



ABSTRACT

The study investigated Perceived Causes of Farmer-Herder Conflict On Livelihood Pattern Of Arable Crop Farmers in Ardo-Kola and Lau Local Government of Taraba State, Nigeria.

Specifically the study examine the perceived causes of farmer-herder conflict, identify the livelihood changes

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ERCEIVED CAUSES OF FARMER-HERDER CONFLICT ON LIVELIHOOD PATTERN OF ARABLE CROP FARMERS IN ARDO-KOLA AND LAU LOCAL GOVERNMENT AREAS, TARABA STATE, NIGERIA

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Introduction

Crop farmers and the nomadic herdsman (pastoralists) have a long heritage and economic relationship, though there were sources of disagreement existing between both groups that were resolved by both groups peacefully (Yakubu *et al.*, Farmers and herders make significant contributions in meeting the nutritional needs of the country and thus contributing to food security of households (Yakubu *et al.*,2021). Violent confrontations between farmers and herders are



adopted by the arable crop farmers in meeting their basic needs due to the conflicts; and identify the constraints faced by the arable crop farmers due to changes in their livelihood activities. Multi stage sampling procedure was used to select 150 arable crop farmers for the study. Result reveals that, Competition for land resources and water resources ($\bar{X} = 3.4$) and population growth ($\bar{X} = 3.2$) were identify as major perceived causes of farmers –herders conflict. Result further reveal that backyard crop cultivation and smaller scale of production were ranked 1st with a mean scores of $\bar{X} = 3.5$) were the perceived causes of farmer-herders clashes while insecurity and lack of fund ($\bar{X} = 1.9$) and inadequate input supply ($\bar{X} = 0.85$) were among the major of constraints affecting farmers livelihoods. It is therefore recommended that, Stakeholders should embark on massive orientation and re-orientation of farmer-herders on the measures and consequences of conflicts.

Keyword: Perceived Causes, Farmer-Herder Conflict, Arable Crop Farmers

prevalent and pervasive in Central and West Africa. From Mali to South Sudan, Democratic Republic of Congo to Nigeria. Climate variability, environmental degradation, and socio-political upheaval have shifted pastoralist migratory patterns and increased tensions between farmers and herders (Soomiyo and Fadaïro, 2020). These changes have increased confrontations between farmers and herders, leading to violent conflict, deaths, forced displacement and migration, erosion of inter-communal relationships, as well as the destruction of agricultural and livestock outputs (Kwaja, and Ademola-Adelehin, 2018). Conflict threatens the livelihood resources of people particularly farming communities due to high dependent on natural resources for survival. Farmer-herder conflicts not only have a direct impact on the lives and livelihoods of those involved, they



also disrupt and threaten the sustainability of agricultural and pastoral production in West Africa (Achonam and Mbadiwe, 2017) Livelihoods must be analyzed in terms of the policies or institutions that shape or impinge on access to natural resources, labor markets, education, social relations, and myriad other factors that shape livelihood opportunities (Maxwell *et al.*, 2017).

The occurrence of different types of conflicts (political, religion, environmental, ethnic, resource, etc.) is not an alien phenomenon to Nigeria and the West Africa region at large (Okeke, 2019). There has been an increasing number of conflicts in Nigeria in recent times which is linked to the farmer-herder conflict (Akerjiir, 2018). Farmers and herders had a cordial and stable relationship that enables the people to work side by side for decades. This interdependent relationship on each other is evident that both groups depend on each other for survival, and it formed the benchmark for exchange which brought about even development (Soomiyo and Fadairo, 2020).

The crop farmers and the nomadic herdsmen (pastoralist) have a long heritage and economic relationship, though there were sources of disagreement existing between both groups that were resolved by both groups peacefully (Yakubu *et al.*, 2021). It has therefore, become imperative to assess perceived causes of Farmer-herder Conflict on Livelihood Pattern of Arable Crop Farmers in Ardo-kola and Lau local Government Areas, Taraba State. The specific objectives were to:

- i. examine the perceived causes of farmer-herder conflict;
- ii. identify the livelihood changes adopted by the arable crop farmers in meeting their basic needs due to the conflicts; and
- iii. identify the constraints faced by the arable crop farmers due to changes in their livelihood activities.

Methodology

The study was conducted in Ardo-Kola and Lau Local Government Area of Taraba State, Nigeria

Ardo Kola is also one of the Local governments out of the sixteen (16) local government areas of Taraba State and has an estimated population of



about 86,921 (NPC 2006) and 125,964 is estimated to be the population as at 2021. It has a total land area of about 2,262km² and located between latitudes 8°34' and 9° 10' and longitudes 10 ° 58' and 11 ° 30' East of the Greenwich meridian. The Local government headquarters is 24kms away from Jalingo the State capital. It's bordered to the east by Jalingo, Gassol to the West and Karim-Lamido to the North and Bali local government area to the South. The climate of the local government area is marked by dry season between (November-March) and rainy season between (April-October). It has an average annual rainfall of between 800mm to 1,525 mm and temperature variation between 150 to 380. The agrarian nature and rich alluvial track of soil found in most part of the local government makes the local government area conducive for growing of various food crops like rice, maize, Cassava, sorghum, yam among others with majority of inhabitants of the local government area are engage in farming as an occupation. The basic amenities available are schools, hospitals, electricity and communication services among others. Some of the economic activities in the local government area are; fishing, pottery, cloth weaving among others. It also has various ethnic groups which include; Jukun-Kona, Mumuye, Fulani among others.

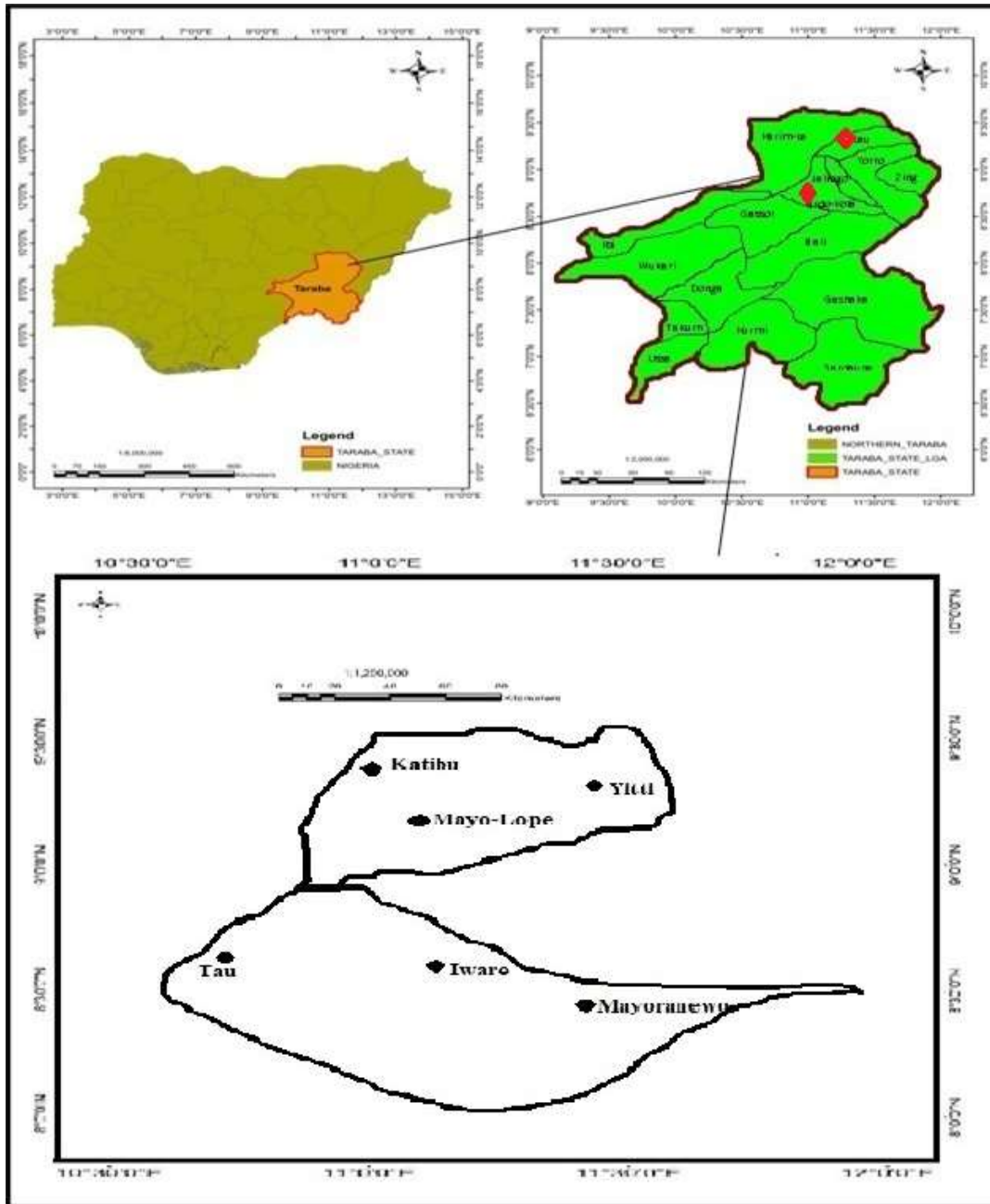
Lau Local Government Area is one of the 16 Local Government Areas in Taraba State which is located between latitude 8° 56'N to 9° 40'N of the equator and longitude 11° 15'E to 11° 40'E of the Green witch meridian.

Lau LGA has a land mass of 1660km² with the population of 95,190 (NPC, 2006). It has a projected population of about 143,833 by 2017. LGA is bounded to the northeast by Demsa LGA of Adamawa state, to the north and west by Karim Lamido LGA, and to the south by Ardo Kola, Jalingo and Yorro LGAs. Lau is a lowland area located on the flood plains of the River Benue. It is drained by river Mayodunga and several others which empty into river Benue. Most of the tributary rivers are silted. Sand deposits have almost leveled the river valleys in most places. Lau LGA has a tropical continental climate and

Sudan savanna type vegetation which consists of grasses and scattered tall trees. The dominant vegetation consists of acacia plants and a type of palm



called giginya in Hausa language. The palm is seen dotting the landscape on the flood plain of River Benue. The soil consists of alluvial soil rich in alluvial deposits and mostly of clay loamy soil and sandy loamy in some places (Oruonye 2015)



Method of Data Collection



The data for this study were obtained mainly from primary sources. This was obtained by the use of structured questionnaire which were administered to arable crop farmers in the study area.

Sample Size and Sampling Techniques

Multi-stage sampling procedures were used for the study.

Stage I: It involve the purposive selection of two local government areas, Ardo- Kola and Lau Local Government Areas in Taraba state recently exposed to incidences of farmer-herder conflicts.

Stage II: It involved a purposive selection of 3 villages, from each of the 2 selected LGAs who have experience farmer-herder clashes recently to give a total of 6 village/towns.

Stage III: Finally A total of one hundred and fifty arable crop farmers were randomly selected from the six selected villages for the study.

Table1: Sample Size Selection Plan

Local governments	Towns/Villages Selected	No. of Respondents
Ardo-Kola	Tau	25
	Iware	28
	Mayo ranewo	22
Lau	Mayo-Lope	35
	Katibu	18
	Yitti	22
2	6	150

Source: Field Survey, 2021

Method of Data Analysis

Data for this study were analysed using descriptive statistics in the form of frequency, percentage distribution, mean , ranking scale and standard deviations.

Results and Discussion



Perceived causes of farmers-herders conflicts

Table 2 shows the distribution of the perceived causes of farmer-herders clashes. The result shows that competition for land resources and water resources with a mean score of ($\bar{X} = 3.4$), and standard deviation of 0.85 was ranked first among the causes of farmers-herders clashes, population growth ($\bar{X} = 3.2$), standard deviation of 0.84 was ranked second, while revenge or reprisal attack ($\bar{X} = 3.1$), standard deviation of 0.78, farming on cattle route ($\bar{X} = 3.0$), standard deviation of 0.68, herders on farm lands without the consent of farmers ($\bar{X} = 2.9$), standard deviation of 0.51, dispute over destruction of farmlands and crop ($\bar{X} = 2.8$), standard deviation of 0.50, land encroachment by herders ($\bar{X} = 2.7$), and poisoning of animals ($\bar{X} = 2.6$) were subsequently ranked as 3rd, 4th, 5th, 6th, 7th and 8th causes of farmers-herders clashes. This simply implies that both parties have been responsible for the act. Farmers cultivation of crops on cattle routes holds them responsible for herders to lure their cattle through other means, while herders on farm lands without the consent of farmers also suggests that the herders were erroneous. Revenge and reprisal attacks have been one of the perceived causes of farmer-herder clashes. In corroboration to this, Yakubu *et al.* (2021) reported that population growth and cattle route encroachment were the major causes of the farmer-herder conflict. This agrees with the assertion by Yahaya (2018) that land encroachment is among the causes of farmer-herder conflicts. Nyong (2015), also revealed that it is natural for the farmers to encroach on marginal lands that had been the traditional pasture routes for the cattle.

Table 2: Distribution of perceived causes of farmers-herders conflicts

Causes of farmer-herder conflicts	SA	A	D	SD	\bar{X}	STD	Rank
Herders on farm lands without the consent of farmers	45(1.2)	53(1.1)	40(0.5)	11(0.1)	2.9	0.51	5 th
Little respect for tradition and custom	8(0.2)	32(0.6)	90(1.2)	20(0.1)	2.1	0.34	13 th
Population growth	71(1.9)	46(1.0)	25(0.3)	5(0.0)	3.2	0.84	2 nd



Herders claim of land right	14(0.4)	40(0.8)	84(1.1)	9(0.1)	2.4		10 th
Uncontrolled grazing	12(0.3)	28(0.6)	35(0.5)	75(0.5)	1.9		14 th
Sexual harassment	18(0.5)	32(0.6)	80(1.1)	20(0.1)	2.3		11 th
Land encroachment by herders	58(1.5)	20(0.4)	42(0.6)	27(0.2)	2.7	0.47	7 th
Revenge or reprisal attacks	80(2.1)	20(0.4)	35(0.5)	15(0.1)	3.1	0.78	3 rd
Disputes over destruction of farmlands and crop	50(1.4)	28(0.6)	46(0.6)	23(0.2)	2.8	0.50	6 th
Competition for land resource and water resources	68(1.9)	57(1.2)	12(0.2)	10(0.1)	3.4	0.85	1 st
Reactions to Anti-grazing rules	9(0.2)	12(0.2)	51(0.7)	75(0.5)	1.6		16 th
Cattle rustling	5(0.1)	11(0.2)	80(1.1)	51(0.4)	1.8		15 th
Hate speech	41(1.1)	23(0.5)	44(0.6)	39(0.3)	2.5	0.34	9 th
Farming on cattle route	63(1.7)	40(0.8)	20(0.3)	24(0.2)	3.0	0.68	4 th
Blocking sources of water	18(0.5)	38(0.8)	42(0.6)	49(0.3)	2.2	0.36	12 th
Poisoning of animals	35(1.0)	39(0.8)	47(0.6)	26(0.2)	2.6		8 th

Source: Field Survey, 2022

Changes in livelihood caused by farmer-herder conflicts

Table 3 shows the distribution based on the changes occasioned by farmer-herder conflict. The result shows that backyard crop cultivation and smaller scale of production were ranked 1st with a mean scores of 3.5 and standard deviation value of 1.1, while migration to other communities and raising home garden were secondly placed with a mean score 3.3 and standard deviation of 1.0. In the subsequent rankings, opting for closer farmlands for crop production ($\bar{X} = 0.80$) opting off-farm livelihood activities for crop production ($\bar{X} = 71$), opting animal husbandry for crop production ($\bar{X} = 0.64$), wage labour in community ($\bar{X} = 0.45$), collection of fuelwood ($\bar{X} = 0.41$), fishing ($\bar{X} = 0.39$), and collection/sales of wild food ($\bar{X} = 0.37$) were



ranked among the changes in livelihood of arable crop farmers caused by farmer-herder conflicts thus, 5th, 6th, 7th, 8th, and 9th respectively. This result shows that farmer-herders conflict has hampered cultivation of crop in different ways. More farmers are discouraged, thereby opting for other means of livelihood to survive. With agriculture contributing significantly to the GDP of Nigeria and its significant role in provision of employment, farmer-herder clashes could literally push the societal efforts in reducing poverty and as well jeopardize livelihood.

Table 3: Distribution of arable crop farmers based on changes in livelihood caused by farmer-herder conflicts

Changes occasioned by farmer-herder conflicts	SA	A	D	SD	\bar{X}	STD
Backyard crop cultivation	88(2.4)	41(0.8)	13(0.2)	5(0.0)	3.4	1.1
Smaller scale of production	85(2.3)	52(1.1)	10(0.1)	0(0.0)	3.5	1.1
Opting animal husbandry for crop production	56(1.5)	50(1.0)	21(0.3)	20(0.1)	2.9	0.64
Opting off-farm livelihood activities for crop production	61(1.7)	45(0.9)	23(0.3)	18(0.1)	3	0.71
Opting for closer farmlands for crop production	71(1.9)	38(0.8)	15(0.2)	23(0.2)	3.1	0.80
Wage labour in community	35(1.0)	21(0.4)	74(1.0)	17(0.1)	2.5	0.45
Collection of fuelwood	25(0.7)	17(0.3)	83(1.1)	22(0.2)	2.3	0.41
Fishing	13(0.4)	7(0.1)	80(1.1)	47(0.3)	1.9	0.39
Collection/sales of wild food	23(0.6)	47(1.0)	55(0.7)	22(0.1)	2.4	0.37



Migration to other communities	82(2.2)	46(0.9)	15(0.2)	4(0.0)	3.3	1.0
Raising home garden/nursery	74(2.0)	51(1.0)	22(0.3)	0(0)	3.3	1.0
Raising and marketing of livestock instead of farming	40(1.1)	12(0.2)	61(0.8)	34(0.2)	2.3	0.45

Source: Field Survey, 2022

Constraints affecting arable crop farmers livelihoods

Table 4 shows the distribution of constraints affecting farmers livelihoods. The result shows that insecurity and lack of fund ($\bar{X} = 1.9$) were placed first based on severity among the constraints affecting arable crop farmers livelihood, inadequate input supply ($\bar{X} = 0.85$), lack of extension service ($\bar{X} = 0.64$), variability in rainfall ($\bar{X} = 0.57$), inaccessible/poor market channels and poor road networks were ranked as the 3rd, 4th, 5th, 6th and 7th constraints affecting arable crop farmers livelihood. With insecurity a severe issue in arable crop farmers livelihood, this implies that farmer-herder conflict contributes as part of insecurity threats to community at large. Tanko (2021) reported that farmers-Herders conflicts happen to be one of the major challenges that have threatened the security and unity of the country, such that, in recent times, Nigeria recorded significant increase in the number of cases associated with natural resource conflicts.

Table 4: Distribution of constraints affecting arable crop farmers livelihoods

Constraints	Severe	Not severe	\bar{X}	STD
Variability in rainfall	89(1.2)	58(0.4)	1.6	0.57
Lack of extension services	92(1.3)	55(0.4)	1.7	0.64
Insecurity	130(1.8)	17(0.1)	1.9	1.20
Lack of fund	129(1.8)	18(0.1)	1.9	1.20
Inaccessible/poor marketing channels	81(1.1)	66(0.4)	1.5	0.5



Poor road networks	71(1.0)	76(0.5)	1.5	0.4
Inadequate input supply	108(1.5)	39(0.3)	1.8	0.85

Source: Field Survey, 2022

Conclusion and Recommendations

It was discovered that competition for land resources and water resources and , population growth were among the causes of farmers-herders conflict. Backyard crop cultivation and smaller scale of production migration to other communities and raising home garden between farmers and herders in the study area are largely revolves around livelihood issue . On the basis of the major findings, the following recommendations were made:

- i. Stakeholders should embark on massive orientation and re-orientation of farmer-herders on the measures and consequences of conflicts.
- i. Policies regarding farming on cattle routes and herders encroaching should be well-designed and adequately adhered by farmers' herders to avoid conflict.

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