0 - 10	174	87.0	6	0	0	125	174	62.1	40
11 - 20	20	10.0		0	0		20	7.1	
Above 20	6	3.0		80	100		86	30.8	
Annual Crop Income									
Below 200,000	54	27.0	432,701.05	76	95.0	25,000.00	130	46.4	316,215.04
200,000 - 400,000	35	19.0		04	5.0		39	13.9	
401,000 - 600, 000	67	33.5		0	0		67	23.9	
601,000 – 800,000	28	14.0		0	0		28	10.0	
800,000 – 1,000,000	16	8.0		0	0		16	5.8	
Annual Income (Livestock)									
Below 200,000	154	77.0	32,000.20	10	12.5		164	58.6	232,000.14
200,000 – 400,000	12	6.0		0	0	732,000.00	12	4.3	
401,000 – 600, 000	04	2.0		0	0		04	1.4	
601,000 – 800,000	06	3.0		0	0		06	2.1	
800,000 - 1,000,000	24	12.0	nputed from Fie	70	87.5		94	33.6	

Source: Computed from Field Survey, 2023

3.2. Forms of Communication System

The forms of communication systems in the intervention of farmers/herders' crisis are presented in Table 2.

Table 2 Forms of Communication System in the Intervention of Farmers/Herders Crisis

Forms of Communication System	Farmers		Herders		Pooled	
	Freq. %		Freq.	%	Freq.	%
Interpersonal	70	35.0	28	35.0	98	35.0
Mediatory	40	20.0	12	15.0	52	18.6
Mass media	127	63.5	44	55.0	171	61.1

Source: Field Survey, 2023

Table 2 reveals that the majority (61.1%) of the respondents identified mass media as the primary communication system used in interventions addressing the farmer-herder crisis in the study area. Specifically, 127 crop farmers (63.5%) and 44 herders (55.0%) considered mass media as the dominant means of communication in intervention efforts. Mass media communication involves the dissemination of information to a broad audience through various channels such as books, journals, periodicals, news bulletins, radio, television, satellite/internet, and sound recordings, among others.

In contrast, only 18.6% of respondents (both farmers and herders) indicated that mediatory communication was used in intervention efforts. Mediatory communication involves the use of a third party (mediator) to facilitate conflict resolution by fostering dialogue and negotiating agreements between conflicting parties. The mediator could be either an insider (from the affected communities) or a government-appointed intermediary tasked with promoting peace. However, in some instances, mediation has been perceived as biased or ineffective, particularly when government intervention appears partial or politically motivated, thereby reducing its credibility among stakeholders.

Furthermore, Table 3 indicates that 35.0% of respondents (98 stakeholders) acknowledged interpersonal communication as a key communication system used in intervention efforts. Interpersonal communication refers to face-to-face interactions between two or more individuals, allowing for direct engagement and immediate feedback. Compared to mediatory communication, interpersonal communication offers greater effectiveness in conflict resolution, as it enhances understanding, promotes trust, and facilitates faster feedback loops. Essential interpersonal communication skills include reading, writing, listening, and speaking, all of which enable effective information exchange, knowledge transfer, and emotional expression. Additionally, these skills can be refined and improved through knowledge sharing, practice, feedback, and reflection, making interpersonal communication a valuable tool in fostering dialogue and resolving conflicts.

3.3. Factors Affecting Communication between and among Stakeholders in the Farmers/Herders Crisis

Factor Analysis was used to study the interrelationship among the many variables that were included in the instrument of data collection that affect communication between and among major stakeholders in the farmer/herder crisis in the study area. The technique further explains these variables in terms of their common dimensions (factors). The first output in factor analysis is the result of extraction of components/factors. Table 3a shows the results of component factor extraction among the stakeholders. Three factors, namely socioeconomic, socio-cultural, and environmental, were *a priorily* anticipated based on the tested variables.

Table 3a Extraction of component factors

Factors	Eigen values	Percentage of variance
Socioeconomic	3.528	49.50
Socio-cultural	3.116	40.88
Environmental	1.989	9.62

Source: Computed from Field Survey, 2023

Table 3a also provides the respective Eigenvalues and percentage of variance for the factors. The rule of thumb here is that only factors with Eigen values greater than 1.0 should be used in further analysis. This criterion of determining the number of factors is chosen among others because of the relatively large number of variables. Moreover, it is the default of most statistical computer programmes. From Table 3.3a, all the included variables in the three identified factors have eigenvalues greater than one. Indicatively, further analysis can be conducted, and it suffices to say that these variables

significantly influenced communication between and among stakeholders in the crop farmers-herders conflict in the study area.

Table 3b presents the data for the oblique rotation of the components. The factor loadings for each of the 18 variables are presented.

Table 3b Oblique rotated factor component correlations (factor loadings)

Factors	Factor 1	Factor 2	Factor 3				
Socio-economic Factors							
Illiteracy	0.388	0.033	0.088				
Personality	0.300	-0.208	0.321				
Poor welfare status	0.635	0.010	0.108				
Language barrier	0.28	0.201	0.048				
Income level	-0.804	-1.365	1.443				
Land resources	0.445	0.118	-0.265				
Socio-cultural Factors							
Family group	0.431	0.692	0.111				
Cultural norms	0.005	0.755	0.49				
Ethnics and religious beliefs	-0.583	0.589	0.077				
Group affiliation	0.025	0.023	0.262				
Self-esteem and ego	0.109	0.218	0.009				
Lack of interest	0.004	0.329	0.137				
Diversity	0.111	0.701	0.097				
Differences in local leadership and political affairs	0.109	0.541	-0.444				
Environmental Factors							
Climatic conditions	0.018	0.358	0.702				
Scarce grazing vegetation	0.019	0.048	0.691				
Scarce productive soil	0.254	0.201	0.458				
Region/location	-0.193	-0.087	0.311				

Source: Field Survey, 2023

Using Kaiser's rule of thumb, which states that variables with coefficients of 0.3 and above may be used to define a factor, the variables with high loadings under the socioeconomic factor include income level (-0.804), poor welfare status (0.635), land resources (0.445), illiteracy (0.388), and family group (0.431). Since all these variables pertain to socioeconomic conditions, the first factor was named "Socioeconomic Factor."

As shown in Table 3.3b, except for income level, which exhibits a negative coefficient, the correlation coefficients for poor welfare status, land resources, illiteracy, and family group are positively signed. This indicates that these variables exacerbate conflicts between crop farmers and herders, thereby increasing the need for communication among stakeholders. Conversely, the negative coefficient of income level suggests that higher income reduces farmerherder conflicts and, consequently, the necessity for conflict-related communication. This finding aligns with McCaffrey (2005), who asserted that peace and conflict resolution at the community level can be facilitated through improved welfare conditions. Furthermore, it supports the argument of Miguel et al. (2004) that low-income levels are strongly associated with conflict in developing countries.

Under the second factor, the variables with high loadings include cultural norms (0.755), diversity (0.701), ethnic and religious beliefs (0.589), and differences in local leadership and political affairs (0.541). Since these variables pertain to socio-cultural influences, this factor was named the "Socio-Cultural Factor." The positive correlation coefficients indicate that these socio-cultural elements contribute to the intensification of farmer-herder conflicts, thereby necessitating increased communication among stakeholders to mitigate tensions.

Similarly, Table 3.3b reveals that the variables climatic conditions (0.702), scarce grazing vegetation (0.691), scarce productive soil (0.458), and region/location (0.311) loaded significantly under the third factor. Given that these variables are environmental, this factor was named "Environmental Factor." The positive correlation coefficients suggest that these environmental stressors aggravate the farmer-herder crisis, reinforcing the need for communication and conflict resolution mechanisms among stakeholders. This finding is consistent with theoretical expectations, as environmental pressures such as resource scarcity and climate variability are well-documented drivers of conflict in agrarian societies.

3.4. Notable Social Change After Intervention

The distribution of respondents according to notable social change after the intervention between farmers/herders crisis in the study area is presented in Table 4. The most notable change, as indicated in the pooled statistics, was the increase in cultivated land, with 56.1% of respondents acknowledging that more farmland was being cultivated following intervention efforts. This reflects a significant shift in agricultural productivity and suggests that the resolution of conflicts has facilitated greater land utilization for farming. Additionally, the diffusion of peace between farmers and herders was recognized as one of the most significant social transformations resulting from the intervention efforts. The involvement of governments, non-governmental organizations, faith-based organizations, and other relevant actors in deploying structured communication systems has played a crucial role in fostering conflict resolution and restoring agricultural activities. Respondents widely agreed that the expansion of cultivated farmland was one of the most impactful social changes following these interventions.

Table 4 Notable Social Change after the Intervention of Farmers/Herders Crisis

Social Change*			Herders		Pooled	
	Freq.	%	Freq.	%	Freq.	%
Farmers and herders meet regularly for deliberations	52	26.0	08	10.0	60	21.4
We sleep with our eyes closed	16	8.0	56	70.0	72	25.7
Herders have more controlled grazing than before interventions	87	43.5	0	0	87	31.1
More farm lands are now cultivated	93	46.5	64	80.0	157	56.1
There is sharp increase in the production of both crop and livestock enterprises	18	9.0	48	60.0	66	23.9
Movement of both herders and farmers less restricted by crisis	63	31.5	12	15.0	75	26.8
There is relatively steady income	18	9.0	68	85.0	86	30.7
Less banditry and insurgency	71	35.5	16	20.0	87	31.1
More diffusion of peace among farmers and herders	85	42.5	28	35.0	113	40.4

Source: Field Survey, 2023 * = multiple responses

Peacebuilding and conflict management involve the application of resolution and negotiation techniques to regulate the level and impact of disruptive conflicts while simultaneously harnessing the constructive aspects of collaboration, cooperation, and compromise. This process seeks to remove cognitive barriers to agreement and promote group synergy by incorporating a range of conflict resolution strategies, including problem-solving, shared goal-setting, resource expansion, avoidance techniques, compromise, authoritative directives, and structural or behavioural adjustments. These approaches are supported by Robbins (2001), as cited in Osisioma (2004), who emphasized that effective conflict resolution requires multidimensional strategies that not only address immediate tensions but also foster long-term stability.

Intervention efforts have covered a wide range of initiatives led by governmental agencies, civil society organizations, and international actors at the community, national, and international levels. These interventions are designed to

address the root causes of conflict and ensure that farmers and herders experience freedom from fear, freedom from want, and freedom from humiliation before, during, and after violent conflicts. The findings align with the perspective of Osisioma (2016), who asserted that a successful peacebuilding or conflict intervention strategy should create an enabling environment for self-sustaining and durable peace, foster reconciliation between conflicting parties, prevent the resurgence of conflicts, integrate civil society into the peace process, establish and reinforce legal mechanisms, and address underlying structural and societal tensions.

Beyond the expansion of farmland and the diffusion of peace, other notable social transformations emerged following the intervention efforts. The findings indicate that herders have adopted more controlled grazing practices, leading to reduced encroachment on farmlands. Additionally, there has been a significant decline in banditry and insurgency, contributing to improved security and stability within the affected communities. The study also found that income levels have become relatively stable, reinforcing economic resilience for both farmers and herders. The easing of movement restrictions has further allowed both groups better access to markets, fostering improved trade and economic interactions. Respondents also reported an increased sense of security, as many now feel safe enough to "sleep with both eyes closed," a sentiment reflecting reduced fear and heightened community trust.

Furthermore, there has been a sharp increase in the production of both crops and livestock, signalling improvements in food security and agricultural productivity. Farmers and herders now engage in regular meetings and deliberations, facilitating dialogue and contributing to long-term conflict prevention. These findings underscore the importance of structured intervention strategies in fostering peace, economic stability, and agricultural growth. The observed social transformations suggest that effective conflict resolution mechanisms, particularly those emphasizing inclusive dialogue, structured communication, and multi-stakeholder engagement, have the potential to significantly reduce hostilities and promote peaceful coexistence between farmers and herders.

4. Conclusion and Recommendations

The crisis between crop farmers and herders in Nigeria has been escalating rapidly, particularly in the northeastern and central regions of the country. This conflict has resulted in significant loss of lives and destruction of property on a large scale. Addressing this crisis requires a multidimensional approach, with communication playing a crucial role in conflict resolution and peacebuilding. The findings from this study indicate that mass media communication systems have been the most effective means of intervention in the farmer-herder conflict. Communication among stakeholders in the crisis was found to be influenced by socioeconomic, socio-cultural, and environmental factors. Despite these challenges, intervention efforts have led to an increase in cultivated farmland and the diffusion of peace between farmers and herders in the State.

Based on the findings of this study, several recommendations are necessary to improve communication among stakeholders in the farmer-herder crisis. First, mass media communication interventions have proven effective in reducing prejudice in conflicts. The government and other relevant stakeholders should leverage mass media to enhance cultural awareness and understanding as a key strategy for conflict reduction. In addition to media campaigns, the involvement of mediators can facilitate reconciliation by helping conflicting parties navigate their differences toward a mutually acceptable resolution.

Second, the government should consider enforcing the ban on open grazing as a priority for enhancing food production. However, for such a policy to be effective, stakeholders in the farmer-herder conflict should be engaged in discussions about the relevance of open grazing and the need to transition to modern cattle-rearing methods. These engagements can be conducted through town hall meetings and structured dialogue forums, allowing all affected parties to contribute to the decision-making process.

Third, the National Orientation Agency (NOA) and other relevant agencies should implement public awareness campaigns to educate citizens on the importance of societal diversity and the adoption of appropriate conflict management techniques. By promoting cross-cultural understanding and the application of non-violent resolution strategies, these efforts can help mitigate tensions and foster peaceful coexistence among different communities.

Fourth, extension agents and communication experts should integrate the findings of this study into the design and execution of intervention programs aimed at resolving the farmer-herder conflict. Effective communication strategies should be incorporated into agricultural extension services to facilitate constructive dialogue, knowledge exchange, and sustainable conflict resolution approaches.

Finally, the government must take immediate steps to implement long-term development plans, including the establishment of ranches and the improvement of grazing reserves, to address the root causes of the conflict. Additionally, local-level negotiations between farmers and herders should be prioritized to ensure inclusive decision-making and shared ownership of conflict resolution strategies. By involving all relevant stakeholders in the negotiation process, the likelihood of sustained peace and acceptance of intervention outcomes will be significantly enhanced.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Abdulbarkindo, A. and Alupsen, B. (2017). Nigeria: Benue State under the Shadow of Herdsmen Terrorism (2014-2016). Open Door International/World Research. Retrieved at www.opendooranalytical.org/research
- [2] Adisa, (2013) "Management of Farmer-herdsmen conflicts in North-Central Nigeria: Implications for collaboration between Agricultural Extension Service and other stakeholders. JIAEE 18(1):1-11
- [3] African Union Commission. (2009). African Union in Mediation. Retrieved from https://reliefweb.int/sites/reliefweb.int/files/resources/3B40814851082846492577 9F00068B10-AU_Mediation.pdf.
- [4] Agande, B. (2017). Anti-open grazing law, a time bomb Miyetti Allah. Vanguard News. https://www.google.co.uk/amp/s/www.vanguardngr.com/2017/i1/anti-open-grazing-law-timebomb-miyetti-allah/amp
- [5] Christopher I., and Ndubuisi, C., I. (2018). A Critical Analysis of Conflicts between Herdsmen and Farmers in Nigeria: Causes and Socio-religious and Political Effects on National Development. AOSIS Publishing, 74(1): 32 44
- [6] Clark, H. (2018). Over 6,000 Nigerians in Christian-Identified Communities Murdered or Maimed by Fulani Muslims in 2018. Retrieved from https://christiannews.net/2018/07/11/over-6000-nigerians-in-christian-identified-c community ties-murdered-or-maimed-by-Fulani-Muslims-in-2018/.
- [7] Faqih, A. and S Aisyah, S. (2019). Communication in agricultural extension services toward farmer empowerment. A J. Phys.: Conf. Ser. 1360 012016
- [8] Flor, A.G. (2007). Development Communication Praxis, Los Banos, Laguna: University of the Philippines Open University
- [9] Fraser, C. and Villet, J. (1994). Communication: A key to human development. FAO, Rome, Italy.
- [10] Idowu, D. (2017). Causes, consequences and resolution of environmental conflict in Nigeria. International Journal of Social Science and Economic Research, 2(1), 2063-2076.
- [11] International Crisis Group. (2017). Herders against Farmers: Nigeria's Expanding Deadly Conflict. Brussels: International Crisis Group.
- [12] International Crisis Group. (2018). Stopping Nigeria's Spiralling Farmer-Herder Violence. Retrieved from https://www.crisisgroup.org/africa/west-africa/nigeria/262-stopping-nigerias-spir violence.
- [13] McCaffrey J 2005. Using Transformative Models of Adult Literacy in Conflict Resolution and Peace-building Processes at Community Level: Examples from Guinea, Sierra Leone and Sudan. Compare, 35(4): 443-462.
- [14] Mefalopulos, P. (2008). Development Communication Sourcebook: Broadening the Boundaries of Communication. Washington DC: International Bank for Reconstruction and Development/The World Bank. p. 224.
- [15] Mikailu, N. (2016). Making Sense of Nigeria's Fulani-farmer Conflict. Retrieved from https://www.bbc.com/news/world-africa-36139388.
- [16] Mohammed A.K. and Abdulkadir, A. (2019). Causes and Socio-economic Implication of Herders-Farmers Conflict in Sabon Daga, Niger State. African Scholar Journal of Env. Design & Construction Mgt. (JECM-4) 15(4):163-179.

- [17] Mohammed, M., M., Umar, B. F. & Hamisu, S. (2017). Farmer-Herder Conflicts Management: The Role of Traditional Institutions in Borno State, Nigeria. Lambert Publishing.
- [18] Moritz, M. (2016). Understanding Herder-Farmer Conflicts in West Africa: Outline of a Processual Approach. Human Organization. 69(2):138-148.
- [19] Muhammed, I., Ismaila, A., B., & Bibi, U., M. (2015). An Assessment of Farmer-Pastoralist Conflict in Nigeria Using GIS. International Journal of Engineering Science Invention. 4: 23-33.
- [20] Musa S. D and Shabu M. I (2014) Resource Use Conflict Between Farmers and Fulani Herdsmen
- [21] Ngbea, T.G. and Ngbea, T.J. (2019). Political and Religious Implications of Herdsmen and Farmers Crises in Nigeria. International Journal of Research in Humanities and Social Studies, 6(2):1-12. www.heijhss.com
- [22] Ngbea, T.G. (2017). Bad governance and insecurity: the challenges for development in Nigeria. International Journal of Research in Humanities and Social Studies, www.heijhss.com
- [23] Okoli, A. C., and Ogayi, C. O. (2018). Herdsmen militancy and humanitarian crisis in Nigeria: A theoretical briefing. African Security Review, 27(2):129-143.
- [24] Olaleye, R.S., Odutola, J.O., Ojo, M.A., Umar, I.S. and Ndanitsa, M.A. (2010). Perceived effectiveness of conflict resolution methods for improved Farmer-Pastoralist relationship in Chikun Local Government Area of Kaduna State, Nigeria. The Nigerian Journal of Rural Extension and Development, 3:54-58.
- [25] Osisioma, B.C. (2016): Conflict Management and Peace Building In Nigeria: Finding The Common Ground. Presented at the NIM South-East Zonal Summit Held at Akanu Ibiam International Conference Centre, Abakaliki. September 6, 2016. 15p.
- [26] Osisioma H. E. (2004), "Conflict Management in Nigeria: A Study of Selected Organisations in the Manufacturing and Service Sectors", Unpublished PhD thesis, Department of Business Administration, University of Nigeria, Enugu Campus.
- [27] Otunuga, A. (2016). Why The Fulani Herdsmen & Farmers Fight: How Climate Change & The Boko Haram Crisis Created The Crisis. Retrieved from http://saharareporters.com/2016/06/03/why-fulani-herdsmen-farm ers-fight-how-climate-change-Boko-haram-crisis-created-crisis-and.
- [28] Premium Times Nigeria. (2018). How to Resolve Herdsmen Crisis Nigerian Working Group. Retrieved from https://www.premiumtimesng.com/news/top-news/255364-resolve-herdsmen-crisis-Nigerian-working-group.html.
- [29] Ramos, M.M. (2007). The Role of Librarians in the 21st Century. Paper delivered during the 35th ALAP Anniversary Forum. http://www.slideshare.net/plaistrlc/the-role-oflibrarians-in-the-21st-century
- [30] Rogers, E. M. (2010). Diffusion of innovations. Simon and Schuster
- [31] Shaibu, U.M. (2018). Conflict between Herdsmen and Nigerian Farmers: Lessons from the USA. Nigeria Agricultural Policy Project Highlights. Scholar Program 15
- [32] Shetima, A.G. and Usman T. A. (2008), Farmers –Pastoralist Conflict in West Africa: Exploring the Causes and Consequences. Information Society and justice (1): 163-184
- [33] Sunday, D. A. (2013): Conflicts among Farmers and Pastoralists in Northern Nigeria Induced by Freshwater Scarcity, Developing Country Studies, ISSN 2224-607X (Paper) ISSN 2225-0565 (Online), 13(12). 2013. Available atwww.iiste.orgm
- [34] UsmanLeme, A. U. (2017). Understanding Farmers-Herdsmen Conflict and the Way Forward. Retrieved from https://www.thecable.ng/understanding-farmers-herdsmen-conflict-way-forward.