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Management Between Farmers And Pastoralist In Jere Local Government Area Of Borno State, Nigeria

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Abstract: This study investigated conflicts over access to natural resources between farmers and pastoralist in Jere LGA of Borno State Nigeria. Specifically, it examined existing mechanisms of access to land and water, explored the kind of events that trigger conflicts and the effectiveness of conflict resolution mechanisms. Focus Group Discussions (FGDs) and Key Informant Interviews (KII) were the main tools used to solicit information from four purposely selected sites. Results revealed that while farmlands can be accessed through various methods with full control by the user, grazing lands are considered common property resources and thus, pastoralist have little or no control over them. The seasonal movement by some pastoral groups and poor communication with other groups also seem to weaken pastoralist hold on land. Conflicts unfold due to mutual encroachment where farmers cultivate within demarcated grazing routes/reserves and pastoralists deliberately graze their livestock on cultivated fields. However, the pastoralists are often viewed as the culprits. Pastoralist lack of representation in the political arena and isolation from participation in decisions making affect rulings which are usually in form of fines imposed on pastoralists. Overall, it appears that pastoralists are more disadvantaged and being squeezed from all directions: physically in terms of space, socially and politically by lack of integration and representation and economically by being subjected to unjust extortions. The study revealed significant challenges to the sustainability of pastoralism as a livelihood activity. It is recommended that efforts to curb farmer-pastoralist conflicts should begin with well demarcated grazing routes and reserves because pastoralist need to have secure access to pasture and watering points and should be empowered with tenure rights over such resources. In the long run however, pastoralism hs to be a sedentary activity with full access to the resources that are required. The role of government in this regard is highly indispensable.

Key words: Natural Resources, Farmer, Pastoralist, Conflict, Nige

I. Introduction

Conflicts over access to and control of natural resources are a common phenomenon in areas where farming and pastoralism co-exist particularly in the semi-arid regions of the world. The continued expansion of cultivation and increase in herd sizes over the years has resulted in mutual encroachment with pastoralist and farmers now competing directly for access to same resources with attendant increase in incidences of conflicts. Such conflicts have reached alarming proportions and attained additional dimensions such as political and ethno-religious. Disputes that began as natural resource conflict over access have become framed in ethnoreligious terms and this has reconfigured farmer/pastoralist conflict in new and striking ways.

In Nigeria's semi arid zone (within which Borno State is located), dry season farming is a significant component of the agricultural system particularly along major riverbanks, and other low laying areas that are generally susceptible to flooding. Such water-logged areas are locally referred to as *Fadamas* and they are vital sources of water and pasture for livestock particularly during the dry season. Over the years, there has been a significant expansion of dry season cultivation in the *Fadama* areas and this has lead to tendencies among farmers to encroach upon grazing areas and vice versa with consequent increase in conflicts. While such conflicts were managed relatively successfully in the past through traditional land tenure systems, this is less and less the case today as a result of increasing human and animal populations, declining water and pasture availability and a consequent increase in the level of competition for these resources. The problem is compounded by the fact that natural resource policies with regards to access and management of such resources are weakly defined and enforced and in most cases subjected to multiple jurisdictions. This has wide implications for sustainable management of natural resources.

Indeed, the abundant literature on resource based conflicts indicates that such conflicts are often analyzed from a macroscopic point of view rarely drawing upon the view of all actors involved (Le Muer *et al.*, 2006). Empirical case studies that describe the whole dynamic of conflicts including the origins of tensions, dispute outbreak, the unfolding and eventually the settlement of the conflict are rare. In this regard, this paper argues that attempts to find lasting solutions to farmer-pastoralist conflicts must dwell on a clearer and deeper understanding of the productive variables and perspectives of all user groups. This requires an adequate

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understanding of the dynamics associated with resource usage, the interest of various users, as well as the traditional and modern mechanisms of access to and management of resources. This informed the need to undertake a micro-level investigation to gauge local norms and viewpoints of resource users to constitute the basis for crafting policy in a negotiated process.

The study therefore seeks to examine the existing mechanisms of access to and management of land and water resources; identify the type of events that usually trigger resource conflicts; identify the individuals, groups and institutions involved in managing conflicts and explore the effectiveness of conflict resolution mechanisms found in the area.

Conceptual Framework/Literature Review

To frame some conceptual referents to the current debate on resource-based conflicts, it is important to highlight the all-encompassing nature of the term "conflict" in the literature. For instance, a conflict may be viewed as an all-round negative phenomenon and it can also be seen as a normal occurrence or a catalyst of positive change. In general conflicts encompass a range of issues such as lack of convergence of goals, conflicting interest and expectation among social groups, intentional pursuit of actions or livelihood strategies that result in damage to others, and open confrontation resulting from conflicting interest or damaging actions (Means *et al.*, 2002). With regards to resource based conflicts, it refers to competition (whether violent or not) over natural resource and open conflicts between user groups. This paper dwells largely on these perspectives. Specifically, it encompasses the continuous and stalemated competition of contradictory interest (real or perceived) among different users. It also includes open confrontations between bearers of contradictory or competing interest through non violent means such as resort to judicial or customary mechanisms for natural resource and conflict management and finally to violent confrontations among user groups. These distinctions become particularly important for the role that formal and informal institutions play in different types of conflict situations. Such roles could essentially be through direct intervention of modern institutions or traditional arbitration mechanisms or indirectly through effective and equitable natural resource management.

Another dimension to the discourse on natural resources and conflicts is the phenomena of environmental scarcity which is also referred to as resource scarcity. This study draws from the concept as outlined by Lemuer *et al.*, (2006) which describes the declining availability of renewable natural resources such as fresh water, soil, and forest resources. There are three fundamental ways in which resource scarcity could occur. The first instance is demand—induced scarcity created primarily by increasing population growth with attendant increase in per capita resource consumption. Secondly, there is the supply-induced scarcity which describes environmental change resulting from depletion and or degradation of natural resource that occurs faster than it is renewed by natural processes. The third instance refers to structural scarcity which denotes unequal distribution and access to natural resources in which less powerful groups in the society relative to other groups are marginalized from equal access to particular resources. Resources are concentrated in the hands of a few elite while the rest of the population is subjected to greater scarcity. Such unequal distribution does not presuppose actual shortage if the resource were to be evenly distributed.

II. The Study Area And Methodology

The Study Area

Jere Local Government Area (LGA) with headquarters at Khaddamari, is one of the 27 LGAs of Borno State, Nigeria. It is located between latitudes 11° 40" and 12° 05" N; longitudes 13° 50"and12° 20" E occupying a total landmass 169 km² and a population of 211, 204 persons with an annual growth rate 2.8% (NPC 2008). The climate of the area is dry and hot for most part of the year with minimum temperature ranging from 15-20° C and maximum range of 37-45° C. The annual rainfall ranges from 500mm to 700mm characterized by high variability and intensity. The rainy season usually last from July to October with a relatively low humidity. This is followed by a long dry season in which competition for water and fodder intensify among irrigation farmers and pastoralist. The major river in the area is the Ngadda River which originates from the flood spills of the Rivers Yedseram and Gombole and flows through the area where overbank flows occur. This resulted in the formation of the Jere Bowl and the Ngadda Channel which has been identified as river channels sandwiched between a series of pond and marsh complexes (Nyanganji, 1994). Such environments generally referred to as Fadamas meaning lowland or floodplain or valley-bottom around a river. The soil is generally sandy with thorny shrubs and short grasses as the basic vegetation characteristics. The area is therefore well suited for irrigation farming and livestock rearing.

Primary production systems such as agriculture, animal rearing, and fishing are the major economic activities and as a result, majority of the people are peasant farmers, herdsmen and fishermen. The farmers carry out a varied mix of cropping systems practicing both rain fed and dry season farming. Most of the settled farmers are of the Kanuri ethnic group while Pastoralists in the area are mostly Shuwa-Arab, Fulani, Bodai, Koyam and Buduma. These ethnic groups are largely semi-settled pastoralist practicing some form of arable

farming while the greater number of their herds is with their nomadic tribesmen. There were many purely nomadic pastoralist of Shuwa Arab extraction living in the area but the gradual decline in water and pasture availability forced them to migrate elsewhere while some are forced to settle and seek other means of livelihood especially farming. Majority of these pastoralist tribes could therefore be referred to as agro-pastoralist. There are also the purely nomadic Fulani groups that come seasonally to the area from neighboring countries of Niger and Chad Republics in search of water and pasture known as the *Bokoloji* and *Udaa* pastoralist. Historical relationships between these groups indicate that they have long co-existed under the traditional negotiated system of shared management of natural resources, resolving conflicts between them through traditional conflict resolution mechanisms. In recent years however, such conflicts have peaked such that even where there are no direct clashes involving whole communities, periodic violent clashes between individual farmers and pastoralist increasingly take place leading to destruction of lives and property and general insecurity.

Methodology

Jere LGA was purposely chosen for this study because it is one of the largest irrigation areas in Borno State due to abundance of surface water sources that make it attractive for animal rearing as well. Indeed most resource based conflicts in Nigeria occur in floodplains or fadama areas usually underlined by shallow aquifers. The River Ngadda system is an important environmental feature that sustains many if not all socio-economic activities such as water supply, fishing, agriculture, grazing and recreation (Nyanganji 1994). Four of the twelve wards were purposely selected for the study. The selected wards namely Alau, Zabbarmari, Gongulon and Lawanti are marshy areas of intensive dry season farming that also attract a lot of pastoralist/semi settled pastoralist during the dry season.

The primary source of data for the study is qualitative in nature and included Key Informants Interviews (KII) and Focus Group Discussions (FGDs). One FGD was held in each of the selected wards with farmers (in Zabbarmari); pastoralist (in Alau); Women (Lawanti) and agro-pastoralist (Gongulon) each consisting of eight participants. Purposive sampling technique was used to select the respondents. Criteria for participation in the FGD required that the respondent must have been resident in the area for a minimum of 5 years. Five KIIs were conducted with individuals that hold positions of influence and other stakeholders that included a traditional leader, community leader among semi pastoralist group, head of farmer's association, security personnel, and Jere Local Government officials. The FGDs and KIIs were recorded with the permission of the respondents and transcribed discerning the key teams.

III. Results And Discussions

Socio-Economic Characteristics of Respondents

The demographic and socio-economic characteristics of the participants examined include age, education level, major occupation, and farm/herd sizes. The age group of the FGD participants in the farmers category indicates that they mostly fall within the age group of 20-50 which is a most active group involved in farming and activities. The pastoralist and women group included respondents above 50 years of age. In terms of education, illiteracy which is a common feature of household settings in rural areas is widespread. Indeed none of the pastoralist possesses any kind of formal education while the highest level of education indicated by 30% of the farmers is uncompleted secondary level education. However, 70% of the respondents indicated having some level of Islamic education.

The farmers are engaged in both rain-fed and dry-season irrigation farming and this may not be unrelated to the availability of water bodies which provide sufficient moisture for dry season farming. Farm sizes range from less than a hectare to four hectares. None of the female respondent's farm size is up to a hectare. The rain-fed farming could be described as subsistence based small scale farming in which about 70% of farm produce is consumed within the household while irrigation farming is largely on commercial basis which augments household income to a large extent. The pastoralists are also engaged in farming activities while the greater concentration of their livestock is with their nomadic folks. Herd sizes range from 25-80 cattle, sheep and goats. Majority of cattle is owned by men while women own the small ruminants and poultry.

Access to Farm Lands

It has been observed that an accurate characterization of the land tenure system is indispensable to any meaningful conflict resolution process. This investigation revealed an array of rules and regulations surrounding access to and use of natural resources in the study area. These rules define natural resource management in terms of access and control, who can gain access to the resources they need, under what conditions and for what purposes.

In a broader context, it has been observed that although the land use act of 1978 nationalized all lands and vested authority in the State to hold it in trust on the behalf of all, ownership and access to land in Northern Nigeria is an amalgam of government regulations, traditional practices, Sharia law and local practices which

vary from place to place. The study area is no exception and thus, FGD participants identified three methods of accessing farmlands namely through inheritance, direct purchase from government or traditional rulers and through rent. Although the sale of farmlands are not common, increase in value of fadama lands has meant that farmers now sale some portions of their lands. Thus, Farmlands can be purchased out rightly with the approval of the traditional ruler locally referred to as the *Bulama* or the *lawan* and a document which indicates evidence of purchase is produced. However, farm sales can also take place simply between the buyer and seller although the deal is described as carrying less validity than when the traditional ruler is involved, even if only as a witness. The study also revealed that women cannot directly purchase land without the involvement of a male relation who conducts the transaction on her behalf.

There are a variety of mechanisms for leasing or hiring land and they all seem to be for a very short period of time, commonly only for two or three years at a time. Leasing appears to be the easiest way of accessing farmlands in the study area. Traditional authorities are often involved in the rental agreement and the tenant must present the owner and the traditional ruler with a symbolic bundle of farm produce after every harvest to demonstrate that they are only the tenant. This serves to establish beyond question the ownership of the land. Women however can freely access farmlands from their husbands through lease without necessarily involving outsiders.

In the case of inheritance, the farmlands like the other properties of the deceased are divided equally between the male heirs while the female gets half of what her male counterparts receives in accordance with Islamic traditions. Overall, women have less access to land than men for a variety of legal and cultural reasons. For instance, women may be given access to family owned farmlands under customary laws but she may be deprived of this access through divorce or widowhood. Thus, despite women's key roles in agricultural activities, collecting and gathering wild products, and in the processing of dairy products, their access to land is still meditated via patrilineal systems and majority do not possess full ownership of land. In few cases where women own farms, it is directly controlled by their husbands, sons or other male family members. Where women are directly in charge, they reported that their fields are lowest in fertility and usually very close to settlements. The male response to these observations was that the women's fields had to be nearer to the settlements so that they can take care of other domestic responsibilities. Majority of the women therefore work on farms controlled by their husbands and the proceeds are collectively owned but under the control of their husbands.

Access to Grazing Lands

Despite the fact that the creation of grazing reserves and routes began as far back as 1965 in Borno State only a few grazing reserves and routes are fully demarcated, developed and fully operational. It was observed that both farmers and pastoralist in the study area do not see grazing as an activity that requires the same type of ownership as cultivation. Grazing lands are often identified as common property resources and so pastoralist have little or no control over them. The season movements by some pastoral groups seem to weaken their hold on land. In general, there are two groups of pastoralist namely the resident groups of pastoralist such as the Shuwa, Koyyam and Bodai who practice short-distance transhumance and have some representation within the traditional system and the migrant Fulani groups such as the Bokoloji, and Udaa that rarely establish enduring relations with other members of the communities. Consequently, rules bordering access to grazing activities are "negatively" defined by farmers as follows: pastoralist can access grazing resources provided they are not being used for any other "exclusive" purpose such as farming; pastoralist can graze their livestock on fallow land, on open areas and on farmland after crops and residues have been cleared. Furthermore, the apparent weak representation of pastoralist in political arenas and poor mechanisms of communication with other communities also reinforces their lack of secure access to grazing resources. In this perspective, natural resource policies that relate to grazing are observed to have weak foundations with little or no implementation of rules governing access and such scenarios have actually contributed to conflict situations. These rules do not define the marginal right of pastoralist with regards to their use of resources. The basic constraint with the use of grazing lands thus seems to be the inability of the pastoralist to institute rules governing access and use of grazing lands The Jere-Tungushe Forest Reserve through which the Jere-Gwom cattle route passes has been virtually overtaken by farmers due to abundant availability of cow dung particularly in the face of high cost in chemical fertilizers. The traditional rulers which in most cases have common tribal affiliations with the farmers are seen as responsible for allocating grazing reserves to farmers. In addition, boreholes and other types of livestock watering points are constructed without involvement of pastoralist in the management or rules to accessing these watering points. The deliberate encroachment on farmlands according to the agro-pastoralist is largely perpetrated by the Bokoloji and Udaa nomads that come from other places rather than the semi-settled pastoralist.

Discussions with the traditional rulers revealed that grazing reserves, shelterbelts and forest/game reserves are managed by forest guards that are appointed by the government while community plantations are

managed by individual members of the community under the supervision of the traditional ruler. Rules guiding the exploitation of forest resources and grazing reserves include the prohibition on cutting life trees, cutting of trees without the permission and restriction of farming activities. These regulations are however often not well defined and enforced resulting in the indiscriminate felling of trees and invasion by farmers. Women are free to harvest the leaves, fruits and branches of forest trees like tamarind (Tamarindusindica) dinya (Vitexdoniana) and kanya (Diospyrosmesiliformis) from the communal and government reserves.

Access to Water and Water Resources

Jere LGA and environs is drained by River Ngadda and its tributaries which provide water for domestic consumption, livestock, fishing and agricultural production. The traditional institutions are the main authorities that provide access to the waterlogged *fadama* lands and water bodies. They enforce rules governing access to water but do not however effectively monitor the water bodies. The statutory authorities appear to be less present and less involved in resolution of water management issues. Watering points are available at most grazing reserves but most of them are no longer functional while the functional ones are not operating at optimal capacity mostly due to poor management. In recent times, access to water is gradually becoming a problem due to its declining availability as a result of natural factors and the formal irrigation projects. The increase in irrigation activities based on small petrol pumps is also extremely common and widespread. These small pumps lift water from shallow aquifers in river channels to supply water to the largely commercial production of vegetables. In the same vein, semi settled pastoralist have also come together to purchase similar pumps to provide water for their livestock during the dry season. These initiatives are now widespread and have solved the water requirements of both farmers and pastoralist to a significant extend.

Events that Trigger Conflicts between Resource User Groups

Discussions on the causes of conflicts with the different groups revealed varied responses but in general, conflicts usually unfold when cattle graze cultivated farmlands and such incidences are reported to the farmer. The culpable pastoralist is identified by witness or by following cattle tracks and negotiations on compensation are negotiated. If the two parties agree with the facts, the amount to be paid by the pastoralist to the farmer is agreed upon but if the dispute is not clear, the two parties go to the traditional authorities. Again, if the judgment of the traditional ruler is not acceptable to either party, the case is further taken to statutory authorities.

Most often, traditional leaders negotiate the seasonal movements of livestock with pastoralist which must be restricted to gazatted grazing routes and assurance to prevent damage to crops. However, a number of changes have taken place such as the expansion of irrigation farming which has lead to tendencies among farmers to encroach upon grazing routes. Indeed the all-year round irrigation activities especially in the Jere Bowl is of particular concern to pastoralist since the irrigated fields not only encroach on grazing routes but also restrict animal access to water especially at the Milde Watering Point that used to accommodate 500-1000 cattle. According to the pastoralist, blocking access to water points and disrupting grazing routes tend to increase the incidence of crop damage that result not only in tension between farmers and pastoralist but also overgrazing on government water points. It must also be highlighted that although he National Agricultural Policy (1998) regulates that 20% of Fadama Lands need to be set aside for grazing, discussions with the farmers and indeed even the pastoralist are mostly unaware of the policy.

Consequently, pastoralist also began to stray on to farmlands resulting in a common type of conflict due to mutual encroachment. Although this is not entirely a new phenomena, increasing human and animal population pressures tend to exacerbate the problem. Most of the pastoral FGD participants also attribute the increasing spate of conflicts to decline in resource availability and environmental degradation linked to climate variability and change. Climate fluctuations imply an increase in pressure on available water resources and pastures. The drying of water bodies and lack of fodder are identified as major contributing factors to conflicts.

A local *Koyyam* community leader outlined the problems of pastoralist:

- The climate is getting drier; fodder and water are getting scarce;
- Tree cutting for fuel wood and bush burning reduced the amount of fodder available;
- Water bodies are constantly under cultivation, thus effectively denying water to herds;
- Inadequate/lack of grazing routes coupled with farmers continuously encroaching into gazette grazing routes.

The Village head of a Shuwa-Arab settlement in Alau area opines that threats facing pastoralist are aggravated by their seemingly weak representation in the political arenas and lamented: "We pastoralist are the orphans of the land".

On the other hand, the farmers seem to have a somewhat different view of the causes of conflicts. They observe that under normal circumstances, the traditional authorities would be informed of the arrival of the

migrant pastoralist by their leaders and farmers are given specified dates to clear their farm produce before herds are allowed access to farmlands. However, the pastoralists are always impatient and hardly await the specified period. The *Bokoloji* herders from Niger Republic and other far places do not even announce their arrival and usually invade the farms at night. These groups of pastoralist are constantly on the move reigning havoc on farms at night, and gone by the morning leaving farmers stranded with no culprit. The farmers do not attempt to go after pastoralist because they are believed to be heavily armed with knives, bows and arrows and always seem prepared for violent confrontations. A farmer described the situation:

"They evade and destroy our farms and if we complain, they kill us still"....

The researcher did not meet any of the migrant pastoralist but encountered a lot of negative story telling about these herders accused of deliberately allowing animals into cultivated fields, careless cutting of trees and violent behavior when confronted. It is interesting to note that the local based agro-pastoralists appear as fearful and not engaged with the migrant pastoralist as any other group.

The commercialization of crop residue in recent years coupled with decreasing farm yields has meant that residues now form a significant proportion of farm income. The farmers revealed that farm yields are getting lower each year and because they are also engaged in keeping livestock, they cannot afford to allow herders to graze their cattle even after farm produce and substantial portions of residues have been evacuated. Indeed, the farmers claim they also keep some livestock at home and would graze their animals on their farms instead if allowing pastoralist to do so.

Discussions with the women group revealed that there use to exist a symbiotic relationship between pastoralist and farmers whereby farmers invited pastoralist to settle on farms during dry season/after harvest to enable their farmlands obtain much needed field manure and in appreciation for the manure, the farmers gave gifts of grains and other produce to pastoralist. Such traditional arrangements are now dislocated resulting in conflicts. Probed further on why such relationships no longer exist, the women revealed that there use to exist a lot of water bodies along the River Ngadda and the Jere Catchment areas which have dried up due to decreasing rainfall and reoccurring droughts and as a result, pastoralist cannot stay for long periods of time due to lack of water. The remaining water bodies are also continuously under dry season recession cultivation or *fadama* farming thus restricting access to pastoralist.

Overall, the FGD discussions revealed that the frequency of conflicts was observed to be increasing over the years, the violent manifestations of such conflicts is also observed to be on the increase by the different respondents to the interviews. In the proceeding section, the role of institutions in the management of these conflicts is examined and the reasons why such conflicts are observed to be increasing are explored.

Institutions Involved in Conflict Management

Conflicts in the study area like in other parts of Northern Nigeria are subject to multiple jurisdictions broadly classified into customary (or traditional) and statutory (or modern) jurisdictions. Traditional institutions in Northern Nigeria since the colonial period have continued to exercise considerable powers particularly within the realm of natural resource and conflict management. With regards to access to land resources, they remain the "de facto" principal framework within which most systems of land tenure are articulated. The specific political structure is variable, but it always reaches down from the Bulamas (ward heads), the Lawans (village head), the Ajias (district head) up to the Emir/Shehu and the Emirate Council. The traditional institutions are therefore well presented at all levels such that no ward or village that does not have a head or chief thus indicating a very clear pattern of authority. In resolving disputes, village heads do not intervene in disputes until it is clear that the ward heads under their authority are unable to resolve them; while the district heads do not intervene until the village heads have exhausted the options available at their disposals. This has very important policy implications because it indicates that rule making can start from bottom. The rules of the traditional authorities with regards to access to resources are well known and clearly understood compared to statutory authorities. The people interviewed could describe the rules of their own community even where these appear not to be formally recorded in any way. FGD Participants were able to define and describe the hierarchy of powers that will resolve a dispute should it not be resolved by the level beneath. The traditional system of managing conflict involves imposition of fines or compensation on an offender for losses or damages. However, where the herder or the farmer disagrees with the compensation, the traditional rulers have no option but forward the case to the courts. The major concern with traditional authorities is the fact that they are often accused of taking bribes and making arbitrary judgments. Thus, because pastoralists are wealthier, they are often seen as wining conflicts while on the part of pastoralist, farmers are seen as the favored group of tribal affiliations.

A major exception to the general rule of subsidiary is found in cases where one side of a dispute takes the problem out of the traditional system into a parallel system, usually by complaining to the Police. This happens where the power of the traditional authorities are seen as weak in enforcing laws and judgments. The FGD discussions revealed that in cases involving migrant pastoralist who are continuously on the move, it is only the Police or the army that are capable of tracking the culprits and bringing them to justice. A community

leader described the scenario in the Kanuri Parlance: "Nguri zaman be sai k3ri zaman be", meaning: "a modern antelope can only be caught with modern hunting dog"... this explains the need to adapt to changing dynamics especially with regards to conflict resolution. According to FGD respondents, the traditional authorities are not adequately empowered to address these issues in an effective way.

However, with all things being equal, there seems to be consensus among farmer respondents that traditional institutions seem to provide better judgments in conflicts regardless of the fact that they are seen as weak in enforcing judgments. For one, the FGD participants view them as stable while successive governments have come and gone. State governments, LGs have moved on while the traditional institutions have remained. Secondly, traditional institutions are more easily accessible and almost everywhere in the communities unlike modern authorities. Thirdly, despite the fact that the legal powers of traditional institutions are in theory limited, they continue to enjoy widespread legitimacy in the eyes of many communities and thus continue to exercise real power. Indeed, in Mairi Kuwait district, most of the FGD participants revealed that they prefer the traditional authorities.

The women respondents on their part observe that the increasingly frequent practice of taking farmer-pastoralist disputes directly to the police rather than the traditional authorities has weakened the power of the traditional institutions. The easy access to the army in recent years particularly as a result of the Boko Haram insurgency has dragged the army into resolving resource conflicts. In most cases, the army personnel are seen as providing a quick response to the problem. According to the village head of Lawanti, this has aggravated the problem because the army is not part of the system and is not permanent in the communities. The reason for the army's presence is the Boko Haram insurgency crisis that is currently affecting the area. The woman leader in Mairi Kuwait described the behavior of reporting conflicts to the police and army as "damaging and undignified" explaining that such behavior will weaken the effectiveness of traditional authorities. Thus, as long as recourse to the police and the army is an option, it can undermine local rulemaking on the part of traditional authorities

In recent years, tribal associations have formed to represent/protect the interest cattle-rearers and the most popular of such groups in the area are the *Miyyetti Allah* a Fulani umbrella organization and *Al-Haya* which represents the Shuwa and Koyyam peoples. Discussions with a *Miyyetti Allah* leader revealed dissatisfaction with the lack of representation of the Fulani in the traditional system of authority and consequent exclusion from the management of land and water resources. Although the Shuwa-Arabs appear to enjoy a degree of representation, many others, particularly the more nomadic do not have any foothold in the informal systems of governance. He complained that if the people of Alau village do not like the village head, they can organize themselves and present their case to the district head or the Emir who can in turn remove the district head but the Fulani do not have that kind of opportunity. If they are unsatisfied with the district head, nothing happens because Fulani "*Basu Kuka*" (they do not take their problems further). As earlier mentioned, all these indicate the weak representation of the nomadic groups in the helm of affairs.

Statutory/Modern Authorities

The FGD participants identified different groups that intervene in conflicts within the various structures of governance. The Police and the Army which are arms of the Federal Government intervene in conflicts over resources. The State Government and the Jere LGA council also intervene in the management of resources and resolving conflicts between resource users. The presence of these different tiers of government appears to be limited with relatively few staff presence and this implies that the capacity of government to enforce rules is limited. There are also series of overlap between them. Consequently, the rules of statutory authorities appear to be less understood and in most cases, the presence of external authorities such as the army leads to confused overlaps between different levels and types of authority. The use of water resources for instance is subject to both local and state government regulations and this inevitably leads to some confusion about what rules to apply. Where there is occasional enforcement of government prerogatives usually by the LGA, they seem to be motivated by rent-seeking concerns. This is both formal as in the case of LGA's revenue generating activities and informal as in the case of tree-felling and other such fees being "pocketed" by government employees.

Where the traditional authorities fail to settle conflicts between pastoralist and farmers, such cases are often referred to the Police, the army or the courts. In most cases, the settlements involve fines imposed on the pastoralist. There are also instances of extortion of the pastoralist by the police sometimes in connivance with farmers.

IV. Conclusions And Recommendations

From the study, what appears obvious is the central issue of competition between different resource users and institutions in access to and control of scarce and fragile natural resources in the context of institutional pluralism regarding existing policy and norms. As such, conflict resolution in most cases is mainly

geared towards calming down the situation and providing temporary solutions rather than totally solving them. This partly explains why conflict situations continue to reoccur.

It is obvious from the discussions that pastoralism as a livelihood activity is faced with a lot of challenges. The search for water and pasture is a continuous struggle particularly in the face of climate change and declining resource base. Pastoralist lack of representation in the political arena and isolation from participation in decisions regarding resource management also hinders the effective management of natural resources and indeed contributes to conflicts. From the observations of the survey, it appears that the pastoralists are being squeezed from all directions: physically in terms of space, socially and politically by lack of integration and representation and economically by being subjected to multiple extortion.

Efforts to curb farmer-pastoralist conflicts should therefore begin with the establishment of well demarcated grazing routes and reserves. Pastoralist access to water points should also be clearly defined. Since flash point of every farmer-pastoralist clash can be traced to encroachment of farmlands to grazing routes and vice versa, pastoralist need to have secure access to pasture and watering points and they should be empowered with tenure rights over such resources. Indeed, migrant pastoralist must be included in rule making because from this study, they do not appear to have any form of representation in local governance. A religious leader in the community suggested going back to the olden days when every village had a community grazing area at its backyard known as Buri. Most of the Buri were located next to towns where pastoralist can take their livestock in the morning for grazing and return them home in the evening. This appears like a form of sedentarisation of pastoralist. According to a religious leader, Jere LGA council should be directly involved and take charge of the initiative while it seeks support from the state government. A Hausa woman leader sees an opportunity for better management in a situation where: muma mu nome, suma susamu fili...a tura shinkafa kadan, a tura gonaki kadan; suma su samu fili.... (We should reduce the size of farmlands and create patches for livestock grazing; Let there be room for co-existence). This is a call for an integrated approach to resource use that takes into consideration the needs of all users.

Conflict resolution measures such as sensitization, advocacy and dialogue with all the stakeholders on a sustained basis could assist in resolving farmer-pastoralist conflicts. Overall, local norms and the different resource user's viewpoints should constitute the basis for formulating policies in a negotiated form and the rights pastoralist must be recognized by all to ensure equity principles. In the long run, pastoralists need to have some kind of tenure rights over resources.

At the policy level, a bill to enact an act for the establishment of the National Grazing Route and Reserve Commission was sponsored as far back as 2011 at the National Assembly. The bill seeks to clearly demarcate boundaries for cattle routes and reserves so as to eradicate or at least reduce incidences of these clashes.

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