

PASTORALISTS MIGRATION CORRIDORS AND THE ROLE OF MEDIATORS IN SOLVING LAND CONFLICTS IN NIGERIA

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March, 2015

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ABSTRACT

In recent times, conflicts between pastoralists and crop farmers have assumed serious dimensions. The conflicts have become perennial, occurring most often during the dry season mostly along pastoralists migration corridors when pastoralists move seasonally southward in quest of greener pasture. In the course of pastoralists seasonal movement they encounter blockages, encroachment and narrow of the migration corridors which has made their cattle to go into farmlands resulting in destruction of crops which leads to frequent conflicts with crop farmers, and consequently several lives and properties are lost.

Also the competition for access to wetland areas (Fadama areas) between pastoralists and farmers has also generated conflicts between them including over access to natural resources like land for grazing and farming purposes and water for livestock and irrigation. The intensification of irrigation in fadama areas has led to increased land conflicts between farmers and pastoralists in Nigeria. This intensification is driven by increase in demand for the same land by the farmer for farming purpose and by the pastoralists for grazing purpose. Thus this research investigated how the conflicts between the pastoralists and farmers are resolved, investigated pastoralism laws in Nigeria in relation to land use right for pastoralists and mapping of pastoralists' migration corridors to identify conflict spots.

This study was carried out in Udeni Gida Community of Nasarawa State in the North Central part of Nigeria. The objective of the study was to identify pastoralism laws in Nigeria and to map some conflicts spots along pastoralists' migration corridors and the role played by mediators in resolving the farmers and pastoralists' land conflicts in Nigeria.

A case study approach was used in order to understand the root causes of the conflicts and how the conflicts were resolved by pastoralists and farmers land conflict mediators. Collection of primary data from the study area was through interviews and focus group discussions for pastoralists, farmers, conflict resolution mediators, experts in pastoralism and staff of Ministry of Agriculture. Hand held GPS was used to collect spatial data and participatory mapping through which pastoralists local spatial knowledge was used in drawing their migration corridors while secondary data were from review of scientific literatures, news articles, news reports and government reports.

The study explains how pastoralists access to pasture and water is blocked by farming activities/practices that have led to land use conflicts due to improve farming practices such as irrigation farming and fadama agriculture have made farmers to farm all year round which is preventing pastoralists to have access to farmlands and water points which they use to have access to in the past during their seasonal migration in search for pasture and water during dry season.

Also the study also explains how land conflicts between farmers and pastoralists are resolved by conflicts resolution actors and the effectiveness of mechanism which they employ to resolve the land conflicts between pastoralists and farmers.

Keywords: Pastoralists Migration Corridors, Mediation, Conflicts, Crop Farmers, Fadama, Mediators

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TABLE OF CONTENTS

1.	Background.....	7
1.1.	Grazing Pattern	7
1.2.	Socio-economic benefits of Pastoralism to the Country	8
1.3.	Pastoralists Migration Corridors in relation to Fadama Farming	10
1.4.	Conflicts between Pastoralists and Farmers.....	11
1.5.	Actors in the Land Conflicts Resolution/Mediation.....	12
1.6.	Laws in relation to Pastoralism in Nigeria.....	12
1.7.	Justification	13
1.8.	Research Problem.....	14
1.9.	General Objectives	16
1.10.	Research Questions	16
1.11.	Hypothesis.....	17
1.12.	Conceptual Framework	17
1.13.	Research Design	18
2.	Literature Review	19
2.1.	Background of Land Tenure in Nigeria.....	19
2.2.	Land Use Tenure in the Study Area	20
2.3.	Pastoralism in Nigeria	20
2.4.	Pastoralists and Farmers Conflicts in Nasarawa State Nigeria	21
2.5.	Laws and Policies with relevance to Pastoralism in NIGERIA	22
2.6.	Irrigation and Fadama Farming Leading to Blockage of Migration Corridors	24
2.7.	Pastoralists and Farmers Conflict Resolution Mechanisms and Actors	25
3.	Fieldwork and Study Area.....	29
3.1.	Study Area	29
3.2.	Conflict Resolution in the Study Area	29
3.3.	Fieldwork.....	31
3.4.	Existing Situation in the Study Area	31
4.	Research Methodology.....	33
4.1.	Secondary Data Source (Desk Research).....	33
4.2.	Primary data source (Triangulation: focus group and semi-structured interviews)	33
4.3.	Sampling.....	33
4.4.	Conflict Analysis.....	33
4.5.	Timeline/Historical Profile	34
4.6.	P-Mapping.....	34
4.7.	GPS Recording	35
4.8.	GIS mapping.....	35
4.9.	Processing/ Analysis Method	35
4.10.	Anticipated output	35
4.11.	Data Collected from Semi-Structured Interviews & Focus Group Discussions	36
5.	Data Analysis and Results.....	37
5.1.	Specific Objective 1	37
5.2.	Specific Objective 2.....	44
5.3.	Specific Objective 3.....	46
6.	Discussions	51
6.1.	Pastoralist Migration Corridor in Relation to Conflict Spots	51
6.2.	Nigeria Pastoralism Laws and Policies in Relation to Land Use Right of Pastoralists	52

6.3. The Roles, Effectiveness of the Intervention and Strategies used by Conflict Resolution Actors/Bodies	54
7. Conclusion and Recommendation	58
7.1. Conduction.....	58
7.2. Recommendations	60
References.....	62
Appendix.....	67
Interview Questions in Relation to the Research Sub-objectives Form	67
Research Design Matrix Table	72
Semi-Structured Interview Form Type A	73
Semi-Structured Interview Form Type B	75

LIST OF FIGURES

Figure 1: Photograph of Fulani Herder	7
Figure 2: Contribution of Different Species to Total Livestock Units in Nigeria.....	10
Figure 3: Agro-Ecological Zones and Densities of Livestock Species 2000.....	10
Figure 4: Map of Death Records as a result of Conflicts between Pastoralists and Crop farmers in Nigeria	15
Figure 5: Death Records as a result of Conflicts between Pastoralists and Crop Farmers in Nigeria per year	16
Figure 6: Conceptual Framework of the Research Project	17
Figure 7: Research Design	18
Figure 8: Successful Mediation Outcome.....	26
Figure 9: Conflicts Management and Resolution Approaches and Procedures by (Moore, 2003).....	27
Figure 10: Continuum of Conflict Management and Resolution Approaches and Procedure (Moore, 2014)	27
Figure 11: Map of Nigeria: Showing Geographic Location of the Study Area.....	30
Figure 12: Conflict Analysis Concept Diagram.....	34
Figure 13: Conflict Diagnostic Map.....	34
Figure 14: Focus Group Discussion with Farmers on Pastoralists Migration Corridors.....	37
Figure 15: Individual Interview with Farmers on Pastoralists Migration Corridors.....	38
Figure 16: Conflicts between Pastoralists and Farmers along Migration Corridors (Farmers Response)	38
Figure 17: Conflicts between Pastoralists and Farmers along Migration Corridors	39
Figure 18: Months the Conflicts Occurs.....	39
Figure 19: Analysis of How Respondents Choose the Percentage of Impact of the Conflicts	40
Figure 20: Photograph with some Farmers in one of the Farmer Where Conflict Had Occurred	41
Figure 21: Photograph of Focus Group Discussion with Pastoralists at the Study Area	41
Figure 22: Nigeria Map and Satellite Image of the Study Area Showing the Points Location of the Conflicts and Migration Corridors Drawn Doing the PGIS Exercise with Pastoralists	42
Figure 23: Nigeria Map Showing the Digitized Pastoralists Migration Corridors.....	43
Figure 24: Types and Causes of the Conflicts between Pastoralists and Farmers.....	44
Figure 25: Percentage of Respondents Aware of Informal Laws Associated with Pastoralists	45
Figure 26: The Ways the Conflicts are Resolved	46
Figure 27: Conflict Resolution Mechanism Used.....	47
Figure 28: Effectiveness of the Conflict Resolution Mechanism	47
Figure 29: Conflict Diagnostic Map for the Research.....	48
Figure 30: Timeline of Pastoralists	49
Figure 31: Historical Profile of Pastoralists Arrival and Conflict with Farmers in Nigeria	50

LIST OF TABLES

Table 1: Showing List of Pastoralists in Nigeria	8
Table 2: Nigeria Land Usage & Livestock GDP.....	9
Table 3: Conflicts between Fulani Pastoralists and Crop Farmers (January -May 2013).....	14
Table 4: Recent Conflict Happening in the Study Area	22
Table 5: Summary of Field Data Collected.....	36
Table 6: Formal Laws and Policy Associated Land Use Right for Pastoralism in Nigeria.....	45

1. BACKGROUND

Pastoralism is a livelihood system around the world, Nigeria inclusive. It involves the rearing of domestic animals such as cattle, sheep, camels, goats, yaks, horses, donkey, e.t.c which involves seasonal migrations in search of seasonal grazing field travelling hundreds of kilometres from their home, usually along established migration corridors (Blench, 2001).

The periods when pastoralists migrate to and from dry-season grazing areas are usually determined by climatic conditions. Pastoralist therefore depend on freedom of movement and access to grazing resources to be able to meet the feeding needs of their livestock and to engage in trade (Blench, 2001).

1.1. Grazing Pattern

In Nigeria pastoralism has a traditional grazing pattern that is influenced by climatic conditions or seasons (Aregheore, 2009). Pastoralists popularly known as nomadic pastoralists in Nigeria have to move far enough from North to South to find pasture and water in other to feed their cattle year-round (Aregheore, 2009).



Fulani herder leading cattle to graze in central Nigeria (file photo)

Photo: IRIN

Figure 1: Photograph of Fulani Herder

Blench (2010) gave some other reasons which contributed to the increase in migration of pastoralists from Northern to Southern Nigeria, among which are the introduction of new veterinary drugs for cattle which increased their disease resistance and treatment drugs. This led to the increased in herd sizes coupled with the seasonal plant growth in Nigeria due to climatic conditions associated with raining and dry seasons compels pastoralists to seek for pasture outside their traditional ecological zones.

In dry seasons in Nigeria, pastoralists frequently move their cattle towards the southern part of the country through communities in central or middle belt of Nigeria. During the raining season, they move their cattle back home in the north to feed on the pasture which will be available as a result of the rain. The movements between pasture lands in the north and dry season grazing areas (farmlands

and forest) in the south allows pastoralist to explore resources in different agro-ecological conditions at different times to make up for fluctuations in pasture availability (Blench and Dendo, 2005).

Nigeria has two seasons raining season which is between April and October while the dry season is from November to March. These seasons has a great influence on the movement of these pastoralists as described earlier above. Thus these pastoralists' livelihoods are threatened by their decreasing access to water and pasture. The shortage is linked to drop in the average of 120 days down from 150 days rainy season in northern Nigeria which has dropped to as it was 30 years ago. This has resulted to cut in crop production by 20 percent (Blench and Dendo, 2005).

Pastoralism in Nigeria is strongly associated with the Fulbe popularly known or called (Fulani), they are a unitary group with a unitary culture divided into numerous subgroups. There are also some fourteen other pastoral peoples in Nigeria which is shown in the table below.

Table 1: Showing List of Pastoralists in Nigeria

Source: (Blench, 2010)

Group	Location	Main Pastoral Species
Arabs		
Baggara	South of Geidam	Cattle
Shuwa	Eastern Borno/Cameroon	Cattle
Uled Suliman	Komadugu Yobe Valley	Camels
Fulbe*		
Anagamba	North-eastern Borno	Cattle
Bokoloji	Northern Borno	Cattle
Maare	South-eastern Borno	Cattle
Sankara	North-western Borno	Cattle
Uda'en	North Eastern Nigeria	Uda Sheep
WoDaaBe	North Eastern Nigeria	Cattle
Kanuri Group		
Badawai	Central Borno	Cattle
Jetko	North of Geidam/Niger	Camels
Kanuri	Borno	Cattle
Koyam	South-Central Borno	Cattle
Manga	North-west Borno	Cattle/Camels
Mober	North-Eastern Borno/Niger	Cattle
Kanembu Group		
Kuburi	Extreme north-east Borno/Niger	Cattle
Sugurti	Lake Chad shore	Cattle
Saharans		
Teda (Tubu)	Northern Borno/Niger	Camels
Berber		
Twareg	North of Sokoto/Niger	Camels
Others		
Yedina (Buduma)	On Lake Chad	Cattle
* Only a few representative groups noted Almost all groups herd small ruminants		

1.2. Socio-economic benefits of Pastoralism to the Country

The contribution of pastoralists to Nigeria local food chain and national food security is very important because they account for 90 percent for the availability of protein such as meat, milk, hide and skin in Nigeria. They account for over 90 percent of the nation's livestock population while the livestock sub-sector accounts for one-third of agricultural Gross Domestic Product and 3.2 per cent of

the nation's GDP (Gundu, 2012). Table 2, 3 and Figure 2 & 3 shows the contribution of livestock to Nigeria GDP, especially cattle which pastoralists are the ones involved.

The crops that are grown by farmers which are usually affected by these pastoralists conflicts includes a variety of annual crops of primary importance which includes rice, sorghum, wheat, millet, cassava, maize, cowpea, soybeans, melon, groundnut, yam, vegetables and so on. They accounts for about 60 percent of the calories and proteins obtained from plants (Bello, 2013). This conflicts has great effect on the nation as it affects both meat and crop availability in Nigeria. Thus solutions to these problems must be sought for.

FAO (2005) sited the below listed statistical information in relation to human population, land usage and livestock contribution to Nigeria GDP which gives insight of the socio-economic benefits of the livestock sector Nigeria which pastoralists are major contributors.

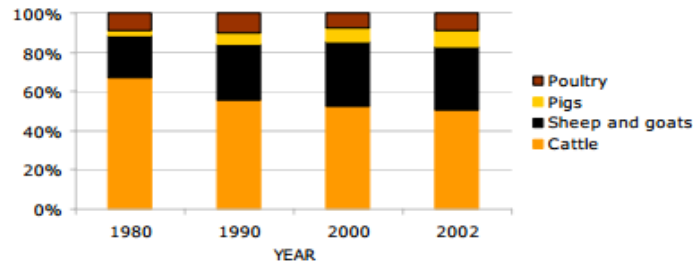
Table 2: Nigeria Land Usage & Livestock GDP

Human population, land and socio-economics	
Human population	120.9 million
Population density on total land	132.8 persons/sqkm
Annual growth rate (1990-2000)	2.8 %
Population in agriculture	38.1 million
As proportion of total population	31.5 %
Total land area	910,770 sqkm
Agricultural land	722,000 sqkm
As proportion of total land	79.0 %
Land under pasture	392,000 sqkm
As proportion of total land	54.3 %
Irrigated area	2,330 ha
Agricultural land per 100 people	60 ha
Agricultural land per 100 people in agriculture	190 ha
Agricultural population density on agricultural land	52.8 persons/sqkm
GDP¹	32,953 million US\$
GDP annual growth rate (1990-2000)	2.1 %
GDP per capita/year ¹	248 US\$
GDP per capita annual growth rate (1990-2000)	-0.6 %
Agriculture, GDP	11,761 million US\$
As proportion of total GDP	35.7 %
Livestock, GDP ¹	1,100 million US\$
As proportion of agricultural GDP	9.4 %
Human development Rank	151 Ranking ²
Human development index	0.466
Poverty incidence³	
Total	34.1 %
Urban	30.4 %
Rural	36.4 %

¹Constant 1995 US\$ ² The HDI rank is determined using HDI values to the fifth decimal point - from 177 countries, as compiled by the UNDP; ³ National poverty line; na: not available

Source: World Bank (2002); UNDP (2004); FAO (2005a)

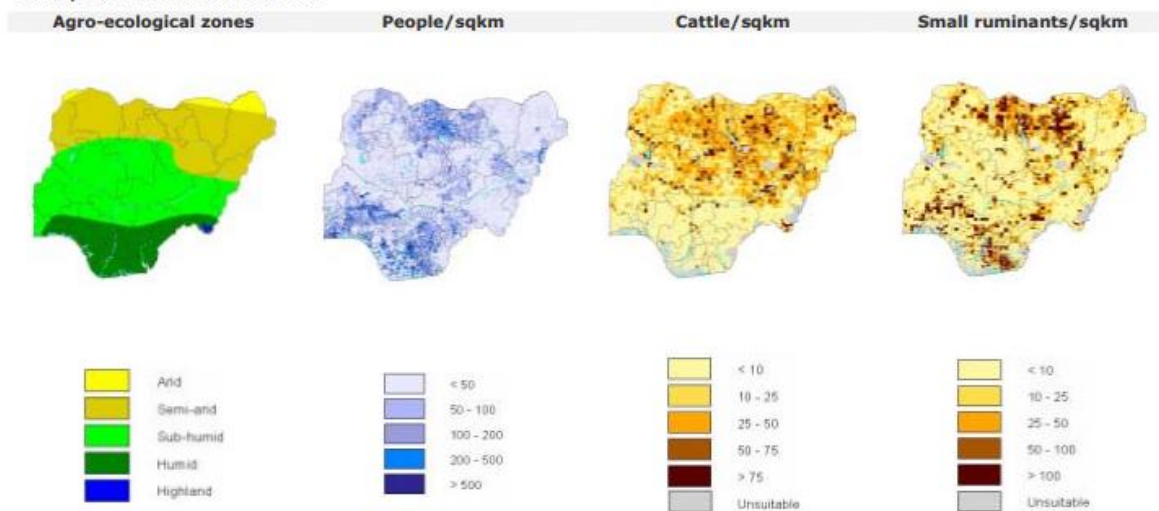
Contribution of different species to total livestock units



Source: FAO (2005a)
Figure 2: Contribution of Different Species to Total Livestock Units in Nigeria

Agro-ecological zones and densities of livestock species (2000)

Density calculated on total land area¹



¹Densities for livestock populations and production are based on total land suitable for livestock production

Source: FAO (2001); LandScan (2002), FAO (2005b)

Figure 3: Agro-Ecological Zones and Densities of Livestock Species 2000

1.3. Pastoralists Migration Corridors in relation to Fadama Farming

In recent years pastoralists migration corridors on both the Western and Eastern axis have been blocked due to the expansion of farms, river basins have equally been blocked due to expansion of fadama dry season agriculture (Gefu and Kolawole, 2002).

Fadama which is defined in Hausa language of Nigeria as a valley-bottom, flood-plain or lowland around a river that flood or becomes wet whenever the river is high. Typically, it flood naturally but the term is also used in areas where people have channelled or pumped water to farms. It is also areas of reeds, teeming with fish and bird-life (Blench and Dendo, 2005). Irrigation is also another system of agriculture currently practiced in fadama areas in Nigeria. These has made unusable land during the dry season productive and it has given lots of economic gains to farmers.

Furthermore, the productivity of fadama land are usually very high. Based on the fertility of the areas grasses are very fresh and moist which can provide good nutrition for animals. In that light, the areas are attractive to pastoralists because of the high quality of pasture. Fishermen also likes fadama areas because many species of fish choose reeds and river-grasses to breed and grow (Blench and Dendo, 2005).

Fadama areas are also populated with dense trees and shrubs along their edges and it helped in protecting the river banks and stop them from falling away into the river. It is also very useful to wildlife such as birds, because they produce food in the form of fish, snails and crabs.

Fadama farming in Nigeria began since 1980s due to the expansion of riverine and valley-bottom cultivation in the wetland areas. The competition for access to these wetland areas by the pastoralists and farmers has generated lots of conflicts (Blench and Dendo, 2003) . Conflicts are usually highest where populations are most dense and competition for fadama land highest (Blench and Dendo, 2005).

The intensification of agriculture in fadama area and irrigation farming has led to land conflicts between farmers and pastoralists in Nigeria. This intensification is driven by increase in demand for the same land by the farmer for farming purpose and by the pastoralists for grazing purpose (Blench and Dendo, 2005).

These developments in the farming subsector have had a tremendous effect on the pastoralists' migration corridors and by extension threatening the livelihood of pastoralists because their livelihood depends mainly on the condition of their herd and the herd depends on availability of pastures and water (Gefu and Kolawole, 2002).

Now they find their routes to grazing areas and water blocked and the result is entering of farms where their cattle destroys crops and the result is land conflicts between them and farmers (Ibrahim, 2014).

1.4. Conflicts between Pastoralists and Farmers

In the past this land conflicts was less because pastoralists and farmers could agree on stock-routes (Blench, 2010). Pastoralists kept to agreed routes and farmers avoided farming across them, these minimized conflicts. A system of burti or migration routes was established by agreement between pastoralists' leaders and local community authorities. If there were dispute/conflict concerning crop damage or wandering stock, these leaders usually assist in resolving the problems before they resulted into violence. But in the 1970s, this system began to crumple as farmers increasingly felt they owned the land across which the cattle passed (Blench, 2010).

In the course of moving to destinations where they will find pasture, pastoralists encounter blockage of corridors and water points by farmers. This has led to destruction of crops and or grazing of harvested crops on farmlands that has resulted to lots of conflicts been experienced presently, especially in these States Zamfara, Adamawa, Kaduna, Plateau, Benue, Taraba, Nasarawa, Ogun, Ondo and Cross River (Jerome and Kolawole, 2002).

The conflicts occur mostly during the dry season which is between Novembers – March which is the period when pastoralists move from north to south Nigeria in search for pasture and water because of the scarcity of water and green vegetation because of the climatic condition due to dry season and fadama areas are usually among their choice destinations (Jerome and Kolawole, 2002).

Another aspect of conflict is the expansion of fadama farming into uncultivated lands. These uncultivated lands are usually used by pastoralists for dry season grazing of their cattle. So by the time of the year when the pastoralists needs the land for grazing of their cattle, they get to the land to see that it has been farmed with crops (Bello, 2013a) .

Fadama utilization for dry season agriculture and crop irrigation in the Middle Belt of Nigeria is where lots of the land use conflicts described above happens. Different conflict mechanisms and mediators have been used in resolving it. The method depends on the enormity of the conflict (Jake, 2011).

1.5. Actors in the Land Conflicts Resolution/Mediation

There are different ways the conflicts between pastoralists and farmers are resolved. In cases that involve crop destruction where the pastoralist agrees that he is guilty interpersonal agreement may be reached between the farmer and pastoralist. Compensation may or may not be paid depending on the agreement but when the crops that are destroyed are minimal and the pastoralists showed some concern only a warning is given (Ibrahim, 2014).

Traditional rulers play a very important role in resolving these conflicts. They utilize their position and power in resolving some of these conflicts. The most frequent form of settling this land conflicts is through the combined effort of the traditional ruler and the head of the pastoralists called (Ardos) in settling the conflicts whereby the farmer whose crops is destroyed ask for compensation which the pastoralists is not ready to honour. Both the traditional ruler /village/district head and the Ardos put efforts in ensuring that a reasonable compromise is reached (Blench and Mallam, 2005).

When traditional ruler /village head/district head and the head of the pastoralists cannot resolve the conflict, the local government steps in or government committee are set-up to handle the conflicts which usually has composition of the following members Veterinary Officer in the local government areas, Ardos, traditional ruler, the paramount ruler in the area, and the District Police Officer. The committee mediates on the conflicts between the pastoralists and farmers Ja'afar-Furo (2014), especially when the conflict is threatening law and order, standing committees are usually set-up by the Government either at the Local, State and Federal Government to handle the conflict, especially when the conflicts is in very large magnitude (Blench and Mallam, 2005; Gefu, 1992).

Other actors in the conflict resolution mechanism are Non-Governmental Organizations (NGOs)/Faith Based Organizations (FBOs) such as the Pastoral Organizations called Miyetti Allah plays role in the conflict mediation. They work in facilitating peace between pastoralists and farmers and are also involve in committees set-up by the Government (Gefu, 1992).

Another mode of resolving this land conflicts is through the police/court.

1.6. Laws in relation to Pastoralism in Nigeria

The informal law which governs these pastoralists is Islam religion which play prominent role in their governing and social interactions. These Islamic religion is used in determining behaviour such as marriage, inheritance, daily prayer rituals, selection of their leaders such as the Ardos, e.t.c are done according through the consultation of the Qur'an' (Okello et.al., 2014; Mark Davidheiser, 2008).

Also other ceremonies and activities are done based on their Islamic faith such as naming and wedding ceremonies, Sallah (Eid a'Kabir) and other animistic harvest celebration or related events involving their livestock and environment which is important to their lives including other traditional practices such as travelling or visiting relatives on certain days of the week, etc.

The arrival of the Europeans saw the imposition of formal laws on societies that had developed generally informal in Nigeria and the pastoralists group inclusive which introduced sophisticated and complex systems of land use and tenure for local production styles and tended to incorporate farmer-pastoralists interaction in the production mechanism (Vigdis and Schroeder, 2000). These subsequent changes weakened the cooperative system between pastoralists and farmers compatibility and equally weakened customary or informal land tenure and resource use (Davidheiser, 2008). The contact and interaction with Europeans were associated with a variety of transforming mechanisms impacting Nigeria social and physical landscapes among which is the designation of Forest reserve by the British in 1916 and grazing reserve in 1960 (Davidheiser, 2008; Hoffmann, 1998).

In 1965 the Northern Regional Government enacted the Grazing Reserve Law and 1976 the Federal Government of Nigeria through the assistance of the United States Agency for International Development (USAID) established hundreds of reserves for use by nomadic pastoral families but how far this grazing reserve law and reserves impacted on the pastoralist still leave much to be desired considering the incessant clashes between the pastoralists and farmers (Gundu, 2012).

In the light of the above, the researcher seeks to investigate how conflicts between the pastoralists and farmers are resolved, investigate pastoralism laws in Nigeria in relation to land use right for pastoralists and mapping of pastoralists migration corridors to identify conflict spots.

1.7. Justification

Pastoralists in Nigeria are severely threatened by the decreasing access to water and pasture for their cattle and by extension threatening 15 million pastoralists livelihood. The implication this has for Nigeria food security is huge with reference to the fact that this pastoralist account for meat availability in Nigeria (BELLO, 2013).

Thus, it is necessary to find out how the conflicts between pastoralists and farmers are resolved by conflict resolution actors. To achieve this, it is important to investigate the root causes of the conflicts and how the conflicts between the pastoralists and farmers are resolved, investigate pastoralism laws in Nigeria in relation to pastoralists land use right and mapping of pastoralist's migration corridors to identify conflict spots including the roles of actors in the conflict resolution Mechanism.

Reported Conflicts Incidents between Pastoralists and Farmers in Nigeria

1. "On 22 December 2009 (IRIN) - A tense calm has been restored following clashes between pastoralists and farmers in central Nigeria's Nasarawa State which lead to the death of about 32 people with lots of the houses burnt, including large number of farms destroyed (IRIN, 2009)".

"Violence erupted in the farming village of Udeni Gida on 18 December when pastoralists attacked farmers following the 6 December incident when pastoralist led their cattle into rice fields resulting in serious conflict between pastoralists and farmers which led to one farmer's death, reported by Mohammed Baba Ibaku, a member of local parliament (IRIN, 2009)".

"Ibaku also reported that on Friday [18 December], pastoralists from Kogi and Taraba States armed with guns stormed the [Udeni Gida] village and opened fire on unsuspecting villagers and by Saturday [19 December] we counted 32 dead bodies from the attacks (IRIN, 2009)".

"Police deployed in the area during the 6 December conflict were withdrawn a few days ago as the authority thought the fighting had stopped, Ibaku told IRIN, but the nomads launched another attack".

"Military troops and police have been re-deployed but tension remained high, he said. (IRIN 2009)"

2. "In Nigeria for instance, there have been cases of bloody conflicts between Fulani cattle pastoralists and farmers. Similar cases have also been reported in Plateau, Benue, Adamawa, Boron, Kwara, Kogi, Cross River and Ogun, etc. Recently, the crisis has taken more dangerous dimension in Nasarawa State and neighbouring States. These land conflicts between pastoralists and farmers has persisted because the way in which the conflicts are handled are lopsided and unreasonable. For an example in Borno State, in May 2009, 700 pastoralists were expelled by the local authority from the State, equally in Plateau, 2000 pastoralists were expelled from the State by the local authority. But the measures were without recourse to establishing and addressing the reasons behind transhumance in the first place (Munsuru, 2014)".

3. “The pastoral Fulbe have suffered, individually and collectively from the land conflicts in Plateau State, thousands of them have been seriously affected by the conflict. They have suffered disproportionately from this unfortunate crisis that went out of control. The conflict has refused to die, just like some malignant social ailment, it has moved from an open and spontaneous bloody stage to quiet, but more ruthless outcomes”.

“This silent but invidious phase of the conflict has led to killing pastoralists and farmers as well as the poisoning of livestock belonging to the pastoral Fulbe. For an example 70 cattle in Heipang in the Barkin Ladi Local Government Area of Plateau State were recently alleged to be poisoned. This heinous crime which is not the first of this act since the conflict started was reported by the spokesperson of the Special Task Force (STF), Lt. Colonel Kingsley Umoh (Daily Trust, 2010; Shettima, 2010)”.

Table 3: Conflicts between Fulani Pastoralists and Crop Farmers (January -May 2013)

Date	Place of Incident	Number of Death
January 1	Jukun Fulani clash in Taraba State	5
January 15	Farmers/Fulani clash in Nasarawa State	10
January 20	Farmers/Fulani clash in Nasarawa State	25
January 24	Farmers/Fulani clash in Plateau State	9
February 7	Fulani/Eggon clash in Nasarawa State	30
March 20	Clashes between Fulani an Tarok, Jos, Plateau State	18
March 28	Clashes between Fulani and Farmers in Riyon, B/Ladi, Jos, Plateau State.	28
March 29/30	Clashes between Fulani and Natives in Bokkos areas of Bokkos LGA Jos, Plateau State.	18
March 30	Farmers and Fulani clashes results to Police Killings	6
April 3	Farmers/Fulani clashes in Guma LGA, Benue State	3
April 10	Clashes between Fulani and Tiv Farmers	28
April 23	Fulani/Egbe Farmers clash in Kogi State	5
May 4	Fulani/Farmers clash in Plateau State	13
May 4	Jukun/Fulani clash in Wukari, Taraba State	39
May 13	Fulani/Agatu clash in Benue State	50
May 20	Tiv/Fulani clash at Benue-Nasarawa boarder	23
	Total	300

Source: Sunday Trust of 26th May, 2013, p.1

1.8. Research Problem

Umar (2002) identified the cause of pastoralists and farmers conflicts to the competition for land use right/accessibility between pastoralist and farmers as the underlying causes of conflicts between pastoralists and farmers in Nigeria.

Also in the course of moving to pastures pastoralists encounter blockage of corridors and water points due to activities of crop farmers such as mentioned above. This has led to destruction of crops and or grazing of harvested crops on farmlands. This seasonal encounter between the pastoralists and farmers has resulted too many land conflicts in Nigeria, especially in north central Nigeria.

The reason for these conflicts is the conflicting interest for the use of the same land , because in the past farmers use to leave their farmland for pastoralists to use for dry season grazing but as result of improve practices in agriculture such as irrigation/fadama farming, farmers now farm all year round. So by dry season when the pastoralists needs the land for grazing of their cattle, they get to the land to see that it has been farmed with crops (Bello, 2013).

Despite finding crops on the farm, pastoralists still allow their cattle to graze the farm and in the process destroy the farmers’ crops. This has led to several land conflicts which has equally resulted to destruction of life and property.

These encroachments into pasture fields by farmers are usually rampant in pastoralists' migration corridors and watering points because the farms which these pastoralists' cattle destroy are usually located along the pastoralists migration corridors. Other form of the conflicts comes from grazing of harvested crops, and destruction of fishing traps by the pastoralists' cattle because farmers encroach into pastures land and farm in the pasture field that used to be used for grazing by the pastoralist livestock (Gefu and Kolawole, 2002).

Umar (2002) also highlighted crop damage by cattle along pastoralists' migration corridors and grazing lands encroachment, and blockage of water points by farmers are the predominant manifest causes of the land conflicts between pastoralists and farmers. The planting of crops late in the year after the raining season among which are cotton, sorghum and potato by farmers recently has made farmers not to release their farmlands to pastoralists at the onset of dry season despite the sequential use of the land which was the practice in the past by farmers and pastoralists in Nigeria. This has generated lots of conflicts because the pastoralists also want to use the farmland for the grazing of his cattle but the farmer has not made it available because the farmers wants to farm all year round. This has led to conflicting interest for the use of the same farmland that have resulted in lots of conflict (Williams, 1998).

It is in the light of these problems that the researcher which to investigate the root causes of the conflicts and how the conflicts between the pastoralists and farmers are resolved, Investigate pastoralism laws in Nigeria in relation to land use right for pastoralists and mapping of pastoralists migration corridors to identify conflict spots.

Also OLAYOKU (2014) referencing the Nigeria Watch database showcased cattle grazing associated with deadly conflicts from June 2006 to May 2014. 615 violent deaths related to cattle grazing were recorded by the Nigeria Watch database within an eight years period from 111 relevant cases reported by the press across the 36 states of Nigeria from June 2006 to May 2014.

The map and chart below shows “the intensity, the patterns, and the geography of the conflicts associated with grazing, based on a study of 7 incidents in 2006, 9 in 2007, 6 in 2008, 13 in 2009, 9 in 2010, 15 in 2011, 17 in 2012, 27 in 2013, and 8 as at May 2014”. See below for the analysis of the trends of this grazing conflicts across Nigeria.

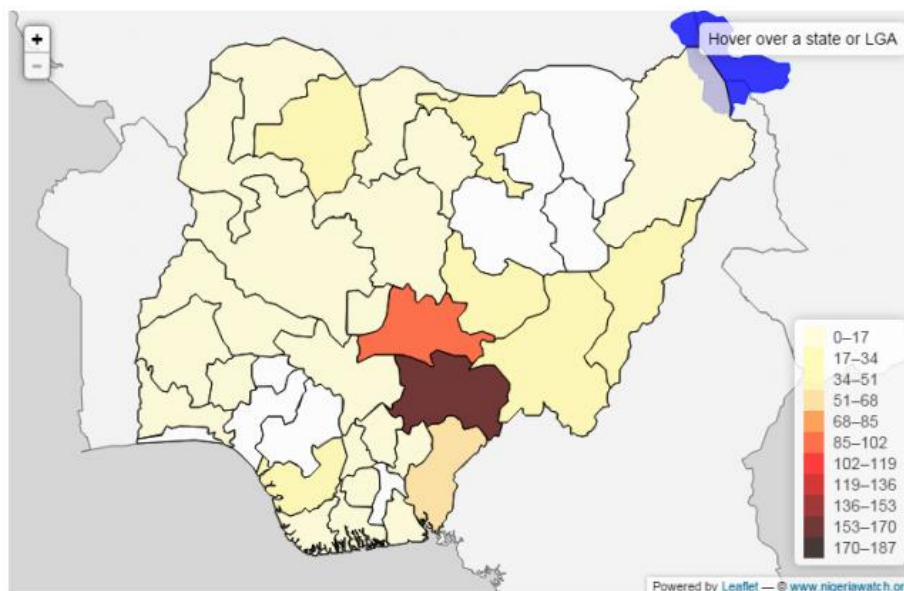


Figure 4: Map of Death Records as a result of Conflicts between Pastoralists and Crop farmers in Nigeria

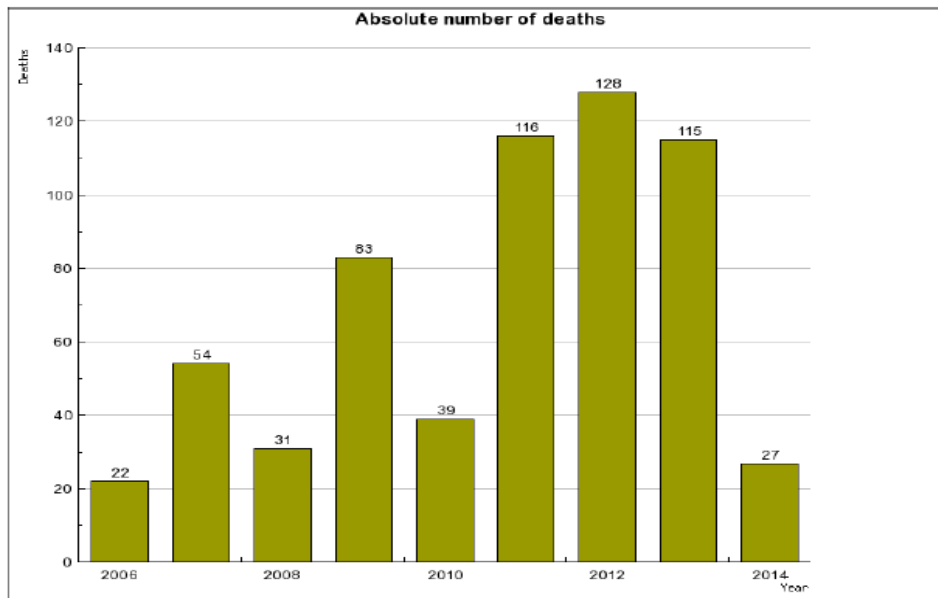


Figure 5: Death Records as a result of Conflicts between Pastoralists and Crop Farmers in Nigeria per year

1.9. General Objectives

This study aims to identify pastoralism laws in Nigeria and to map some conflicts spots along pastoralists' migration corridors and the role played by mediators in resolving farmers and pastoralists' land conflicts in Nigeria.

Specific Objectives

1. Identification of some Conflict spots along selected pastoralists' migration corridor
2. Investigate pastoralism laws in Nigeria in relation to land use right of pastoralist in Nigeria
3. Investigate the Roles of Mediators in resolving land conflicts between pastoralists and farmers, how effective their strategies and intervention been.

1.10. Research Questions

For each sub-objective to be met, the following questions will be answered;

1. **Identification of some Conflict spots along selected pastoralists' migration corridor in Nigeria**
 - a. Does pastoralist in Nigeria have an established migration corridor?
 - b. Are there conflicts between farmers and pastoralists along the corridor?
 - c. Where are these Conflict spots?
 - d. What time of the year do these conflicts occur?
 - e. What is the magnitude of these conflicts?
2. **Investigate pastoralism laws in Nigeria in relation to land use right of pastoralist.**
 - a. What do the formal and informal laws say about pastoralists land use in Nigeria?
 - b. Are there any legislation for Pastoralism in Nigeria in relation to land use right for pastoralists?
 - c. Does Nigeria land law and property right have provision for temporary access right for pastoralists?
3. **Investigate the Roles of Mediators in resolving this land conflicts between pastoralists and farmers, how effective their strategies and intervention been.**
 - a. Who are the actors that resolve these land conflicts within the selected migration corridor?

- b. What are the procedures/strategies these mediators employ in resolving the conflicts between pastoralists and farmers? How effective has it been?
- c. Do these mediators refer to the formal and informal land use law when handling the land conflict cases between farmers and pastoralists?
- d. How have the conflicts been resolved by mediators?
- e. How have the conflicts been solved by parties involved in the land conflicts and the host community?

1.11. Hypothesis

That effective land conflict mediation and resolution will improve land accessibility and land use for pastoralists in Nigeria.

1.12. Conceptual Framework

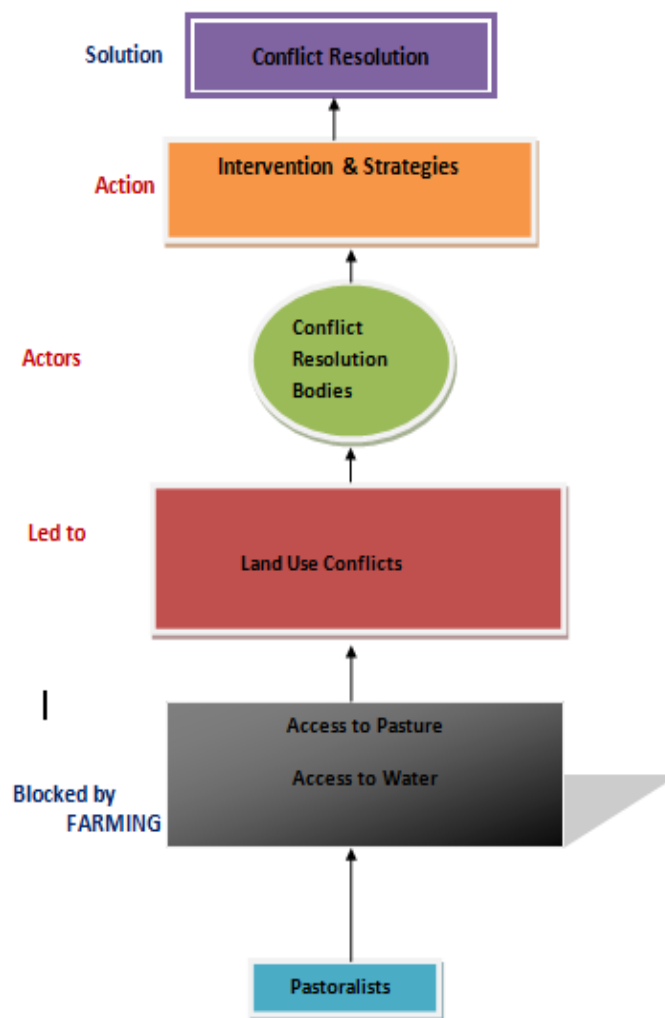


Figure 6: Conceptual Framework of the Research Project

This conceptual framework explains how pastoralists access to pasture and water is blocked by farming activities/practices that have led to land use conflicts because as a result of improve farming practices such as irrigation farming and fadama agriculture have made farmers to farm all year round which is preventing pastoralists to have access to farmlands and water points which they use to have access to in the past during their seasonal migration in search for pasture and water during the dry season.

Also the conceptual framework shows that this land conflicts between farmers and pastoralists are resolved by some conflicts resolution bodies which were mentioned in the background above who uses interventions and strategies to resolve this land conflicts. Thus the researcher will be looking at the effectiveness of the interventions and strategies used by mediators including mapping of the migration corridors to identify the conflict spots in the study area in Nigeria.

1.13. Research Design

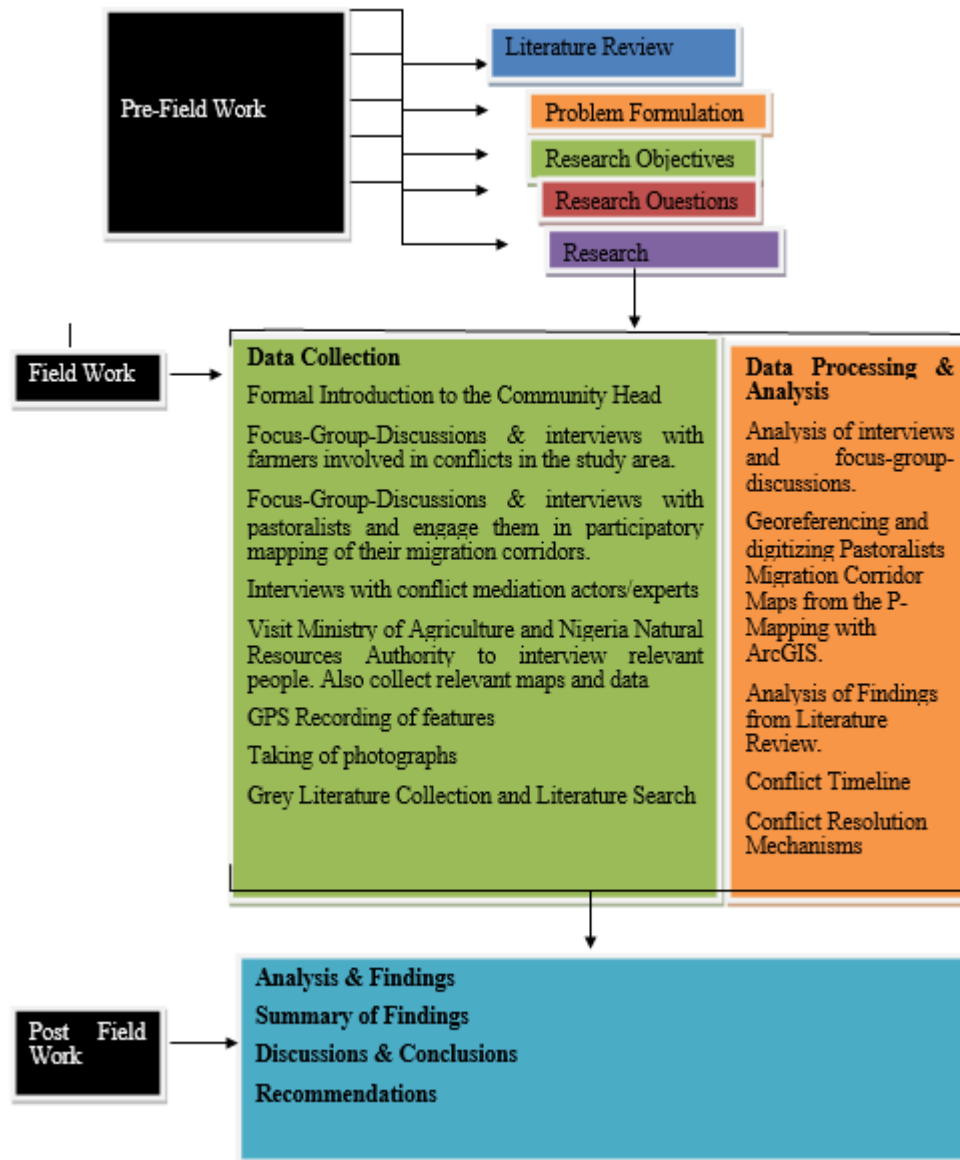


Figure 7: Research Design

2. LITERATURE REVIEW

Pastoralists and farmers conflicts have remained the most predominately resource-use conflict in Nigeria especially in North Central Nigeria which is also where the study area for this research is located. The necessity to provide food crops and animal in order to meet high demand led to increase demand and use of land. This has led to rivalry between these two groups. These has manifested in the conflicts witness between the pastoralist and farmers (Bello, 2013; Blench and Mallam, 2005)

The conflicts have increased food and meat scarcity, insecurity of life and property of farmers, pastoralists and communities where most of the conflicts happens, with a resultant effect nationwide. Thus this research study describes the traditional relationship between pastoralists and crop farmers in the persistent resource conflicts witnessed in Northern States, especially north central Nigeria. It emphasized on the resolution of these conflicts, in the mechanism used and identifies the root causes, effects which if not address will lead to the escalation of the conflicts.

Access to land for Pastoralist, farmers and all is fundamental to achieve the overall goal of responsible land governance. This can be achieved by relevant land institutions to facilitate land use tenure rights for all citizens, pastoralist and farmers inclusive. The issue of tenure security in land administration also expressed the degree of recognition and guarantee of property rights and it is particularly hinged on two major components which includes the duration of rights and effective legal protection against eviction (UN-HABITAT, 2008; Deininger and Augustinus, 2010). This will also go a long way in avoiding or solving land conflicts between farmers and pastoralists. Thus the research identifies the role of the law in terms of pastoralists' access right and tenure security.

In recent times, pastoralist faces land tenure problems which was not the case in the past but as a result of population growth, including loss of grazing lands to private farm owners, ranches, parks, urbanization, leading to the blockage of migration corridors. Also there is periodic dislocations brought about by drought, famine, etc. some examples of this problems scenario is seen in the Mongolia and China case (Fratkin, 1997; Vernooy, 2012) .

Therefore, proper land governance becomes highly necessary to ensure that the rights of pastoralists and farmers are adequately protected through basic principles and practices that are universally accepted in universal declarations such as; Universal Declaration on Human Rights (UNDHR), the guidelines for Responsible governance of tenure by the FAO, LGAF, etc. (WorldBank, 2011; Ghebru et al., 2014).

2.1. Background of Land Tenure in Nigeria

As a result of Nigeria's ethnic and cultural diversity, that influenced its pre-colonial land tenure system making it very complex. Different customary systems are practice by different ethnic groups at different geographic areas. There were no formal records of land transaction existed until the colonial regime. It was the government of the colonial eras that started the formal documentation of rights and interests with the land registration law in 1863 in Lagos State Nigeria then in 1894 it spread to other States (Klaus, 2013 ; Akpoyoware, 2010).

Nigerian societies operated their own different unique traditional systems until 1924. Prior to these there was no uniform tenure system in Nigeria (Kayode and Alade, 2014). In the pre-colonial Nigeria different types of land tenure systems were practiced. Despite this variation in the tenure system the value attached to land come from the basis that land is for housing, food and employment.

In these pre-colonial eras in Nigeria societies land was not considered a purchase as granting freehold rights rather it was considered only as a right of occupancy (Jacobson and Webb, 1946). This was

practiced mostly in non-Islamic societies where no man, not even the king, had control or private ownership of land (Jacobson and Webb, 1946). Traditional legal councils on land for conflict resolutions were in place. Some of the land transactions made by kings were given to other communities, clan or village were in the form of gifts. Traditional surveyors and valuers conducted valuation and measurement measures on land matters.

2.2. Land Use Tenure in the Study Area

The colonial regime in Nigeria saw the invasion, coercion, treaty, cession, convention or agreement by the British Crown in acquiring lands. The lands acquired became State land in post-colonial regime. Thereafter the Native Land Acquisitions of 1900 and the Lands and Native Rights Ordinance of 1916 established the formal land tenure systems in the country (Uchendu and Klaus, 2013).

These laws created formal private ownerships of land but in northern Nigeria a semi-feudal system existed for a while but later the colonialists declared all land in the northern part of Nigeria as public land. Two years after independence in 1962, the Northern Regional Government created a law that subjected all land in that region to the control of their Governor for the use and benefit of all northern (FAO, 1997). At the local level, natural resources are held as a communal property. This made the resources to be commonly used and managed such as hunting, firewood collection, fruits and nut harvesting, and even farming or grazing of livestock. Chiefs are vested with the control of the land and they hold them in trust for all members of the community which is then allocated to indigenous farmer or to family for farming.

2.3. Pastoralism in Nigeria

Cattle herding is dominated almost entirely by the Fulani tribe in Nigeria. (Adisa, 2012; Bello, 2013) gave a good description of the herding system of the Fulani in Nigeria (pastoralism). According to them herding is a challenging task as pastoralists have to move their herds a strategy to deal with environmental changes and to be able provide food and water for their herds all year round. They wander from place to place in search for pasture and water as a matter of necessity which is not only toilsome but also becoming increasingly strenuous and is now leading to lots of conflicts, especially in North Central Nigeria where they compete for land and water resources with crop farmers.

Adisa and Badmos (2009) stated that the optimal Fulani cattle herd size lies between 80 and 100. With a predominance of female over male at ratio 4:1, a balanced functional species composition is maintained in the following way, slow-maturing Sokoto Red cow and the lyre-horned White Fulani cattle are usually in the flock of the pastoral Fulani holdings. The White Fulani cattle produce higher milk and beef yield as compared to the Sokoto Red but is more fragile.

Cattle belonging to individual family members are usually owned by male family members who take charge of all cattle, which makes it difficult to know the cattle owned by female family members. Fulani men who have less than twenty cows are considered to be poor, while women who have six cows or more are said to be rich (Bello, 2013)

Most of the small ruminants and all of the poultry are owned by women (Iro, 1994). Herding is dominated by the youths although most Fulani men herd cattle well past the middle age, while decisions about grazing are mainly made by the elderly members of the family. These pastoralists group known as Fulani have high ability in using sign language, cane and verbal command to control their cattle's. The front rows are occupied by the faster cattle (Iro, 1994).

During migration, a typical herd consisting of several family units move in a column of up to five meters wide and two kilometres long. And by the time it passes any given point, 'everything that stands at that point is destroyed (Akpa et al., 2012; Iro, 2009). Iro (1994) described the annual herding cycle

which stated that the herding season begins with southward movement of the herd and along rivers and stream valleys from October to December – marking the end of rainy season and beginning of dry season.

January to February is the harmattan season that is characterized by longer hours for herd grazing, increased rate to stable water sources where they drink water. These thus increase southward movement for pastoralists. They find this period very challenging which is between March and April which is very tough for them and their cattle, because it is the hottest time of the year. As such the pastoralists grazes his cattle only towards evenings and at nights (Adisa and Badmos, 2010)

May and June signify the end of dry season and vegetation starts to grow. Thus pastoralists starts to head back northward with their cattle in this rainy season period till September which is the peak of raining season. Cattle-breeding is usually carried-out during this season, production of milk and very short grazing hours. The production of arable crops coincides with this cattle herding. therefore Farmer-pastoralists conflict becomes common during this period (Bello, 2013; Adisa and Badmos, 2010).

Pastoralists in Nigeria generally leaves in marginal land bordering farming hamlet areas, and bush/ fields which farmers have left to fallow for several years. Some of them have gained land rights through purchase or after lengthy occupation of unclaimed land. Usually they do not obtained any official certificates of land occupancy except on rare occasion they hold customary rights of land occupancy by settling for generations on previously uncultivated land or by purchasing from village head/indigenes of the community. Generally they are temporary occupants of pieces of land which they use during their seasonal migration in search for pasture and water through formal or informal arrangement with farmers or village leaders for rights to use the land for dwelling, grazing and or cropping temporarily (Taylor and Waters, 2013).

2.4. Pastoralists and Farmers Conflicts in Nasarawa State Nigeria

The pastoralists and crop farmer conflicts in Nasarawa State Nigeria has been attributed to the destruction of crops, irrigation equipment and the struggle for fadama area in communities in the State which is also experienced in other neighbouring States in north central Nigeria in the course of pastoralists seasonal movement from north east and north west in search for pasture and water because of the availability of vast arable land and water due to its geographic location which is within savannah grassland and River Benue a major river in Nigeria. The consequence is struggle for farmland between pastoralists and farmers for available land which is becoming scarce by the day (Okoli and Atelhe, 2014). This massive migration of pastoralists into the State has resulted in stiff competition for the increasingly scarce land resources, leading to confrontations and violent conflicts because this mobility is associated with the destruction of crops in farms due to the blockage or encroachment of pastoral corridors/routes by farming activities or wandering out of the corridors by the pastoralists into farms (Okoli and Atelhe, 2014; Gefu and Are Kolawole, 2002).

Ikoli and Adele (2014) pointed out that from existing literatures, official documents, and research findings that the farmer and pastoralists conflicts in Nasarawa State Nigeria have been attributed to several factors among which are contestations regarding land ownership and use. Some of his reasons are listed below:

- i. “Struggles for grazing/ farm fields in the light of the diminution of arable land in the state”
- ii. “Destruction of farmlands/ farm-crops by pastoralists”
- iii. “Provocation of parties – farmers and herders alike – through trespass on cherished valuables”
- iv. “Increasing deprivation and livelihood crisis in the context of growing ecological resource scarcity and lack”
- v. “Politicization of native/nomad differences through mobilization of clannish, ethnic, religious, or other primordial sentiments”

- vi. “Increasing pressure on land and resources thereof as a result of rising population”
- vii. “Indigenization and sedentarisation of grazing communities in the State”
- viii. “Culture of criminal brigandage and opportunism among the youths of both sides of the conflict divide”
- ix. “Inefficient land use laws and administration”

Table 4: Recent Conflict Happening in the Study Area

S/no	Month/year	Place	Immediate cause(s)	No of people killed	Other effects
1	20/11/2011	Akpanaja, Ondori Rukubi in Doma Local Govt. Area	Trespass into Agatu, Tiv and other farms by the Fulani herdsmen	4	Houses were burnt, farm produce destroyed and people deserted their homes
2	10/2/2011	Udeni-Gida Nasarawa Local Govt. Area	Killing of Fulani cows by AFO farmers	1	Houses and farm produce were damaged by both parties; girls were rapped
3	17/4/2011	Border communities between Doma Local Govt. of Nasarawa State and Guma LGA in Benue State	Killing of a Fulani herdsmen by the Tiv community	30	Damage of property, injuries of varied degrees; Population displacement
4	13/1/2012	Doka, Kwara and Ungwan Yaran mada in Keana and Doma LGA	Fulani herdsmen alleged stealing and killing of their cows by he Tiv/Mada/Migili communities	10	Destruction of prosperity, population displacement
5	24/3/2012	Yelow (Igbabo) in Ekye Dev. Area of Doma LGA	Encroachment on Eggon farmland by the Fulani herdsmen	10	Destruction of property, people displaced
6	24/7/2012	Kotsona village in Tunga, Awe LGA	Fulani herdsmen grazing on Tiv farms in the area	About 35	Property were destroyed
7	5/1/2013	Agbashi town in Doma LGA	Chopping of a young Agatu man’s hand in his farm and rapping of women and girls in the farms by Fulani herdsmen	5 (Fulani)	Houses were destroyed in Fulani camp; people was displaced
8	6/1/2013	Agbashi town in Doma LGA	Reprisal attack Fulani herdsmen over the killing of their people	16 (Agatu) ed	Houses and property were destroyed
9	17/3/2013	Ambane-Egga, Ladi Ende in N/Eggon LGA	Fulani Herdsmen attacked claiming reprisal for killing two of their own	5	Houses and property were destroyed
10	4/8/2013	Kuduku, Ajo Villages in Keane LGA	Reprisal for killing five Fulani herdsmen for trespass	20	Houses and property were destroyed

Source: National Orientation Agency (NOA) Nasarawa State Pulse Report 2011-2013, n.p

Also Adisa (2012) and Blench (2004a) discussed the causes of farmer and pastoralists conflicts which is the destruction of crops by cattle and other property such as irrigation equipment and other infrastructure reported by the farmers, while the pastoralists position is that the burning of rangelands, fadama farming and blockage of migration corridors and water points by farmers are the causes of farmer-pastoralists conflict in Nasarawa State and other neighbouring States.

2.5. Laws and Policies with relevance to Pastoralism in NIGERIA

Informal Laws

The informal laws governing land tenure in northern Nigeria was Islamic inheritance law (Okello et al., 2014). Alegwu (1983) described Maliki code of the Sharia under the Maliki law and divided into five broad categories. The five categories are listed below.

1. Land held in absolute ownership by individuals (mamluka).
2. State-owned land (amiriyya). The usufruct of umiriyya may be granted by the ruler.
3. Common land (matruka); generally land close to settlements and used for common purposes such as grazing and wood collection.
4. Deadland (mawat); land remote from a residential area that could be acquired by any individual for cultivation or building upon it.
5. Wakf- either private wakf (land dedicated to religious purposes) or territorial wakf (territories conquered by Muslims).

Formal Laws

1910 Land and Native Rights Proclamation (repealed)

1916 Land and Native Rights Ordinance (repealed)

1962 Land Tenure Law (repealed)

1965 Grazing Reserve Law

1978 Land Use Act of 29 March 1978

1999 Federal Republic of Nigeria Constitution”

Farmers and Pastoralists (Prevention and Settlement) of Disputes Edict 1996

1998 ECOWAS Transhumance Protocol

The Food and Agriculture Organization (FAO) of the United Nations Action Plan for Transhumance Livestock Breeding in West Africa

The Land and Native Rights Proclamation (1910)

The proclamation affirmed that all lands in Nigeria Northern Provinces were held by the Governor in trust for the people (Banire, 2005) . This lead to the general believes that land ownership has been transferred from chiefs, who allocated rights of use to occupants, to the colonial Government.

The Land and Native Rights Ordinance (1916)

These vested the settlement of land disputes in the hands of the Native Authority (NA), an institution at the village and district level based on traditional institutions

The Land Tenure Law of 1962

This law differentiated the difference between native lands (under customary law administered by Native Authority (NA) and government lands.

The Grazing Reserve Law (1965)

The law was promulgated in northern Nigeria with the objectives of encouraging pastoralists to settle permanently. Thus the law made provision for defining and demarcating specified grazing areas for grazing purposes. But less than 1% of targeted grazing reserves had been gazetted in the northern states by 1980 (Burnham and Gefu, 1994 ; Okello et al., 2014).

The Land Use Act (1978)

Nigeria has not reform its land tenure legislation in the last 37 years. The 1978 Land Use Act is still the law governing land tenure in Nigeria. The introduction of the Act in 1978 abolished previous statutory and customary land tenure systems in the country (Hoffmann, 2004a). It nationalised all land and vested it under the control of the Governors of the States who has the authority to manage land for the benefit of all Nigerian while rural land are under the control of local government (Art.2). They are shouldered with the responsibility to grant customary rights of occupancy for agricultural, residential, grazing or other purposes (Art. 6 (1)).

The Act which was promulgated in 1978 as a decree and later transferred into the country constitution with the intention of nationalizing landholding in the country (Ako, 2009). However the Act does not provide a supportive legal framework for pastoralist livelihoods, nor does it provide traditional pastoralists with any legal rights over land. They are still at the mercy of their host communities (Hoffmann, 2004a).

In relation to the management of rural/communal lands which is usually under the control of the Chiefs who are vested with the control of the land and they hold them in trust for all members of the community which is then allocated to indigenous farmer or to family for farming while the Local

Government area grant land for agricultural, residential, and other purposes and issues customary rights of occupancy to any person or organization for the use of land for grazing purposes and such other purposes ancillary to agricultural purposes as may be customary in the Local Government area concerned with the following restriction which say that no single customary rights of occupancy shall be granted in respect of an area in excess of 500 hectares if granted for agricultural purposes, or 5000 hectares if granted for grazing purposes, except with the consent of the State Governor (Hoffmann, 2004a ; Bruce, 1998 ; Rasak, 2011).

1999 Federal Republic of Nigeria Constitution

The Nigeria Constitution stated that every citizen in Nigeria have the fundamental right of movement in search of his or her legitimate business anywhere in the country, thus transhumance have utilized this to move across the country in search of pasture and water for their livestock.

ECOWAS Transhumance Protocol of 1998

Nigeria is part of the ECOWAS Transhumance Protocol of 1998 which gives West countries access to grazing rights in other countries in the ECOWAS zone. The ECOWAS Transhumance Protocol allows for pastoralists to move across borders in search of pasture upon the fulfilling the conditions laid down in the Protocol. So it is not strange to see a Malian, Burkinabe or Nigerian pastoralist grazing his cows, sheep or goats in Nigeria or a Nigerian grazing his livestock in Benin, Togo or Ghana.

Policies

Milligan and Binns (2007), Omotayo (2000) and Omotayo et. al. (1999) described the policy which proposed the grazing reserve strategy that projected the need for pastoralist to settle in 1909 which lead to sedentarisation of pastoralists in Jos area in 1942. The policy which was given birth to following a World Bank Report in 1940s and 1950s which argued that free-ranging grazing was wasteful and unsustainable given human population growth rates as such proposed settlement for pastoralists with the provision of key basic needs, such as marketing information, veterinary posts, fodder, and water, movement would become unnecessary. Based on this the Federal Government of Nigeria in 1960 after Nigeria independence adopted the World Bank recommendation and passed the Grazing Reserve Law in 1965 which provided legal backing to the grazing reserve strategy.

2.6. Irrigation and Fadama Farming Leading to Blockage of Migration Corridors

Gefu and Kolawole (2002) discusses high population densities that have resulted in overcrowding of existing farm lands and the subsequent demands for arable crops to meet up with the high population growth in many Africa countries with Nigeria inclusive necessitated the adoption of irrigation farming techniques. Based on this farm lands that was not put to use during dry seasons are now been utilized. These have equally affected traditional grazing lands which used to be used by pastoralists for dry season grazing for their herds are now been cultivated as a result of irrigation farming.

In northern Nigeria the objective of irrigation projects is to allow substantial increase in dry season farming which is usually established using open sources and shallow groundwater in floodplain environments which is also called fadama land using shadoof or small petrol pumps (Kimmage and Adams 1990 ; Acharya and Barbier, 2000). But these wetlands have other competitive uses apart from crop farming such as for grazing, fishing and wildlife hunting (Blench and Mallam 2005).

In the past in Nigeria fadama land used to be used for raining season crop farming and during the dry season it is not farmed on rather it was used for livestock grazing by pastoralists and in the process the animals add their dung/ manure to the soil which farmers were happy about but with advent of dry season irrigation pastoralists do not have access to these grazing land. This has equally generated lots

of conflicts between the pastoralists and farmers because of the competitive uses each one wants to utilize the land for (Blench and Mallam 2003; Bello, 2013b).

2.7. Pastoralists and Farmers Conflict Resolution Mechanisms and Actors

Hussein et al. (1999) discussed the violent conflicts between pastoralists and crop farmers in semi-arid Africa which includes Nigeria and the study area. The argument is that since the establishment of colonial rule in Africa the relationship between these two groups have been both complementary and competitive and most recently conflictual. These conflicts are over natural resource use, specifically land use.

Moritz (2006) also has similar views in addition to his position that the conflicts also have direct impact on the lives and livelihoods of parties involved in the conflicts which is also disrupting and threatening the sustainability of agricultural and pastoral production systems in the communities where it exists. And if it is not checked can lead to intra- and inter-state wars. Thus is the need for proper Farmer-pastoralist conflict resolution initiatives/strategies.

Blench (2004) identified three types of institution through which pastoralists and farmers conflicts are settled which are Traditional authorities, Police and court, Local and State governments.

Traditional authority

Blench (2004) highlighted that in the rural setting intervention in resolving these conflicts between pastoralists and farmers are done by village heads who resolves this conflicts. Sometimes they utilize court like procedures such as calling for witnesses, carrying-out site inspection and independent assessment of costs of damages. While sometime they make arbitrary judgements and people occasionally accuse them of corruption.

Police and court

Also Blench (2004) stated that the Police and Court have bad reputations among rural communities therefore they are only used as last resort.

Local and State governments

Blench (2004) equally highlighted the setting- up of committees that settles these pastoralists and farmers conflicts that may arise by Government authorities in their regions.

Turner et al. (2012) highlighted a general pattern for the management of conflicts which should follow the listed steps below:

1. “Disputants seek to manage disagreements between themselves. This may involve others, but disputants speak directly to each other. A major factor affecting the success/failure of direct negotiation is whether the disputants have a good relationship prior to the dispute; when direct contact between disputants occurs in relation to when the transgression occurs (time for cooling down); whether one party or the other feels insulted; the abruptness of the onset of the disagreement (crop damage being abrupt); and the perceived magnitude of the material harm experienced by one or both parties”.
2. “Disputants seek mediation among friends and family members who may have stronger priorities among themselves than do the disputants to each other. The distinction between step 1 and 2 is not always entirely clear since there are often others present when disputants directly discuss their disagreement but often there is a point in disputes when mediation is intentionally sought”.

3. “Disputants seek resolution and management of the disagreement through local customary authorities most particularly the village chief but also Islamic priests and pastoralist leaders. This step is most often relied upon in disagreements where one or both disputants seek compensation for a wrong (e.g., crop damage, stolen livestock)”.
4. “Disputants seek resolution and management of the disagreement through an extra-local authority. The canton chief, who in Niger is best viewed as a customary authority, is tied to a lineage of high social status at the level of the smallest administrative district called the canton. The arrondissement is the next largest administrative district which is administered by the sub prefect, a position filled through appointment by the government. Local courts also exist at the arrondissement where some serious conflicts are adjudicated. According to local informants, most disagreements first go through local authorities before reliance on extra-local authorities. The only exception to this is when disagreements turn violent. These cases often move directly to the arrondissement level (but with involvement of the village chief). Conflicts that involve multiple jurisdictions (e.g., multiple villages or multiple cantons) are more likely to be adjudicated at a higher administrative level”.

Conflict Resolution Strategy in Nigeria

Gefu (1992), Blench and Mallam (2005) and Ibrahim (2014) described how minor conflicts in Nigeria are settled between farmers and pastoralists themselves and also when the conflicts cannot be resolved by themselves then it is resolved by traditional mediation or arbitrations by ward/village heads, district heads or the paramount ruler. Sometime grand rules are established with the pastoralists and the farmers, so that if crop damage or other disputes occur, both sides are already aware of agreed procedure.

When the conflict is beyond the competence of community leaders/traditional leaders and the head of the pastoralists, State conflict resolution committee are established with representatives drawn from Local Government Council, Security Agencies, farmers and Miyetti Allah (Pastoralists association) with the Director General of the Department of Local Government as the chairman (Blench and Mallam, 2005; Ja`afar-Furo, 2014). Similarly Non-Governmental Organizations (NGOs), Faith Based Organizations (FBOs) such as the Pastoral Organizations called Miyetti Allah plays role in conflict mediation and are also involved in direct settlement of disputes including law enforcement agencies and the court (Gefu, 1992). The figure 8 below shows a peaceful and successful mediation outcome where the parties are shaking hands as a sign of agreement and peaceful settlement of the conflict/dispute.



Source: Dokumentation und Transfer 2007 (www.informdoku.de)

Figure 8: Successful Mediation Outcome

Conflict Management Mechanism

Conflicts should be managed at the potential or emergence level before it degenerates to escalation stage or beyond. Blank (2013) described the “Snake” Model which diagram is shown below which is an example of mechanism design for Natural Resource Conflicts at Community Level, developed by Partners for Democratic Change which can be adopted in pastoralists and farmers conflicts since they are both competition for natural resource use.

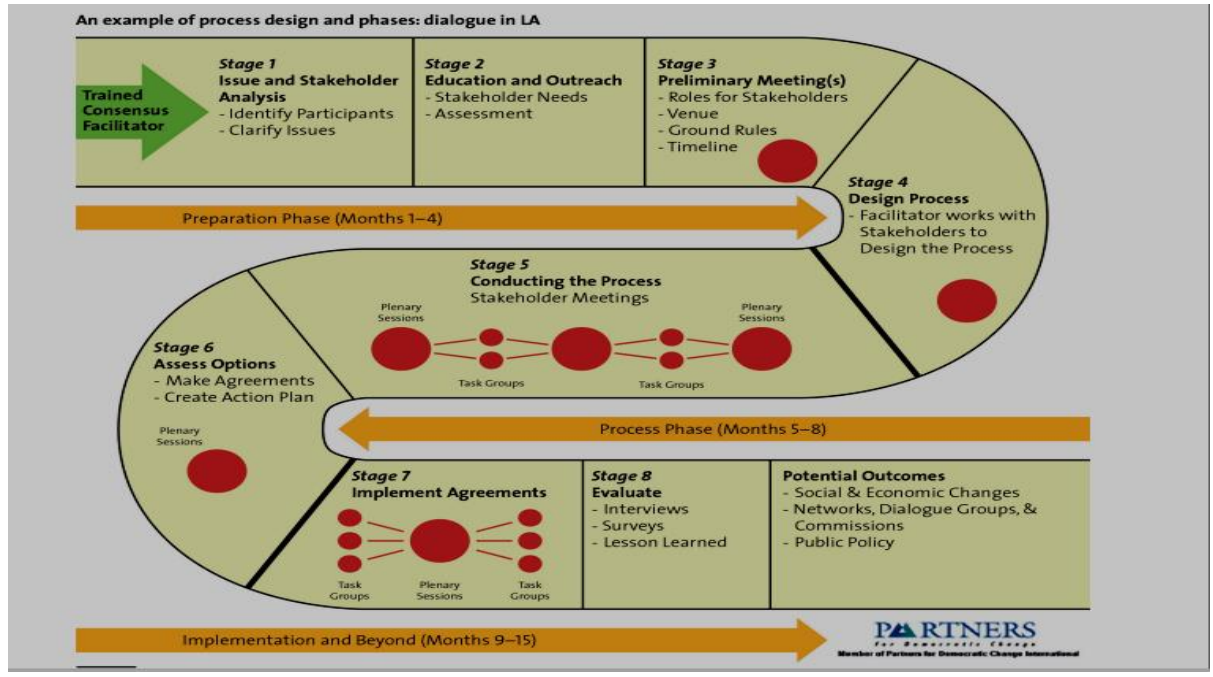


Figure 9: Conflicts Management and Resolution Approaches and Procedures by (Moore, 2003)

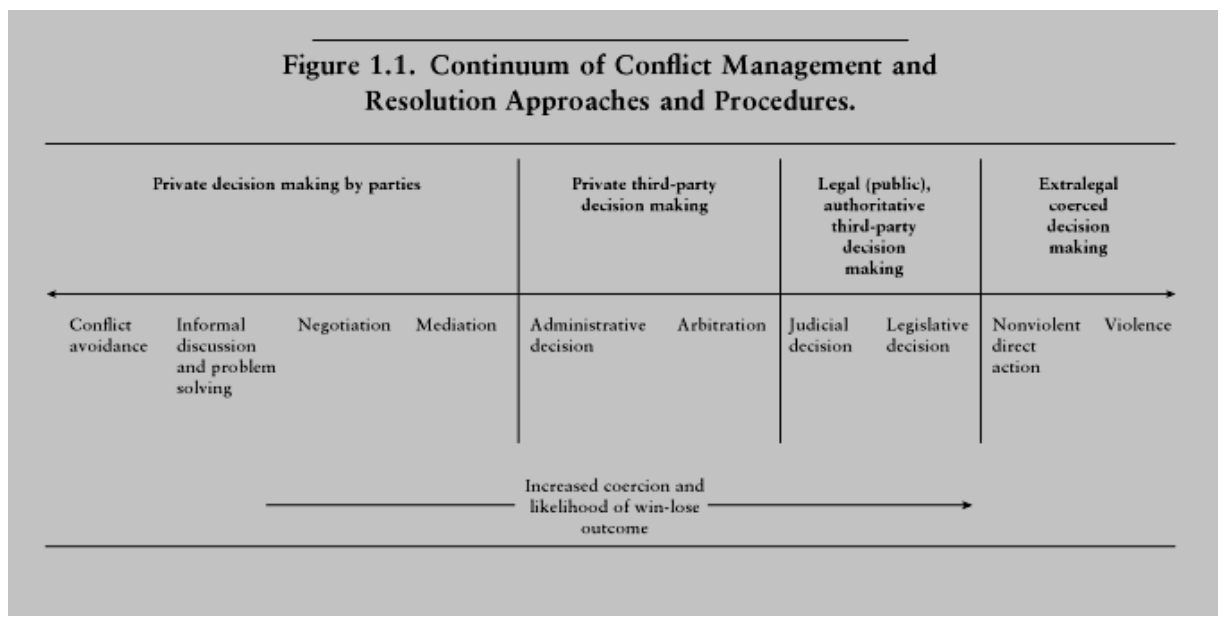


Figure 10: Continuum of Conflict Management and Resolution Approaches and Procedure (Moore, 2014)

Moore (2014) gave an overview of conflict resolution procedures, defines mediation and presents an insight into effective mediation outcomes which are a) conflict ripeness, (b) the level of conflict intensity, and (c) the nature of the issue(s) in conflict.

Analysts have frequently highlighted the importance of proper timing of mediation initiatives for successful outcomes achievement. Conflicts is believed to have passed through a life cycle that encompasses a number of distinguishable phases, and that certain stages are more amenable to outside intervention than others (Kleiboer, 1996 ; Lazaro, 2000).

Kleiboer (1996) stated that conflicts follow the logic of "clock time." The duration of conflict in relation to the period such as day, month, year is associated with the persistence or change of attitudes of the adversaries toward the conflict. A "classical" position is that mediation is most fruitful when failure to reach an agreement suggests an emergency. A feeling of emergency will strongly increase the disputants' motivation to moderate their intransigence and revise their expectations.

Washington (2014) described mediation as a mechanism where people in dispute meet with a neutral third party to resolve the conflicts. The mediators must be unbiased, neutral third parties, who guide and follow a structured negotiation process. Mediators provide parties with a safe and neutral environment that will facilitate effective deliberations. They should allow the parties to reach their own mutually agreeable solution.

In mediation mechanism individuals in the conflict must be willing to express their concerns honestly and in the open and the concerns of other people in the conflict should be put into consideration. Mediation encourages collaboration between the parties so that creative solutions can be explored and lasting solutions can be found. Mediation is highly recommended for settling of conflicts because it is faster, cheaper, and often more effective than other conflict resolution means. Mediation is usually started and completed in a matter of a few weeks for even the most complex cases unlike litigation that can go on for years which is equally very expensive. Almost any case can be successfully mediated.

3. FIELDWORK AND STUDY AREA

For this study, primary and secondary data collection methods were employed Participatory Rural Appraiser (PRA), Participatory Geographic Information System (PGIS), Global Position Satellite (GPS) and taking of photographs were used for the primary data collection while literature search from existing sources for the secondary data which are described in chapter 4. The study area is discussed in this chapter.

3.1. Study Area

This study area is located in Nasarawa States in North Central Nigeria it was chosen because of its high cases of land conflict between pastoralists and farmers. It is situated within the Savannah grassland region of north-central Nigeria. Its major vegetation is undulating grassland with light forests close to River Benue. Agriculture is the main occupation of the people in the study area. Among the food crops they grow includes yam, beans, maize, guinea corn, sugarcane, soya beans, rice, groundnuts, and assorted fruits and vegetables.

The study area lies in a geographical or ecological belt characterized by sparse habitation. In effect, their low population density made it very favourable for grazing and other agricultural activities. The vast arable land in the study area and a fairly small population made the struggle for farmland not to be noticed in the past until the migration of sedentary and nomadic pastoralists into the area led to the struggle for farm and pasture land that has led to several confrontations and violent land conflicts between pastoralists and farmers because pastoralists livestock enters farms and rivers and destroys crops and irrigation equipment in the course of their searching for pasture and water in the community by name Udeni Gida community located in Nasarawa Local Government Area of Nasarawa State in Nigeria West Africa.

3.2. Conflict Resolution in the Study Area

There are three ways conflicts are resolved in this study area between farmers and pastoralists. The Traditional Ruler plays a very important role in resolving these conflicts. He utilizes his position and power in resolving some of these conflicts. Also involve is a Pastoral Organizations called Miyetti Allah an NGO who plays role in conflict mediation. Lastly is government committee which is set-up to handle conflicts in very large magnitude.

In cases that involve crop destruction where the pastoralist agrees that he is guilty interpersonal agreement may be reached between the farmer and pastoralist. Compensation may or may not be paid depending on the agreement but when the crops that are destroyed are minimal and the herdsman showed some concern only a warning is given. The most frequent form of settling this land conflicts in the study area is through the combined effort of the village head and the head of the pastoralists called (Ardos) in settling disputes. Both the village/district head and the Ardos put efforts in ensuring that a reasonable decision is reached.

When the community traditional ruler/community head and the head of the pastoralists cannot resolve the conflict then the local government or other organs of government steps in, especially when the conflict is threatening law and order, standing committees are usually set-up by the Government either at the Local, State and Federal level to handle crisis .

This Committee usually has composition of the following members Area Veterinary Officer in the local government area, Ardos, Community Leaders, the paramount ruler in the area, and the District Police Officer. The committee mediates between the herders and farmers. Another mode of resolving this land conflicts is through the police but it usually fails as gathered from respondents

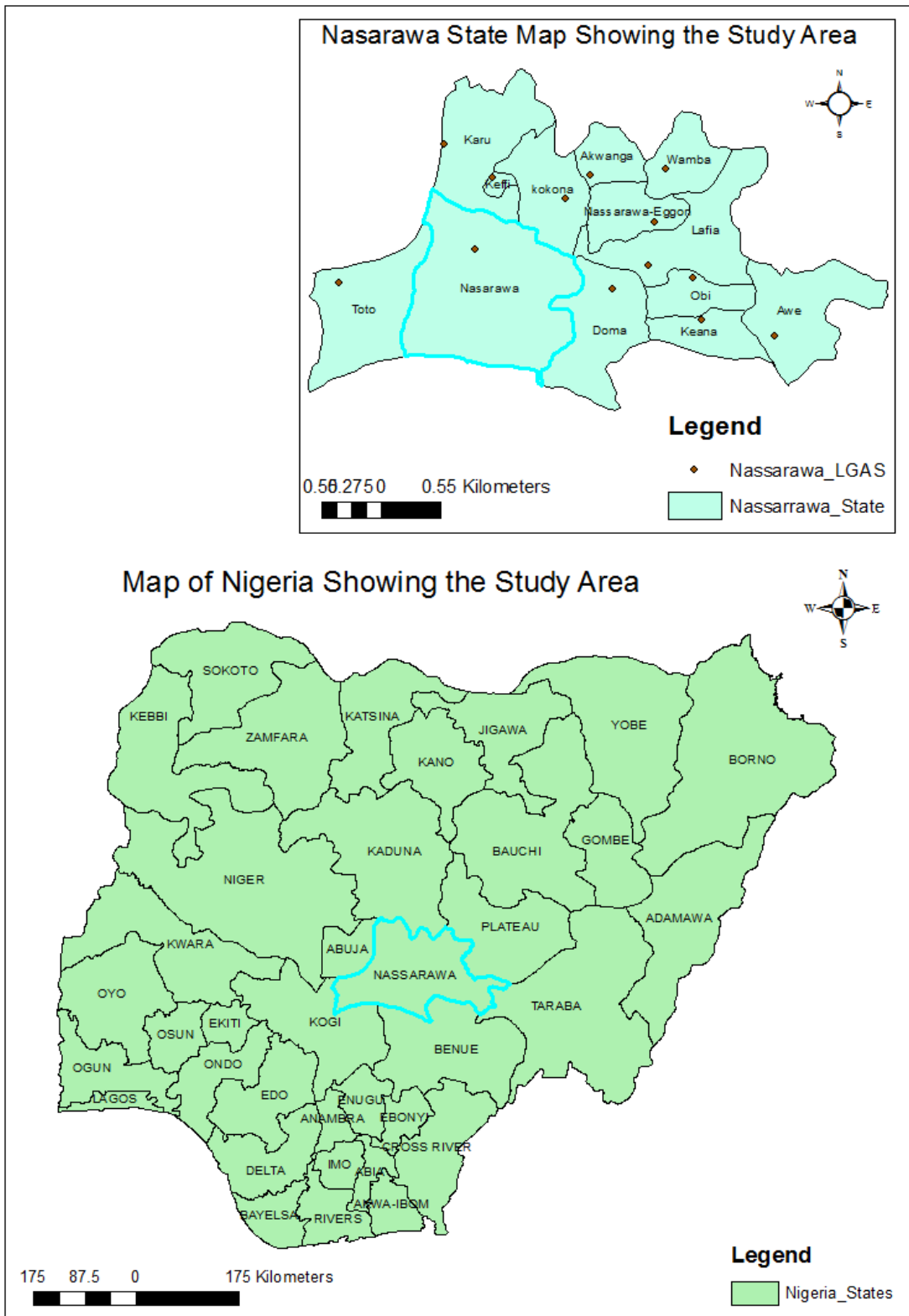


Figure 11: Map of Nigeria: Showing Geographic Location of the Study Area

3.3. Fieldwork

Preparation for field data involved development of interview and focus-group questions in semi-structured form formats which was used to interview pastoralists and farmers type A and type B which was used to interview Conflict Mediation Actors/ Experts (NGOs, Traditional Rulers, and Government Committees) including staff of Ministry of Agriculture and Natural Resources (see Appendix). The data collection drive started on the 29th September 2014 to collect information and data of the conflict situation on ground between pastoralists and farmers in the study area and also to the Local Government Council at the Local Government Headquarters, Local Development Authority, Nigeria Police Force Headquarters and Federal Ministry of Agriculture and Natural Resources in Abuja where I sourced for grey literatures.

The permission to carry-out the fieldwork activities in the community was gotten from the Traditional Ruler who was equally interviewed and assisted in arranging for the focus group discussion session comprising 12 crop farmers in the Traditional Ruler Place and subsequently arranged for another focus group discussion also involving 12 crop farmers. Interviews were held with 6 crop farmers who have been involved in the conflicts and those with current destruction on their farms. GPS points were taken in those farms which happen to be the conflicts spots because the conflicts usually take place on farmlands. Two similar focus group discussions was held with pastoralists, first comprise of 10 pastoralists while the second session comprise of 6 pastoralists who were also involved in the PGIS exercise to identify their migration corridors within the community and up to Northern Nigeria. Interviews were held with 4 Actors in conflict resolution, 4 experts in pastoralism and staff of the pastoral NGO called Miyetti Allah. The field work ended on the 30th October, 2014.

3.4. Existing Situation in the Study Area

Below listed are existing situation of the causes and resolution of the conflict between pastoralists and farmers in the study area which is Udeni Gida community in Nasarawa Local Government Area of Nasarawa State Nigeria and it is believe that similar situations will be found in other communities along the pastoralist migration corridors in Nigeria.

- Nigeria have established migration corridors which some pass through the study area but the width of corridors in the study area are not well defined. The widths are narrow which cannot accommodate standard herds' size passage. The narrow, encroachment and blockage of these corridors have resulted in crop damage and subsequently conflicts between pastoralists and farmers.
- Irrigation farming is also part of the problem in the community, river banks are farmed on so when pastoralist takes their cattle for watering at the river crops are destroyed during the passage to the river.
- Destruction of crops that are left on the farm during dry seasons such as cassava, yam, beans, corn, guinea corn, sorghum, etc. is also part of the problem in the community resulting to pastoralists and farmers conflicts.
- The magnitude of the pastoralists and farmers conflicts in this community is huge as it affected lives, property and crops.
- Mediation is mainly used to resolve the conflicts between pastoralists and farmers in this community.
- The mediation is carried-out by the following persons and organizations representative, the Traditional Ruler, the Head of Pastoralists and Head of Farmers in the community, Pastoral NGO Miyetti Allah or through Government Committee which usually are made up of these members Traditional Rulers, Director Livestock Services, Local Government Chairman, Natural Emergency Management Agency, Police, and State Government Representative.
- Sometimes the farmers and pastoralists settle the conflicts as a result of crop damage between themselves. Farmers unions in the community deliberate and they come up with a

resolution/decision on the conflicts which are sent to the Traditional Ruler for on-ward communication to the pastoralists' leader for enforcement.

- When these pastoralists don't honour this request/decision from the Traditional Ruler then the Traditional Ruler sends it to the Local Government Chairman to intervene, which at times leads to Arbitration.

4. RESEARCH METHODOLOGY

This study uses a case study approach enables the examination of the conflict phenomena and using P-Mapping using Scale Maps and or Images to get local spatial knowledge (LSK) of the community and target groups IIED (2007), Participatory Geographic Information Systems (PGIS) for assessing land use conflicts locations and migration corridors using participatory GIS data Brown and Raymond (2014) including the use of interviews and focus group discussions a Participatory Rural Appraisal (PRA) methodology to get the views of actors and stake-holders (pastoralists, farmers, local mediators, chiefs, e.t.c) (Holmes, 2001).

The case study approach facilitated the investigations of the roles played in resolving land conflicts between pastoralists and farmers by land conflict mediators since it is well suited for investigations of interactions between phenomenon's in their real life context (Yin, 2013). It is also an idea method for descriptive studies whereby data is obtained from interviews, focus-group discussions and questionnaires

4.1. Secondary Data Source (Desk Research)

The research methodology involved desk research that included review of scientific literatures, news articles and news reports. Also relevant documents from the Ministry of Agriculture, Nigeria Natural Resources Authority, as well as Library, on-line documents relevant to the research was sourced and used.

4.2. Primary data source (Triangulation: focus group and semi-structured interviews)

It involved collection of social data from the study area through interviews and forum group discussions to investigate how pastoralist and farmers manage land conflicts which happens in their seasonal encounters.

A Semi-structured interview guided with a prepared interview forms were used to obtain data in face-to-face interviews, focus group discussions with the above mentioned groups and other stake-holders in the study area.

4.3. Sampling

A purposeful selection of 30 farmers and 16 pastoralists, 10 conflict mediation experts and actors were interviewed. The farmers and pastoralists were selected by the leaders of the two groups in Udeni Community which was based on the following criteria.

- i. Those that had been involve in the farmer-pastoralists conflict in the community.
- ii. Those that have been involve in a conflict resolution mechanism either at the community level or government mediation committee

4.4. Conflict Analysis

Based on the conceptual diagram figure 6, conflict analysis methods was relevant for this research since it includes practical mechanism of examining and understanding the reality of the land conflicts under focus from a variety of perspectives. It specifically assist the researcher to achieve the following listed below:

- Understand background/history of the pastoralists and farmers land conflicts in Nigeria situation and current events.
- Identify other groups involved in the land conflicts apart from the pastoralists and farmers that are hidden from literature (shadow).
- Understand the perception of groups in the conflicts and their relationship with each other.
- Understand the trends and factors that underpin the conflicts.

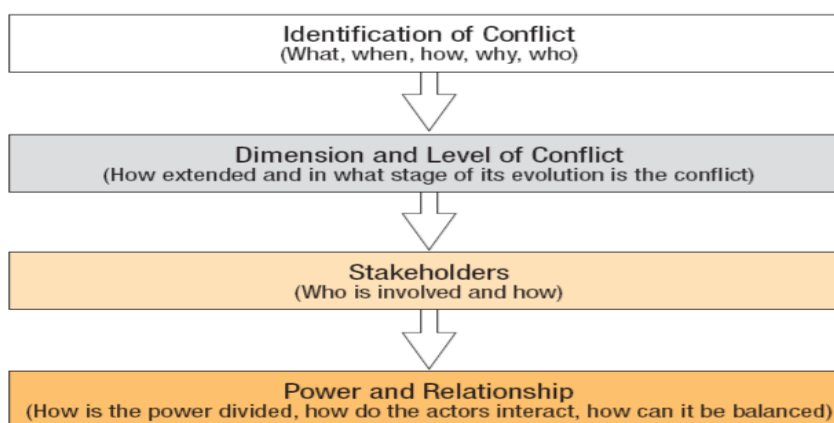
Conflict Analysis: Key Elements



Source: APFO, CECORE, CHA, FEWER, International Alert, Saferworld (2004). Conflict-sensitive approaches to development, humanitarian assistance and peacebuilding.

Figure 12: Conflict Analysis Concept Diagram

CONFLICT DIAGNOSTIC MAP



Source: FAO

Figure 13: Conflict Diagnostic Map

4.5. Timeline/Historical Profile

Timeline of events is seen from different perspective to know the history and trends of the conflict.

4.6. P-Mapping

Using an Administrative Map of Nigeria with a Scale of 1: 1 500 000 and a 27 kilometres Satellite Imagery of the study area pastoralists and farmers were engaged in participatory mapping. The reason for using scale map and the imagery is because the imagery coverage was very small which showed only the study area location which had very few information while the administrative map had a coverage of

the whole country with lots of feature such as roads, rivers, e.t.c and there was need for pastoralists to show how they migrate from northern Nigeria to the study area in search for pasture and water for their cattle. Through this exercise pastoralists drew their migration corridors/routes.

4.7. GPS Recording

GPS Coordinates of the farms where conflicts had occurred due to crop damage by pastoralists' cattle were taken. This enabled the researcher to get the coordinates used for the geo-referencing and digitizing of the scale map/imagery from the P-Mapping exercise.

4.8. GIS mapping

GIS software (ArcGIS 10.2.2) was used to georeferenced the scale map from the P-Mapping exercise which was overlaid with the satellite imagery of the study area. From this GIS map and satellite image pastoralists' migration corridors from the north to the study area can be visualized and some locations of farms where the land conflicts between pastoralists and farmers had occurred or termed conflicts spots can equally be visualized.

4.9. Processing/Analysis Method

The processing involved both qualitative and quantitative methods. (e.g. coding) to interpret the interview. The recordings of interviews from the focus-group-discussions and individual interviews was first transcribed and then coded quantitatively. ArcGIS 10.2.2 is used for processing the map and satellite image from the P-Mapping exercise (PGIS).

4.10. Anticipated output

Sub objective 1

Pastoralists' migration corridors from the study area to the north was derived by engaging pastoralists in P-Mapping exercise on scale maps and satellite imagery with the researcher's guidance. Pastoralists drew their migration corridors. This facilitated the production of the pastoralists' migration corridor and the conflicts spots map.

Sub objective 2

Result from research question 2 revealed Nigeria law and policy provisions for pastoralists/pastoralism

Sub objective 3

Result from research question 3 shows pastoralists and farmers land conflicts how they are resolved by mediators and how the pastoralists and farmers deal with the conflicts themselves. In answering this research question the researcher involved pastoralists and farmers in the targeted community and stake-holders such as community leaders, actors in land conflict mediation/resolution and other community groups and government representatives using Participatory Rural Appraisal methodology (focus-group discussions, interviews using semi- structured interview forms). The researcher choice of this methodology is because it is based on action/case research done with the help of participation of people. This approach enabled incorporation of knowledge and opinions of target groups and stake-holders in the research. Also it facilitated communication between the researcher, community leaders and stake-holders.

4.11. Data Collected from Semi-Structured Interviews & Focus Group Discussions

Table 5: Summary of Field Data Collected

S/No	No. of Interviews	From	No. of Participants
1	2	Focus Group Discussion with Farmers	24
2	6	Interviews with Selected Farmers involved in the conflicts	6
3	2	Focus Group Discussion with Pastoralists	16
4	4	Interviews with Actors in the Conflicts Resolution	4
5	4	Interviews with Experts in Pastoralism	4
6	1	Interview with Traditional Ruler of Udeni Community	1
7	1	Interview with Leader of Pastoralist NGO	1
Total	20		56

5. DATA ANALYSIS AND RESULTS

This chapter consist of the analysis of data collected from the focus group discussions and interviews from pastoralist, farmers and other stake-holders in relation to answering the research questions and objectives. Also the outcome from the PGIS exercise and literature review are analysed.

5.1. Specific Objective 1

5.1.1. Pastoralists & Farmers

Pastoralist and Migration Corridors in Nigeria

In this sub-section, the question about if pastoralists have migration corridors which they use for their movement in search of pasture and water were asked to 16 Pastoralists in 2 focus group discussions giving a total of 2 answers.

Therefore, 2 responses were analysed from the 2 focus group discussions which requested them to choose between a yes or no answer. All of the respondents or 2 of the 2 focus group said yes that pastoralists have migration corridors while none of the respondents 0r 0 out of the 2 interviews said no that pastoralists do not have migration corridors.

They also stated that the migration corridors width have been reduced to path way from the standard width of between 50 to 100 meters.

Also 24 Farmers in 2 focus group discussions were asked if pastoralists have migration corridors which they use for their movement in search of pasture and water giving a total of 2 answers. The 2 responses were analysed from the 2 focus group discussions which requested them to choose between a yes or no answer. Half of the respondents or 1 group of the two focus group discussion said yes that pastoralists have migration corridors while another half of the respondents or 1 group of the two focus group discussion said no that pastoralists do not have migration corridors. Figure 14 represents this result

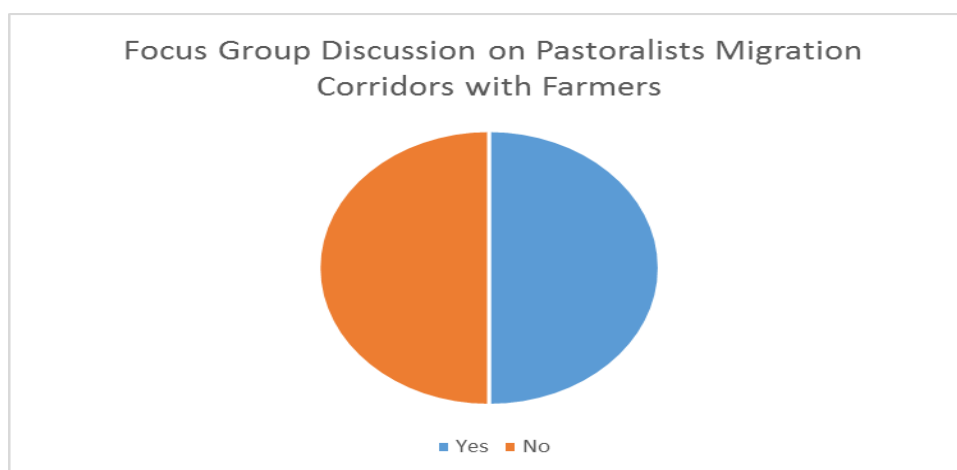


Figure 14: Focus Group Discussion with Farmers on Pastoralists Migration Corridors

There were also 6 individual interviews with famers which took place on the farms where conflicts had occurred. They were also asked if pastoralists have migration corridors which they use for their movement in search of pasture and water. 67% of the respondents or 4 of the 6 interviews said yes that pastoralists have migration corridors while 33% of the respondents or 2 of the 6 interviews said no that pastoralists do not have migration corridors. Figure 15 represents this result.

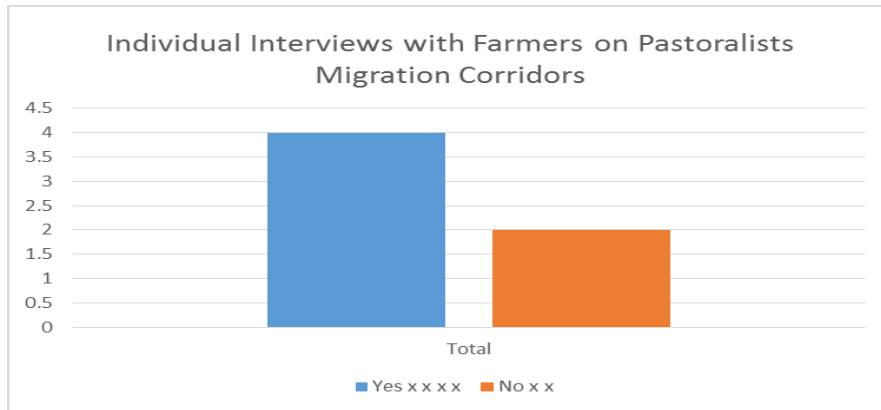


Figure 15: Individual Interview with Farmers on Pastoralists Migration Corridors

Conflicts between Farmers and Pastoralists along Migration Corridors

Also in this sub-section, the question about if there are conflicts between pastoralists and farmers along the migration corridors were asked to 16 Pastoralists in 2 focus group discussions giving a total of 2 answers which was answered by a yes or no answer. All of the respondents or 2 of the 2 focus group discussions said yes that conflicts between pastoralists and farmers happens along the migration corridors while none of the respondents Or 0 out of the 2 focus group discussions said no that the conflicts between pastoralists and farmers do not happen along the migration corridors.

The respondents that stated yes said that most of the conflicts between them and crop farmers occurs along the migration corridors because their passage through the migration corridors is associated with destruction of crops because of blockage, narrow and encroachment of migration corridors by crop farmers.

Similarly, 24 farmers participated in 2 focus group discussions where the question about if there are conflicts between pastoralists and farmers along the migration corridors were asked and a total of 2 answers were gotten from a yes or no answer. Half of the respondents or 1 of the 2 focus group discussions said yes that conflicts between pastoralists and farmers happens along the migration corridors while another half of the respondents Or 1 out of the 2 focus group discussions said no that the conflicts between pastoralists and farmers do not happen along the migration corridors. Figure 16 represents this result.

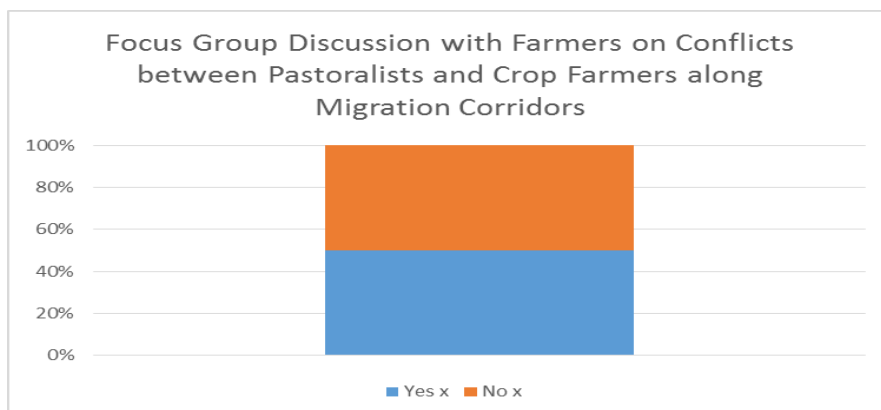


Figure 16: Conflicts between Pastoralists and Farmers along Migration Corridors (Farmers Response)

There were also 6 individual interviews with farmers on their farms where conflicts had occurred. They were also asked if the conflicts between pastoralists and farmers happened along the migration corridors. 67% of the respondents or 4 of the 6 interviews said yes the conflicts between pastoralists and farmers happened along the migration corridors while 33% of the respondents or 2 of the 6

interviews said no the conflicts between pastoralists and farmers do not happen along the migration corridors. Figure 17 represents this result

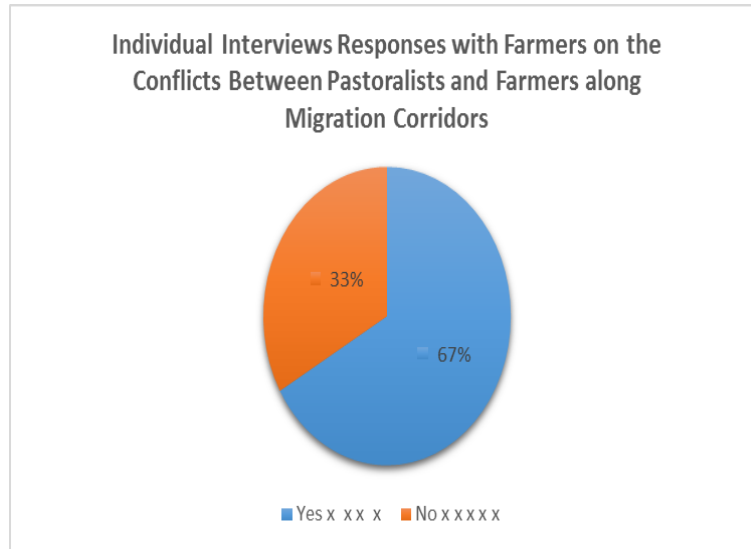


Figure 17: Conflicts between Pastoralists and Farmers along Migration Corridors

Time of the Year Pastoralists and Farmers Conflicts Occurs

Another 10 responses were analysed from the 2 focus group discussions with pastoralists, 2 focus group discussion with farmers and the 6 individual interviews with farmers. The respondents were asked to state the time of the year when the conflicts between farmers and pastoralists occurs. Respondents were requested to choose from a table containing months of the year. 61% said that conflicts between nomadic pastoralists and crop farmers occurs mostly between January and March which is dry season. Figure 18 represents this result.

Pastoralists stated that the conflicts in dry season is mostly due to late season farming due to irrigation farming by crop farmers which blocks their cattle access to rivers because crops are planted close to rivers/streams bank which block their cattle access to water while crop farmers stated that the up-rooting of crops left for late harvesting by cattle is among the causes of the conflicts between them and pastoralists and the destruction of their irrigation planted crops and irrigation equipment installed in the rivers which is destroyed by pastoralists cattle in their search for drinking water.

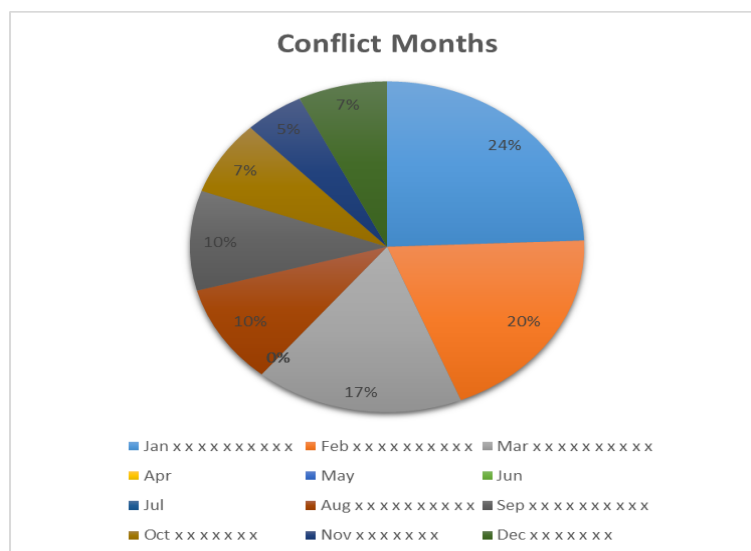


Figure 18: Months the Conflicts Occurs

Impact of the conflicts on the lives of Pastoralists and Farmers

In this sub-section, one question were asked in the following interviews which are 4 individual interviews with actors in the conflict resolution between pastoralists and farmers, 4 interviews with experts in pastoralism, 1 interview with the Traditional Ruler of the Community and 1 interview with the leader of a Pastoral NGO . This also makes up 10 interview from 10 respondents where they were asked to choose from a range of percentage boxes ranging from 10%-100% based on their perception of the impact of the conflicts in relation to crop damage, cattle death, loss of lives and properties in Udeni Gida Community the study area for this research.

Majority of the Respondents chose that conflicts between pastoralists and farmers has 80% impact on their crops, cattle, lives and properties. 3 respondents chose 70%, 5 respondents chose 80% and 2 respondents chose 90%. The respondents stated that the conflicts has serious impact on the host community generally as lives and property are been destroyed. They stated that specifically pastoralists animals are been killed and farmers crops destroyed which is their sources of livelihoods which are seriously affected and recently the conflicts have taken a different dimension as dangerous arms are now been used which have resulted to increase of death rate and destruction of properties in Udeni Gida Community Figure 19 represents this result.

Community the study area which is also applicable to other communities with pastoralists and farmers conflicts. Also the conflicts have serious security implication for the communities where they occur because there are usually attacks and counter attacks which have made these communities to live in fear and also affected the socio-economic situation as people are fleeing from the community, investors and foreigners not prepared to come to such communities.

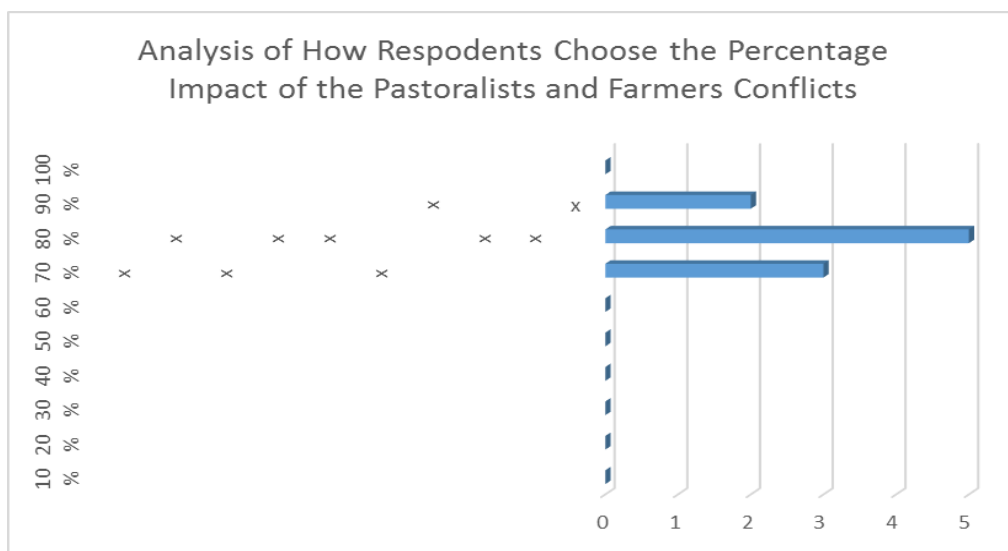


Figure 19: Analysis of How Respondents Choose the Percentage of Impact of the Conflicts

Conflicts Spots

Respondents stated that most of the conflicts are along or close to the migration corridors. This was also confirmed after taking the GPS points of the farms where conflicts had taken place which was plotted on a satellite imagery of the study area which can be seen Figure 20.



Figure 20: Photograph with some Farmers in one of the Farmer Where Conflict Had Occurred



Figure 21: Photograph of Focus Group Discussion with Pastoralists at the Study Area

Pastoralists Migration Corridors From the Study Area To Northern Nigeria Drawn During The PGIS Exercise

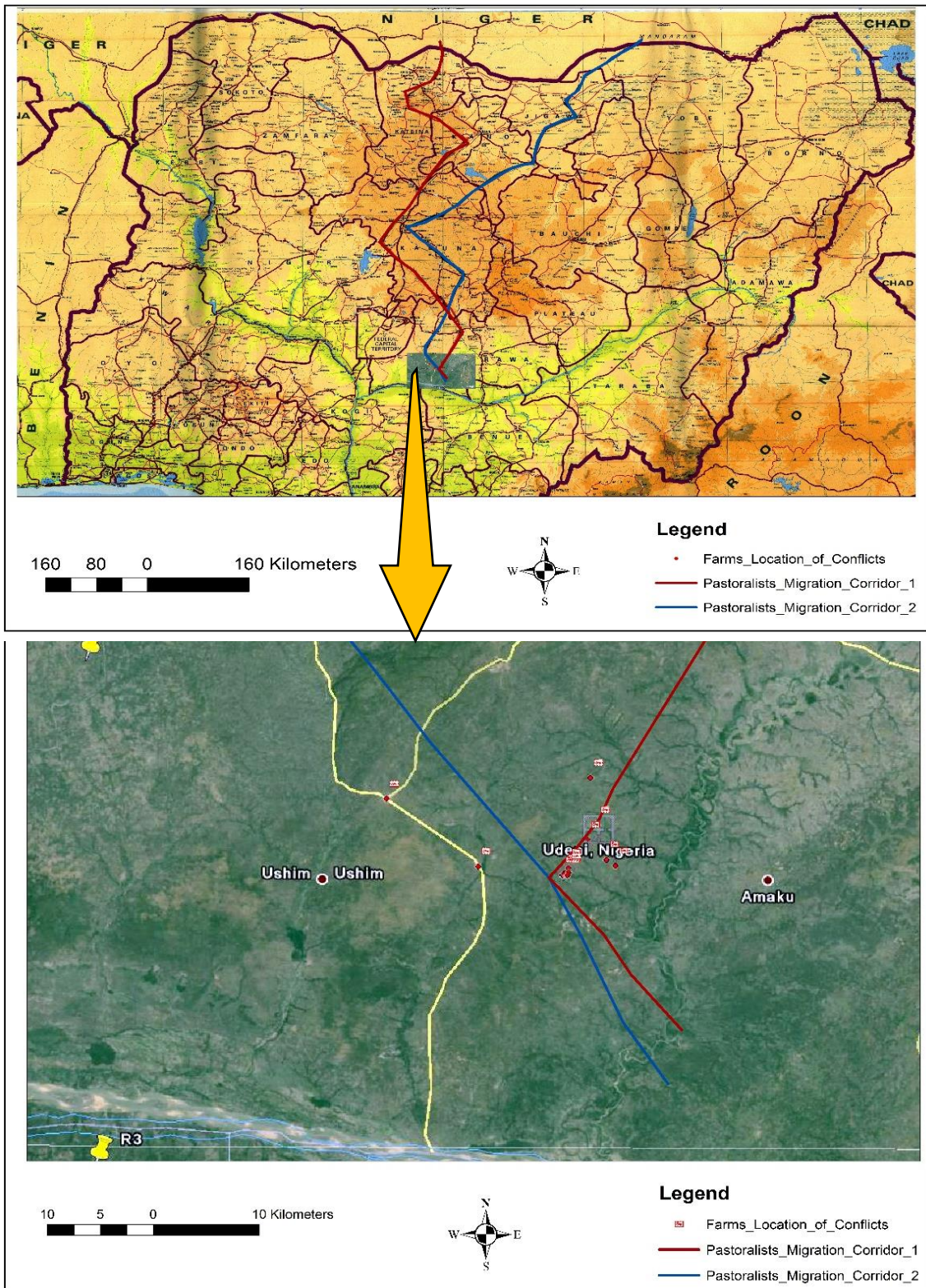
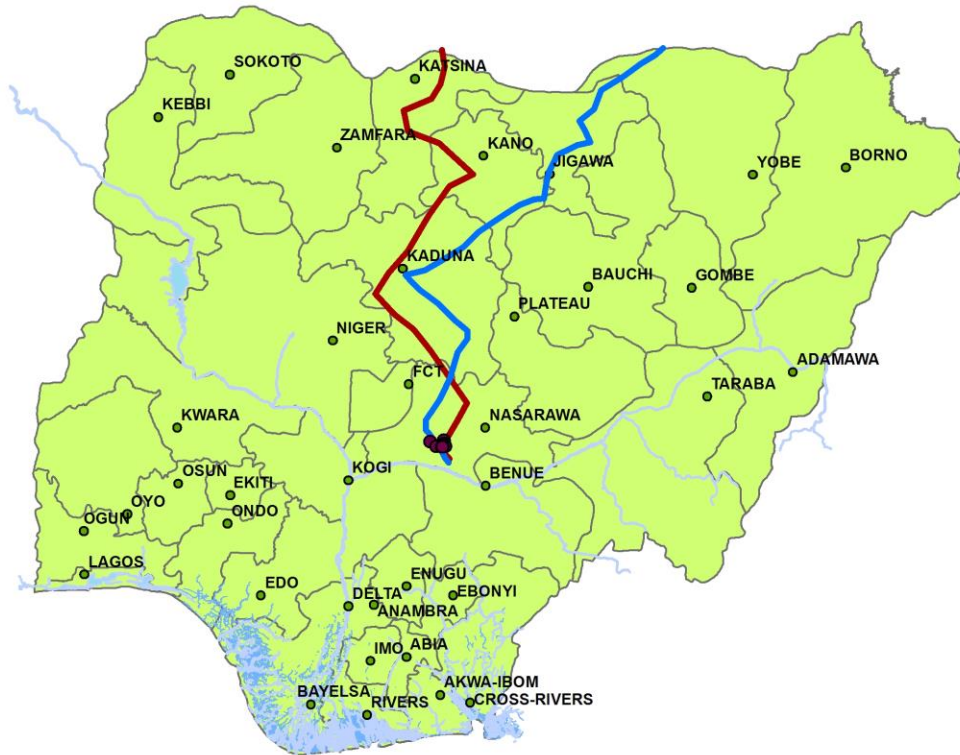


Figure 22: Nigeria Map and Satellite Image of the Study Area Showing the Points Location of the Conflicts and Migration Corridors Drawn Doing the PGIS Exercise with Pastoralists

Nigeria Map Showing the Digitized Pastoralists Migration Corridors



Legend

- Farms_Location_of_Conflicts
- Pastoralists_Migration_Corridors_1
- Pastoralists_Migration_Corridors_2
- Federal_And_State_Capitals
- Major_Rivers
- Minor_Rivers
- State_Boundary

175 87.5 0 175 Kilometers

Figure 23: Nigeria Map Showing the Digitized Pastoralists Migration Corridors

Causes of the Conflicts

This sub-section also comprises the 10 responses that were analysed from 2 focus group discussions with farmers, 2 focus group discussions with pastoralists and 6 individual interviews with farmers making up 10 interview from 10 respondents. All of their responses were written down and grouped into the following with reference to their responses grazing land competition, crop destruction, irrigation farming, illegal settlement, stealing of cattle, migration corridor blockage/encroachment, attack on dependant and water point struggle.

26% which is 10 responses of the 38 responses from the respondents said crop destruction is the major cause of conflict between farmers and pastoralists, 18% which is 7 responses of the 38 responses said that irrigation farming is second major cause of the conflicts, 16% which is 6 responses of the 38 responses said migration corridor blockage and encroachment is the third major cause of the conflicts. See the charts below for other causes. Figure 24 represents this result.

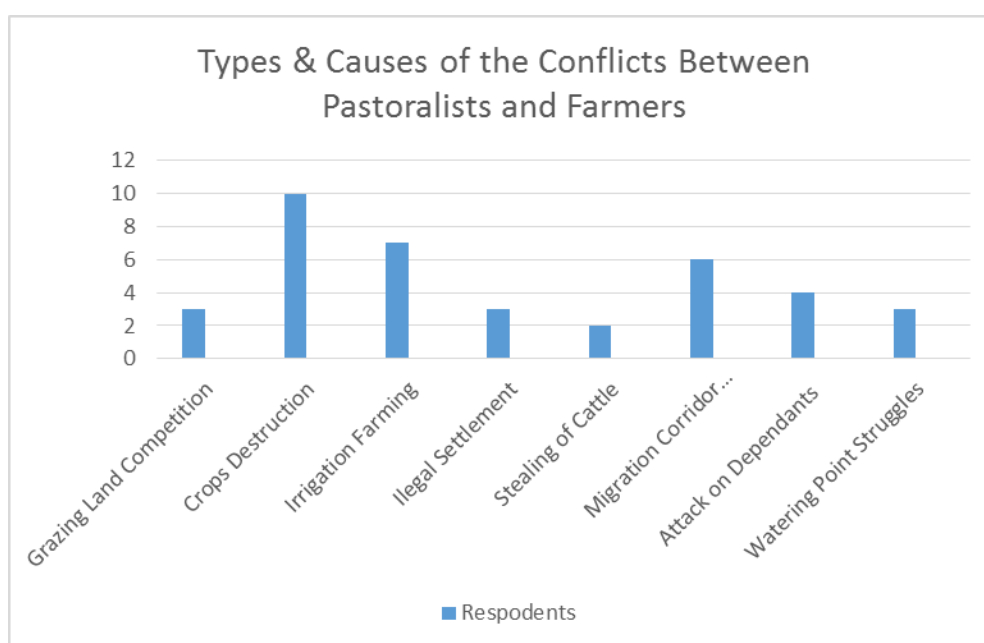


Figure 24: Types and Causes of the Conflicts between Pastoralists and Farmers

The results above in figures 14, 15, 16, 17, 18, and 19 answered the research questions associated with the research sub-objective 1 which is the identification of some conflict spots along selected pastoralists' migration corridor in Nigeria as listed in page 16. Fig. 14 & 15 answered research question (1a) as majority of the respondents stated that pastoralists have established migration corridors which has been used for centuries, Fig. 16 & 17 answered research question (1b & c) it ascertained that the conflicts between pastoralists and farmers occurs and mostly along the migration corridors, Fig. 18 answered research question (1d) it showed that the conflicts occurs mainly between the month of January and March which is dry seasons which nomadic pastoralists make their seasonal movement in search for green pasture and water for their cattle while Fig. 19 answered research question (1e) as majority of the respondents said the conflicts between pastoralists and farmers has led to lots of crops destruction, cattle death, lives and properties of the two parties and the host community.

5.2. Specific Objective 2

This part is made up of 3 questions in the interview form related to pastoralism laws and legislations in relation to land use, land accessibility for pastoralists in Nigeria. The respondents interviewed in this sub-section comprises of 4 individual interviews with actors in the conflict resolution between pastoralists and farmers, 4 interviews with experts in pastoralism, 1 interview with the Traditional

Ruler of the Community and 1 interview with the leader of a Pastoral NGO. The 10 respondents were asked what the formal and informal laws say about pastoralists land use right in Nigeria, if Nigeria land law or any law have provision for temporary access right for pastoralists and if there were aware of any legislation for pastoralism in Nigeria in relation to right to migration corridors and access to grazing areas for pastoralists.

Informal Laws on Pastoralism Land Use Right in Nigeria

70% of respondents or 7 of the 10 respondents said they are not aware of any informal law on pastoralism land use right in Nigeria but believes that pastoralism is associated with the culture of pastoralists which is a way of life for them and as such can be traceable to their customary and traditional laws while 30% of the respondents or 3 of the 10 respondents stated out rightly that they are not aware of any informal law associated with pastoralist land use in Nigeria. Figure 25 represents this result

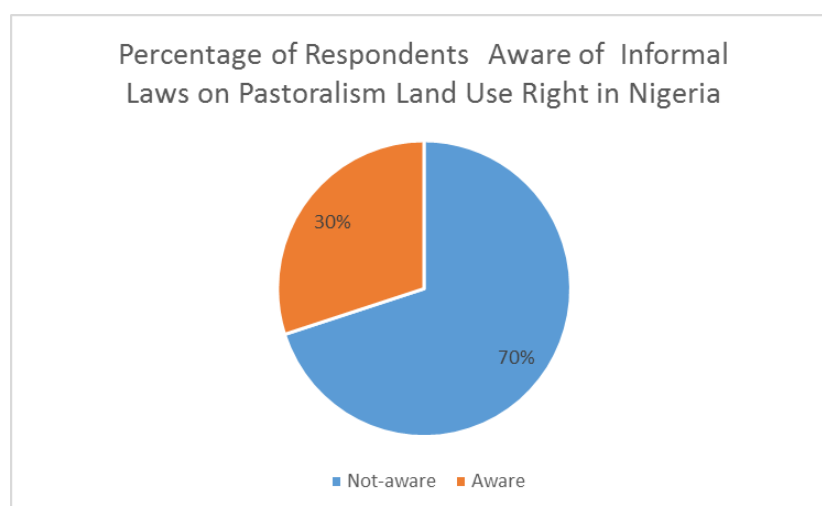


Figure 25: Percentage of Respondents Aware of Informal Laws Associated with Pastoralists

Formal Laws on Pastoralism Land Use Right in Nigeria

All of the respondents or 10 of the 10 respondents stated that there are several laws which had been in place that facilitated pastoralism practice in Nigeria such as the Citizenship law from the 1999 Nigeria Constitution, the 1978 Land Use Act and the 1965 Grazing Reserve Act, etc.

Table 6: Formal Laws and Policy Associated Land Use Right for Pastoralism in Nigeria

S/N	Formal Laws and Policy Associated Land Use Rights for Pastoralism in Nigeria	Dates
1	Grazing Reserve Law	1965
2	Land Use Act	1978
3	Federal Republic of Nigeria Constitution	1999
4	ECOWAS Transhumance Protocol	1998
5	Nigeria Agriculture Policy	1988

The results above in figures 25 and table 6 answered the research questions associated with the research sub-objective 2 which investigate pastoralism laws in Nigeria in relation to land use right of pastoralist as listed in page 16. Figure 25 and table 6 answered research question (2a & b) it ascertained that there are both informal and formal laws relevant for pastoralism land use right in Nigeria while the laws/policies listed in table 6 from literature search of relevant laws and policies associated with pastoralism land use rights in Nigeria answered research (2a & c) which was equally discussed in chapter 2.

5.3. Specific Objective 3

How the Conflicts between Pastoralists and Farmers were resolved

This part is made up of 1 question relating to how conflicts cases between pastoralists and farmers are resolved. The respondents interviewed in this sub-section comprises of 4 individual interviews with actors in the conflict resolution between pastoralists and farmers, 4 interviews with experts in pastoralism, 1 interview with the Traditional Ruler of the Community and 1 interview with the leader of a Pastoral NGO. All of their responses were written down and grouped into the following with reference to their responses Traditional Ruler, Government Committee, between pastoralists and the farmers themselves, Pastoral NGO, Court and Police.

40% of respondents or 4 of the 10 respondents said that conflicts are resolved by Traditional Ruler, 20% of respondents or 2 of the 10 respondents said that the conflicts are resolved by Government Committee, 20% of respondents or 2 of the 10 respondents said that the conflicts are resolved by pastoralists and farmers themselves, 10% of respondents or 1 of the 10 respondents said that the conflicts are resolved by NGO and 10% of respondents or 1 of the 10 respondents said that the conflicts are resolved by Police while the Court had none or 0 of the 10 respondents said that the conflicts between pastoralists and farmers are not resolved by the court for lack of trust on the court and the long time it takes court to decide on cases. See the chart below for the graphical representation of the interview. Figure 26 represents this result

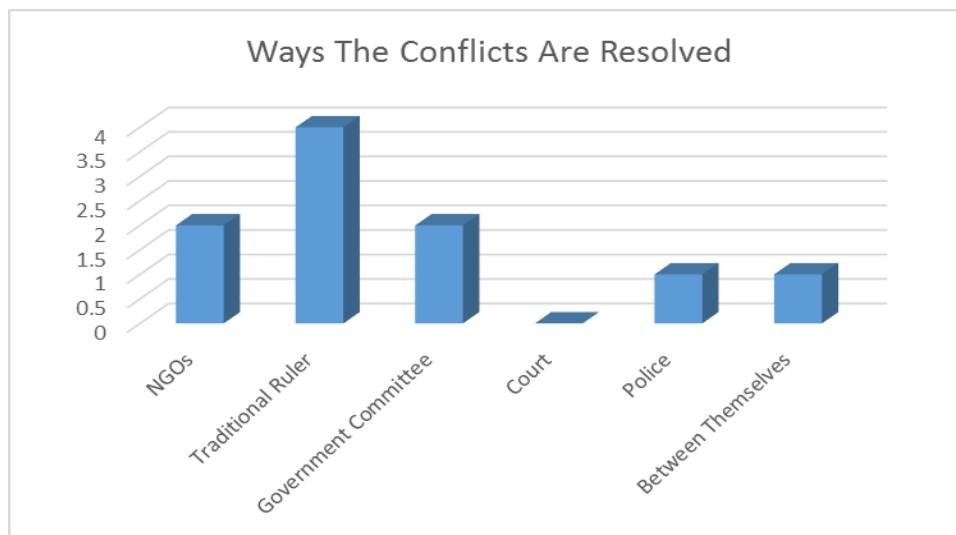


Figure 26: The Ways the Conflicts are Resolved

Resolution Mechanism mostly used in resolving the Conflicts

This part is made up of questions relating to the conflict mechanism been used in resolving the conflicts between pastoralists and farmers. The respondents interviewed in this sub-section comprises of 4 individual interviews with actors in the conflict resolution between pastoralists and farmers, 4 interviews with experts in pastoralism, 1 interview with the Traditional Ruler of the Community and 1 interview with the leader of a Pastoral NGO. They were requested to choose between mediation, arbitration, adjudication, and police and by themselves.

60% of respondents or 6 of the 10 respondents said that conflicts are resolved through mediation, 20% of respondents or 2 of the 10 respondents said that conflicts are resolved by themselves, 10% of respondents or 1 of the 10 respondents said that conflicts are resolved by police, 10% of respondents or 1 of the 10 respondents said that conflicts are resolved through arbitration while adjudication got none. Figure 27 represents this result.

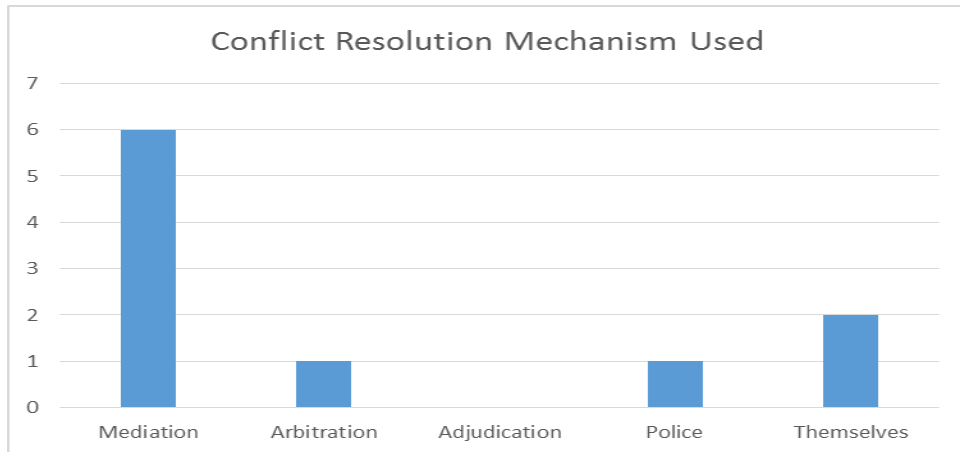


Figure 27: Conflict Resolution Mechanism Used

Effectiveness of the Resolution Mechanism

This part is made up of questions relating to the effectiveness of resolution mechanism been used in resolving the conflicts between pastoralists and farmers. The respondents interviewed in this subsection comprises of 4 individual interviews with actors in the conflict resolution between pastoralists and farmers, 4 interviews with experts in pastoralism, 1 interview with the Traditional Ruler of the Community and 1 interview with the leader of a Pastoral NGO. They were requested to choose between the most effective, least effective and not effective in relation to mediation, arbitration, and adjudication.

80% of respondents or 8 of the 10 respondents said that mediation is the most effective resolution mechanism, 20% of respondents or 2 of the 10 respondents said that mediation is least effective, 80% of respondents or 8 of the 10 respondents said that arbitration is least effective resolution mechanism, 20% of respondents or 2 of the 10 respondents said that the mediation is most effective. None of respondents or 0 of the 10 respondents said that adjudication is not an effective resolution mechanism. Figure 28 represents this result.

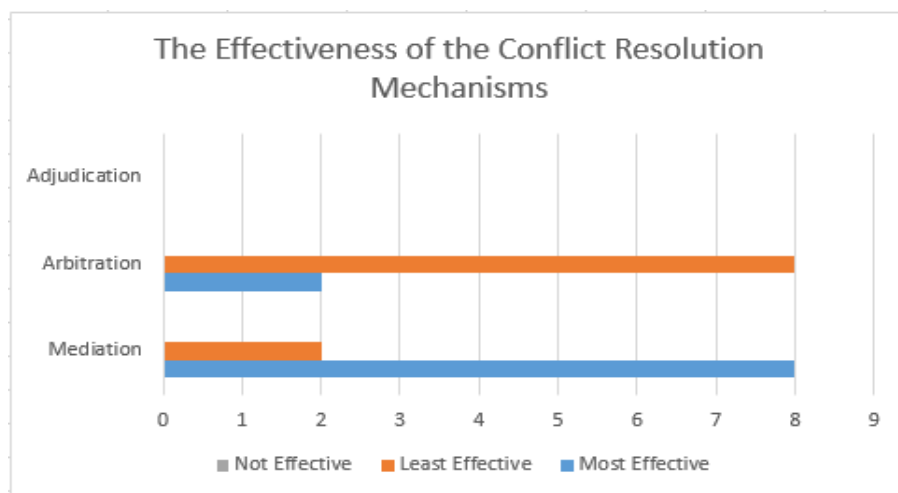


Figure 28: Effectiveness of the Conflict Resolution Mechanism

The results above in figures 26, 27 and 28 answered the research questions associated with the research sub-objective 3 which is to investigate the roles of mediators in resolving the land conflicts between pastoralists and farmers, how effective their strategies and interventions as listed in page 16 & 17. Fig

26 answered the research question (3a) it highlighted Traditional Rulers, NGOs, Government Committee, between parties themselves, Police and Courts as the actors/ways that pastoralists and farmers conflicts are resolved, Fig. 27 answered the research question (3b) it highlighted Mediation, Arbitration, Adjudication, Police and themselves as the ways/mechanisms employed in resolving the conflicts between pastoralists and farmers, Fig. 28 highlighted mediation as the most effective mechanism used in resolving the conflicts because it is fast, cheap and enables conflicting parties to come to a peaceful agreement, arbitration is least effective as decision are most times imposed on parties while adjudication is not used as it is slow, costly and the parties have less trust using it.

Conflict Map & Timeline/Historical Profile

Also conflict Diagnostic Map, Timeline and Historical Profile of the pastoralists and crop farmers' conflicts was used for examining and understanding the conflicts. Figure 29 is a conflict diagnostic map of the pastoralists and crop farmers' conflicts and the actors in the pastoralists and farmers conflicts resolution and their level of engagement/relationship, figure 30 is a Timeline of some recent pastoralists and crop farmers conflicts which involved displacement of communities, loss of lives and properties and Figure 31 is Historical Profile of the conflicts between pastoralists and farmers which gives a background and history of events/situations that have led to the conflicts.

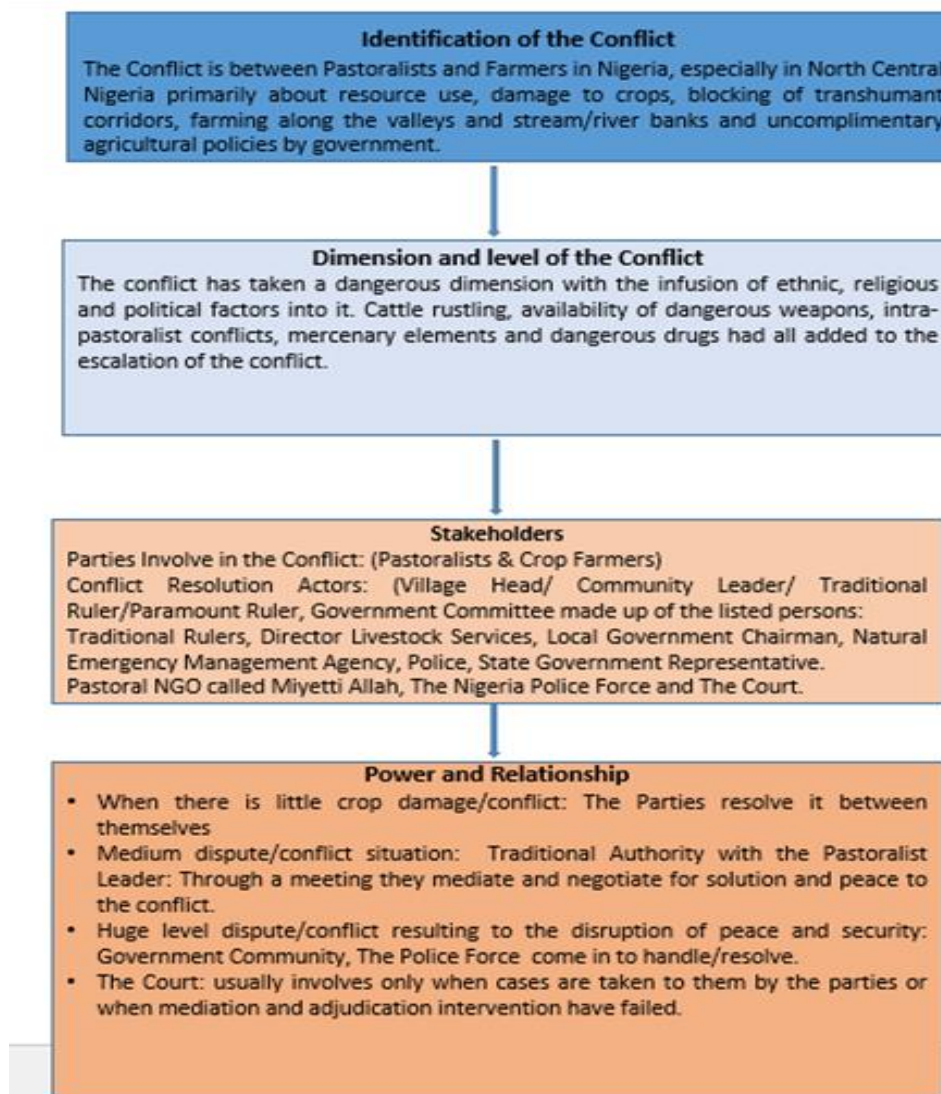


Figure 29: Conflict Diagnostic Map for the Research

Timeline of Recent Pastoralists and Crop Farmers Conflicts In Nigeria

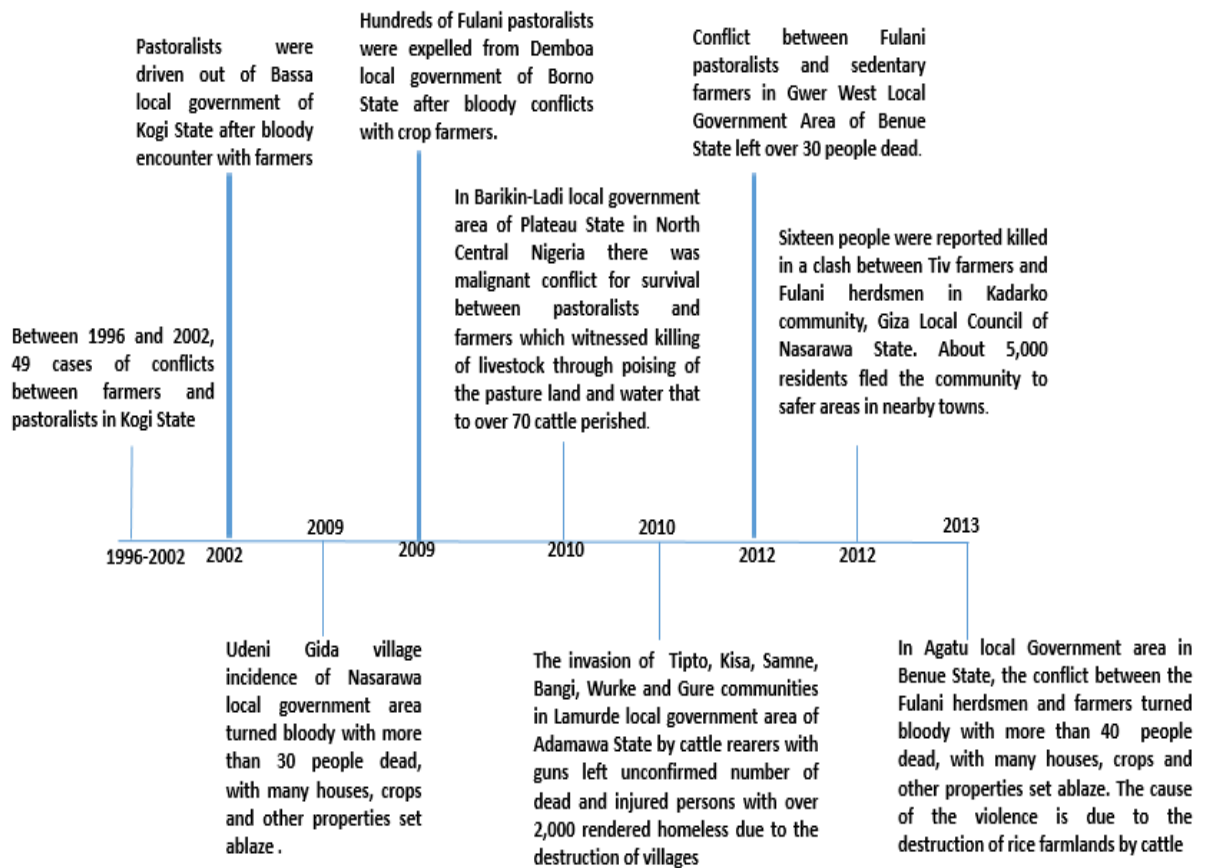


Figure 30: Timeline of Pastoralists

Pre-Colonial Era	Dates
Fulani Pastoralists arrived Nigeria from Senegambia Region	13 th Century
A sedentary urban class of religious scholars was well established by early	19 th Century
Usman Dan Fodio a Fulani Pastoralists Leader led a jihad to conquer most of northern Nigeria forming the Sokoto Caliphate.	19 th Century
The Sokoto Caliphate was the largest Africa State south of the Sahara at that time and the land tenure was organized according to Islamic Inheritance Law	19 th Century
By early twentieth century all land in northern Nigeria became State-owned under the British Colonial Rule with application for land rights for farming or grazing requiring government approval	20 th Century
The adoption of new irrigation techniques, and the sedentarisation schemes for transhumant pastoralists that accompanied the introduction of capitalism to West Africa Nigeria inclusive, disrupted the production symbiosis of Fulbe and farmers in addition to increasing the likelihood of conflict between them	20 th Century
The associated outcomes, (for instance, population growth, environmental degradation, and a gradual shift from exchange-based relations to marketization and commodification), intensified the pressure on natural resources and made them both more scarce and more desirable. As the production patterns were altered and the scarcity of natural resources and the competition for them increased, there was a corresponding growth in the potential for opposition between the interests of graziers and cultivators.	20 th Century

Land use conflicts in river basin and floodplain areas increase as degradation of rangelands, growing populations, and greater pressures on these areas to produce food, cause increased competition for land and water resources'	20th Century
The sedentarisation of some pastoralists, combined with the other changes in land tenure that colonial regimes undertook, weakened transhumant production system and the symbiosis with farmers. Sedentarisation, therefore, not only contributed to conflict between these groups but hindered mobility which, in many ecological zones, is greatly beneficial for pastoralist production strategies	20th Century
The enormous demand in the world market for the raw materials that were and are grown in West Africa generated an expansion and intensification of farming, frequently resulting in deforestation and the destruction of grazing reserves used by pastoralists.	20th Century
The switch in production meant major changes in the way that land in West Africa is utilised, and played a major role in the increased land and natural resource competition between the pastoralists and crop farmers of recent years	20th Century
Conflict and goal incompatibility between Pastoralists and farmers were further exacerbated directly and indirectly by changes in power dynamics, medical advances introduced by Europeans, and demographics	20th Century
The colonial governments obliterated the existing political systems, which maintained Pastoralist-farmer production symbiosis. These regimes tended to favour certain ethnic groups at the expense of others, and there was a general preference for farming groups, with pastoralists often being stigmatised as unruly and warlike.	20th Century
Consequently, such favouritism caused significant changes in the balance of power between them. This dynamic was an important part in the gradual decrease of available land for pastoralist production.	20th Century
The processes and changes in power balances between these groups brought about by the colonial administrations altered the cooperative system and generated farmer-pastoralists goal incompatibility and conflict.	20th Century
The colonial era further undermined the basis of pastoralists-crop farmers goal compatibility and the customary land tenure systems, which contained conflict management mechanisms, by introducing systems of conflict management based on formal European-style laws and courts which were ineffective.	20th Century
The pastoralists usually did not use the formal judicial arenas and procedures for handling resource conflicts established by colonial regimes. This group felt that they would probably not be satisfied with the outcome of judiciary procedures and preferred to migrate, or simply avoided the situation or dispute.	20 th Century
Colonialism brought new medical knowledge and practices to West Africa and both the human and the cattle (especially as rinderpest was brought under control) populations rose greatly, resulting in an increase in competition for land resources.	20 th Century
Post-colonial period	
The models of the colonial era were generally followed by post-colonial governments. For example, some of the features of the land tenure systems and land laws (including the bias against pastoralists, especially the nomads) instituted during the colonial period generally remained unchanged	21 st Century
The independent governments and development agencies continued several of the policies instituted by previous regimes such as nationalisation and privatisation of land, sedentarisation of nomads.	21 st Century
After colonialism, development groups, in conjunction with independent governments, have continued the articulation of the two modes of production and the impacts on farming and pastoral systems that increased the likelihood of conflict between farmers and herders.	21 st Century
The introduction of new irrigation technology and techniques into Africa through development projects allows the expansion of agriculture into relatively arid regions. In the 1950s and 1960s many farmers in the Sahel expanded north into semi-arid regions traditionally used by pastoralists as grazing lands, and this process has continued since then.	21 st Century
These has led to blockages, narrow and encroachment on pastoralists migration corridors and access to water which has equally led to their diversion out of migration corridors leading to crop destruction which results to conflicts between them and crop farmers.	21 st Century
Also communities presently sedentary pastoralists and farmers have conflicts over land for living. The villagers who are predominately farmers see the pastoralists as trespassers who have come to take over there land and as such give them ill treatment. These confrontations have also lead to conflicts between pastoralists and crop farmers.	21 st Century

Figure 31: Historical Profile of Pastoralists Arrival and Conflict with Farmers in Nigeria

6. DISCUSSIONS

6.1. Pastoralist Migration Corridor in Relation to Conflict Spots

Nomadic pastoralists migrate between January and March which is during the dry season in Udeni community which is the study area of this research. They migrate this period in search for pasture and water for their cattle. This practice is similar to what is found in literature. Nomadic pastoralists migrate through Udeni Gida community during the dry season and migrate back through the community during the start of the raining season. This practice is similar to practices in other States in north central Nigeria as explained by (Aregheore, 2009 ; Blench and Dendo, 2005). It was well explained in chapter 1 above.

Pastoralists' migration through the study area experienced several conflicts with crop farmers as a result of blockage, narrow and encroachment on migration corridors, farmland and watering point struggle/destruction. Also farm lands that used to be used by pastoralists for their dry season grazing are no more available because crop farmers now farm in dry season in this community as a result of irrigation farming. This has equally led to river banks been farmed by crop farmers resulting to blockage to the stream/river which has also affected pastoralists access to the river which they need to water their cattle.

These blockages, narrow and encroachment on the migration corridors and access to water has also led to the diversion of pastoralists out of the migration corridors/routes which leads to crop destruction which results to conflicts. This practices and situation is also found in other part of communities in Nigeria as described by (Gefu and Kolawole, 2002; Blench and Dendo, 2005 ; Ibrahim, 2014; Bello, 2013a; Jake, 2011).

Also in the community pastoralists and farmers have dispute over grazing land and the land where the pastoralists resides. The villagers who are predominately farmers see the pastoralists as trespassers who have come to take over their land and as such give them ill treatment. These confrontations have also lead to conflicts in this study area.

Causes of the Pastoralists and Farmers Conflicts

The result in Figure 24 reveals that majority of the causes of the conflicts between pastoralists and farmers are grazing land competition, crop destruction, irrigation farming, illegal settlement, stealing of cattle, migration corridor blockages/encroachment, attack on dependant and water point struggle. This conflicts usually happens along pastoralists migration corridors as gathered from the field work and from literatures Blench (2010), Bello (2013), Blench and Mallam (2005) and Okoli and Atelhe (2014) during January to March which is dry season period when pastoralists engage in their seasonal migration from northern Nigeria to southern Nigeria through the middle belt or north central States among which the study area belongs to which was also described by (Gefu and Kolawole, 2002).

Crop destruction by the cattle of the pastoralists is responsible for most of the conflicts between the pastoralists and farmers at the study area and other similar communities along the migration corridors which Gefu and Kolawole (2002) also discussed. Also crops waiting late harvesting are destroyed by cattle especially in dry season when pastoralists pass through. The cattle use their horn to up-root tuber crops that farmers left inside the ground for later date for harvesting. The following crops which are yam, cassava, corn, guinea corn, sorghum, e.t.c that are among the crops been damaged.

Also it was gathered in this research that apart from pastoralists' migration corridors been blocked, narrow or encroached. The competition for land and natural resources between farmers and pastoralists is also responsible for the conflicts between them such as the farmer needing

rivers/streams for irrigation farming and the pastoralists needing the same river/stream for watering their cattle where in the process crops planted close to the river/streams are destroyed and even water pumps and other equipment which are used to transport the water for the watering of the plants are destroyed by the cattle. This scenario was discussed by (Ibrahim, 2014; Blench and Mallam, 2003; Gefu and Kolawole, 2002)

6.2. Nigeria Pastoralism Laws and Policies in Relation to Land Use Right of Pastoralists

Informal Laws on pastoralism land use right in Nigeria

Dual systems use to be operated in northern States Nigeria as they practiced traditional Africa concept of communal ownership and also practiced Islamic concepts which operated on individual ownership. Okello et al. (2014) stated that pastoralists in northern Nigeria operated on Islamic inheritance law. Ega (1983) stated that the land tenure system in most of the northern States of Nigeria has an origin in customary law and that it is hard to separate Muslim doctrine from customary law in northern Nigeria.

Ega (1983) further explained how Muslim law is an imposed system of judicial administration and that in Hausa areas which is northern Nigeria under focus Muslim law is generally looked upon as obligatory. This situation has given land tenure a double ancestry in northern Nigeria.

Also Chimah Ezeomah (1985) stated that the basic tenet of customary land tenure in Nigeria is that land is owned whether it is under cultivation or lying fallow based on this relationships are built between the owners and the strangers in which case the farmers are the owners while the pastoralists are the strangers. The author further added that such rights have been in place for centuries before the arrival of pastoralist groups dated back to the 13th century and is still in place till these century.

Chimah Ezeomah (1985) also confirmed these when he stated that customarily land were loaned to nomadic Fulani as they are known in Nigeria on a non-permanent basis and when they leave, it reverts to the customary owner. Additionally he reiterated that historically pastoralists have not been active in landholding quest.

Formal Laws on pastoralism land use right in Nigeria

There are several laws which had been in place that facilitated pastoralism practice in Nigeria such as the Citizenship law, the 1978 Land Use Act and the 1965 Grazing Reserve Act, etc. However, there are gaps in the 1978 Land Use Act and the 1999 Constitution which has led to these conflicts. For example the Citizenship Section in the 1999 Constitution gives everybody the right to reside in any part of the country. This has made pastoralists to move anywhere and settle without proper consultation or acquiring of the land where they which to settle in a host community. Not taking into consideration that that land belongs to somebody either individually or communally.

Okello et al. (2014) attested to this also where he stated that pastoralists practiced social structure of common land use and that even if the opportunity arise for them to buy land so that they can possess outright ownership to the land they usually do not consider to.

Also the lapses of the 1978 Land Use Act which stated that any other land is free for all including for grazing 10 km within the radius of local government is administered by the local government while rural land is administered by local chiefs and is given freely to anyone that wants to use it for agriculture. This cannot be true because somebody has been occupying the land before the Land Use Act. Therefore land is not free, it has an owner so it is wrong for pastoralists to go and settle in somebody else community without taking proper process of acquiring the land before they settlement because somebody owns it despite it been empty.

This views conforms to Nuhu (2008) which stated that in traditional society in Nigeria land were vest in groups, extended family or the community while land assignment were on freehold basis by the chief in the community but the colonial era introduced individual ownership and thus two different

forms of land ownership were practiced at that time which are individual and communal land tenure but the introduction of the 1978 Land Use Act individual ownership was discontinued, and the State Governor(s) replaced the chief, family head or emir as the controlling authority behind land allocation.

Nuhu (2008) further stressed that the Land Use Act (LUA) operated along with previous land laws as there were no express provision that repealed earlier laws on the use of land. Section 4(a) of the LUA stated that “lands in the Northern States shall continue to be administered in accordance with the provisions of the Land Tenure Law until ‘other provisions are made in that behalf’ ”. This law precludes non-natives from acquiring title over land that are subject to customary law.

Before the enactment of the Land Use Act there were two forms of Land Tenure operating in Nigeria which are the freehold system and leasehold right. The freehold practiced in the south allowed individuals, families, communities to own and control land while in the North the leasehold right is granted by either customary authority or the Government.

In the same light Dyer (2008) stated that land was managed by Native Authority during the colonial regime which is a body at the village and district level equivalent to customary institutions which were usually controlled by Fulani. The system continued in the post-independence era with the Land Tenure Law of 1962 and later the enactment of the 1978 Land Use Act owing to several factors among which is the need for more land by the national government for development and to encourage agriculture.

Statutory and customary land tenure systems in the north and south of the country was swept away by the Land Use Act by nationalizing all land and vested them under the control of the Governor of each State who were given authority to manage land for the benefit of all Nigerians. However, access to pasture and water resources in Nigeria is still not clearly regulated. Pastoralists in Nigeria are not provided with any legal rights over land by the 1978 Land Use Act which was later entrenched in the Constitution of Nigeria. They still rely on their host communities for grazing lands.

Also pastoralists’ livelihoods are not provided with any supportive legal framework by the LUA. State Governors are empowered by the ACT to grant land for grazing purposes which it defined as agricultural land for growing fodder for livestock on the grazing area including in regard to their access and ownership to water points (Art. 50 (1)) Hoffmann (2004) stated that “Any occupier or holder of such land, whether under customary rights of otherwise howsoever, shall if that was on the commencement of this act being used for agricultural purposes, continue to be entitled to possession of the land for use for agricultural purposes as if a customary right of occupancy had been granted to the occupier or holder thereof by the appropriate Local Government, and the reference in this subsection to land being used for agricultural purposes includes land which is, in accordance with the customary law of the locality concerned, allowed to lie fallow for purposes of recuperation of the soil.”

Furthermore, the Nigeria Constitution which stated that every Nigeria citizens have the fundamental human right to freedom of movement in search of legitimate businesses. This position of the Constitution empowers pastoralists to move anywhere in the country in search for pasture and water for their cattle since cattle rearing is their legitimate business and source of livelihood as such they should be accommodated anywhere they go for either to settle or for seasonal grazing and watering of their cattle.

Similarly, pastoralists from neighbouring West Africa Countries were given grazing rights into other countries in the ECOWAS zone which includes Nigeria with reference to ECOWAS Transhumance Protocol of 1998 and the ECOWAS Protocol of Free Movement of Goods and Persons in West Africa. This cross-border free movement have equally facilitated the free movement of pastoralists in and out of Nigeria and have also contributed to the conflicts between pastoralists and crop farmers because most of the pastoralists from neighbouring countries are not aware of the migration corridors and thus wanders into places or farms they ought not to enter for grazing which have led to destructions of crops and water facilities.

In that light pastoralists from Burkinafaso or Malia can be seen in Nigeria grazing their cattle or a Nigerian Pastoralist in Togo or Ghana grazing his cattles. BELLO (2013) stated that ECOWAS Transhumance Protocol permitted pastoralists in the region to move across boarders in search of the pasture and water provided they fulfil the Protocol rules and regulations.

The 1965 Grazing Reserve Law was put in place to give legal backing to the acquisition of grazing reserves by the Regional Northern Government to acquire land and turn it into Grazing Reserves for grazing and agricultural purposes. The land Use Act of 1978 recognized and captured this law into the LUA and clearly categorized the land specific purpose and method and size of acquiring it.

Also the National Agricultural Policy of 1988 gave the specification of a minimum of 10% of the national territory would be used as grazing reserves for lease allocation to herders. And specified the level of involvement and authority of the various tiers of government. This policy was put together by the Central Government which is tailored towards protecting Pastoralism in Nigeria but the Policy has not been adequately enforced.

Awogbade (1987) stated the same and indicated that the “National Agricultural Policy of 1988 suggested that minimum of 10% of the national territory (about 9.83 million hectares, of which 20% was to be low lying fadama) would be acquired and constituted into grazing reserves for lease allocation to herders”. “This was a conscious effort by the Central Government to protect pastoralism, the policy has not been enforced. As a result, only about 313 Grazing Reserves covering a total of 2.82 million ha, had been acquired. Of these, about 52 reserves were gazetted by 1998, mainly in the Northern States of Nigeria”.

6.3. The Roles, Effectiveness of the Intervention and Strategies used by Conflict Resolution Actors/Bodies

Figure 26 identified the following persons and organizations as actors in the conflict resolution and their roles in resolving the conflicts between pastoralists and crop farmers in Nigeria which are Village Head/ Community Leader/ Traditional Ruler/Paramount Ruler, Government Committee made up of Traditional Rulers, Director Livestock Services, Local Government Chairman, Natural Emergency Management Agency, Police, State Government Representative, Pastoral NGO Miyetti Allah, Court and the Police. Blench (2004), Gefu (1992), Blench and Mallam (2005) and Ja`afar-Furo (2014) equally identified the same mentioned actors and their roles in the conflict resolution intervention between pastoralists and farmers which is similar to the fieldwork revelation.

Village Head/ Community Leader/ Traditional Ruler/Paramount Ruler

The result shown in figure 26 shows that the most active or mostly used actor in the conflicts resolution/mediation between pastoralists and farmers is the Traditional Ruler/Village Head/Community Leader/Traditional Ruler/Paramount Ruler depending on how it is called in a particular community but in the study area of this research it is called Traditional Ruler. In resolving conflicts between pastoralists and farmers in the study area, the Traditional Ruler are informed of complains about crop destruction or other form of destruction caused by pastoralists then the Traditional Ruler and some of his cabinet member deliberate on the reported case and also carry-out some investigation on the complaint, thereafter he sends message or invite the Head of the Pastoralists group in the community informing him about the farmers complains who then investigates to find out the offender. Then a formal mediation meeting is fixed where both the offender and complaint meet to resolve the issue with the Traditional Ruler presiding.

Blench and Mallam (2005) described similar situation in other communities where Traditional Rulers play a very important role in resolving pastoralists and famers conflicts. The author further discussed how Traditional Rulers utilize their position and power in resolving some of these conflicts with the combined effort of the head of pastoralists called (Ardos) in settling the conflicts whereby the farmer whose crops are destroyed ask for compensation which the pastoralists is not ready to honour. Both

the traditional ruler /village/district head and the Ardos put efforts in ensuring that a reasonable compromise is reached. Ibrahim (2014) also discussed how cases that involve crop destruction where the pastoralist agrees that he is guilty interpersonal agreement may be reached between the farmer and pastoralist. Compensation may or may not be paid depending on the agreement but when the crops that are destroyed are minimal and the pastoralists showed some concern only a warning is given.

However, if the dispute is very serious the traditional ruler /village/district head gets involved in the settlement of the problem such as traditional ruler /village/district head. Sometimes they utilize court like procedures such as calling for witnesses, carrying-out site inspection and independent assessment of costs of damages. While sometime they make arbitrary judgements and people occasionally accuse them of corruption (Blench, 2004).

Also Farmers Unions in the community at the study area deliberate on cases of conflicts between them and pastoralists which is something unique been done in this community which I did not find happening in my literatures search. They then come up with requests concerning the conflicts which are sent to the Traditional Ruler for on-ward communication to the pastoralists' leader for enforcement. When the pastoralists do not honour this request/decision from the Traditional Ruler then the Traditional Leader sends it to the Local Government Chairman to intervene in issue, which at times leads to Arbitration

Government Committee:

At the study area Government Committee was set up when the conflicts between pastoralists and farmers could not be handled by the Traditional Ruler with the assistance of the Pastoralists Head including the failure of the intervention of Local Government Chairman then a State Government Committee was set-up. The Committee utilizes the experiences and diversity of its composition which normally comprises different respected highly placed individuals and credible organizations such as the Traditional Ruler who are respected by their people, the Local Government Council Chairman, representatives of the Law Enforcement Agency and other representatives mentioned above. They are usually fair in their hearing as all parties are given opportunity to say their side of the story before decisions is reached. They do not consult any law document in the mediation proceedings. Government also through this Committee gave communities in the study area relief materials because the conflicts involved huge loss of lives and properties.

The above findings conforms to the position of following authors Ja`afar-Furo (2014) Blench and Mallam (2005) and Gefu (1992) who equally stated that when traditional ruler /village head/district head with the head of the pastoralists and the Local Government Chairman cannot resolve the pastoralists and farmers conflict, Government Committee are set-up to handle the conflicts which usually has composition of the following members Veterinary Officer in the Local Government Council, Ardos, Traditional Ruler, the Paramount Ruler in the area, and the District Police Officer. The committee mediates on the conflicts between the pastoralists and farmers especially when the conflict is in very large magnitude and is threatening law and order of the host community and neighbouring communities.

Pastoral NGO Miyetti Allah:

This research have also found out Pastoral NGO called Miyetti Allah is also a major actor in the pastoralists and farmers conflict resolution/mediation. Their roles and functions is to preach peace, to bring farmers and pastoralists together, to resolve conflicts between pastoralists and farmers. They usually meet with different stake-holders in the conflict resolution process such as the Traditional Ruler, Local Government Chairman, etc. with the aim to resolve the problems between farmers and pastoralists. They also engage in bringing the pastoralists and farmers together in resolving issues amicably. They also engage in enlightenment/educating pastoralists on the need for peaceful co-existence between pastoralists, farmers and the host community. Gefu (1992) also discussed how they

play role in conflict mediation process and also how they are involved in direct settlement of conflicts between pastoralists and farmers.

This research has similarly identified that they are active actor in Government Committees for the mediation of the conflict between pastoralists and farmers. At the study area they assist in tracing nomadic pastoralists who pass through during dry seasons in the advent of destruction. If they find the offending pastoralists they bring them back to pay for the damages they caused to the farmer but if they are not found then they settle the problem with the affected farmer themselves.

Also they set-up committee which responsibility is to go round to watch farms to find out where cattle have damaged crops. Then they trace the pastoralists responsible for the damage and ensure that compensation is paid to the farmer and the pastoralist disciplined. Okello et al. (2014) presented different view about Miyetti Allah which literally means 'thanks be to God' that was formed in 1972 with an aim to represent Fulani interests in official government circles, and a major objective to improve access to grazing land for pastoralists. IRIN (2014) also stated that the group is known as Miyetti Allah Cattle Breeders Association of Nigeria (MACBAN) and that they are Fulani nomad union and highlighted how they responded to State Government's Actions in reaction to treatment administered on pastoralists which they referred to as "barbaric and primitive"

The Police Force:

The Nigeria Police Force is also important actor in the conflict mediation/resolution, they are members in the Government Committee (Ja`afar-Furo, 2014; Blench and Mallam, 2005; Gefu, 1992). Also Cases of crop damage and cattle rustling are reported to them for intervention which most time leads to arrest and interrogations. The two parties are then invited to the Police State for questioning and subsequent prosecution. But the fieldwork revealed that the Police has not been effective in resolving or mediating this conflicts between pastoralists and farmers because most times they are corrupt and do not proffer fair solution because whosoever reports first is the complainant while the person arrested is the accused and most importantly they still have to investigate the issue and charge the case to court before enforcing the law. Thus making the process too long and most time justice is never gotten because the Police have to investigate and come up with facts, evidence and thereafter charge the case to court. Also IRIN (2014) described the failure of the Police in handling the conflicts between pastoralists and farmers at Udeni Gida Community the study area despite the deployment of large number of them they were unable to handle the conflict between pastoralists and farmers in the community.

Also Umar (2002) stated that the most detested method of conflict resolution is the police/court and as such it is rarely used. The author further stressed how the Police exploits and extort Pastoralists in the occurrence of conflict between pastoralists and farmers. Thus the Ardos advocate for cases to be handled by high-ranked Police Officers who they believe has more competence to handle conflicts rather than junior Officers who harasses Pastoralists.

Due to the seriousness of the pastoralists and farmers conflicts in Nigeria the Inspector General of Police set-up a Task FORCE on Cattle Rustling and Associated Crimes in 2014 as a result of serious security threat to the lives and livelihood of pastoralists, farmers and people of the community where this conflicts exits. Also the Nigeria Police is strengthening its capacity to carry-out its own mediation and render alternative dispute resolution services where and when considered appropriate in the conflicts between pastoralists and farmers as gathered from the Force Public Relations Officer.

The Court:

The court have not be put into use in the study area for resolving the conflicts between pastoralists and farmers because of the very long process involve in deciding on cases and is also very expensive. Umar (2002) stated how informal traditional mechanisms for conflict resolution are more functional in Zamfara and that both farmers and pastoralists prefer using traditional mechanism rather than using formal authorities like the court or police when it comes to the issue of conflict arbitration.

The Conflict Resolution Mechanism:

The fieldwork ascertained the conflict resolution mechanism been used in resolving the conflicts between pastoralists and farmers in the study area. Figure 28 showed that mediation is mostly used and is more effective in the study area. The reasons given it is faster to get justice and cheap. It also allows both aggrieved pastoralists and farmers to air their views/ grievances and agreeable resolution is reached with both parties in agreement. This conforms to Washington (2014) description of mediation as a mechanism where people in dispute meet with a neutral third party to resolve the conflicts. The mediators must be are unbiased, neutral third parties, who guide and follow a structured negotiation mechanism. Mediators provide parties with a safe and neutral environment that will facilitate effective deliberations. They should allow the parties to reach their own mutually agreeable solution.

In the Study area when conflict between pastoralists and famers occur, if the dispute is little the pastoralists and farmers settle it themselves but when it results to violent conflict the Traditional Ruler call a meeting where the Pastoralists Leader is invited and complains heard from both conflicting parties having been identified and invited to the meeting then the Traditional Ruler and the Pastoralist Leader collectively agrees on solution/compensation. Also Farmers Union in the community deliberate and they come up with a position on the conflict which is sent to the Traditional Ruler for on-ward communication to the Pastoralists' Leader for enforcement. When the Pastoralists do not honour the request from the Traditional Ruler then the Traditional Ruler sends it to the Local Government Chairman to intervene in issue, which at times leads to Arbitration. In very huge violent conflict between pastoralists and farmers Government Committee is set-up to resolve the conflict which they undertake through mediation mechanism.

They utilize the experiences and diversity of the composition of the Committee who normally are drawn from different professionals such as representative from the Law Enforcement Agency, the Traditional Ruler and Pastoralists Leader who are respected by their people, the Local Government Chairman, etc. They are usually fair in their hearing as all parties are given opportunity to say their side of the story before decisions is reached.

Similarly Blench (2005), Ibrahim (2014) and Gefu (1992) described that minor conflicts are settled between famers and pastoralists themselves but conflicts that cannot be resolved between them are resolved by traditional mediation or arbitrations by ward/village heads, district heads or the paramount ruler. Sometime grand rules are established with the Fulani and the farmers, so that if crop damage or other disputes occur, both sides are already aware of agreed procedure. Also when the conflict is beyond the competence of community leaders/traditional leaders and the head of the pastoralists, State conflict resolution committee are established with representatives drawn from Local Government Council, Security Agencies, farmers and Miyetti Allah (Pastoralists association) with the Director General of the Department of Local Government as the chairman (Blench, 2005; Ja`afar-Furo, 2014). Similarly Non-Governmental Organizations (NGO) such as the Pastoral Organizations called Miyetti Allah plays role in conflict mediation and are also involved in direct settlement of disputes through the assistance of law enforcement agencies(Gefu, 1992).

7. CONCLUSION AND RECOMMENDATION

7.1. Conclusion

The overall objectives of this thesis is to identify pastoralism laws in Nigeria in relation to land use right of pastoralists and to map some conflict spots along pastoralists migration corridors including the role played by pastoralists and farmers conflicts mediators/actors in resolving the conflicts in Nigeria. It was imperative for me to identify the root causes of the problem, the magnitude and the actors involved in the conflict. Thus the research examined the situation in Udeni Gida community which is a community situated in North-central Nigeria a region where pastoralists and farmers conflicts is very rampant in Nigeria. To meet the overall objective, three sub-objectives was addressed:

1. Identification of some Conflict spots along selected pastoralists' migration corridor
2. Investigate pastoralism laws in Nigeria in relation to land use right of pastoralist in Nigeria
3. Investigate the Roles of Mediators in resolving this land conflicts between pastoralists and farmers, how effective their strategies and intervention been.

The results from the first sub-objective show that pastoralists have established migration corridors in Nigeria as ascertained from literature and the participatory mapping exercise with pastoralists at the study area during the fieldwork. The spatial extent of the migration corridors and the period of the migration was obtained through the participatory mapping by the pastoralists. This migration corridors which are in the different axis (north-west and north-east) of the country from north to south have been in existence for centuries and have been used yearly by pastoralists. In recognition of this migration corridor or stock routes, in the past an agreement between pastoralists' leaders and local community authorities who were predominantly farmers was established known as a system of burti or migration routes/corridors. But in the 1970s, this system began to crumple as farmers increasingly felt they owned the land across which the cattle passed which led to blockages, encroachment and resultant conflicts between them.

In recent years pastoralists' migration corridors on both the western and eastern axis have been blocked, encroached and narrow due to the expansion of farms, rivers have equally been blocked due to expansion of fadama dry season agriculture which has led to destruction of crops and irrigation equipment that have generated lots of conflicts between crop farmers and pastoralists. The conflicts occur mostly during the dry season which is between January – March which is the period when pastoralists pass through Udeni Gida Community the study area of this research in search for pasture and water.

The magnitude of the conflicts is very great has it has serious effect on livelihood and economic situation on both the pastoralists and farmers as they both loss lives, properties, crops and cattle. The crops that are grown by farmers that are affected by these pastoralists and farmers conflicts includes a variety of annual crops among which are rice, sorghum, wheat, millet, cassava, maize, cowpea, soybeans, melon, groundnut, yam, vegetables and so on while the different species of cattle that are killed in the course of the conflicts are slow maturing Sokoto Red and lyre-horned White Fulani cattle. This conflicts has great effect on the nation as it affects both meat and crop availability in Nigeria.

The conclusion for this sub-objective are that the conflicts between pastoralists and crop farmers happens at dry seasons and close to pastoralists migration corridors as seen in figures 14, 15, 16, 17 & 18 and discussed in chapter 1, 5 and 6. The Participatory Map in figure 22 & 23 shows the spatial location of the farmers where the conflicts between pastoralists and farmers occurred and also the spatial location of the pastoralists' migration corridors which was drawn by pastoralists are along or close to the farms where the conflicts occurred.

The results on the second sub-objectives, investigate pastoralism laws in Nigeria in relation to land use right of pastoralist, shows that in the past the informal laws governing land tenure in northern Nigeria

is customary and Islamic inheritance law which was discussed in chapter 1, 2, and 6. The Islamic inheritance law governing land tenure in northern Nigeria had great influence in the pastoralists land use and accessibility through the Maliki code of the Sharia law and is divided into five broad categories which are Land held in absolute ownership by individuals (mamluka), State-owned land (amiriyya), the usufruct of umiriyya which may be granted by the ruler., common land (matruka); which is generally land close to settlements and used for common purposes such as grazing and wood collection, Deadland (mawat); land remote from a residential area that could be acquired by any individual for cultivation or building upon it, and Wakf- either private wakf (land dedicated to religious purposes) or territorial wakf (territories conquered by Muslims).

The reason responsible for this dual system in northern Nigeria is the integration of Fulani with Hausa ruling system in the Sokoto Caliphate after Usman Dan Fodio led a jihad that conquer most of the northern Nigeria State in 19th Century. The Sokoto Caliphate was the largest Africa State south of the Sahara at that time and land tenure was organized according to Islamic Inheritance laws while those States not conquered were practising customary law but by the early 20th Century all land in northern Nigeria became State-owned under the British Colonial Rule with the application for land rights for farming or grazing requiring government approval. The colonial regime imposed formal laws regarding land ownership/use rights which continued after their departure.

Thus the formal laws and policies in Nigeria that had effect on pastoralist land use right and accessibility are 1910 Land and Native Rights Proclamation (repealed), 1916 Land and Native Rights Ordinance (repealed), 1962 Land Tenure Law (repealed), 1965 Grazing Reserve Law, 1978 Land Use Act, 1999 Federal Republic of Nigeria Constitution (Citizenship Section), 1998 ECOWAS Transhumance Protocol and Nigeria Agriculture Policy 1988. This formal laws and policies were discussed in chapter 2 and 6. Some of this laws and policies brought about the nationalisation, privatization and commercialization of lands in Nigeria which brought about the acquisition of more land for the government for developmental purposes such as road construction, provision of social amenities/infrastructures and increased crop production which have led to the blockages, narrow and encroachment of pastoralists migration corridors and the privatization of land used for grazing purposes which pastoralists used to have unfiltered access to in the past because farmers now acquire land without any provision for overlapping pastoral land rights/uses.

Also the policies that brought about irrigation/fadama farming in northern Nigeria allows the expansion of agriculture into relatively arid region of Nigeria which have facilitated the expansion of dry season farming which have affected grazing lands used by pastoralists for their cattle seasonal grazing. This have equally affected pastoralists access to water points as farmers now farm along or close to river banks using irrigation equipment and in fadama areas. These policies facilitated major changes in the way that land in Nigeria is utilized and played a major role in the increased land and natural resource competition between pastoralists and crop farmers in Nigeria which have led to lots of violent conflicts between them and host communities.

Furthermore, the Grazing Reserve Law was promulgated in northern Nigeria in 1965 with the objectives of sedentaring pastoralism in Nigeria which is expected to transform pastoral production systems into market economies in Nigeria. The Law was put in place to give legal backing to the acquisition of grazing reserves by the Regional Northern Government to acquire land and turn it into Grazing Reserves for grazing and agricultural purposes. The Land Use Act of 1978 recognized and captured this law into the LUA and clearly categorized the land specific purpose and method and size of acquiring it while the National Agricultural Policy of 1988 gave the specification of a minimum of 10% of the national territory to be used as grazing reserves for lease allocation to pastoralists. The conclusion for this sub-objective are that the laws and policies identified has significant effects on the land use right and accessibility of pastoralists in Nigeria that have weakened transhumant mobility/production, increased competition for land and water resources between pastoralists and farmers that have led to violent conflicts experience in the country.

The third sub-objective investigated the roles of mediators in resolving the land conflicts between pastoralists and farmers, how effective their strategies and intervention been. Experts interviewed and literatures in this research identified the actors that resolved the land conflicts between pastoralists and farmers conflicts in Nigeria are the traditional ruler /village/district head, head of the pastoralists (Ardos), pastoral NGO Miyetti Allah, Government Committee made of the following members the Local Government Chairman, Veterinary Officer in the Local Government Council, the District Police Officer, etc. The conflict resolution mechanism they use are either mediation or arbitration while adjudication is rarely used

This study identified that mediation is the most used resolution mechanism used in resolving the conflicts between farmers and pastoralists because it is most effective, fast, cheap and allows all parties to air their views and grievances. Mediators do not refer to any formal and informal land use law when handling the land conflict cases between farmers and pastoralists rather they give all parties opportunity to hear their views through fair hearing meetings with the aggrieved parties and some of their members. The traditional Ruler of the community who are respected by the people then take decisions while the government committee utilize the experiences and diversity of the composition of the Committee who normally are drawn from different sectors/professionals in mediating on the conflict thereafter coming up with a resolution.

This research contributed to the overall objective of the thesis which is to identify pastoralism laws in Nigeria and to map some conflicts spots along pastoralists' migration corridors and the role played by mediators in resolving farmers and pastoralists' land conflicts in Nigeria. The spatial extents of pastoralists' migration corridors were studied and the temporal aspects of pastoralists' seasonal migration were also studied in relation to the conflicts between pastoralists and farmers in Nigeria including the roles played by the actors in the pastoralists and farmers conflicts in resolving the conflicts. Pastoralism laws in Nigeria in relation to land use right of pastoralist and the root causes of the conflicts were described. I concluded that effective land conflict resolution will improve land accessibility and land use for pastoralists in Nigeria with reference to the hypothesis of this study because when there is peace in communities along the pastoralists migration corridors pastoralists will have unfiltered access to pasture and water during their seasonal migration since during effective conflicts resolution pastoralists seasonal land rights would have been told to the farmers as such they will avoid blockage, narrow and encroachment into pastoralists migration corridors including avoiding dry season crop farming on pasture field used by pastoralists for their dry season grazing. Also during an effective pastoralists and farmers land conflicts proceedings, pastoralists will be educated to properly secure seasonal pasture lands from host communities and the registration of their seasonal rights on the land which will give them a strong legal position and security of access to the pasture land and also reduce conflicts with crop farmers.

7.2. Recommendations

This research is not in favour of the fire-brigade approach to conflict-management/resolution of the pastoralists and crop farmers' conflicts in Nigeria. This is because by the time you are trying to put out the conflict, substantial damages must have occurred. It is better to prevent conflicts from erupting than waiting to snuff it out after it has erupted. Therefore, my recommendations are aimed at the strategies of preventing the eruption of these conflicts. They are as follows

- All gazetted domestic and international pastoralists' migration corridors and grazing reserves in Nigeria should be re-traced and demarcated.
- Grazing reserves in Nigeria should be fully developed through the provision of water points, medical as well as welfare facilities for pastoralists.
- All existing land use laws associated with the accessibility and tenure security for pastoralists in Nigeria should be revisited to ensure that pastoralists seasonal land rights to pasture land are upheld and adequate laws to forestall encroachment of pastoralists' migration corridors introduced and enforced.

- Crop farmers, pastoralists and traditional authorities should be involved in all decisions pertaining to creation of pastoralists' migration corridors and grazing reserves, as well as in the settlement of the conflicts between pastoralists and farmers.
- Grassroots Security Committees comprising leaders of crop farmers, Pastoralists leaders (Ardos), traditional authorities and security agents should be set up in all the conflict flash-points to address the problem on-the-spot.
- The law prohibiting illegal possession of offensive weapons should be strictly enforced and offenders brought to book immediately.
- Pastoralists should never be allowed to establish temporary settlements (huts) inside the Fadama area. All pastoralists should use Fadama area from 7.00am and move out with their cattle to uplands at 6.00pm to their temporary settlements areas for night grazing daily.
- Fadama users (irrigation) to demarcate their plots with trees this gives physical protection to crops against livestock damage.
- Water sources for livestock should never be blocked for irrigation purposes such as natural streams, ponds or rivers in the Fadama area should be left open free of farming activities so that livestock and people can get direct access to them, this should include all water sources on upland areas also.
- The State Government should facilitate the opening up of all the pastoralists' migration corridors and demarcate them with survey beacons that will prevent blockage, encroachment and narrow of the corridors/routes.
- Mediators should be trained on mediation strategies and relevant land use laws and agricultural policies in Nigeria so that they would be able to follow a structured negotiation process and will also be able to educate pastoralists and crop farmers during mediation sessions their land use rights and restrictions as this will assist in preventing future occurrence of the conflicts between pastoralists and farmers as they would have been enlightened.

Also there is the need for further research in this topic preferably for PhD study so that there will be enough time to carry-out similar fieldwork activities in more communities and States in Nigeria so that a comparative case study approach can be used to understand pastoralists with their grazing practices and farmers with their cultivation practices that have led to the conflicts between them and how the conflicts have been resolved within at least 3 chosen communities.

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APPENDIX

Interview Questions in Relation to the Research Sub-objectives Form

Sub-Objective 1

1. Identification of some Conflict spots along selected pastoralists' migration corridor in Nigeria

Research Question 1

- a. Does pastoralist in Nigeria have an established migration corridor?
- b. Are there conflicts between farmers and pastoralists along the corridor?
- c. Where are these Conflict spots?
- d. What time of the year do these conflicts occur?
- e. What is the magnitude of these conflicts?
- f. Which migration corridors and agriculture lands will be overlaid with the conflict spots?

Answers to the questions above were gotten from Pastoralist and farmers using: Forum-group-discussion with Farmers and with pastoralists which also involved PGIS: to answer the research questions guided with a semi-structured Interview Form shown below:

Interview Questions Used

QUESTIONS

1. Are there conflicts between pastoralists and farmers in this community? Yes No
If yes. What type of conflict and cause of the conflict?

Type of Conflicts	Cause
1.	
2.	
3.	
4.	
5.	

2. Which of the following ways were the conflicts mentioned above resolve/mediated? Please fill as appropriate.

Conflict	Between themselves	(NGOs	(FBOs	Traditional Ruler	Government Committee	Court	Police	Other
1.								
2.								
3.								
4.								
5.								

3. Have you ever been involved in a conflict with pastoralists/farmers?

Yes No . If yes kindly give reasons for these conflicts:

I. -----

II. -----

4. Does pastoralist have an established migration route?

Yes No . If yes or no please kindly give reasons for your answer:

I. -----

II. -----

5 Are there conflicts between farmers and pastoralists along the routes?

Yes No . If yes please mention some of the conflict spots/location below:

6. What time of the year do the conflicts mentioned above occur?
 Please tick appropriately the months when the conflicts Occurs.

Conflict	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1												
2												
3												
4												
5												

10. Which resolution Mechanism were used in resolving the conflicts mentioned above between pastoralists and farmers. Please fill in appropriately how the cases were mediated/resolved:

Conflict	Mediation	Arbitration	Adjudication	Others	Explanation of what was done in the resolution/Mechanism.
1					
2					
3					
4					
5					

N: B others could be Police, between parties, etc.

11. What you think of the effectiveness of the resolution mechanism and outcomes of the conflict cases in focus?

Conflict	Effectiveness of the resolution mechanism and outcomes
1	
2	
3	
4	
5	

12. Does the host community play any role in the resolution mechanism?

Sub-Objective 2

2. Investigate pastoralism laws in Nigeria in relation to land use right of pastoralist.

Research Question 2

- a. What do the formal and informal laws say about pastoralists land use in Nigeria?
- b. Are there any legislation for Pastoralism in Nigeria in relation to land use right for pastoralists?
- c. Does Nigeria land law and property right have provision for temporary access right for pastoralists?

Answers to the questions above were gotten from Interviews with Experts such as Lawyers and Staff of Ministry of Agriculture (Livestock and Animal Husbandry Department) and from grey literature search such Nigeria Constitution, ECOWAS TRANSHUMANCE ROTOCOL of 1998, National Livestock Development Project Document, Nigeria Agriculture Policy Document, the 1964 Northern Region Grazing Reserve Law, etc. To answer the research questions guided with the semi-structured Interview Form, following questions were asked.

QUESTIONS

- What do the formal and informal laws say about pastoralists land use in Nigeria?

- Does Nigeria land law, property right or any other law have provision for temporary access right for pastoralists?

- Are there any legislation for Pastoralism in Nigeria in relation to right to migration routes/corridors and access to grazing areas for pastoralists

Sub-Objective 3

III. Investigate the Roles of Mediators in resolving this land conflicts between pastoralists and farmers, how effective their strategies and intervention been.

- a. Who are the actors that resolve these land conflicts within the selected migration corridor?
- b. What are the procedures/strategies these mediators employ in resolving the conflicts between
- c. Pastoralists and farmers? How effective has it been?
- d. Do these mediators refer to the formal and informal land use law when handling the land conflict cases between farmers and pastoralists?
- e. How have the conflicts been resolved by mediators?
- f. How have the conflicts been solved by parties involved in the land conflicts and the host community?

Answers to the questions above were gotten from Interviews with Experts such as Lawyers and Local Government Staff involve in Pastoralism and Land Use Conflict Resolution between Pastoralists and Farmers who are part of Government Conflict Resolution Committee, Members of Pastoralist NGOs called Miyetti Allah who plays important role in resolving the conflict between farmers and pastoralists. The Police Force PRO was also interviewed. To answer the research questions guided with the semi-structured Interview Form, following questions were asked

QUESTIONS

- What is your opinion about the conflicts between pastoralists and farmers in Nigeria generally and in Udeni Gida Community?

- Which resolution mechanism were mostly used in resolving this land use conflicts between pastoralists and farmers Mediation Arbitration Adjudication Others please specify: _____

- What do you think of the effectiveness of these mechanism in solving the conflicts?

Mechanisms	Most effective.	Least effective	Not-effective	
Mediation				

Arbitration				
Adjudication				
Others()				

Reasons for choices:

- In your opinion, what percentage of impact do you think these conflicts have on the lives of farmers and pastoralists? (in relation to crop damage, cattle, live, property)

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

- Who are the people/organizations involve in resolving these conflicts?

- What do you think about the procedures/strategies employed in mediating/resolving these land use conflict cases between pastoralists and farmers?

Research Design Matrix Table

Research Sub-Objectives	Research Questions	Data Collection Sources	Techniques of Data Collection	Techniques of Data Analysis	Anticipated Result
1) Identification of some Conflict spots along selected pastoralists' migration corridor in Nigeria	a. Does pastoralist in Nigeria have an established migration corridor? c. Where are these conflict spots? f. Can the conflicts be visualized on a map?	P-Mapping exercise with pastoralists on scale maps and satellite imagery Literature Review	PGIS Literature Review	ArcGIS	Pastoralists' migration corridors with land conflict spots map.
	b. Are there conflicts between farmers and pastoralists along the corridor? d. What time of the year do these conflicts occur? e. Which level of conflict resolution was the conflict resolved?	- Interviews - Focus group discussions with Farmers, pastoralists and some stakeholders in the community	PRA	Tabular Statistics	Time-Line Table of Conflict Occurrences in the study area Table showing Resolution Processes which will include Mediation Arbitration Adjudication
2) Investigate pastoralism laws in Nigeria in relation to land use right of pastoralist.	a. What do the formal and informal laws say about pastoralists land use in Nigeria?	Literature Review of Nigeria Constitution, land policy in relation to pastoralism in Journals and Books. Information from Ministry of Agriculture, Nigeria Natural Resources	Desk Research-Literature Review Interviews	Analysis of Findings Interviews Analysis	The position of Nigeria law in relation to pastoralism
	b. Are there any legislation for Pastoralism in Nigeria in relation to land use right for pastoralists? g. Does Nigeria land law and property right have provision for temporary access right for pastoralists?	Authority. Literature Search from Sources mentioned above.	Literature Review Interviews	Analysis of Findings Interviews Analysis	
3) Investigate the Roles of Mediators in resolving this land conflicts between pastoralists and farmers, how effective their strategies and intervention been	a. Who are the actors that resolve these land conflicts within the selected migration corridor? b. What are the procedures/strategies these mediators employ in resolving the conflicts between pastoralists and farmers? How effective has it been?	Conflict Mediation actors' institutions such as the Chief palace, land dispute courts, police stations, government land conflict committees.	Literature Review Interviews/questionnaires	Timeline/Historical Profile Conflict Map	List of the actors. Role of each actor.
	c. Do these mediators refer to the formal and informal land use law when handling the land conflict cases between farmers and pastoralists? d. How have the conflicts been resolved by mediators? e. How have the conflicts been solved by parties involved in the land conflicts and the host community?	Conflict Mediation Actors/ Experts	Interviews/questionnaires	Conflict Analysis	An assessment of the cases

Semi-Structured Interview Form Type A

Semi-Structured Interview

Serial no ____

For gathering information about PASTORALISTS & FARMERS LAND USE CONFLICTS IN NIGERIA
@ UDENU GIDA COMMUNITY LOCATED IN NASARAWA LOCAL GOVERNMENT OF NASARAWA STATE.

Dear Respondent,

I am Ossai Chuks, a post graduate student of faculty of Geo-Information Science and Earth Observation, University of Twente and I am carrying out a study on "Pastoralists Migration Corridors and the Role of Mediators in Solving Land Conflicts in Nigeria". This research is purely for academic purpose, the findings will be of immense benefit in the area of conflict resolution. Please I will like to have your view on issues relating to pastoralists and farmers land use conflicts in the State, especially at Udeni Gida Community. Kindly feel free to express your opinion and I assure you that your responses will be kept strictly confidential. Your honest response to the following questions will be highly appreciated.

TYPE A: FOR PASTORALISTS & FARMERS

SECTION A. SOCIO-DEMOGRAPHIC INFORMATION

1. Age Range 18 – 36 ____ 37 – 50 ____ 51 – 70 ____ 71 – 90 ____
2. Number of Participants: Male _____ Female _____

SECTION B. QUESTIONS

1. Are there conflicts between pastoralists and farmers in this community? Yes No
If yes. What type of conflict and cause of the conflict?

Type of Conflicts	Cause
1.	
2.	
3.	
4.	
5.	

2. Which of the following ways were the conflicts mentioned above resolve/mediated? Please fill as appropriate.

Conflict	Between themselves	(NGOs)	(FBOs)	Traditional Ruler	Government Committee	Court	Police	Other
1.								
2.								
3.								
4.								
5.								

3. Have you ever been involved in a conflict with pastoralists/farmers?

Yes No . If yes kindly give reasons for these conflicts:

- I. _____
- II. _____

4. Does pastoralist have an established migration route?

Yes No . If yes or no please kindly give reasons for your answer:

- I. _____
- II. _____

5 Are there conflicts between farmers and pastoralists along the routes?

Yes No . If yes please mention some of the conflict spots/location below:

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6. What time of the year do the conflicts mentioned above occur?

Please tick appropriately the months when the conflicts Occurs.

Conflict	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1												
2												
3												
4												
5												

10. Which resolution processes were used in resolving the conflicts mentioned above between pastoralists and farmers. Please fill in appropriately how the cases were mediated/resolved:

Conflict	Mediation	Arbitration	Adjudication	Others	Explanation of what was done in the resolution processes.
1					
2					
3					
4					
5					

N: B others could be Police, between parties, etc.

11. What you think of the effectiveness of the resolution processes and outcomes of the conflict cases in focus?

Conflict	Effectiveness of the resolution processes and outcomes
1	
2	
3	
4	
5	

12. Does the host community play any role in the resolution processes?

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Semi-Structured Interview Form Type B

Semi-Structured Interview

Serial no _____

For gathering information about PASTORALISTS & FARMERS LAND USE CONFLICTS IN NIGERIA
@ UDENU GIDA COMMUNITY LOCATED IN NASARAWA LOCAL GOVERNMENT OF
NASARAWA STATE.

Dear Respondent,

I am Ossai Chuks, a post graduate student of faculty of Geo-Information Science and Earth Observation, University of Twente and I am carrying out a study on "Pastoralists Migration Corridors and the Role of Mediators in Solving Land Conflicts in Nigeria". This research is purely for academic purpose, the findings will be of immense benefit in the area of conflict resolution. Please I will like to have your view on issues relating to pastoralists and farmers land use conflicts in the State, especially at Udenu Gida Community. Kindly feel free to express your opinion and I assure you that your responses will be kept strictly confidential. Your honest response to the following questions will be highly appreciated.

**Type B: For Experts and Staff involve in Pastoralism & Land use
Conflict Resolution between Pastoralists and Farmers**

SECTION A. SOCIO-DEMOGRAPHIC INFORMATION

1. Age Range 18 – 36 _____ 37 – 50 _____ 51 – 70 _____ 71 – 90 _____
2. Number of Participants: Male _____ Female _____

SECTION B. QUESTIONS

- What is your opinion about the conflicts between pastoralists and farmers in Nigeria generally and in Udenu Gida Community?

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- Which Resolution Processes were mostly used in resolving this land use conflicts between pastoralists and farmers Mediation Arbitration Adjudication Others please specify: _____

What do you think of the effectiveness of these processes in solving the conflicts?

Processes	Most effective.	Least effective	Not-effective	
Mediation				
Arbitration				
Adjudication				
Others()				

Reasons for choices:

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■ In your opinion, what percentage of impact do you think these conflicts have on the lives of farmers and pastoralists? (in relation to crop damage, cattle, live, property)

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

■ What do the formal and informal laws say about pastoralists land use in Nigeria?

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■ Does Nigeria land law, property right or any other law have provision for temporary access right for pastoralists?

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■ Who are the people/organizations involve in resolving these conflicts?

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■ Are there any legislation for Pastoralism in Nigeria in relation to right to migration routes/corridors and access to grazing areas for pastoralists

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■ What do you think about the procedures/strategies employed in mediating/resolving these land use conflict cases between pastoralists and farmers?

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