



“Climate change, pastoral migration, resource governance and security: the Grazing Bill solution to farmer-herder conflict in Nigeria”

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Climate change, pastoral migration, resource governance and security: the Grazing Bill solution to farmer-herder conflict in Nigeria

Abstract

Violent conflict between native communities and migrant herdsman is one of Nigeria's most ubiquitous security challenges in the age of climate change. It accounts for an increasing number of human and material losses which is not only surpassed by the country's ongoing counter-insurgency, but also threatens unity among its regions. It has therefore gained attention in the legislative arm of government. In response, lawmakers mainly of Northern Nigeria extraction have proposed a Grazing Bill which seeks to expand and legalize nationwide access to grazing land for pastoral farmers in defiance to agitation in host communities for legislative protection. A cardinal principle of federalism is the premium placed on preservation of local interests that are peculiar to component units while harnessing strength in areas of concerns common to federating units. Against the backdrop of Nigeria's federal system and its social, ecological and historical diversity, this paper examines the implications of the proposed Grazing Bill for managing farmer-herder conflict. It argues that frameworks which downplay the country's diversity will further aggravate conflicts and insecurity in the fragile federation. The paper therefore advocates for sedentary system of cattle ranching.

Keywords: climate change, Grazing Bill, migration, Nigeria, conflicts, ethno-diversity.

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Introduction

Since time immemorial, migration has been one of man's strategies for coping with his existential vicissitudes as challenges prompt him to move from one environment to another in search of better opportunities to meet his livelihood needs. While many factors shape human decision on migration, the compelling roles of environmental factors have gained increasing attention in recent years. Man's decision to move and his choice of destination are often informed by his goals and experience in one environment, either by virtue of the limitations, which it imposes or the opportunities that abound elsewhere. In its report in 2007, the Intergovernmental Panel on Climate Change (IPCC) identified floods, heat waves, desertification, violent winds, outbreak of disease and food insecurity as top among the effects of climate change. This corroborates its earlier position that "resettlement may be the most threatening short-term effect of climate change" (IPCC, 1990, p. 9).

Environment-induced human migration poses significant threat to security, as it upsets the socio-economic and demographic composition of

societies. In many parts of the developing world, human migration has been at the heart of many contestations and conflicts as those between natives and migrants over access to natural resources such as fresh water for native populations, arable land for farmers, or pasture for cattle herders (Adekunle & Adisa, 2010; Amusan, 2011; Amusan & Jegede, 2014; Baca, 2015; Barrot, 1992; Benjaminsen & Ba, 2009). In Nigeria, conflicts between farmer and migrant cattle herders have become a national security issue in recent times. Owing largely to its plurality and ethnic divide, environment-induced migration creates volatile contact and competition between groups of highly conflicting natural resource-dependent livelihood systems. In the case of farmers and pastoral herders, it further strains already tenuous national fault-lines and fuels insecurity. This more so at a time when the nation faces one of the world's deadliest terrorist insurrections from the Boko Haram terror group – an episode in which casualty estimates stand at well over 20,000 lives with over five million displaced (Amusan & Oyewole, 2014; ENDS, 2014).

It is certain that the re-emergence and escalation of farmer-herder conflict further complicates the circle of insecurity, which have characterized Nigeria's democratic space (Conroy, 2014; Sayne, 2011). Farmer-herder conflict is not new, its longstanding existence as a security problem is evident in the volume of studies on the subject (see, for example, Abbass, 2011; Adekunle & Adisa, 2010; Azuwiki & Enwerem, 2010; Fabusoro, 2007; Fasona & Omojola, 2005; Folami & Folami, 2013). There is no doubt that unmitigated conflict exposes the nation's fragile peace and unity to greater risk. Indeed, the theatre of competing intergroup

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conflicts, which pervade the country, has dire implications for its political stability, economic development and national unity.

Finding a balance between exigencies of environment variability, sustainable livelihood and human migration is a major challenge to governments in many federal systems. This is so because while a cardinal aim of the state is the protection of the lives and properties of the citizen with law-making as one of the most potent instruments, the sharing of jurisdiction among component units in a federal system often results in overlapping interests especially in heterogeneous societies. It is also trite that laws governing federation must be responsive to the concerns of component units (Kritz, 2007). It is against the above backdrop that the legislature at various levels seeks to evolve legislative measures towards managing pastoral farming and its associated volatilities in the country.

This paper explores the prospects of the legislative intervention through the Grazing Bill as an option for mitigating future incidences of violence. We examine socio-ecological, cultural and political precipitations of farmer-herder conflict and propose options for peaceful co-existence in Nigeria.

1. Conceptual and theoretical background

Links between environment, migration and conflict have been a subject of intense debate over the years, giving rise to controversial use of terms and lack of uniformed frame of analysis. This difficulty is attributed to the diversity of disciplinary orientations which converge in the study of environment-population dynamics (Brooks, 2003; Dun & Gemene, 2008). In the current study, we operationalize concepts such as climate change, environment-induced migration, vulnerability and conflict. A generally agreeable definition of climate change is found in the IPCC glossary of terms which defines climate change as “any change in climate over time, whether due to natural variability or as a result of human activity” (IPCC, 2007, p. 21). Observed changes in the climate systems underlie predictions on its future dynamics both in social and ecological terms. Evans (2012, pp. 3-8) notes that in addition to its geophysical impacts such as temperature increases, the changes will impact social and environmental systems through hazards such as excessive heat and the melting of glaciers, which will result in secondary impacts including desertification, coastal flooding, land degradation, reduced crop yield, low water availability and food insecurity, among others.

Vulnerability is another central concept in climate change impact assessment. According to the IPCC Fourth Assessment Report (2007), vulnerability refers to the degree of susceptibility of geophysical, biological and socio-economic systems to the adverse impacts of climatic variability. The report puts it as follows:

Vulnerability to climate change refers to the propensity of human and ecological systems to suffer harm, and their ability to respond to stresses imposed...The vulnerability of a society is influenced by its development path, physical exposures, the distribution of resources, prior stresses and social and government institutions (IPCC Fourth Assessment Report, 2007, p. 720).

Building upon the usage of the term by the IPCC (2007), Brooks discourses vulnerability as either biophysical (ecological) or social in which case vulnerability manifests in its linkage subsisting socio-economic factors: level of poverty and inequality, availability of and access to food, the state of innovation or technology, the pattern of resource distribution, access to insurance against hazards, quality of housing, among others (Brooks, 2003, pp. 3-4).

Related to vulnerability is environment-induced migration. While the link between climate change and human migration or displacement is widely acknowledged in the literature (see Amusan & Jegede, 2014; Barnett & Webber, 2009; Gomez, 2013), scholars are uncertain about the actual weight of climate events in peoples’ decision to move, or even on the mechanism with which its effects play out. As is the case with sending and receiving destinations in Nigeria’s pastoral transhumance, Bauhaug, Gleditsch, and Theisen (2008) note that migration could be both a cause and effect of deteriorating environmental situations. In the context of this paper, migration provides a loop from vulnerability to socio-ecological contestations and conflict. Wilson and Hanna (1979) see conflict as a “struggle involving opposing ideas, values, and or limited resources”. Deutsch’s (1973) and Wilson and Hanna’s (1979) works both highlight seven causes of conflict one of which is the struggle for control over scarce natural resources that are essential to survival; this position is captured by frustration-aggression thesis.

However, in spite of the impact of environmental factors, a number of socio-contextual aggravators are noted to amplify or attenuate population exposure to environmental variability. These factors become evident with proper understanding of the

political economy of resource distribution in developing countries. For example, the intricate politics around the appropriation of valuable resources such as land for commercial agriculture by the political elite capitalist class. Or even the instrumentation of the subaltern peasant farmers in the power struggles among the elite, as well as the more overt contestations often associated with historical ethnic and religious fragilities of intergroup relations in Nigeria. In essence, while environmental degradation provides empirical basis for examining pastoral transhumance and conflict, the more complex socio-contextual forces which aggravate and precipitate conflict cannot be downplayed. It is for this reason that scholars highlight the error of disaggregating causal factors from the close-knit social and ecological variables, which ginger conflict precipitations conceptualizing this through frustration-aggression thesis (Burke et al., 2009; Hsiang, Burke, & Miguel, 2013).

Frustration-aggression theory. Theoretical insight into the environment-conflict nexus can be situated within the frustration-aggression framework. This theory is associated with the works of many prominent pioneering psychologists including Sigmund Freud, McDougal (Dougherty & Pfaltzgraff, 1996). However, its modern application is often associated with a 1939 monograph on aggressive behavior published by a group led by John Dollard at Yale University Institute of Human Relations. Dollard et al. (1939, p. 7) contend that “the occurrence of aggressive behavior always presupposes the existence of frustration and, contrariwise, that the existence of frustration always leads to some form of aggression”. In other words, the exhibition of aggressive behavior always follows from a frustration-evoking impulse.

Dollard’s original theory posits that aggression occurs when there is an external impeding interference to some goal-response by an individual, which generates an aggressive energy that is ultimately released through aggressive behavior that is directed either toward the frustrating agent or “displaced” in aggressive behavior towards non-associated targets (Felson, 1992). Dougherty and Pfaltzgraff (1996, p. 269) explain that frustration arises when a barrier is interposed between a person and certain goals they desire to achieve, leading to the mobilization of extra energy that flows over into the exhibition of generalized destructive or aggressive behavior. It has also played a central role, for example, in the interpretation of stressors associated with the environment and their aggression effects. According to Slettebak (2012, p. 164), “environmental shocks generate insecurity,

frustration, scarcity of important resources, and weakened enforcement of law and order, which are frequently suggested to increase the likelihood of outbreaks of armed violence” (see also Brancati, 2007; Burke et al., 2009; Nel & Righarts, 2008).

By bringing into a unified purview, the interplay between ecology, i.e., environmental decline, poor institutional response and contestation with receiving communities, this theory captures the crisis between farmers and herders that the Nigerian state is currently contending with, even when contextualizing this from the socio-historical perspective.

2. A socio-historical background to farmer-herder conflict

The Nigerian state is beset with many precipitating, which predispose it to intergroup tension and competition creating conducive atmosphere for conflict. Since its independence from British colonial rule in 1960, following series of amalgamation of its diverse peoples starting from the annexation of Lagos in 1861, the country has been at the throws of centrifugal pressures. Its creation as a country under the name ‘Nigeria’ followed the amalgamation of the Protectorates of Northern and Southern Nigeria, and the Lagos Colony on January 1, 1914. The amalgamation unified the two protectorates into a single British Colony of Nigeria under the administration of a Governor General, the first of which was Sir Frederick Lugard (British Colonial Report – Annual, 1916; Falola & Heaton, 2008). The colonial accident which later became Nigeria is aptly captured in a 1914 report presented to the British imperial government on the amalgamation. Frederick Lugard gave a vivid background to the process and series of amalgamations which culminated in the creation of Nigeria when he explained:

The geo-political entity “Nigeria” is a colonial creation whose origins are to be found in the three British proto-colonial economic polities: the Colony of Lagos, which was under the supervision of the Colonial office, the Niger Coast (Oil Rivers) Protectorate under the Foreign Office, and the territory of the Royal Niger Company, a royal chartered company vested by Her Majesty’s Government with judicial and administrative powers (Dorward, 1974, p. 2).

Since its creation, therefore, Nigeria has been an encapsulation of ethno-linguistically and geographically diverse groups and localities with pervasive heterogeneities among its people. It is in view of its pluralism that Blench (2003, p. 2)

describes Nigeria as “the third most ethnically and linguistically diverse country in the world after New Guinea and Indonesia”. With ethnic groups and distinct linguistic units numbering between 248 (Coleman, 1958) and 440 (Crozier & Blench, 1992), respectively, Blench argues that Nigeria is a country in which ethno-linguistic diversity has a very significant effect in almost every area of the economy, intergroup relations and national integration.

The diversity of the post-colonial Nigeria led Osimen, Balogun, and Adenegan (2013, p. 79) to argue that “the 1914 amalgamation exercise embarked upon by Lord Lugard of the areas of North and South of the river Niger and Benue was a unification without unity, or at best unity in diversity”. This factor accounts, to a large extent, for the fragile nature of ethnic and religious relations and constant tension among its various groups. Heterogeneity nature of the country is evident in its variegated climate, which impacts on grazing system by herders.

3. Cross-regional analysis of Nigeria’s climate

While the Grazing Bill debate has seen increasing polemics among analysts, the import of Nigeria’s ecological and climatic characteristics as a major factor in the conflict has been noted by many. Nigeria has been described as highly prone to varying effects of climate change due to its location, unique and varying ecological characteristics (Amobi & Onyisi, 2015). The country has a total surface area of 91.07 million hectares and a land mass of about 923,768 km², with a coastline totalling 850 km in length bounded south by the Atlantic Ocean (Cleaver & Shreiber, 1994). As a result of its size and ecological diversity, it has been argued that “no single generic model or adaptation scheme could reasonably apply to the whole country” (Sayne, 2011, p. 3). Variations in geography and climatic features across its regions imply that “climate change events will impact on [the] variegated ecologies differently” (Amobi & Onyisi, 2015, p. 206). This explains Olufemi and Samson’s (2012, p. 17) assertion that the consequence of climate change for Nigeria is “a geographical pincer threat from desertification in the north to rising sea levels [risks] in Nigeria’s southern coastal regions”. Fasona and Omojola (2005) further highlight this regional variation when they argued that:

In terms of climate change driven land degradation, Nigeria is being ‘attacked’ in all fronts: serious coastline erosion, the pervasive gully erosion in Eastern parts of the rain forest zone and Central

Guinea savannah zone, and the ferocious wind erosion and desertification in the Sudano-Sahelian zone. Nigeria is yearly loosing an increasing amount of prime agricultural and grazing lands, which results in ecological migration and intensification of transhumance among the Northern cattle rearers (Fasona & Omojola, 2005, pp. 5-6).

Nigeria’s location is unique in that it cuts across all tropical ecological zones, which covers from about longitude 2^o 40¹ to 14^o 45¹ East of the Greenwich meridian, and North of the equator from latitude 4^o 15¹ to 13^o 55¹. All tropical ecological zones are found in Nigeria from the southern Atlantic to the edge of the Sahara, which makes a latitudinal distance of about 1500 km. These zones include: the Mangrove swamp of the Southern zone situated between latitude 4 and 6^o 30¹N, tropical rainforest situated around latitude 6^o30¹ to 7^o45¹, which reaches from the southwest to the southeast. It also has a Guinea Savannah belt on latitude 7^o45¹N to 10^oN, Sudan Savannah belt on 10^oN to 12^oN, as well as the Sahel Savannah situated in areas above latitude 12^oN (Fasona & Omojola, 2005).

According to Fasona and Omojola’s detailed account, Nigeria’s ecological diversity is also manifest in its topographic features, which differ widely across its regions, and also influence the types of interaction between people and the environment, as is evident in regional agricultural traditions. Both Aregheore (2009) and Oyenuga (1967) opine that Nigeria’s topography and soil composition also reflects its diversity, which influence its agro-based systems across the country. As much as these influence varieties of food and animal availability for human consumption, the negative effects of climate change constitutes ecological degradation with negative impacts on farmer-herder relationship.

4. Farming systems and farmer-herder contestations in Nigeria

The implication of Nigeria’s varied agro-ecological regions is that opportunities in the production of crops and livestock vary across the country. These regional differentiations in agro-productive traditions have come with certain threats in recent times due to increased climatic and ecological pressure. This is more so with high reliance of the agricultural systems on traditional tools and methods. Although technological innovation is known to have improved the practice of agriculture globally, its introduction in Nigeria’s agricultural system has been far below with subsistence farming practices taking the dominant share of activities in the sector (Enete & Amusa, 2010). Under such

circumstance, small scale traditional farming systems remains the dominant form of agricultural practice across the country, leaving the majority of the farmers operating at risk of climatic perturbations and uncertainties.

Given the traditional nature of pastoral farming techniques in contrast to modern ranch system of livestock production that has become popular elsewhere, nomadic pastoral farmers faced one of the greatest direct impacts of climate change in the agricultural sector. Migration and increasing competition for grass and water as heightened by drought and sahelization poses a threat to existing resources, forcing more reliance on migration into new terrains, thus making conflicts inevitable (Amusan & Jegede, 2014). As Adekunle and Adisa (2010, p. 2) note, conflicts arising from herders' search for resources such as water, forage and land in host communities have remained a "most important" problem faced by Fulani herdsman in the course of tending their herd. This has brought about enmity between them and the host community, particularly with arable crop farmers.

The resulting social conflagrations have had huge adverse impact both on security in general and the economy in particular. The magnitude of human and material losses resulting from farmer-herder conflict is alarming. Studies indicate that violence associated with this resource contestation accounts for the deaths of thousands and the displacing tens of thousands more in addition to other indirect humanitarian toll such as the proliferation of ethnic/vigilant militias, the aggravation of inter-communal tensions, and adverse implications on the growth of the country's agricultural sector (Baca, 2015). An April 2016 report funded by the Department for International Development (DFID) noted that "conflict between farmers and herdsman across the North-Central accounts for a Nigeria's loss to the tune of at least \$14 billion in potential revenues annually"¹. Another report found that farmer-herder conflicts increased to alarming levels from 1999, which accounts for the deaths of thousands and the displacing tens of thousands more possibly because of the lack or weak legal frameworks guiding land use in the country.

5. Legal frameworks guiding land use and pastoral practice in Nigeria

Although livestock market contributes one third of the Agricultural Gross Domestic Product (GDP) and accounts for as much as 3.2% of Nigeria's GDP (Nuru, 1984; Fabusoro & Oyegbami, 2009), the absence of government recognition of the sector continues to impede the optimization of its potentials. As a result of the poor operational framework, the sector currently generates only 6,8

billion USD of a potential 20 billion USD annually, as it remains riddled with local strifes and poor government attention and recognition (Okello et al., 2014). Muhammad, Ismaila, and Bibi (2015) explain that livestock sector in Nigeria have no clearly demarcated grazing lands, which could provide rangelands and passageways (cattle corridors) in order to allow livestock to access water points and pastures without causing damage to cropland. The spate of violence which has erupted in different parts of the country as a result of conflict between herders and their host communities therefore indicates government's acknowledgment of the need to revisit extant laws in order to halt growing tension between pastoralists and their hosts.

Inconsistencies between government policies and the diversity of operational environments underlie security risks associated with the livestock production sector in Nigeria. For example, without due cognizance to regional variations in agricultural traditions marked by conflicting patterns of natural resource use between arable and pastoral farming systems, the Land Use Act of 1978 granted equal access both traditions in any part of the country (Muhammed, Ismaila, & Bibi, 2015). This blanket rule marked a major departure from the Land Tenure Act of 1962 (Rasak, 2011). Under that legal framework, the Federal government held the right to redraw the boundaries between cattle routes, range lands and farm lands accordingly and envisaged peaceful co-existence of various groups. In the National Agricultural Policy of 1988, it was stipulated that a minimum of 10% of the national territory, that is, 9,8 million acres, be allocated to grazing reserves. However, only 2.82 % was acquired out of 313 reserves (CIEL, 2006; Ibrahim, 2012).

The National Grazing Route and Reserve Commission Bill of 2011 was the most recent attempt at establish grazing routes and reserves across the 36 states of Nigeria and the FCT (Kumolu, 2014). On 3rd July 2012, a Bill titled 'The National Grazing Route and Reserve Bill' was presented to the Nigerian Senate for deliberation (Daily Trust, 2012). Division among lawmakers on the legality of the Federal Government step to appropriate lands from any state of the federation for use as grazing reserve, however, stalled the Bill's passage at third reading. While some have argued that the government's and the upper house' failure to promulgate a law to establish grazing reserves indicates poor commitment to finding a lasting solution to the conflict (Muhammed, Ismaila, & Bibi, 2015), public opinion particularly among

host communities show apprehension towards legalising land-grabbing and culture clash between migrants and their hosts.

Many states of the federation have also resorted to sedentarization as a strategy for preventing conflict between farmers and pastoralists. There is hardly any state in Nigeria where cattle herders, mostly of the Fulani extraction, do not have a sedentary settlement. This strategy is, however, noted to impose greater challenge in regards feeding and maintaining the herds when compared with a peripatetic pastoral system. RECANIGER (2009), for example, explained that pastoral systems are 20% more productive than sedentary animal rearing for the simple reasons that an intensive maintenance of field bio-mass is required in a sedentary system so as to avoid depletion of pasture. Nonetheless, most countries with highly developed livestock production systems run a sedentarized system in ranches. While this system could halt the recurrent tension as plays out in Nigeria, it is also a very intensive system in which basic requirements that will encourage pastoralists to settle in designated areas need to be in place in various parts of the country.

6. The political economy of farmer-herder conflict

Much of the discourse on conflict between the two largest agricultural traditions in Nigeria has been conditioned by the fragile relations among the country's many ethnic and religious groups, as well as economic and political interests of the elite. It is therefore safe to argue that the farmer-herder conflict, like most conflicts in Nigeria reflect similar convergence of counter-narratives that are often precipitated by historical fault-lines. This mix of nature and culture is easy to become confounded and aggravated by the disparate or combined effects of ecological, political, religious, ethnic or economic tensions. As such, any attempt at reversing the trend of violence in farmer-herder contacts in Nigeria needs to understand the historical and political dimensions of the contestations. In recognition of this premise, scholars allude to the historically suspect relationship between the Fulani and non-Fulani peoples of Nigeria – itself, a derivative of the history of conquests in which the Fulani ethnic group played a huge role in the evolution of the Nigerian state (Okeke, 2014; Horton, 1972; Adeleye, 1971; Last, 1967).

According to Okeke, the Fulani ethnic group of the West African savannah who are mostly cattle herders are known in Nigeria's political history for the series of events called the Fulani jihads through

which they conquered a greater part of the area that later became Northern Nigeria between 1804 and 1810. A larger percentage of the farmer-herder hotspots in the last decade are located in the areas which were untouched by the wave of Fulani Islamic Jihad. Okeke noted that the areas that were not conquered during the Jihad are in today's Central Nigeria that includes present day Plateau, Benue, Taraba, Nasarawa and Kogi states. Some of these cities in history had experienced Fulani Jihadist onslaught, which were aided by the Fulani warrior's effective use of mounted war cavalry and a strong united military formation through, which they took slaves of the natives in the raided communities. Udo (1980, pp. 22-23) attributes the sparse population of large areas of today's North Central Nigeria to the frequent attacks and depredations of Fulani slave raids despite its vast farming lands.

The gradual decimation of Fulani suzerainty would come to an end following British conquest of Northern Nigeria in the first decade of the twentieth century, thus bringing an end to Fulani rule in the area and to the relief of most peoples of Central Nigeria. According to Udoh (1980, p. 24), end of Fulani conquest and supremacy above the territories was consolidated by the British conqueror's colonial policy of fixing of boundaries between the various ethnic groups, as well as between clans and villages, thus conclusively terminating the practice whereby one powerful groups could forcibly encroach upon the land of neighboring groups.

7. The Grazing Bill and sustainable peace in Nigeria

The series of Bills aimed at finding lasting solution to incessant conflict occasioned by competition between herders and their host communities across the country have drawn wide public interest. Referred to generally as Grazing Bill, legislative debates on the issue has been on the front-burner receiving impetus from increasing spate of violence between herdsmen in their host communities – largely farmers in recent times. Giving awareness of its effects for security, the legislature at state and national levels have given priority to crafting legal instruments with a view to reverse the trend of insecurity that has enveloped many communities and dampened the morale of both herders and farmers. However, while the motif of the various legislative interventions has been to ensure peaceful coexistence and a regulated interaction between farmers and herders, it has been a subject of controversy.

The pendency of priority on a legislative solution is seen in the number of processes ongoing in the area of grazing laws. According to Okeke (2014), a 2013 Bill sponsored by Mrs. Zaynab Kure (Southern Nigeria) before the Nigerian Senate – the upper arm of the two houses of the country's National Assembly entitled – Bill for an Act to provide for the Establishment, Preservation and Control of National Grazing Reserves and Livestock Routes and the Creation of National Grazing Reserve Commission and for purposes connected therewith. Similarly, another Bill designed on the same issues was sponsored with backing from legislators from the northern region of Nigeria, and considered at the House of Representatives, the lower house of the National Assembly. The Bill in the lower house sought that power be granted to a federal commission to acquire lands from all the state governments and the Federal Capital Territory to establish grazing routes and reserves for Fulani herders. Subject to the directives of the Commission, Fulani herdsmen would have a right to such lands, despite the wishes of the owners, and despite the wishes of the government of any state (Okeke, 2014).

The controversy generated by these pieces of legislation have been amplified by the complex diversity of the Nigerian state. For example, while the Bills have elicited optimism among the people of the north and received strong support from lawmakers of Northern extraction, it was vehemently opposed by legislators from Southern Nigeria, and some from central Nigeria. In addition to these legislative divides, several associations representing the interests of different ethnic groups in Southern and Central Nigeria include the Ijaw National Congress, the Federation of Middle Belt Peoples, Afenifere (a Yoruba organization), the Movement for the Survival of Ukwuani People and the Southern Kaduna in Diaspora have publicly opposed the Bill (Nzeshi, 2013; The Sun, 2013; Okeke, 2014).

A number of issues have been raised on both sides of the debate. On the supporting line of thought, Grazing Bill proponents justify the Bill on a number of grounds. First is the fact that cattle herders need pasture for their cattle and since they are Nigerians, they are constitutionally allowed to reside and carry out their activities in any part thereof. Second, they contend that environmental change manifested particularly through desertification has led to a drastic decline in the supply of pasture in the Northern region. This, coupled with overgrazing as a result of the ever growing size of herds, has rendered the environment unsustainable. They therefore attribute conflict to the forced migration to the south as herders are compelled by environmental

and demographic forces to seek alternative sources of pasture. Oftentimes environment-induced population movements occur without recourse to national borders (Amusan, 2013). It is in the course of migratory adaptation according to this line of argument that herders often come into conflict with farming communities (see Kawu, 2012).

Lawmakers in support of the Grazing Reserve Bill also highlight frequent loss of herds as both a cause and often a consequence of farmer-herder conflicts. As a strategy for preventing such recurrent conflicts, the sponsors of the Bill suggest that the federal government designates grazing routes and reserves across the 36 states of the federation regardless of the cultural and agro-cultural characteristics of the localities. By implication, they seek rights for Fulani herdsmen to have access to take possession of lands found suitable in any part thereof within Nigeria including those situated in non-Fulani communities for the purpose of cattle grazing. This proposal has received support from pro-Fulani interests (Kawu, 2012). Quite a good number of stakeholders including state governors see the Grazing Bill proposals as an option for peace in the affected states (Balai, 2012). Others contend that Fulani migration towards central and southern Nigeria is to cut costs: to minimize transport costs by taking their cattle closer to cattle markets (Okeke, 2014).

From an opposing point of view, civil society groups and indigenous groups have been most vocal in rejecting the Grazing Bill. This position has been hinged on a number of arguments. One is that the Bill would deprive indigenous peoples of lands which otherwise would have been used purposes suitable to the local agricultural practices and livelihood systems. Second, critics argue that such a redistribution of land would deprive the natives of farm lands and render families landless, since such lands were traditionally transferred as inheritance from one generation to another. Others contend that acquisition of land for grazing across the nation was a part of its effort to advance the expansionist agenda of the Fulani who are historically associated with Islamic Jihad. It is likely that, once entrenched on reserves, the Fulani would seek to acquire more and, contrary to the express purpose of the Bill; more conflicts will result between herders and natives over land. It is also argued that southern Nigeria has much less land than the northern region and its available land faces greater population pressure from its higher population density when compared to the north.

Ecological degradation arguments are countered by the observation, according to Okeke (2014), for example, that while it is true that desertification has impacted the northern fringes of Nigeria, this is inadequate a rational for the southward exodus of herdsman. Specifically, studies show that the extent of degradation in northern ecological settings is not substantially harmful enough to impede grazing and farming as traditionally obtained in the region. This is more so as farming in the north is often of short-term crop production including maize, millet, sorghum, melon among other such crops. As such, environmental decline, they argue, has not significantly disrupted farming and cattle production as gravely as it has in Niger or Chad, which, despite having more severe problems of drought and desertification, still export cattle and beans to Nigeria (Okeke, 2014, p. 76).

Okeke also showed the elitist nature of the Grazing Bill proposal suggesting that it may be a strategy to move competition for land, which indeed occurs across the country to the south with a view to making land available to greater elite capitalist farming of cattle and crops in the north by clearing more of the herders out of way. While noting the clashes between farmers and herders in the north as a result of encroachment on grazing lands and the acquisition of virgin lands by capitalist farmers in Northern Nigeria, Okeke argued that large scale farmers are also acquiring vast lands for farming in the region which is an elite created problem resulting from the Fulani, Hausa and Kanuri capitalists with whom the power to address land issue in the region also lies. From this light, lack of access to herders is to be blamed on northern capitalist and therefore, provides no moral or political justification for herder to invade other regions. In the same way such artificial scarcity of land does not put other regions under any moral or political obligation to give up their lands to Fulani herders to make up for the grazing lands seized by their own elites in the true spirit of federalism (Okeke, 2014, p. 76).

Conclusion and recommendations

This paper has highlighted both the importance of ecological variations and change, as well as the

pivotal role played by the peculiar nature of Nigeria political terrain in the competition between the two contending livelihood systems in the country. While it admits that climate change is a reality and has significant impacts on human security through its adverse effects on pastoral livelihoods, it argues that migration and conflict goes beyond this causal narrative. The combination of socio-historical factors provide a backdrop to farmer-herder conflict in Nigeria in the face of an increasing decline in natural resource base and growing competition for land and its associated resources.

Viewed in the context of Nigeria's federalism, farmer-herder conflict is a complex and sensitive issue on which policy makers must exercise great circumspection and take into account the interest of all segments of the populations in fashioning out appropriate legal frameworks. Such a framework must be sensitive to the core existential principles under-guiding the fragile peace among groups, particularly between peoples of the host communities and migrant pastoral farmers in Nigeria. The content and intendments of the Grazing Bill therefore falls short of this key prerequisite, as it ignores the interests and concerns of the host communities.

It is therefore time to borrow a leaf from other civilizing nations and organizations by embracing modern techniques of cattle ranching (Amusan, 2014). This paper recommends that the government should develop framework for the transformation of livestock production system in Nigeria from the current traditional nomadism to a ranch-based activity. This will further open new areas of agricultural enterprise and investment in the form of multiplier effects on economic development such as forage-crop farming that will produce feed for cattle, as well as provide storage and transportation services. This forward and backward linkages will promote sustainable economic development. The legislative organ of the state must develop the political will to holistically confront this issue in a conclusively rather than foist one-sided legislation that may further widen the gap of distrust between different regions and cultures in Nigeria.

References

1. Abbass, I. M. (2011). No Retreat, No Surrender: Conflict for Survival between Fulani Pastoralist and Farmers in Northern Nigeria. *European Scientific Journal*, 8(1), 153-166.
2. Adekunle, O. A., & Adisa, S. R. (2010). An Empirical Phenomenological Psychological Study of Farmer-Herder Conflicts in North-central Nigeria. *Journal of Alternative Perspectives in the Social Sciences*, 2(1), 1-27.
3. Adeleye, R. A. (1971). *Power and Diplomacy in Northern Nigeria: The Sokoto Caliphate and its Enemies, 1804-1906*. London: Longman.
4. Amobi, D., & Onyisi, T. (2015). Governance and Climate Change in Nigeria: A Public Policy Perspective. *Journal of Policy and Development Studies*, 9(2), 199-209.

5. Amusan, L. (2011). Water: a crisis in waiting. *New Zealand International Review*, November/December, 36(6), 21-24.
6. Amusan, L. (2013). Nigeria and its Neighbors in the Age of Climate Change: An Assessment of the Lake Chad Basin Area. In Adeoye A. Akinsanya and John A. Ayoade (Eds.), *An Introduction to Political Science in Nigeria* (pp. 261-282). Lanham, Maryland: University Press of America.
7. Amusan, L., & Oyewole, S. (2014). Boko Haram Terrorism in Nigeria: A Reflection on the Failure of Democratic Containment. *Politeia. Journal for Political Science and Public Administration*, 33(1), 35-49.
8. Aregheore, E. M. (2009). Country pasture/forage resources profile, Nigeria, In Suttie J. M and S.G Regnolds (Eds.), *Agriculture and education services*. Apia Samoa: Marfel consulting.
9. Azuwike, O. D., & Enwerem, E. (2010). Nigeria's Changing Environment and Pastoral Nomadism: Redistribution of Pains and Gains. Imo State University. Retrieved from http://www.diss.fu-berlin.de/docs/servlets/MCRFileNodeServlet/FUODOCS_derivate_00000001383/Azuwike-NIGERIAS_CHANGING_ENVIRONMENT_AND_PASTORAL_NOMADISM-%20329.pdf (accessed on October 20, 2016).
10. Baca, M. W. (2015). Farmer-Herder Clashes Amplify Challenge for Beleaguered Nigerian Security. IPI Global Observatory, July. Retrieved from <http://theglobalobservatory.org/2015/07/farmer-herder-nigeria-buhari-abuja-fulani/> (accessed on October 20, 2016).
11. Balal, A. (2012). Nigeria: Suswan Urges Dialogue Over Herders/Farmers Clashes. 1 November. <http://allafrica.com/stories/201211010307.html> (accessed on October 20, 2016).
12. Barnett, J., & Webber, M. (2009). Accommodating Migration to Promote Adaptation to Climate Change. Policy brief. For the Secretariat of the Swedish Commission on Climate Change and Development, and the World Bank World Development Report 2010 team. Stockholm: Commission on Climate Change and Development.
13. Barrot, P. (1992). Farmers vs. Herders: Conflict Erupts. *Club du Sahel Newsletter*, 12, 5-6.
14. Bauhaug, A., Gleditsch, N. P., & Theisen, O. M. (2008). Implications of Climate Change for Armed Conflict. Paper presented at the World Bank Workshop on Social Dimensions of Climate Change. The World Bank, Washington DC. 5-6th March. Retrieved from http://www.engagingconflict.it/ec/wp-content/uploads/2012/05/Feron_Bauhaug-Implications_of-Climate-change-for-armed-conflict.pdf (accessed on 15/03/14).
15. Benjaminsen, T. A., Ba, B. (2009). Farmer-herder conflicts, pastoral marginalisation and corruption: a case study from the inland Niger delta of Mali. *The Geographical Journal*, 175(1), 71-81.
16. Blench, R. (2003). The Dimensions of Ethnicity, Language and Culture in Nigeria: The Ethnicity Dimension. Paper submitted to DFID, Nigeria. Retrieved from <http://www.rogerblench.info/Development/Nigeria/Economic> (accessed on 02 September, 2016).
17. Brancati, D. (2007). Political Aftershocks: The Impact of Earthquakes on Intrastate Conflict. *Journal of Conflict Resolution*, 51(5), 715-743.
18. British Colonial Report – Annual (1916). Nigeria: Annual Report for 1914. British Colonial Reports—Annual, No 878, April. Retrieved from http://libsysdigi.library.illinois.edu/ilharvest/Africana/Books2011-05/3064634/3064634_1914/3064634_1914_opt.pdf (accessed on 02 September, 2016).
19. Brooks, N. (2003). Vulnerability, risk and adaptation: A conceptual framework. Tyndall Centre for Climate Change Research Working Paper 38, November. Retrieved from <http://www.tyndall.ac.uk/sites/default/files/wp38.pdf> (accessed on December, 10, 2016).
20. Burke, M., Miguel, E., Satyanath, S., Dykema, J., Lobell, D. (2009). Warming increases risk of civil war in Africa. *Proceedings of the National Academy of Sciences*, 106(49), 20670-20674.
21. CIEL. (2006). CBPR database -Nigeria. Centre for International Environmental Law. Retrieved from http://www.ciel.org/Publications/CBPR_Nigeria_9-18-06.pdf (accessed on November 2, 2016).
22. Cleaver, K. M., & Shreiber, G. A. (1994). Reversing the Spiral: The Population, Agriculture, and Environment Nexus in Sub-Saharan Africa, Directions in Development. The World Bank.
23. Coleman, J. S. (1958). *Nigeria: A Background to Nationalism*. Berkeley: University of California Press.
24. Conroy, S. (2014). Land Conflict, Climate Change, and Violence in Nigeria: Patterns, Mapping, and Evolution. Retrieved from <http://www.nsrp-nigeria.org/wp-content/uploads/2017/03/Land-Conflict-and-Climate-Patterns-in-Nigeria.pdf> (accessed on May 3, 2017).
25. Crozier, D., & Blench, R. M. (1992). *Index of Nigerian Languages* (2nd Edition). Dallas: SIL.
26. Daily Trust. (2012). Nigeria: Grazing Reserves Commission Bill Divides Senate. 4 July 2012. Retrieved from <http://allafrica.com/stories/201207040466.html%20> (accessed on 1 March 2016).
27. Deutsch, M. (1973). *The Resolution of Conflicts*. New Haven: Yale University.
28. Dollard, J., Doob, L., Miller, N., Mowrer, O., & Sears, R. (1939). *Frustration and aggression*. New Haven: CT: Yale University Press.
29. Dorward, D. C. (1975). *Government publications relating to Nigeria, 1862-1960*. East Ardsley, England: EP Microform. Retrieved from <https://www.britishonlinearchives.co.uk/group.php?cat=&sid> (accessed on June 22, 2016).
30. Dougherty, J. E., & Pfaltzgraff, R. L. (1996). *Contending theories of international relations: a comprehensive survey*. New York: Longman.

31. Dun, O., & Gemene, F. (2008). Defining 'environmental migration'. *Forced Migration Review*, October 2008, Issue 31.
32. ENDS (2014). Genocide in Nigeria: Boko Haram Death Toll 100,000 – 1,000,000. News Rescue Online. December 14. Retrieved from <http://newsrescue.com/genocide-nigeria-boko-haram-death-toll-100000-1000000/#axzz4ggh1AVKW> (accessed on April 9, 2017).
33. Enete, A. A., & Amusa, T. A. (2010). Contribution of Men and Women to Farming Decisions in Cocoa Based Agroforestry Households of Ekiti State, Nigeria. *Tropicultura*, 28(2), 77-83.
34. Evans, A. (2012). Resource, Risks and Resilience: Scarcity and Climate Change in Ethiopia. Centre on International Cooperation, New York University. Retrieved from http://cic.nyu.edu/sites/default/files/evans_security_ethiopia_2012.pfd (accessed on September, 2016).
35. Fabusoro, E., & Oyegbami, A. (2009). Key issues in the livelihoods security of migrant Fulani pastoralist: empirical evidence from Southwest Nigeria. *Journal of humanities social sciences and creative arts*, 4(2), 1-20.
36. Fabusoro, E. (2007). Key Issues in Livelihood Security of Migrant Fulani Pastoralists: Empirical Evidence from Southwest Nigeria. AEGIS European Conference on African Studies, African Studies Centre, Leiden, Netherlands, 11-14th July.
37. Falola, T., & Heaton, M.M. 2008. *A History of Nigeria*. New York: Cambridge University Press.
38. Fasona, M. J., & Omojola, A. S. (2005). Climate Change, Human Security and Communal Clashes in Nigeria, *Human Security and Climate Change*, International Workshop, at Holmer Fjord Hotel, Asker, Near Oslo. 21-23, June.
39. Felson, B. R. (1992). Kick' Em When They're Down: Explanations of the Relationship Between Stress and Interpersonal Aggression and Violence. *The Sociological Quarterly*, 33(1), 1-16.
40. Folami, O. M., & Folami, A. O. (2013). Climate Change and Inter-Ethnic Conflict in Nigeria. *Peace Review*, 25(1), 104-110.
41. Gomez, O. (2013). Climate change and migration: A review of the literature. A study commissioned by the International Institute of Social Studies, The Hague (Erasmus University Rotterdam), and the International Development Research Centre. Canada.
42. Horton, R. (1972). Stateless Societies in the History of West Africa In J.F.A. Ajayi and Michael Crowder (Eds.), *History of West Africa*, Vol. 1. London: Longman.
43. Hsiang, S. M., Burke, M., & Miguel, E. (2013). Quantifying the Influence of Climate on Human Conflict. *Science Express*. Retrieved from http://www.gci.org.uk/Documents/_Paper_Quantifying_the_Influence_of_Climate_%20n (accessed on March 6, 2014).
44. Ibrahim, A. (2012). Linking vision with reality in the implementation of policy framework for pastoralism in Nigeria. *Pastoralism: Research, Policy and Practice*, 2(7), 1-7.
45. IPCC (1990). Climate Change: The IPCC Scientific Assessment. Report prepared for Intergovernmental Panel on Climate Change by Working Group I J.T. Houghton, G.J. Jenkins and J.J. Ephraums (Eds.), Cambridge University Press, Cambridge. Retrieved from https://www.ipcc.ch/publications_and_data/publications_ipcc_first_assessment_1990%20wg1.shtml%20 (accessed on August, 2013).
46. IPCC, Working Group II (2007). Glossary of Terms. IPCC Fourth Assessment Report: Climate Change 2007, Working Group II: Impacts, Adaptation and Vulnerability. Retrieved from http://www.ipcc.ch/publications_and_data/ar4/wg2/en/annexessglossary-a-d.html (accessed on August, 2014).
47. Kawu, I. M. (2012). Prejudice, ignorance, profiling and the Fulbe nomad. *The Vanguard*, 19 July.
48. Kritz, N. J. (2007). The Rule of Law in Conflict Management. *Leashing the Dogs of War: Conflict Management in a Divided World*, 401-424.
49. Kumolu, C. (2014). Fulani herdsmen, farmers clashes: Furore over grazing reserves. *Vanguard News*. Retrieved from <http://www.vanguardngr.com/2014/04/fulani-herdsmen-farmersclashes-furore-grazing-reserves/%20> (accessed on 15 November, 2016).
50. Last, D. M. (1967). *The Sokoto Caliphate*. London: Longman.
51. Muhammed, I., Ismaila, A. B., & Bibi, U. M. (2015). An assessment of farmer-pastoralist conflict in Nigeria using GIS. *International Journal of Engineering Science Invention*, 4(7), 23-33.
52. Nel, P. R., & Righarts, M. (2008). Natural Disasters and the Risk of Violent Civil Conflict. *International Studies Quarterly*, 51(1), 159-184.
53. Nuru, S. (1984). Livestock research in Nigeria. In Von-Kaufmann R., Chater S. and Blench R. (Ed.) Livestock systems in Nigeria's subhumid zone. Proceedings of the second ILCA/NAPRI symposium held in Kaduna/Nigeria on the 29th October-2nd November.
54. Nzeshi, O. (2013). Grazing Reserves Bill: The Challenges Ahead. *This Day*, August 10.
55. Okeke, O. E. (2014). Conflicts between Fulani Herders and Farmers in Central and Southern Nigeria: Discourse on Proposed Establishment of Grazing Routes and Reserves. *International Journal of Arts and Humanities*, 3(1), 66-84.
56. Okello, A. L., Majekodunmi, A. O., Malala, A., Welburn, S. C., & Smith, J. (2014). Identifying motivators for state-pastoralist dialogue: Exploring the relationships between livestock services, self-organisation and conflict in Nigeria's pastoralist Fulani. *Pastoralism Springer*, 4(12), 1-14.

57. Olufemi, F. J., & Samson, A. O. (2012). Climate Change, Environment and Conflicts in Nigeria, British. *Journal of Arts and Social Sciences*, 6(1), 11-20.
58. Osimen, G. U., Balogun, A., & Adenegan, T. S. (2013). Ethnicity and Identity Crisis: Challenge to National Integration in Nigerian. *IOSR Journal of Humanities and Social Science*, 16(4), 79-86.
59. Oyenuga, V. A. (1967). Agriculture in Nigeria: An introduction. Rome: Food and Agriculture Organization of the United Nations.
60. Rasak, S. E. (2011). The Land Use Act of 1978: Appraisal, Problems and Prospects. A Bachelor of Law Project, University of Ilorin, Nigeria. Retrieved from <http://www.unilorin.edu.ng/studproj/law/%200640ia168.pdf%20> (accessed on 18 October, 2014).
61. RECANIGER (2009). Etude régionale sur les contextes de la commercialisation du bétail/accès aux marchés et défis d'amélioration des conditions de vie des communautés pastorales. Regional Study on the contexts of livestock marketing/Market Access and challenges of improving the living conditions of pastoral communities. IRAM, SNV, p 96. Retrieved from http://www.recaniger.org/img/pdf/rapport_commercialisation_betail__iram_snv_2009.pdf%20 (accessed on 20 January, 2015).
62. Sayne, A. (2011). Climate Change Adaptation and Conflict in Nigeria. *Special Report*, United States Institute for Peace. Washington. Retrieved from http://www.usip.org/sites/default/files/Climate_Change_Nigeria.pdf (accessed on 12, September, 2015).
63. Slettebak, R. T. (2012). Don't blame the weather! Climate-related natural disasters and civil conflict. *Journal of Peace Research*, 49(1), 163-176.
64. The Sun (2013). 20 feared killed as Fulani herdsmen, Soja Patali clash in Benue. Retrieved from <http://sunnewsonline.net/news/20-feared-killed-as-fulani-herdsmen-soja-patali-clash-in-benue> (accessed on September 3, 2016)
65. Udo, R. K. (1980). Environment and Peoples of Nigeria: A Geographical Introduction to the History of Nigeria. Obaro Ikime (Ed.), *Groundwork of Nigerian History*. Ibadan: Heinemann.
66. Wilson, G. L., & Hanna, M. S. (1979). *Groups in Context: Leadership and Participation in Small Groups*. New York: Mc Graw-hill.