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Farmer-Pastoralist Conflict in West Africa: Exploring the Causes and Consequences

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Abstract

The West African sub-region has earned reputation as a home of bloody civil wars. Paradoxically, the prevalence of *high-intensity conflicts* (HIC) or complex political emergencies (intra-state wars, inter-state wars, and insurgencies), which engulfed the region in the 1990s, has obscured an equally important form of conflict: *low intensity conflicts* (LIC). So far, a significant proportion of intellectual and policy energy has been channeled on the former, as buttressed by the intellectual paradigm of "resource war" theory, and a social and political praxis in the form of humanitarian intervention in Sierra Leone and Liberia. In this article, we seek to fill the gap in the literature and policy discourses by drawing attention to farmer-pastoralist conflict as an example of *low-intensity conflict*. The article first engages recent theoretical and policy debates. Based on this, it explores the causes and consequences of farmer-pastoralist conflicts. It also traces the history and ecology of the conflicts, and discusses their repercussions. The article concludes that while it is difficult to establish a single explanatory variable responsible for low-intensity conflict, it is apparent that social and environmental factors act in tandem to perpetuate it.

1: Introduction

The West African sub-region has been a theatre of resource conflict involving sedentary farmers and mobile pastoralists. Against the backdrop of environmental degradation, resource scarcity, demographic change and political instability, the region perhaps demonstrates elements of 'the coming anarchy' (Kaplan, 1994). Farmer-pastoralist conflict is one of the key manifestations of this anarchy, and this is deeply rooted in the history, ecology and political economy of the region. Livestock is the primary means of livelihood

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for over 12 million people in West Africa (Nura, 1996). Over 70 million people in the same region also depend on livestock and livestock-related enterprises for their livelihood (Nura, 1982, 1983, McDowell and DeHaan 1986, cited in Nura, 1996). The West African livestock sector is dominated by traditional systems of production, processing and marketing; and the nomadic and semi-nomadic pastoralists hold the large proportion of the cattle, camel, sheep and goats. The pastoralists in the West African sub- region operate within an expansive geography, oscillating between their major base in the semi-arid north during the rainy season, and the wetter south during the dry season. Throughout West and Central Africa, the nomadic and the semi-nomadic pastoralists move within and across countries principally in search of pasture and water for their herds, and in the process, contact with settled crop farmers is inevitable.

First, the pastoralists have to move across, and graze on farmlands that belong to crop farmers. Secondly, pastoralists require the calories produced by crop farmers, much as the crop farmers also often require the protein and dairy products produced by the pastoralists. According to Monod (1975) "no nomad can exist for long without contact with sedentary people." Monod also observed that even the Tuareg nomads of the Sahara maintain contact with oasis dwellers. Thus, pastoralists and crop farmers are intertwined—sharing land, water, fodder and other resources. As a result, there are several problems bordering on the relationship between farmers and pastoralists, foremost of which is the perennial conflict over resource use. For example, in the two major livestock corridors of Nigeria (the northwest and northeast), conflict between crop farmers and pastoralists have become particularly acute in recent years. It has been a recurring social problem for many decades but 'in recent years, the activities of pastoralists who move with arms usually in large groups and who commit intentional crop damage has added another dimension to the conflict' (FACU, 1999:6).

In this paper, an attempt is made to explore the context, and highlight the peace and security implications of the persistent resource-use conflict between farmers and pastoralists in the West African sub-region. The paper attempts to draw from the various studies on the conflict across West Africa, citing specific findings related to countries such as Nigeria, Niger, Senegal, Benin, Mali etc., as well as other countries in the region such as Cameroon and Sudan. However, though the paper draws from specific relevant examples across the region, its objective is to present a more generalized synthesis of the problem, considering the similarity in the ecology, as well as the pattern of farmer-pastoralists interaction in the region. The paper is divided into six major sections: I) introduction; II) conceptual definitions and theoretical debates; III) historical overview; IV) exploring the causes of the conflict; V) implications for regional peace and security and VI) conclusion and recommendations.

2: Conceptual Definitions & Theoretical Debates

2.1: Pastoralism

According to Azarya (1996), pastoralism refers to an economy that is based on raising livestock, which could be undertaken by sedentary or nomadic groups. Nomadism, on the other hand, refers to the extent of spatial movement of the groups in question. Thus it is

generally acknowledged in the literature that the question of pastoral production is conceptually different from the extent of residential mobility. Extending this line of argument further, some researchers like Salzman (1972) have emphasized that it is possible to have a multi-resource nomadism, that is, mobile groups who may combine cultivation, hunting, gathering, sale of labour as well as livestock herding. Pastoralism, on its part, involves management of domesticated animals from which food is extracted and it can also be carried out from a fixed location. While nomadism and pastoralism are not necessarily mutually inclusive, it is important to note that nomadism represents an integral social, political and environmental dimension of pastoralism. It represents the technique and technology of pastoralism, because, it is a movement among others:

> To avoid wide range of hazards in the social and physical environment, an option not normally available to agricultural people who are tied to their agricultural lands and their stored agricultural products. Pastoralists may move with their herds to avoid insects and diseases; to reduce competition with other groups; and to avoid would–be authorities (Dyson-Hudson and Dyson-Hudson, 1980:17-18).

2.2: Sedentary crop farming

Crop farming is practiced by *sedentary farmers* who are defined as 'farmers living in permanent settlements gaining their livelihood mainly from crop production, with domestic animals providing supplementary income' (Hussein, 1998). Lowland dry farming systems are thus crop-livestock production systems occupying around 10 per cent of the world's dry lands and supporting 10 times the number of people that live under pastoral production systems. In such environments, unreliable rainfall often creates acute shortage of food and unless livestock are few and integrated closely with crop production, overgrazing may occur and add to environmental degradation (UNRISD, 1997). However, it must be noted that sedentary cultivators are also "stock breeders" or "herders"; and just as many stock breeders or "herders" are also, to some extent, "farmers". Thus the links between "farming" and "herding" is a continuous rather than a discrete one. Also, while it may appear paradoxical, the emergence of pastoralism as a specialised economic activity was actually enhanced by the development of agriculture (Bonte and Galaty, 1991). Agriculture made it possible for the development of a regional system of complementary exchange between pastoralists and cultivators.

2.3: Environmental/resource-use conflict

A core concept in this paper is *environmental conflict* sometimes also used interchangeably with *resource use conflict*. Environmental conflict has been variously defined and debated. Baechler (1999: 279-280) presents a very comprehensive definition of this concept based on an international research project, which 'focused on the interrelationship between environmental degradation, mal-development and violent conflict' (p.85). This project was called the "*Environmental Conflicts Projects*" (ENCOP) covering 40 different area studies including countries in West Africa such as Nigeria and it adopted the following 'working definition' of environmental conflicts:

> Environmental conflicts connote environmentally caused *violent* conflict or *war*. Environmental conflicts manifest themselves as political, social, economic, ethnic, religious, or territorial conflicts, or conflicts over resources or national interests, or any type of conflict. They are traditionally conflicts induced by environmental degradation. Environmental conflicts are characterized by the principal importance of degradation in one or more of the following fields: overuse of renewable resources; overstrain of the environment's sink capacity (pollution); impoverishment of the space of living. Violence occurs if and when actor (a) discriminates against actor (b) or several actors (b, c...) in terms of access to renewables the actors request or depends on. Environmental conflicts are rebellions against discrimination within the context of transforming society-nature relationship.

A fundamental problem with the ENCOP conceptualisation of environmental conflict lies with the limitation of conflict to 'violence' and 'war'. While such limited definition might be operationally useful within the context of their study, it fails to properly address the sociological meaning of the concept. Environmental conflict or resource-use conflict between farmers and pastoralists, for instance, is by any definition, a *social conflict*. Social conflict generally implies an interaction between groups in a competitive setting and such interaction need not be 'violent' or transforms into a 'war' before it is considered as a conflict. According to Hocker and Wilmot (1985), conflict is 'the interaction of interdependent people who perceive incompatible goals and interference from each other in achieving those goals'

In this context, resource conflict is simply operationalized in this paper as the interaction between two or more interdependent resource users, in this case, between crop farmers and pastoralists over common environmental resources including land, pasture, crop-residues, livestock passages (*burtali),* and water points (boreholes, wells , streams etc.). Resource use conflict arises from competition and conflict of interest and can be violent or non violent, and in this paper, both violent and some non-violent conflicts are considered. Violent conflict is defined as conflict with 'violence of a physical nature,' (Hussein et al 1999:401), in order to distinguish it from non-violent conflict, which also manifest from conflict of interest and competition. In this conceptualisation, 'non-violent outcomes' of conflict of interest and competition over resources include institutional rules defining categories of inclusion and exclusion to natural resources; migratory avoidance strategies adopted by herders to keep away from zones of intense competition with farmers and both farmers and herders diversifying into multiple sources of livelihood. Other outcomes include alliance building between farmers and local herders to check resource exploitation by external actors and litigations/legal actions taken to define use rights and or obtain compensation for crop damages. Resource-use conflict can have both positive outcomes (for example, when it leads to the development of new institutions, new rules, and the empowerment of disempowered groups) and negative outcomes (for example, destructive violence, social breakdown etc.).

Blench (1997, 1998) while not defining what resource conflict means, provided a very broad and useful classification of resource conflict in semi arid Africa. He based his classification on two general arenas of conflict namely *point* and *eco-zonal* resources. Point resources are defined as resources such as mines, large farms and reserves while eco-zonal resources refer to the patchy resources of the semi-arid region. Conflict between pastoralists and farmers is a classic example of conflict over eco-zonal resources. He notes that this conflict is the most

geographically spread and dominant in the literature. Other sources of resource conflict may be locally significant but are tied to point resources such as mines, game parks or infrastructure projects.

2.4: Theoretical Debates

There are several theoretical explanations of resource conflict between multiple resource users. Some of the most common and widely cited theories include those of Hardin's *The tragedy of the commons theory* (Hardin, 1968, 1988*)*, which is perhaps the first, most influential and controversial theory on range-land tenure and resource conflict. This approach, developed by Hardin in the 1960s, held that indigenous common land tenure systems in Africa encouraged the degradation of natural resources. Hardin argued that overstocking and degradation were inevitable as herders held animals individually while the range was unregulated common property. Ostrom (1990), summarizing Hardin's theory, argued that the expression tragedy of the commons has come to symbolize the degradation of the environment as a result of many individuals using scarce resources. Another equally important theory is the *environmental scarcity theory* proposed and developed by Homer-Dixon.

This theory, articulated best in the works of Homer-Dixon (1991, 1994, 1995, 1999) and Gizewski (1997) attempts to link conflict between multiple resource users to increased tension between these groups resulting from growing vulnerability and insecurity of their livelihoods. It considers conflict between multiple resource users as an inevitable outcome of the competition for scarce natural resources to achieve security of livelihood. Homer-Dixon (1994) argues that environmental change, population growth and unequal social distribution are the three main sources of scarcity, which leads to violent conflict. In this context, Homer-Dixon also considered the political economy of resource distribution, contending that 'the first two (sources of scarcity) are most pernicious when they interact with unequal resource distribution'. Nonetheless, the environmental scarcity theory has received widespread scholarly attention, including those who have critiqued it from the perspective of the political economy of scarcity.

2.5: Theoretical perspective: The political economy of scarcity and resource conflict

The *greed* versus *grievance* theoretical debate, articulated in the works of Collier (2001), was developed to explain wider processes of conflict including civil wars; and seriously questioned the role of scarcity(*want*, *grievance* etc.) in conflict causation. Collier argued that conflicts were related to proxies for *greed* (economies based on primary commodities and large number of poorly educated young men) rather than proxies for *grievance* (inequality, lack of political rights, etc.). In his view, the real drivers of conflict are thus the possibilities of predation and for 'doing well out of war'.

However, a well-grounded critique of the scarcity thesis has been elaborated earlier in the works of Baechler, 1999; Hilyard, 1999; and Suliman, 1999. Baechler, for example, contends that there is no direct causal link between scarcity and conflict, especially violent conflict. Explaining it within a broad framework of 'society-nature relationships', he posits that the common interest of two or more actors to use a plot of land, for example, automatically includes the competing interests of who uses it, why, how, and probably when. He claims that a combination of common and competing interests consequently lead to the

transformation of nature, which, in turn, affects and transforms the relationship between the users as well. 'Nonetheless', he notes, it is 'only in exceptional cases or at some turning points in history the competing interests dominated the common interests to the degree that the "running together" of key factors intentionally led to violent struggles over access to resources in defined areas'. The domination of common interests by competing interests results from the scarcity of natural capital and/ or the breakdown of established regulations over access to resources.

The scarcity of resources is neither always "natural" nor does it automatically lead to conflict between resource users. Several scholars have elaborated this point further. There is ample evidence to show 'that scarcity has always been an elementary and ever present-condition of existence throughout human history' (Baechler, 1999). Episodes of harvest failure and shortages brought about by warfare and social and environmental dislocations characterized all historical epochs (Hilyard, 1999).Citing Cohen (1977); Baechler argues that common as well as competing interest of actors over the use of natural environment is an enduring fact of human life. 'Hence, conflicts over scarce environmental goods are not at all a new phenomenon; they form an intrinsic part of dialectical interactions between human beings and nature. People in all cultures have tried to overcome resource scarcity, each in their own way by using their societal and instrumental possibilities' (Baechler, 1999; Cohen, 1977). Some post-modern critiques question the whole notion of scarcity especially when it is linked to environmental resources arguing that nature is not 'scarce'. Rather, scarcity is a matter of definition and a man-made phenomenon, connected to factors such as power politics and distribution as well as to the drawing of boundaries and to international politics. It can be noted that this point bears direct relevance to the contemporary problem of 'resource scarcity' in many areas of the world including West Africa.

Studies by Lattimore (1940, 1962) among others have shown that boundaries and territories have never had any meaning to nomadic pastoralists' property rights. Writing of Mongol tribes, Lottimore pointed out that no single pasture would have had much value to them because it soon would have become exhausted. The pastoral nomads, driven by what Lottimore called 'the sovereign importance of movement' wandered about herding their livestock. The case against 'scarcity' is therefore, first and foremost, an ontological one. Scarcity would not have existed for pastoral nomads if territories and borders have not been invented to exclude them, and hence, in the process bring them into direct conflict with other resource users particularly farmers. The formation of modern states encapsulated nomadic pastoralists within fixed, artificial boundaries. By making a group that was historically mobile new prisoners of limited spaces, the modern state system has rendered nomadic pastoralists vulnerable to the vagaries of social and natural scarcities. How and when do the different regulatory mechanisms breakdown and scarcity (natural or otherwise socially and politically manufactured) lead to conflict between resource users? Many and varied explanations have been suggested in the literature but perhaps the most convincing is the political economy approach to the subject.

The experience of scarcity in the sense of which individuals or groups get access to the sources and means of livelihood; for instance, land and pasture (within the context of this paper), and which individuals or groups *do not*, depends on the distribution of political and economic power within society (Hildyard, 1999). Scarcity and hunger, which may lead to group conflict, is not always "natural"; it is often socially constructed, politically

manufactured and economically distributed. Even when there is "natural" scarcity, the distribution of its impact within society is socially determined. Thus the first and most fundamental way in which scarcity leads to conflict is through the deliberate creation of scarcity and or inequity in its distribution within the various segments of society. Scarcity and its consequences can be distributed within society such that no group is made to suffer more than the rest. Most of the traditional common tenure regimes permit joint management of land and therefore, limit the ability of any one group or individual to control access. In this way, 'scarcity and its resulting hardship' become not the burden of any group or individual but 'a shared phenomenon' (Hildyard, 1999). Hildyard believes that scarcity has always been brazenly used as an instrument of 'population control'-in its original sense of 'controlling people'. He however cautions that our recognition of 'socially generated scarcity—insufficient necessities for some people and not others—is not to deny absolute scarcity—insufficient resources, no matter how equitably they are distributed'.

The crux of the argument here is that, where abundance is distributed with some level of equity, scarcity too will be spread out to some degree. The breakdown of common property regimes through a combined process of state appropriation of land as well as the general penetration of capitalist market relations into the countryside has led to the marginalisation of the politically weaker sections of the rural communities. Deriving from the theoretical perspective on the political economy of scarcity, the paper argues that pastoralists are pushed into the fringes of society not as a result of "scarcity" of land and pasture or "over population" but through a sustained process of agricultural colonisation, political marginalisation and social exclusion.

3: Historical Overview

Resource use conflict between farmers and pastoralists is neither a recent phenomena nor peculiar to any country or the West African sub-region. According to Blench (2003:1) 'the conflict between nomad and the settled goes back to the earliest written records and is mythically symbolised in many cultures'. For example, it is said that Cain slew Abel, and the Chinese emperors built the Great Wall to keep out the marauding hordes. As far back as 1953, Spate noted three 'perennial motifs with a strong geographical backing which run through the course of human history'. These 'perennial motifs' were identified as: conflict between townsmen and farmers, sea power and land power and peasant farmers and nomadic pastoralists. He regarded the third as the most serious and the one that has attracted the attention of some classical historians and this conflict was described as:

> The secular struggle of peasant and nomad on the frontiers of the desert and the sown, which have shifted back and forth with climatic changes, with the rise and decay of strongly organised states, with changes in the technology of war and peace....So spectacular have been the changing fortunes of this struggle that some (Ibn Khaldun and A.J. Toynbee) have seen in it a main key to the course of history (Spate, 1953:16).

Heathcote (1983), summarising this view, argued that both Ibn Khaldun and Toynbee saw the historic conflict between 'the desert and the sown' as one emanating from the economic contrast between the two modes of livelihoods. The two historians saw the conflict mainly

as phenomena peculiar to North Africa and South West Asia. Both, according to Heathcote, attributed the conflict to 'the contrasts in the apparent wealth and life style between the oases and river-lands and the desert hinterlands' which 'were so marked and where cycles of feast alternated with famines from droughts or plagues-whether of insects pests or plant diseases' (Heathcote 1983:276). Others like Lynn-Smith (1969) have shown that the conflict between nomads and farmers was historically not peculiar to those regions identified by Ibn Khaldun and Toynbee and that, the same conflict has occurred in Latin America. His claim was based on the fact that the conquering Spanish pastoralists ousted indigenous agriculturalists from the fertile valleys in the sixteenth and seventeenth centuries, and thereby laid the foundation for the conflicts of the twentieth century. In the contemporary period, for example, the 1917 Mexican agrarian revolts, as well as conflicts in Peru in 1950 and in Bolivia in 1953 were all identified as examples of this conflict.

Generally speaking therefore, the conflict between nomads and farmers cannot be limited to any geographical region or even to any particular historical phase. It is nevertheless imperative to note that the conflict has always been endemic in those regions where the environmental, economic and social conditions have combined to predispose the two groups to a competitive encounter as the case in the arid regions of Africa and Asia.

4:0 Background to the Conflict

In West Africa, the eighteenth and nineteenth centuries were two historical periods characterized by the contest for power, conflict and open warfare between various nationalities and groups, particularly between the pastoral Fulbe and other sedentary groups of the sub-region. Yet, 'during this period, despite the political domination and enforced slavery suffered by farming populations at the hands of herding populations from northern areas of the Sahel, very deep exchange relations persisted between the two groups. The desert herders depended on savanna farmers for calories, exchanging salt for grain, and for the provision of essential needs such as tent poles, cloth and cooking utensils' (Webb 1995, cited in Hussein, 1998:20). This exchange relationship was also evident in the wide network of exchanges between pastoralists and cultivators including, for instance, Pastoralists trading animal manure for grain (ODI, 2000). Horowitz and Little (1987:62), writing on Niger, noted that in the post harvest period, farmers were 'enticing animals onto the cropped fields with gifts to the herders of money, sugar and tea. Farmers were known to dig wells on the fields to attract post-harvest grazing and to consign a few animals to the care of a particular herder in the hopes that he would lead the herd onto the owner's field'.

However, Horowitz and Little, citing earlier studies (Horowitz, 1972, 1973, 1975; Horowitz et al, 1983) also concede that relationship between herders and farmers were occasionally strained. Relationships were particularly strained as a result of the early southward movement of herders into the sedentary zone before the harvests were complete. In general, however, they observed that land use between pastoralists and farmers in Niger was complementary rather than competitive. In a study of Fulani Pastoralism in the Jos area of central Nigeria, Awogbade (1983) also observed that though the relationship between farmers and Fulani pastoralists was coming under increasing pressure due to 'fierce competition for resources', Fulbe herds were still welcomed by Jos farmers. Herders keep animals for the village farmers who consider livestock, particularly cattle, as a form of

investment; milk, cattle and manure are traded for agricultural produce and social links between the sedentary populations and the herders are evident in ceremonial exchanges. Such complementary interactions and exchanges have also been reported of other agricultural societies (Kanuri, Hausa, Songhay) and the pastoral groups (Tuareg, Fulbe) in Niger where `all cultivators own livestock, and many nomads practice agriculture' (Bernus, 1974).

In a similar study of the 'Goll' of Fandene village, Senegal, Gueye (1994) cites a well known adage in the region which holds that "herder and field are natural allies" which buttresses the long standing reciprocal, complementary relationship that has existed between agriculture and animal husbandry, that is, between farmers and pastoralists. The closeness of the reciprocal ties between farmers and pastoralists in the semi-arid regions of Africa have led many scholars to liken it to the relations between family members: in some cases as husbands and wives; in others like disputing brothers (i.e. Cain and Abel (Van den Brink et al. 1991; cited in Hussein, 1998). However, as Raynaut and Delville (1997: 112) noted:

> Such a co-existence has never been without tension because it demands a conciliation of rival interests. Conflict can erupt when livestock is poorly controlled, and when herds wander on to cultivated fields. This has always had a tendency to occur at critical periods in the annual cycle, particularly during sowing, when herds are late in leaving agricultural lands, and during harvests, if they return too early. Clashes occur when agricultural activities hinder the movement of herds and cut off their access to water sources or pastures.

5.0: Exploring the Causes of the Conflict

While conflicts between farmers and pastoralists are not new phenomena, because 'they already occurred at the time of the Biblical patriarchs' (Breusers, et al, 1998:357), it has been argued that such conflicts are on the increase in West Africa; though the claims of increasing conflicts between farmers and herders often lack empirical evidence(Hussein, 1998, Hussein et al, 1999). What is not in dispute is the tenacity of this conflict, and the ample attention it has received both from researchers and policy makers. Some factors have been advanced to explain the preponderance of the conflict between farmers and pastoralists in West Africa. They include growing pressure on natural resources, caused by human population increase; the growth in the population of herds; and the extension of cultivated areas (Breusers, et al 1998). However, recent work by Milligan and Binns(2007) in northern Nigeria have seriously questioned the assumption which seem to regard farmer-pastoralist conflict as an 'inevitable consequence of steady population growth, environmental stress, and irrational natural resource management', arguing that such 'crisis narratives' are technicist in approach and have the tendency to obscure other points of view, in particular, those 'that place an accent on the role of power, history, and symbolism in the dynamics of rural society, and neglects the degree of heterogeneity and disequilibria in the natural environment'. In what follows, an attempt is made to explore and critique some of the causes of farmer-pastoralist conflict in West Africa, including environmental and social factors, as well as those related to the landlessness and political powerlessness of pastoralists.

5.1: Environmental context of the conflict

Perhaps a key explanatory factor in the conflict is environmental. According to Scoones, (1995:2) farmer-herder conflict is likely to be most acute in the semi-arid zone (500-750mm average rainfall per year). This zone falls between the arid lands where only livestock-based production systems are possible and the more humid zones that can support crop-livestock production systems. The semi-arid region of Africa lies between the Sahara and the Sudanian zone, encompassing most parts of West Africa. This zone favours contact between crop farmers and herders as it is favourable for both finding new pastures and expanding crop cultivation (Bernus 1974 cited in Hussein 1998:14). Hussein, referring to the works of Bennet (1991) further notes that one important environmental characteristic of the semi-arid region which affects the livelihood strategies of both crop and livestock farmers is the low level and unreliability of rainfall, characterized by short rainy season and recurrent cycles of drought and famine. As Brown and Crawford (2008: viii) rightly observed, 'climate change is not new to Africa. West Africa in general and the Sahelian region in particular are characterized by some of the most variable climates on the planet'. Brown and Crawford further aptly observed that Climate variability in the region appears to have become acute in the 20th century, with a period of unusually high rainfall from the 1930s to the 1950s, followed by an extended cycle of drought for the next three decades. In most parts of West Africa, the 1968-74 Sahelian drought and famine in particular had a devastating effect, which decimated both human and livestock populations; and also provoked mass migration of human and livestock population across the region.

From that period onwards, the hitherto existing patterns of human and livestock population movements in the region became completely altered, with serious consequences on resource use, competition and conflict. For example, according to Moorehead (1989), conflict between farmers and pastoralists in Mali's Niger River delta started to occur when the delta became drier; and local farmers begun cultivating deeper parts of the delta including stock routes leading to the flood plains. Consequently, pastoralists took to crop damaging measures that initiate conflict out of the frustration that farmers are overtaking their grazing areas. Furthermore, in the views of Breusers et al (1998), the droughts of the 1970s and 1980s not only led to an the increase in competition over natural resources between farmers and pastoralists due to what they called 'a saturation of space', but it also resulted in a breakdown in the balance between the two groups. They contend that since the droughts, the two production systems have increasingly converged, with farmers engaging in cattle breeding and pastoralists in agriculture, thereby leading to the disappearance of both ecological and economic complementarities between the two groups.

5.1.1: The case of the Lake Chad

The environmental crisis in the West and Central African sub-regions, which has greatly impacted on the livelihoods of both crop farmers and pastoralists, is best illustrated by the recession of the Lake Chad. The Lake Chad is aptly described as the major wetland in the semi-arid Sahel corridor, supporting some 11 million people, who directly depend on the Lake and its hinterland for survival (FAO, 2004). This is in addition to the economic

benefits derived by other millions of farmers, pastoralists, fisher people, hunters, traders, etc who live in the four countries that directly share the Lake—Cameroon, Chad, Niger and Nigeria. Unfortunately, the Lake Chad has decreased by about 90% since the 1960s, from about 23, 000 square kilometers to only some 1,350 by 2001(Giwa Report, 2004). The drying of the Lake has led to declining resources on which farmers, pastoralists and Fishermen depend; for instance, according to Lemoalle (2004:325), as a result of the decrease in the level of the Lake, the aquatic vegetation along shores of the lake totally disappeared by 1973. Thus, the continuous drying of the Lake Chad has serious ecological, social and economic consequences for the West African sub-region; above all, it has led to intense competition and conflict between the various resource-users; in particular, between farmers and pastoralists.

However, it must be noted that in addition to the recession of the Lake, in the whole of West Africa and other dry lands of the world, human and livestock population is increasing while pasture resources are declining. A study by Sidahmed (1996), using historic data (1960s to 1996) collected from 36 dry land countries used AGROSTAT estimates (FAO, 1996) to compare the trends in livestock and human populations with the changes in permanent pastures. Area-wise, the permanent pasture remained unchanged over three decades, whereas the human population increased 2.6 times. In spite of some fluctuations, livestock numbers increased from 400 million head in 1961 to 600 million in 1995. Other environmental factors that contribute to resource use conflict in the West African sub-region is the fact that grazing resources including pasture and water are found in different places at different times of the year, hence the need for constant mobility among pastoralists for opportunistic resource use, which brings them into contact with the 'landed' settled farmers, and produce competition and conflict.

Yet, while it is recognized that the environment and its associated factors such as environmental degradation, resource scarcity and climate change often do or may play important role in the causation and continuation of conflict; they are seldom the only or even the most important factor (Frerks, 2007). In most cases, conflict is caused by a multiplicity of factors acting together; in particular, political and socio-economic factors are 'often mobilized by conflict entrepreneurs through identity-politics that serve to arouse feelings of mutual distrust and hate'(Frerks, 2007:17). This, according to Frerks, debunks simple (neo) Malthusian approaches that tend to place emphasis on mono-causal or reductionist environmentalist explanations, in which scarcity is assumed to lead directly to conflict. Thus, it is imperative to consider other factors in the explanation of resource-use conflict between farmers and pastoralists.

5.2: Social context of the conflict

In addition to the environmental factors, there are also other social and political factors, all of which work in combination to produce resource use conflict. As Suliman (1997) elaborates, 'ecological borders are, in most cases, also ethnic and cultural borders...ecological borders become ethnic and cultural lines of demarcation, where people meet to cooperate or to fight'. For example, in most of West Africa, including Nigeria, an ethnic dimension comes to play in the conflicts, which often appear to oppose two broad ethnic groups—*Fulani* pastoralists versus a population group of sedentary farmers, who are made up of a variety of ethnic groups. This ethnic dimension to the conflict, in the views of Breusers et al, indicates

not only the increase in competition over natural resources due to what they called 'a saturation of space', but also a breakdown in the balance between the two groups. They contend that since the droughts of the 1970s and 1980s, the two production systems have increasingly converged, with farmers engaging in cattle breeding and pastoralists in agriculture, thereby leading to the disappearance of both ecological and economic complementarities between the two groups.

Hussein et al (1999) views conflict of interest as part of the fundamental relationship between different resource users; and once there is a conflict of interest, a stage is set for competition that may in turn lead to violent conflict. Though there is no automatic cause-effect relationship between conflict of interest, competition and conflict, the likelihood is increased with scarcity of resources on which the groups depend; and the asymmetrical manner in which the effects of scarcity are distributed between farmers and pastoralists. A clear case of the linkages between conflict of interest, competition and violent or non-violent conflicts can be illustrated with Toulmin's (1983a) study. Toulmin has argued that in semi-arid Africa, there are three interlocking resource users who are engaged in a competitive demand for the resources on which pastoralists depend. These resource users are the sedentary cultivators, other pastoralists groups and new livestock owners.

However, in line with the theoretical perspective adopted in this paper, it is pertinent to re-define the whole concept of scarcity, and evaluate the extent to which it plays a part in competition and conflict among multiple resource-users. Contrary to the neo-liberal and neo-Malthusian arguments, scarcity is not an absolute given or as mediated by prices on a market because natural resources are not marketable commodities in many instances. As Frerks (2007:20) argues so convincingly 'Property and access rights are embedded in a myriad of social and political relations. In this complex, issues of identification and ethnic and religious identities need to be included, as they are not only vehicles for the mobilisation of people in case of violent conflict, but also are constitutive for the determination of membership of groups that are excluded from access to resources'. Frerks contends that scarcity is relative and must be perceived as such by the actors involved. Also, the question must be answered as to why scarcity leads people to resort to violent conflict rather than non-violent means to solve their problems. In his view, the fundamental reason why scarcity leads to violent conflict can only be located in the social and political relations between the parties involved, including local ethnic relations as well as patterns and processes of identification with specific identities. Based on their status in the local and broader political economy of a nation or region, specific groups of people, such as the pastoralists in most West African states in the contemporary period, may be denied access to resources or can be increasingly marginalized.

5.3: Agricultural encroachment and pastoral political powerlessness

Toulmin argued that the rising level of competition between farmers and herders developed out of several factors including but not limited to agricultural encroachment and the political powerlessness of herders in the post-colonial state. The issue of pastoral political powerlessness has been clearly articulated in the works of Marty, 1992; cited in Hussein, 1998:41 in north Cameroon, which shows that herders feel threatened by agricultural colonisation. This displacement goes on unabated because the farmers are perceived by pastoralists to be in close alliance with the state, thereby rendering the pastoralists powerless.

He also argues that when conflict occurs between farmers and pastoralists the state arbitration structures only listen to farmers, thus leaving the pastoralists as helpless and defenceless victims. The extent of pastoral political powerlessness is best demonstrated by the testimony among some pastoralists in the Hadejia-Nguru wetlands who argued that rules governing the trespass of animals are made and enforced by farmers with an inherent bias against pastoralists or animal keepers. According to them, when passing judgments on conflict between farmers and pastoralists, the *Alkalis* or judges will always say *"It's the cattle that move to meet the farm; it's not the farm that move to meet the cattle" (*Winter and Rowley, 1998:26). Thus, as a result of the colonial and post-colonial state's 'farmer-bias' in development policy, the pastoralists are often criminalized as causing the conflict. In actual fact, as Traore (1996) argued, it also makes sense to think of "straying fields" into grazing lands, to describe a situation in which the agriculturalists are causing the conflicts and not the herders (rather than always talk of "straying animals"). However, this is a question of power; and in the contemporary dispensation, it is what pastoralists lack badly.

5.4: Pastoral landlessness

The extent of pastoral political powerlessness therefore manifests in landlessness among pastoralists in the region. In examining the question of land rights, the farmers are considered as 'the landed' group, that is, those who claim ownership over the land and exert political control over it. On the other hand, the pastoralists or herders are regarded as 'the landless' group, those who do not own the land they use and settle on (Dafinger and Pelican, 2002). Thus, within the context of the contemporary political economy of land use:

> Pastoralists in West Africa dry lands have little legally recognised tenure security over their traditional grazing lands. In many countries, pastoralism is not legally recognized as a productive us of the land (*mise en valeur*) and as a consequence, pastoral lands have been subject to expropriation by the state and marginalized in favour of agricultural use (Leonard and Longbottom, 2000:43)

In the past when the balance of power between pastoralists and farmers was in favour of pastoralists in some West African state such as Mali, pastoralists had a secured access to land and its associated resources. For example, Maiga and Diallo (1998) have argued that under the Fulani social, political and religious organisation known as the *Dina* in Mali, all the pre-existing forms of social and political organisation were made subordinate to pastoral priorities. This system was in operation during the theocratic rule of Sekou Amadou (1818-1862). In particular, the *Dina* developed a land tenure arrangement, which divided the delta as a whole into agro-pastoral territories known as *leydi* and the grazing lands of the *leydi* were divided among the important Fulani chiefs. However, with the colonial conquest in 1894 and the demise of Fulani political dominance and hence, the collapse of the *Dina* system, the balance of power gradually shifted in favour of agriculturalists. The French colonial government passed a law, in which those who used the land for agriculture were deemed by the administration to have stronger rights of land use and appropriation to the detriment of the pastoral system, thereby reversing the previous arrangement. While the *Dina* was an all-inclusive system, which considered the interests of crop farmers, pastoralists and fisheries, the succeeding system under French dominance created a conflict between pastoral interests (based on the *leydi)* and the agricultural village system (based on farm plots).

Similarly, Awogbade (1983) has also captured the land-related benefits derived by the nomadic pastoralists from the formation of the Sokoto Caplihate in some detail. He recounts that before the formation of the Caliphate, the nomadic Fulani had to negotiate for permission to graze in all the areas they moved into. 'In return for grazing rights and the promises of protection from the local people, the rulers demanded for tributes and courtesy calls to be paid annually as acknowledgement of their rights to the land' (p.11). This situation, according to Awogbade, changed in favour of the nomadic pastoralists with the formation of the Caliphate:

> They now gained rights to grazing grounds, recognition of cattle tracks, and more clearly defined rules governing grazing facilities, because their new rulers wished to ensure their continued support. Equality with other Fulani and the replacement of the Hausa leaders by the settled Fulani made life more tolerable for the nomadic Fulani in terms of the use and access to grazing resources, a factor which improved relations between the Fulani and the indigenous communities. These changes also introduced some pastoralists to a settled way of life and to positions of power (Awogbade, 1983:11).

When land is scarce or its access is highly contested, the pastoralists, who constitute the landless and powerless group, are greatly disadvantaged. As Baba further observed in the case of Nigeria, land use conflict between arable farming and pastoralism is basically a systematic one 'arising from differences in the perception of land resources, the institutional tools for utilizing the land resource base, and the very process of land utilization between the two systems of production' (Baba, 1986:62). While these broad factors, taken individually or collectively, are all important explanatory variables in understanding farmer-pastoralist conflict in West Africa, some have argued that the tendency to think that a particular type of conflict is about 'poverty' or 'environment' or 'ethnicity' is fundamentally flawed(Ohlsson,2003:26). According to him, there is the need to incorporate sets of explanation built on several factors including environment, poverty, ethnicity, etc. into a common framework by concentrating on the importance of livelihoods: 'Poverty may be a near-endemic condition in certain societies. Loss of livelihoods, however, marks a rapid transition from a previously stable condition of relative welfare into a condition of poverty or destitution. In turn, such losses of livelihoods are often caused or exacerbated by environmental degradation'

5.5: Changing demographic conditions

The impact of changing demographic conditions on farmer-pastoralist conflict is perhaps best illustrated with reference to Nigeria. According to Blench (2005), if the census figure is projected back to the pre-colonial period, the human population for the whole of Nigeria may be as low as 10 million in the late 19th century. If this is compared with the present population of some 140 million (2006 National Population and Housing Census), the land area under cultivation in the earlier period would have been certainly much less extensive; and hence, pastoralists and cultivators could have existed without much friction (Blench, 2005: IV-16).

Similarly in a study of North Borgou in northern Benin, De Haan (1998) showed how conflict developed between farmers and pastoralists as a result of changing demographic and

environmental conditions. He argues that the area is a meeting point between peasant farmers and pastoralists and that, 'environmental problem has already become a serious problem in the region due to population growth, increased commercialisation and the immigration of pastoralists from the Sahel' (p.210). The region was originally inhabited by three major groups namely the Bariba and the Boko who had developed farming and the Dendi who combined farming with fishing. The Fulani pastoralists migrated to the area more than a century ago, a little later than the other three farming groups, and thus, had to ask the farmers for permission to use the land.

Over time, a pattern of symbiotic relationship had developed between the farmers and the pastoralists, 'including the bartering of goods, services, as well as ways of sharing space, which 'ensured the best living conditions in the fairly capricious, sub-humid and semi-arid climate' (p.212). He suggests some reasons for the development of farmer-pastoralist conflict in the region to include the expansion of agricultural cultivation into grazing areas. Other factors are damage to crops by herds as well as 'disappearing passages to grazing areas and watering points' (p.219). The pastoralists need to pass through the passages on their way to the river Niger especially in the dry season but irrigated market gardening and cultivation on the banks of the river has blocked such passages. Local authorities intervene especially when a valuable crop like cotton is damaged. Occasionally, violence and even deaths occur.

De Haan's study, while giving us a clear picture of the dynamics of resource use and the development of conflict between farmers and pastoralists, failed to locate the issue within a broader regional political economy. Why, for example, do the pastoralists have to give up the traditionally accepted "cattle passages" due to "land pressure"? Why should the blame of crop damage and hence, compensation, always be pushed on the pastoralists even when agriculture has apparently encroached on grazing areas and colonised cattle passages as his study documented? These questions can only be addressed with reference to the political powerlessness of pastoralists enumerated above.

6: Exploring the Consequences

Why, it may be asked, do we have to bother about resource-use conflict between farmers and pastoralists in the West African sub-region? The first set of consequences which warrant the attention of both policy makers and scholars is the extent to which this conflict affects food security in a region known for its often devastating episodes of drought and famine, such as the Sahelian famine of the 1970s. In a recent study of conflict in the *fadama* areas of Nigeria's northern state of Borno in which this author was involved, both farmers and pastoralists asserted that conflict between the two resource users is real and increasingly assuming an alarming proportion; with serious implications for agricultural productivity. For instance, some farmers in one of the Focus Group (FGD) Sessions argued that '*unless something is done about this conflict, we shall be forced to abandon crop farming entirely'*. This sense of helplessness and frustration seem to resonate with all the fadama farmers across the state. As a result of the conflict, fadama farmers have already been forced to abandon cultivating some particular crops, for example, in Bama Local Government Area of the state, the farmers indicated they no longer cultivate tomatoes, which used to be planted with onions.

In some other places such as Monguno Local Government Area, fadama farmers have also been forced to limit the variety of crops they can cultivate (Audu et al, 2007).

A second set of consequences relate to the implications of the conflict to national, regional and even and international security. According to Gizewski (1997), the past two decades has witnessed growing recognition of environmental factors for national and international security. In 1987, the UN World Commission on Environment and Development pointed to environmental stress as "a possible cause as well as a result of conflict". In 1992, the UN Security Council also warned that sources of instability in the economic, social, humanitarian, and ecological fields included military and political "threats to peace and stability". Though there are a number of people who have raised valid arguments against the 'securitisation' of the environment (Frerks, 2007:15), some of the manifest security implications of environmental crisis particularly in the West African Sahel cannot be ignored.

Local resource use conflicts have been linked to some of the wider conflicts in the West African sub-region such as the serious tensions between the Tuaregs and the state in both Mali and Niger as well as the civil war in Chad. It is important to recognize that nomadic pastoralists are often not encumbered by national borders. For instance, within the larger regional frame of the Chad Basin, pastoralists move across and come into direct contact with representatives of different states, and thus events across the border impact directly on the lives and livelihood of pastoralists (Moritz, 2005). Indeed, some scholars are of the opinion that we should think of the Chad Basin not as neighbouring states, but as the locus of several partially overlapping ecological, cultural, economic and political zones. These zones are crossed by political, economic and criminal transnational networks (Roitman, 2004). A good example of such transnational network is the transit of cattle through the ancient routes from Sudan through Chad and Cameroon to Nigerian livestock markets.

The complex regional ecology of the Chad Basin also directly impinges on the issue of resource-use conflict. Several instances abound to buttress this point. The 1983 war between Nigeria and Chad was originally started by conflict between fishermen of the two countries. In the Diffa Department in Niger, which is located at the borders of Lake Chad and close to Nigeria, Cameroon, and Chad, conflicts between Tubu, Arab and Fulbe herders over wells articulated with civil wars in Niger and Chad (Thebaud and Batterbury, 2001). In 2002, some 20,000 Fulbe cattle herders fled Nigeria and sought refugee in Cameroon to escape clashes with farming communities on the Mambila plateau in Taraba state (*IRIN News.org* 15 April 2005). Similarly, in the Senegal valley, conflicts over natural resources between herders, farmers and fisher people articulated with other conflicts and escalated into border conflict between Senegal and Mauritania (Homer-Dixon, 1999, Schmitz, 1999).

Elsewhere on the continent, especially in some East African countries (Ethiopia, Sudan and Somalia) 'pastoral related-violence influenced by outside factors has fuelled larger complex political emergencies resulting in famine and mass displacement of civilian populations' (Hendrickson, 1997:14). The current conflict in the Darfur region of Sudan is a case in point. The relations between the African and Arab inhabitants of Darfur have been tense during much of the history of the region. Historically, Darfur was the centre of the slave trade, with the Fur kingdom exporting Africans from other parts of Sudan as slaves to the Arab world. In more recent times, however, much of the conflict is rooted in the differing, and often, competing means of livelihood between the African and Arab inhabitants of the region. The

African peoples are sedentary farmers, while the Arabs are nomadic herdsmen. Since the drought of the 1980s, the nomadic Arab tribes from the more arid northern part of Darfur have been pushing further and further south into the semi-arid and humid mountain areas of Fur territory, and staying much longer than they previously did. The nomadic Arab incursion into the Southern Darfur region brought them in direct confrontation with the sedentary farmers "whose crops have been trampled on and consumed by herds of camels or cattle. Some of the African communities resorted to self-defense groups in the 1990s to protect their crops, homes, and families from increasing incursions by the Arab camel or horse-mounted raiders, many of whom have also been armed over the past decades" (*Human Rights Watch*, May 5, 2004).

Despite these negative consequences of the conflict between farmers and pastoralists in West Africa, it must be noted, as Blench (1997:4) observed, 'resource conflict is often a major stimulus to the evolution of intricate interlocking patterns of exploitation. Without initial conflict, the complex patterns of cooperation that characterize the multiple-use of many African wetlands would never have developed'. Furthermore, considering the asymmetrical nature of power relations between farmers and pastoralists in the contemporary period, conflict may be the only viable means of empowering the disempowered group, namely the pastoralists; and in this way, addressing injustice in the distribution of scarce resources.

7: Conclusion

Resource use conflict particularly between farmers and pastoralists is widespread in the West African sub-region. While it is difficult to establish a single explanatory variable responsible for this conflict, it is apparent that social and environmental factors act in tandem to perpetuate it. In particular, it can be concluded from the observations made in the paper that the decline in the water level of the Lake Chad (a major wetland in the semi-arid Sahel corridor) and its other aquatic resources is a serious problem with short and long term social, political, economic and security implications for the whole of the West African sub-region. Thus, generally, in most parts of Africa, especially in the semi-arid Sahel corridor, farmer-pastoralists conflicts are often nested in bigger conflicts with religious, ethnic, political and other dimensions. Presently, there is no proliferation of arms among West African pastoralists unlike the case of the pastoralists of the Horn and East Africa. However, there is growing concern among scholars and policy makers that these relatively smaller, low level conflicts between farmers and pastoralists in the West African sub-region, which may be rightly regarded as 'localized green-wars', will increasingly articulate with other conflicts of interests and lead to intra and inter-state wars (Bennet, 1991; Kaplan, 1994), with serious implications for food security, regional peace, security, cooperation and development. Yet, despite these observations, it is concluded that conflict between farmers and pastoralists should not be appraised as entirely negative, since it may lead to empowering the pastoralists who have been marginalized in the contemporary political economy of natural resource access.

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