

A Critical Analysis of the Relationship Between Climate Change, Land Disputes, and the Patterns of Farmers/Herdsmen's Conflicts in Nigeria

Olalekan Waheed Adigun^{[a],*}

^[a]Department of Political Science, Nnamdi Azikiwe University, Awka, Nigeria.

*Corresponding author.

Received 21 January 2019; accepted 10 March 2019
Published online 26 March 2019

Abstract

Relying on the Nigeria Watch database and newspaper reports from August 2014 to April 2018, this study analyses the root causes, patterns, and politicisation of the farmers/herdsmen conflicts in Nigeria. This study critically examines the relationship between climate change, land disputes, and the patterns of farmers/herdsmen conflicts in Nigeria.

Scholars' attempts to examine the relationship between environmental (in)sustainability and violent conflicts have been largely inconclusive. The recent conflicts between farmers and herdsmen may have taken a different pattern, especially in the North-Central region of Nigeria. Many people have attributed the increase in the conflicts between the two communities (farmers and herdsmen) to several non-environmental factors. The study adopts longitudinal research methods to unearth the connections between climate change, land disputes, and the patterns of the conflicts. It, however, looks at the conflict(s) as a product of environmental influences but escalated by the "vested interests" benefiting from the continued conflicts in the region.

Key words: Climate change; Conflicts; Farmers; Herdsmen; Land disputes; Political ecology

Adigun, O. W. (2019). A Critical Analysis of the Relationship Between Climate Change, Land Disputes, and the Patterns of Farmers/Herdsmen's Conflicts in Nigeria. *Canadian Social Science*, 15(3), 76-89. Available from: <http://www.cscanada.net/index.php/css/article/view/10967>
DOI: <http://dx.doi.org/10.3968/10967>

INTRODUCTION

This paper looks at the uneasy relations between farmers (or crop producers) and herdsmen (livestock keepers) in Nigeria. This relationship has become the subject of academic interests in recent time due to its implications for food security, development, national security, and the environment in the era of climate change. This relationship is 'uneasy' because some see it essentially as characterised as violent and conflictual with no benefit whatsoever for either party, while others see it as symbiotic where both parties benefit despite the tensions over limited resources both lay claim(s) to. Also, some scholars see the tensed relations as caused essentially as human competitive tendencies for limited space or resources. Only recently has there been media outrage over the bloodlettings resulting from violent conflicts between the two groups in Nigeria's North-Central region. The frequencies of these conflicts since 2014 in the North-Central part of Nigeria makes the issue a source of developmental, environmental, national security, and inter-ethnic political concerns (Adams and Bradbury, 1995).

Although it is a problem that dates back to the pre-colonial period, the frequency of farmers/herdsmen conflicts appears to be on the increase in recent times. There also seem to be no clear consensus among scholars to show a clear time-series evidence and the factor(s) responsible for this rise in violent conflicts between the farmers and the herdsmen (Hussein, Sumberg and Seddon, 1999; Olayoku, 2016). Recently, several claims have been made as to the factors that have given rise to the seeming rising incidence of violent attacks between the herders and the farmers in Nigeria with serious national security implications. The solutions proffered have been between two irreconcilable extremes which include politicians urging violent reactions on the sight of one community member of the other.

The causes of the changing violent conflicts between the two communities in literature have been attributed to the following: (i) the breakdown of 'traditional'

management of resource (land) and conflict resolution between both parties since the interventions of the post-colonial state in Africa (ii) changing patterns of land reforms and increased competitive demand for land for various use(s) between the “landedness” (owners of land, in this case, the farmers) and the “landless” (those who do not own land, in this case, the herdsmen) (Dafinger and Pelican, 2006) (iii) increase in the population of livestock, humans, urbanisation, and other causative agents in the demand for land for several uses and the declining weather conditions causing draughts and food supplies (Bassett, 1986) (iv) the role of vested interests, “invisible hands” or “third force” profiting from the continued conflicts. The fourth point is rarely looked at by scholars in the understanding of the changing patterns of the conflicts between both communities. These arguments have, however, been used to advance and advocate development policy changes in other to mitigate the conflicts. Some of these policy changes include the establishment of “cattle colonies” or reserves; or the drawing of lines or land sharing (Dafinger and Pelican, 2006) between herders and farmers which will include comprehensive reforms in land tenure systems. Some other recommendations have included that since the state has played partisan roles by taking sides with one faction against the other, the state should withdraw and both parties should revert to the traditional means of conflict resolutions dating back to the pre-colonial era with the state “strengthening of local structures for conflict settlement and prevention with the participation of traditional leaders, representatives of the local administration” (Cabot, 2017, p.162; Bello, 2013). Despite the fact that all these explanations have their obvious gaps, the assumptions and theses upon which they are based are very robust.

This paper, therefore, looks at the new patterns of violent conflicts, exploring their causes, patterns and consequences based on the following research questions:

- What is the connection between climate change and the patterns of the Farmer/Herdsman conflicts in Nigeria?
- What is the connection between land disputes and the conflicts?
- How have the key actors in the conflicts responded to the conflicts?

These questions will be analysed using content analysis as a research method. This paper hopes to fill a research gap, especially in the role of vested interests, “invisible hands” or “third force” in the conflicts, that seems to have escaped rigorous academic inquiry because there is a current tendency for scholars to overlook or *empirically* under-researched this aspect of farmer/herdsman relations.

FARMERS/HERDSMEN RELATIONS, SOCIAL ORGANISATION, AND CONFLICTS: A THEORETICAL EXPLORATION

The literature on farmers/herdsman relations reveals three perspectives as a level in the social organisation. The first

perspective notes that the Farmers/Herdsman relations have always been based on cooperation or symbiosis. As Bassett (1986, p.248) contends in his study of Fulani nomads in West Africa, that the relationship between both parties “reflects this human ecological symbiosis between pastoralists and farmers.” This is because scholars have had challenges separating between the planting of crop and livestock production as two distinct entities. As noted by Toulmin (1983) and Pelissier (1977), since both communities contribute fairly to the balancing of the Agricultural ecosystem, many farmers are increasingly keeping livestock and herders are increasingly engaging in the cultivation of crops in Africa. Though both farmers and herdsman have distinct cultures and sometimes compete for limited space, they need each other more often than they do not. In this case, both communities, know each other well through social interactions and maintenance of the social organisation. But, “conflicts over crop damage” (Bassett, 1986, p.248) often strain this complementary relationship. This perspective argues that the relations between both communities are symbiotic. The key challenge to this seeming peaceful relation between both communities could be traced to the social value of land which often defines social relations and standings of the individual in a social hierarchy with others having to bear the burden of being classified as “landless” (Dafinger and Pelican, 2006, p.147).

The second perspective in their relationship is overwhelmingly supported by several scholars and policy analysts that competition, conflict, and rivalry defines the relations. The frequent violent conflicts between both parties in Nigeria which have recorded loss of lives have placed the farmers/herdsman conflicts on the front burner of political discourse in recent times. Bassett (1986) and Bennett (1991) note that limited supply of land coupled poor weather conditions and unpredictable environmental factors such increase the chances of violent conflicts, stiff competition, and rivalry between farmers and herdsman. The conflicts have also been explained in terms of the forces of increase in urbanisation, human population, and socio-economic factors arising from unemployment (Cohen, 2009). Cabot (2017) sees the conflicts as traceable to the impacts of climate change. In the extensive study of the impacts of climate change on the Farmers/Herdsman conflicts in three West African countries of Côte d’Ivoire, Ghana and Burkina Faso, Cabot (2017, p.4) argues that the two “groups that depend heavily on natural resources are especially vulnerable and likely to see a surge in conflicts and violence”. With the severity of climate changes expected in the years to come, Cabot argues, the conflicts between the two groups are likely to be on the increase. On their part, Breusers, Nederlof, and van Rheenen (1998, p.380) argue in their study in Burkina Faso note that “both livestock and cropping activities compete for the same resources, but this cannot be translated into competition on ethnic lines, due to the uniformisation of production systems and other existing relations.”

The third perspective, rarely researched, is the influence of vested interests in the conflicts. Aluko (2006a, p.93) noted that vested interests are stakes “in some entity or in the course of events.” The vested interests, “invisible hands” or “third force” in the context of farmers/herdsmen conflicts often employ “political propaganda ... who exploit political capital out of these incidence to win the support of the electorate in their constituencies.” (Baidoo, 2014, p.53). Baidoo (2014, p.65) notes further that “political exploitation whereby various interest groups seek to gain political capital out of the ... situation in order to gain the support and popularity of the masses”. On his part, Ahmed-Gamgum (2018, p.61) argues that the conflict between both communities is “politically motivated insecurity ... which was used as campaign outfit” which has “popped up discussions as from 2016 on who should be voted into power and who should not be voted into power come 2019.” The state can sometimes take sides with the vested interest in the conflicts, for political reasons, by taking sides with a faction to the displeasure of the other, this leaves the other to develop “coping strategies” which includes resorting to self-help like violence “in order to access and control the remaining natural resources” (Cabot, 2017, p.160).

For the purpose of this paper, we use the terms, “conflicts”, “violence”, “attacks” and “killings” as synonymous. Hussein, et al (1999, p.401) categorise the Farmers/Herdsmen conflicts into inter-personal, state and political violence. The interpersonal conflicts exist at the level of inter-personal relations in the social organisation (Aluko, 2006a, p.92). This exists in the form of physical assaults between individual members between the two communities (Hussein, et al, 1999). State violence arises when the state decides to take sides with a party to the conflicts for political purposes (ibid). This can take the form of expulsion, withdrawal of certain privileges to one party for the benefit(s) of the other in the conflict leaving them with little option other than self-defence. Political violence, on the other hand, is when both parties resort to extreme self-help and in many cases, invasion of villages, wanton destruction of lives and properties, mass murders and infliction of injuries (ibid). The conflict can only get to this level when the vested interests feel they can derive maximum benefits from such a situation. Also, in analysing the phenomenon of the Farmers/Herdsmen conflict, this paper adopts the political ecology approach which will be explained in the next section.

CLIMATE CHANGE AND FARMER/HERDSMEN CONFLICTS: ANY CONNECTION(S)?

Climate is perhaps the most important aspect of man's natural environment (Aluko, 2006b). It can, therefore, be said that any change in climatic conditions will have

implications for man's interactions with other humans and the environment. Clement and Shelford (1939) note that climatic conditions have the capacity to effects behavioural changes in human interactions. But can we then argue that these give us enough evidence to support the claim that there is a connection between climate change and conflicts?

Attempts by scholars to find the connections between climate change and the farmers/herdsmen conflicts have been largely inconclusive, thereby producing three results: denial, affirmations, and correlations.

The acrimony brought about by the climate change debates has passed three historical phases since the era of contentious debates between climate change affirmation and scepticism, if not outright denial (Diethelm and McKee 2009; McIntyre and McKittrick 2003); to debates on nature versus anthropogenic agency following scientific affirmation of climate change (Allison et al. 2009; Carr, Brash and Anderson, 2010; RealClimate 2005); and to current debates which focus on the scope of impacts, options for adaptation, and impacts reduction. The recent debates on the impacts of climate change on human security are motivated not only by the strength of scientific evidence of changing climatic system which has spurred global interest (IPCC, 2007) but also by recognition of its alarming social implications either potential or actual. Among the diverse implications, its potential to precipitate violent conflict draws strong impetus from increased incidence of resource-related violence already manifesting in many parts of the developing world (Dokos, 2008; IPCC, 2007).

Some scholars since the end of the Cold War have developed frameworks like “environmental security”, “environmental conflicts” and “eco-violence” or eco-violence theories as attempts to explain how “shrinking resource pie” is supposedly fuelling violent civil conflicts (de Soysa, 2002, p.1). Homer-Dixon (1999), Cabot (2017), Bassett (1986), Bennett (1991), and Cohen (2009) argue that environmental scarcity, urbanisation, desertification, demographic changes play in spawning violent conflicts. Others, however, argued that there is “little or no support for ecoviolence theories” (de Soysa, 2002, p.27). Percival and Homer-Dixon (1998, p.279) explain that the eco-violence framework defines “scarcities, the social effects arising from these scarcities, and the ensuing movement towards violence.” The eco-violence framework has been a reference case in studies on the interaction between human vulnerability in situations of conflict associated with environmental problems such as drought, erosion, and population growth that is believed to have significant causal links pressure on availability of environmental resources, aggravating inequality in distribution and access to scare resources, and heightening contestation among powerful groups to control a limited resource (Dougherty and Pfaltzgraff, 1996)

To Dougherty and Pfaltzgraff (1996), Cabot (2017), Bassett (1986), Bennett (1991), and Cohen (2009) the eco-

violence core postulation is that the depletion occurring in the amount or quality of resources reduces the total [resources] available, while increases in population divide what remains [of such natural resources] into smaller portions. These scholars identify population growth and resource depletion as two potent factors which converge to produce conflict in many parts of the developing world.

The eco-violence framework sees conflict as a product of scarcity or the fear of natural resources depletion that may occur in at least two primary ways as illustrated by its proponents: one, “the environmental effects of human activities in a given ecological zone, which is in itself a function of the total population of the region and the physical activity per capita as defined by the level of available physical resources (whether non-renewable resources, renewable or ideational such as institutions, belief systems, social relations and preferences), and (2) the level to which the ecosystem in that region is vulnerable (Isiugo and Obioha, 2015).

Contrary to the assumption that grievances, group identities, and opportunities for violent collective action are causally independent, Percival and Homer-Dixon (1998) present a socially intertwined process in which grievances play a very significant role in influencing the formation of groups and in defining what group membership means.

Percival and Homer-Dixon (1998, pp.279-280) note that “the causal relationship between environmental scarcities- the scarcity of renewable resources-and the outbreak of violent conflict is complex... since environmental scarcity emerges within a political, social, economic, and ecological context and interacts with many of these contextual factors to contribute to violence”, hence they note that “the context specific to each case determines the precise relationship between environmental scarcity and outbreaks of violent conflict” (Ibid, p.280).

The relevance of the eco-violence approach in examining the dynamics of resource contestations in Nigeria derives from the balance of variables captured in the framework. The eco-violence framework as described by Gleditsch and Urdal (2002) as far removed from the simplifications which characterize some other analysis of the environment-conflict discourse as represented by the sensationalism of Kaplan (1994). Thus, Homer-Dixon avoids the tendency for definitive claims presenting population pressure and environmental degradation as sole sources of violent environmental conflict and instead emphasizes the close interrelationship between demographic/environmental, social, and political factors in the generation of violent conflict.

POLITICAL ECOLOGY, LAND DISPUTES, AND THE FARMERS/HERDSMEN CONFLICTS IN NIGERIA

To properly understand the Farmers/Herdsmen conflicts in Nigeria, it is important to look at the political contexts

where both operate. Okoli (2013) and Peet and Watts (1996) sees political ecology as essentially concerned with the study of the interconnections and interrelations between the economic, political, cultural and religious factors in the context of the environments and its influence. This investigates the changing socio-cultural influences among the farmers and herdsman and how they contribute to the conflicts.

Agriculture contributes a significant percentage to Nigeria’s Gross Domestic Product (GDP). The major activities in Nigeria’s agricultural sector are crop and livestock production. Livestock production alone accounts for about one-third of agriculture’s contribution to Nigeria’s GDP (Bello, 2013). In addition to its nutritional value, the herdsman, responsible for breeding cattle account for substantial sources of animal proteins consumed by Nigerians (Ibid). Cattle herding has almost become synonymous with the Fulani, Fulbe the Shuwa, the Koyam, the Badawi, the Buduma and the Dark Buzzu tribes spread across several West African countries. The most popular with this trade are the Fulanis. The crop production aspect of Nigerian agriculture is dominated by rural-based small-scale arable crop producers, who account for about 80% of total food supplies (Fayinka, 2004). Crop production in Nigeria is carried out mostly in the rural areas.

The political ecology of the Farmers/Herdsman conflicts in Nigeria can be properly seen when properly used in the context of the scarcity and the right to own resources. In this regard, we can use the competition for scarce resources (land) between the two groups desperate to protect their traditional means of livelihood and culture in the ever-shrinking ecosystem made aggravated by the availability of declining resources, overcrowding, incursion into each other’s traditional lines and spaces, and rising tensions from social interactions (Bello, 2013). In the case of Nigeria, which is the case focus of this paper, the situation seems to have been aggravated by the devastating effects of migration-induced climate change to the North-Central region led herdsman to travel farther in search of pasture for their livestock. This region, unfortunately, has suddenly become a hotbed for the violent conflicts between the two groups in recent times.

The nomads or pastoralist sees herding as an essential part of their culture. In the context of the farmers/herdsman conflicts in Nigeria, the average Fulani herdsman sees his herd of cattle as his reference not only to his means of subsistence, but also his cultural heritage as handed down from his ancestors. In effect, he immediately sees any threat to his herd as an attack on his identity, heritage, and means of survival which must be protected, if possible, with his life. It was in other to protect the Fulani cattle heritage that led to the formation of Miyetti-Allah Cattle Breeders Association of Nigeria (MACBAN) to prevent their culture from extinction through advocacy for cultural and political integration of

the traditional herders anywhere they settle (Awogbade, 1987).

Because the state has often been seen as an unfair arbitrator in resolving conflicts between the herdsman and farmers using policies like heavy taxation, expulsion, and in some cases, indiscriminate arrests of members of one group in the favour of the other; one of the parties have increasingly resorted to the use of violence partly driven by the “do-or-die” mode for survival in a hostile and competitive environment of scarce and leaner resources. As Okoli and Atelhe (2014, p.80) have noted in their field study of Nassarawa state that “the attempt by the settled native farmers to displace, disinherit, victimize, or marginalize the herdsman in their common ecological domain has been adjudged by the latter as an invitation to war. The inevitable outcome of this pattern of inter-group relations in the state has been a vicious circle of eco-violence and vendetta.”

While the two groups have maintained cooperative relations in time past, the increased human population has had its toll on arable land for farming. Nonetheless, the persistence of slash and burn agriculture typical of much of semi-arid and sub-humid West Africa has allowed the two groups to co-exist, especially through the exchange of crop residues for manure.

However, in recent times, pressure on land has constantly brought the herdsman and the arable farmers into violent conflict, which has claimed many lives and properties. In North-Eastern Nigerian state of Adamawa 28 people were reported dead and over 2000 farmers displaced in farmers/herdsman conflicts in 2005 (Nweze, 2005).

Integrated Regional Information Network (2009) observed that part of the reasons for the increased conflicts between the two groups is as a result of desertification which poses serious constraints for both farmers and herdsman. In addition, of Nigeria's over 400 grazing reserves, less than one-third are presently officially in use as a result of conversions of their usage to farmlands or housing facilities to cater for the increased human population as a fallout of the pressures of urbanisation. In his study, Adisa (2012) notes that conflicts arising from such leads to inequitable access to land, diminishing land resources, antagonistic values among land users, land use policy contradictions, and non-recognition of rights of indigenous people own the resource and nebulous provisions of the Land Use Act (1978) to adequately cater for the rights of settlers/non-indigenes to own land for commercial and agricultural purposes. As Okoli and Atelhe (2014, p.81) posit, “When the people's sources of livelihood are threatened as a consequence of the ecological vicissitudes and vagaries associated with climate change, desperate tactics are employed to ensure survival.”

Estimates by the International Centre for Investigative Reporting records that communal violence, mostly

involving contests for resources, killed at least 10,000 Nigerians in less than a decade and this is strongly linked to climate change (Ojetunde 2017). Ojetunde (2017) notes that desertification-induced migration is another factor forcing herdsman in Nigeria to migrate southwards. This has made herdsman who used to depend on the green pasture they had in past had to start moving down to the Middle Belt areas thereby increasing the pressure on land. Also, the International Crisis Group (2017) noted that the key causative factors behind this escalating conflict are “climatic changes (frequent droughts and desertification); population growth (loss of northern grazing lands to the expansion of human settlements); technological and economic changes (new livestock and farming practices); crime (rural banditry and cattle rustling); political and ethnic strife (intensified by the spread of illicit firearms); and cultural changes (the collapse of traditional conflict management mechanisms)”

In the past five years, International Crisis Group (2017) reports “annual average of more than 2,000 [lives] from 2011 to 2016, for some years exceeding the toll from the Boko Haram insurgency. Tens of thousands have been forcibly displaced, with properties, crops and livestock worth billions of naira destroyed, at great cost to local and state economies.”

Though the problem is largely an environmental or ecological issue, vested interests in the conflicts seem to be deriving some benefits as a means of consolidating power and economic resources. This makes the conflict have implications of serious national security proportions. While other factors highlighted above have been well researched by scholars, this new dimension for the changing patterns of the conflicts is of interests to this paper.

METHODOLOGY

The author relied largely on data for this study from the Nigeria Watch database accessed from its website¹. The Nigeria Watch database is a research project that monitors lethal violence, conflicts, and human security in Nigeria. The project originally began in 2006 in Paris but moved to the French Institute for Research in Africa (IFRA-Nigeria) in 2013, which is located at Nigeria's premier University of Ibadan. The Nigeria Watch aims to²:

“compile and monitor homicides and violent deaths (including accidents) in Nigeria in order to provide statistics, analyse trends and draw maps that can help to localise dangerous spots and secure transport of passengers and goods. The data relies on a thorough reading of the Nigerian press (15 dailies & weeklies)

1 www.nigeriawatch.org

2 Nigeria Watch database mission statement on <http://www.nigeriawatch.org/index.php?html=3>

and reports from human rights organisations. The two main objectives of the database are 1) to set up a GIS (Geographic Information System) to localise dangerous spots; 2) assess the rise, decline or stabilisation of violence in Nigeria (all things being equal).”

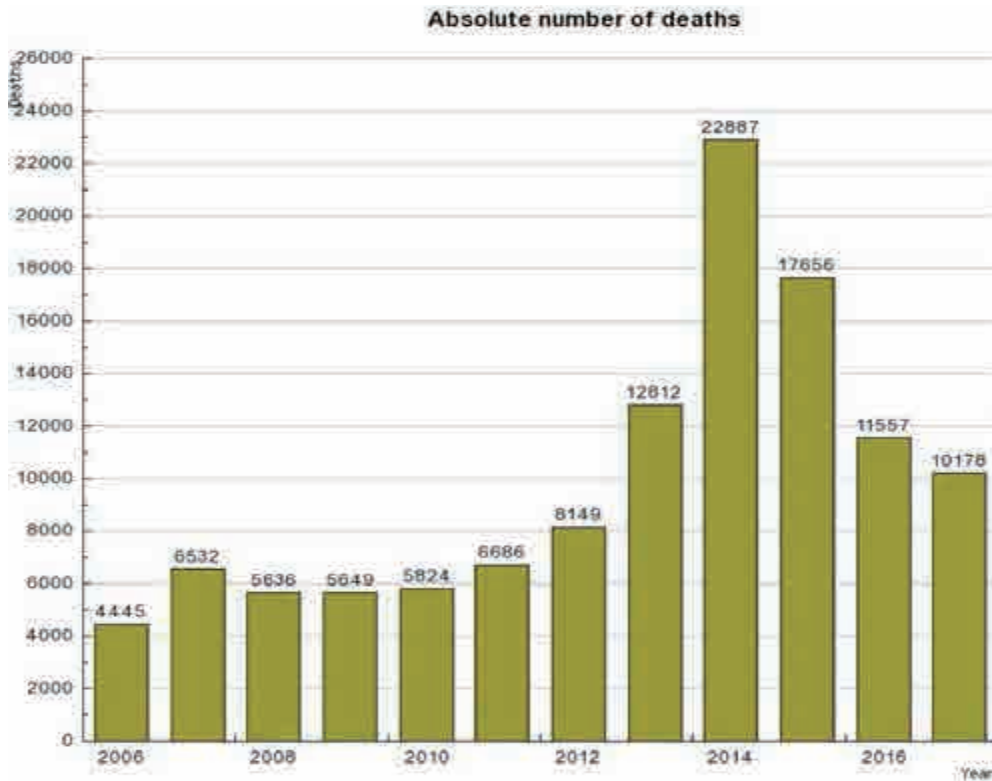
The author also relied on media reports on the farmers/herdsmen conflicts especially the period not covered by the database. The database does not yet have record (as of the time of this writing) of 2018 conflicts. The author, therefore, compiled media reports from January to April, 2018 to complement Nigeria Watch database.

A study of this nature depends on the credibility of the data. The author, therefore, chooses Nigeria Watch database because it has proven to be a reliable source(s) of data since its commencement in 2006. It also has a history of non-partisanship and credibility which are two essential requirements for a study of this nature. The database also depends on several sources to generate the data in addition to its field staff. The coding scheme adopted by Nigeria Watch firmly tallies with the objectives of this study. Also, the database leaves no room for the user to choose which data to use or not use under each coding classification.

INSECURITY, KILLINGS, AND THE PATTERNS OF FARMERS/HERDSMEN CONFLICTS: ANALYSIS OF TRENDS AND PATTERNS ACROSS NIGERIA (AUGUST 2014-APRIL 2018)

During the past four years, the Nigeria Watch database has recorded 1067 violent deaths related to cattle grazing (1.7%), out of a total of 62,278 violent fatalities in Nigeria. The relatively small number of deaths recorded for this by the Nigeria Watch database may be due to the ethnic and religious categorisation of the conflicts by the media which may have led the coders at the database to record several deaths as having either ethnic, religious or political causes. For instance, the tag “Fulani herdsmen” may fall easily under ethnic conflict rather than just land issues or just livestock rearing.

The analysis that follows was undertaken with several reported cases in the media across Nigeria’s 36 states from August 2014 to December 2017. The database seeks to understand the frequency, intensity, trends, location, and patterns of the violence based on several incidents in the years under review. The author supplements Nigeria Watch database with content analysis of media reports from January to April 2018 since Nigeria Watch is yet to come up with data for 2018.



Source: Nigeria Watch database, 2017.

Figure 1
Major Trends of Violence 2006-2017

According to the Nigeria Watch database, there has been a reduction in the numbers of recorded fatalities in Nigeria since 2014, as indicated in Figure 1 above. A decline of about 56% in lethal violence witnessed in this period can be attributed to the renewed fight against Boko Haram insurgents (which accounts for about half of lethal violence in 2014) that saw the group's gradual retreat to neighbouring countries. In 2015 alone, the insurgents account for 9264 out of a total of 17024 (Nigeria Watch, 2016, p.9). On the other hand, cases of cattle grazing appear to be on the rise since 2014. As shown in Table 1 below, the deaths arising from cattle grazing recorded 386 deaths in 2017 as against 114 in 2015 which is about 239% increase.

Table 1
Violent Deaths in Nigeria Caused by Cattle Grazing (August 2014–December 2017)

Year	Number of Deaths
2014	79
2015	114
2016	168
2017	386
Total	747

Source: Nigeria Watch database

In 2017, conflicts between farmers and herdsmen in search of grazing and water for their cattle took place in 20 states of the federation including the retaliatory attacks on the Fulani community in Mambilla Plateau, Taraba state. The frequency of the conflicts led states like Ekiti and Benue to pass anti-grazing laws as a means to cope with the problem.

Table 2
Recent Farmer/Herdsmen Clashes in Nigeria (January–April, 2018)

Date	Place of Incident(s)	Number of Deaths
05-Jan-18	Akor village of Guma Local Government Area of Benue State.	19
23-Jan-18	Numan district of Adamawa state	6
05-Feb-18	Guma Local Government Area, Benue state	6
08-Feb-18	Saki, Oyo state	1
12-Feb-18	Korakga Uvir in Guma local government area of Benue state.	2
12-Feb-18	Zangwra community, Miango District, Irigwe Chiefdom, Plateau State	3
12-Feb-18	Azege village, Ayilamo in Logo local government area, Benue state	1
13-Feb-18	Itigi, Cross River state	1
05-Mar-18	Umenge village in Guma Local Government Area of Benue State	5
07-Mar-18	Omusu village, at Ojigo Ward, Edumoga in Okpokwu Local Government Area of Benue state	26
17-Mar-18	Ugboha, Esan South East Local and Odigete Ovia North East Local Government Areas of Edo state	5

Date	Place of Incident(s)	Number of Deaths
11-Mar-18	Bakos, Plateau state	16
15-Mar-18	Rafiki area of Plateau State	2
19-Mar-18	Omala Local Government Area of Kogi state	10
30-Mar-18	Bakin Kogi, Kaninkon chiefdom in Jama'a Local Government Area of Kaduna State	6
06-Apr-18	Agagbe area of Gwer West local government area of Benue State	10
08-Apr-18	Benin City, Edo state	2
10-Apr-18	Oyi, Anambra state	1
11-Apr-18	Logo and Ukum local government areas of Benue state	15
13-Apr-18	Taraba, Zamfara, Benue	66
17-Apr-18	Benue and Nasarawa states	36
17-Apr-18	Ukemberagya/Tswarev ward of Gaambe-Tiev, Logo local government area of Benue state	1
22-Apr-18	Logo local government of Benue State	1
21-Apr-18	Aniocha North Local Government Area, Delta State.	1
20-Apr-18	Suntai Local Government Area of Taraba State	4
23-Apr-18	Logo local government area of Benue state	1
25-Apr-18	Gwer East Local Government Area of Benue State	19
25-Apr-18	Guma local government area, Benue state	39
26-Apr-18	Logo local government area of Benue state	7
30-Apr-18	Gwer West Local Government Area of Benue state	8
Total		320 ¹

Source: Author's compilations of reports on *The Vanguard* between January to April, 2018.

As shown in Table 2 above, there was a record of 320 deaths arising from farmers and herdsmen conflicts between January to April 2018. This period witnessed some of the most horrific attacks reported by the media including the killing of 2 clergymen and 17 parishioners at St. Ignatius Catholic Church in Ukpok -Mbalom community in Gwer East Local Government of Benue State³. In January 2018, Mobgal Hore Fulbe, the umbrella body group of Fulani herdsmen in Adamawa state raised the alarm about silent killings of herdsmen and rustling of cattle in Numan and Demsa Local Government areas of the state. The author could not verify this claim as such are hardly reported in the media.

3 Fresh bloodbath in Benue, 2 Catholic priests, 17 others killed by herdsmen (2018, April 25) *The Vanguard* Accessed on <https://www.vanguardngr.com/2018/04/fresh-bloodbath-benue-2-catholic-priests-17-others-killed-herdsmen/>

LAND DISPUTES AND PATTERNS OF FARMERS/HERDSMEN CONFLICTS: A GEO-POLITICAL ANALYSIS (AUGUST 2014-APRIL 2018)

Conflicts over land ownership in Nigeria is extremely complex. It often has political, economic, religious, and cultural undertones. Partly accounting for this complexity is that access to land is believed to play important economic roles (Conroy, 2014) just as it is an important symbol of social status in Africa (Dafinger and Pelican, 2006). Land conflicts are also some of the most difficult to report in the media.

Nigeria Watch database shows that land conflicts account for 1367 of the violent deaths from August 2014 to April 2018 according to Table 3 below; while farmers/herdsmen conflicts accounts for 1067 during the period. This shows the important connection between access to land and the farmers/herdsmen conflicts.

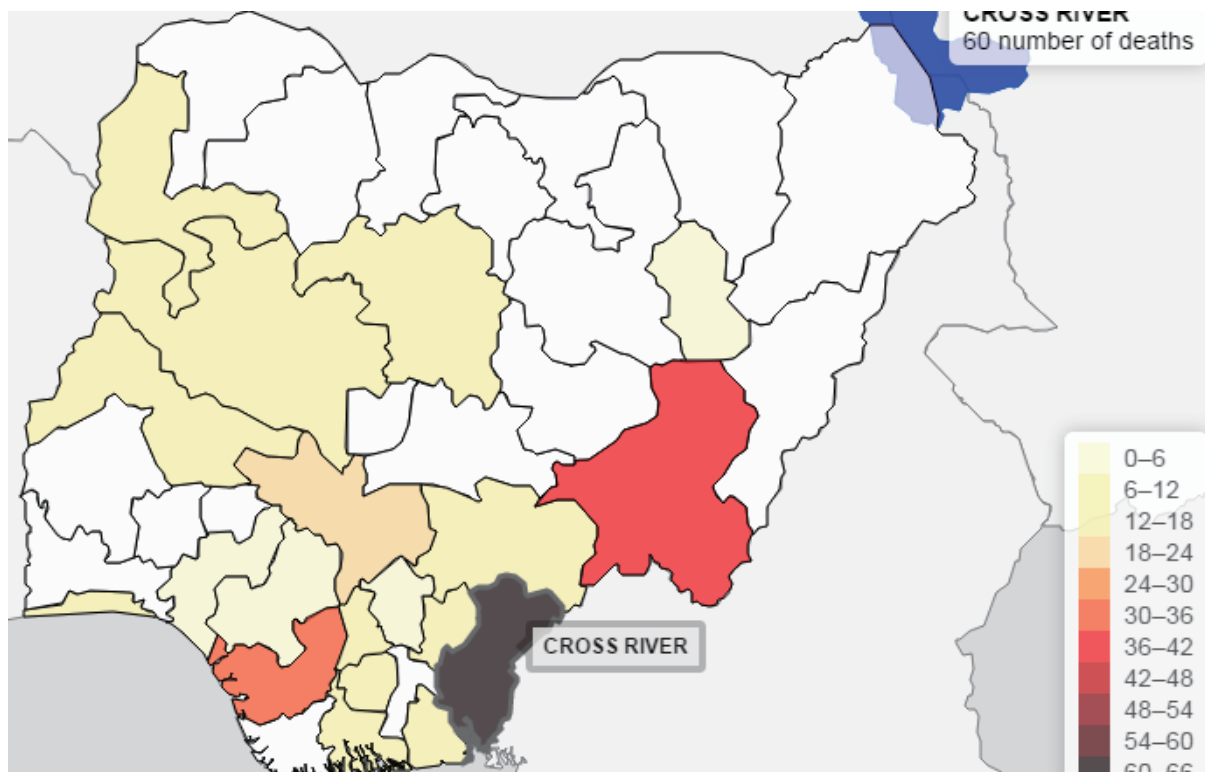
According to the database (cited in Ichite 2015), 68% of deaths occurred in the northern part of Nigeria. The North-Central or Middle Belt (especially Benue, Plateau, and Nassarawa) accounting for the largest reported cases of deaths arising from land disputes. Media reports of the clashes between the farmers and herdsmen between January and April 2018 have largely been in Benue with Local Government Areas (LGA) like Guma, Logo, and Makurdi being the worst hit.

Table 3
Violent Deaths in Nigeria Caused by Land Disputes (August 2014–April 2018)

Year	Number of deaths
2014	41
2015	111
2016	200
2017	1015
2018	NA ²
Total	1367

Source: Nigeria Watch database.

In 2016, communal conflicts accounted for a large chunk of deaths from approximately 65 incidents recorded across the country according to Nigeria Watch (2017, p.17). The cause of violence in the communities was primarily land dispute. States like Delta, Cross River, Kogi, and Akwa Ibom recorded high number of fatal community conflicts. The heaviest incidences were prevalent in the Middle-Belt states. Gassol LGA in Taraba state, North-Central Nigeria recorded 22 people losing their lives to land-related conflicts. Cross River and Delta, according to the report, lost 60 and 31 people respectively to land-related conflicts. Figure 2 below depicts the situation.



Source: Nigeria Watch, 2017.

Figure 2
Map of Fatalities Related to Communal Violence per State in 2016

IDENTITY POLITICS, LAND DISPUTES, AND THE PATTERNS OF FARMERS/HERDSMEN CONFLICTS IN NIGERIA

This section takes a critical look at the connections between access to land disputes, identity politics and the new patterns of the conflicts. While we do not completely agree with Baidoo (2014) and Ahmed-Gamgum (2018) that the insecurity arising from the farmers/herdsman conflicts were primarily motivated by the need to derive “political capital” by some political actors in the conflicts, a careful analysis of the recent events since January 2018 seem to confirm the role of vested interests in the conflicts. Unlike Baidoo (2014) and Ahmed-Gamgum (2018), these vested interests may not always be about gaining political capital out of the conflicts.

Between January to April, 2018 there has been increased media reports of continued clashes between both parties. The implications of these conflicts are that Nigeria loses in addition of loss of lives and properties, the country loses \$13.7 billion annually⁴. Olayoku (2016, p.74) argues that “political authorities, and local or foreign ‘mercenaries’ also played a role” in escalating the conflicts.

With land being a symbol of social and economic status among farming communities, herdsman face continued threats to their livestock, an essential symbol of their heritage, especially in areas where land disputes are severe. With land fixed in supply and in many cases declining due to the effects of desertification, erosion, drought, and climate change, life appears to be getting more difficult and strenuous in the face of scarcity of grazing land for both the farmers and herdsman. These almost automatically mean the degradation of grazing routes, farm encroachments, the further breakdown of traditional means of resolving farmers/herdsman conflicts, and weakening of policy frameworks to protect grazing routes.

The connection(s) between climate change and conflicts is still being debated among scholars, even though it can take a very long time to see such connection (if such exists). The struggle for land between farmers and herdsman appear to be getting fiercer by the day. Both communities see land as their means of livelihood. With the limited access to land in addition to resource-scarcity, the possibility of violent conflicts between both parties is always on the high side. The resulting conflicts between both parties have serious implications on food security, development policies, national security, the environment, and agriculture as an important sector of the economy needless to mention the wanton loss of lives and properties that have always accompanied the conflicts.

4 Nigeria loses \$13.7bn annually to farmers, herdsman conflicts, says Abdulsalami (2017, October 30) The Vanguard Accessed on <https://www.vanguardngr.com/2017/10/nigeria-loses-13-7bn-annually-farmers-herdsman-conflicts-says-abdulsalami/>

The current research on the farmers/herdsman conflicts points to climate change as an important factor in exacerbating the already depleting resources (Conroy, 2014, p.7) arising from the competition over the availability of fertile land for crop production for farmers and grazing for herders. Buttressing further the impact of climate change-induced Southwards migration of the herdsman, one official in Tureta Local Council in Sokoto State narrates as follows:

“In the past, the migration use to be more in the middle of the dry season and after harvest but nowadays it is throughout the year. Worst of all during planting season, they (Fulani herdsman) walk on seeds planted, and in most cases a lot of the seeds fail to germinate. This has caused huge loss to us. The damage is usually the cause of our conflicts with the Fulani herdsman. It is a yearly battle between us.” (Odoh and Chidozie 2012, p.120)

Odoh and Chidozie (2012, p.118) further posit that in Nigeria, “... communal clashes (often mis-interpreted or mis-represented as ethnic and religious clashes) are actually struggle over either the control of land or mineral resources or both.” They further argue that climate-induced migration caused by the “cereal-productive Sudan savannah ecology is transiting to pure Sahel and the influence of the Sahara is increasing southwards” gives better account of the increasing frequencies of these conflicts in Nigeria.

Several studies found out that most Nigerians, about 60%, do not know or deny the reality of the concept of, causes and effects of climate change on their environment (Odjugo, 2013; Nzeadibe, Egbule, Chukwuone, Agu, 2011; IRIN, 2017). Though the Federal Government is fully aware of the problem and has responded by creating a Department of Climate Change in the Ministry of Environment in 2011 as part of “measures necessary to reduce vulnerability to climate change.”⁵

Even though existing studies focus largely on the possibilities of climate change-induced conflicts from farmers/herdsman, climate change-induced migration portends a greater danger. Recently, the World Bank has raised an alarm that over 140 million people could be forced to leave their countries by 2050 due to the worsening impacts of climate change thereby creating a looming humanitarian crisis and threatening the development process (Odunsi 2018). Ever since the Land Use Act of 1978 was passed by Major-General Obasanjo (the head of state during military rule), the sub-surface mineral rights belong to the state and managed by local political elites, and not the people (Ibeanu 2000 cited in Conroy 2014). The Act vested the powers to discretionarily allocate land to ruling elites in conjunction with powerful/manorial-like traditional/customary chiefs to determine who gets what and how as far as access

5 Department of Climate Change (2018) Department of Climate Change, Federal Ministry of Environment, Abuja Available on climatechange.gov.ng/about-us/department-of-climate-change/

to land is concerned within the communities. The new land-use administration originally intended to boost agriculture have had unintended consequences especially in the area of environmental degradation for failing to anticipate climate change. With the Land Use Act outliving its usefulness, there have been stringent calls for its amendments or outright abrogation since it has made access to land especially for settlers/non-indigenes to do business and other economic activities rather difficult. The powerful vested interests and the manorial-like traditional chiefs in addition to its inclusion in the 1999 Constitution have all made it difficult to amend despite the fact that current realities urgently demands its amendment. Unfortunately, the question of land was central during the debate as to whether to adopt cattle ranching as a solution to end this crisis because there were fears that farmers (who are often indigenes) may lose more lands to herders (who are often either settlers or non-indigenes). The Committee for the Defence of Human Rights (CDHR), in January 2018, said that the Federal Government's proposed establishment of cattle ranches across the country will not bring lasting solution to herdsmen/farmers clashes because "over 370,000 hectares of Nigeria's land will be given to herdsmen"⁶. This was at the same period that Delta state Governor Ifeanyi Okowa even though his state was under siege by herdsmen he "will not cede land" to the herders for ranching as "definite policy to end herdsmen's attacks"⁷. The Yoruba Council of Elders (YCE) also rejected the idea of ranching or "cattle colonies" saying it will not allow it in the South-West⁸.

As a response to their dissatisfaction with grazing and the fear of losing their lands, several governors went ahead to ban open grazing with strict enforcement in their states without providing alternatives to the herders making them threaten to resort to self-defence for the protection of their means of livelihoods thereby raising concerns that the army may be conniving with the herdsmen defying the Open Grazing Prohibition Law in Benue state to carry out their threats of violence as alleged by Independent Human Rights and Crime Monitoring Group (IHRCMG)⁹.

Identity politics is an integral part of Nigerian political life. The Nigerian political elites have always

sought to reap advantages from the multidimensional, especially ethnic and religious identities, more so during electioneering periods, and this has resulted in conflicts and instability. Due to the multi-ethnic composition of Nigeria, some vested interests often try to take advantage by seeking electoral and economic gains from the conflicts. This is perhaps why Lenshie (2014, p.198) argues "Nigeria's political atmosphere presents an ever increasing level of virulent ethno-cultural resurgence of identity. The elite's manipulation of ethnicity and religion tends to" escalate challenges like the farmers/herdsmen conflicts. Identity politics is not the problem in itself, but the use to which these vested interests put these ethnic and religious consciousnesses (Paul, Onwuegbuchulam and Mtshali, 2017).

The Middle-Belt region of the country, the hotbed of the farmers/herdsmen's conflicts, is the meeting point between the North (largely dominated by Muslims) and the South (largely dominated by Christians), identity politicians have found ways to push the narrative that the conflict is between Muslims and Christians.

The absence of vehicles of social control that were characteristic of traditional African societies, such as kinship, religious and political systems concerned with the well-being of the community, has led to the escalation of ethno-religious conflicts.

In the heat of the conflicts, Vice President Professor Yemi Osinbajo warned against politicizing farmers/herdsmen crisis the country saying such interpretation could inflame passion from certain quarters thus cause an unpredicted crisis in the country (Agbakwuru & Erunke, 2018). Also, in a direct response to one-time Minister of Defence and Chief of Army Staff, Lt. Gen. Theophilus Yakubu Danjuma (rtd), the Buhari administration cautioned leaders in the country against making inflammatory statements that could threaten the country's unity. Lt. Gen. Danjuma has earlier made a statement alleging that the military was on the side of the terrorist group to wipe out some of the minority groups in the country and advised citizens to defend themselves (Agbakwuru, 2018). Gen Danjuma(Rtd.)'s statement immediately attracted the attention of several groups including the tribal leaders of Benue state under the aegis of the Mdzough U Tiv, the Idoma National Forum and Omi Ny'Igede who declared their support and calling on indigenes to take up arms against herdsmen¹⁰.

Despite these warnings, many people, especially on social media went on with the narrative of "Muslim killing Christians" or "Fulanis herdsmen killing" a development which soon attracted organisations from both religions

6 Cattle colonies: 370,000 hectares of Nigeria's land'll be given to herdsmen for personal business – CSO (2018, January 23) The Vanguard Accessed on <https://www.vanguardngr.com/2018/01/cattle-colonies-370000-hectares-nigerias-landll-given-herdsmen-personal-business-cso/>

7 Delta under herdsmen's siege — Okowa (2018, March 8) The Vanguard Accessed on <https://www.vanguardngr.com/2018/03/delta-herdsmens-siege-okowa/>

8 Herdsmen Menace: We won't allow cattle colonies in S'West — YCE (2018, January 19) The Vanguard Accessed on <https://www.vanguardngr.com/2018/01/herdsmen-menace-wont-allow-cattle-colonies-swest-yce/>

9 Exercise Ayem A' Kpatuma encouraging influx of herdsmen into Benue — Rights group (2018, March 8) The Vanguard accessed on <https://www.vanguardngr.com/2018/02/benue-killings-herdsmen-agree-cease-fire/>

10 Benue tribal leaders back Danjuma, accuse FG, military of aiding takeover of Benue by herdsmen (2018, March 27) The Vanguard Accessed on <https://www.vanguardngr.com/2018/03/benue-tribal-leaders-back-danjuma-accuse-fg-military-of-aiding-takeover-of-benue-by-herdsmen/>

and ethnic groups. Strictly speaking, several reports show how the Media unnecessarily tagged the suspected herdsmen "Fulani" with neither proper investigation nor revelation of the names of the perpetrators. A check on the key phrase "Fulani Herdsmen" on *Vanguard* online website revealed during the period under from January-April, 2018 more than 80% of the stories that were reported between farmers and herders clashes, described the herdsmen as "Fulani herdsmen". According to *The Vanguard*, "...what is primarily a battle for land and water fuelled by climate change and rapid population growth has been seized upon by identity politicians and religious leaders"¹¹. This came with serious ethnic and religious profiling especially tagging all herdsmen as "Fulani" and Muslims even without proper investigations of their names or background.

On 29 April 2018, the Middle Belt Conscience Guard monitoring the Herdsmen/Farmers Crisis in Nigeria alleged that members of the National Assembly are out to scale up public anger against the President and his security team over the activities of terrorists in the country. The group saw the invitation of the President by the National Assembly is "sham with hidden objectives"¹². This was at the same period when the Christian Council of Nigeria (CCN) accused the Federal Government of trivialising and playing down the violent activities of killer-herdsmen in Nigeria, by describing it as "conflicts between herdsmen and farmers." (Nwaiwu, 2018).

SUMMARY AND CONCLUSION

This study has situated and analysed the relationship between climate change, land disputes, and the patterns of farmers and herdsmen conflicts in Nigeria. Using data from the Nigeria Watch database from August 2014 to April 2018, it has identified the major stakeholders as being basically communities of farmers and herdsmen.

In this study, we found out the following: first, the farmers/herdsmen conflicts appear to be more prevalent in the Middle-Belt (North) and other minority-dominated areas of the South. We observed that several human factors, such as the increased population density, economic and social status attached to land, Boko Haram insurgency, etc and environmental issues such as increasing desertification, encroachment on grazing routes as an effect of increase in human population, decreased productivity of farmlands as an effect of draughts. While land disputes might have been involving multinational corporations exist in minority areas in the South, access to

land-related disputes is nationwide with the north adding socio-economic and political shortcomings that make land conflict more likely, especially where the livelihoods of most people in that are primarily agrarian which see farmers and herdsmen compete fiercely for over land and its resources. Nigeria Watch database shows that there was an increase in deaths arising from land disputes and farmers/herdsmen's conflicts between 2014 and 2018 which provides the necessary correlations between them.

Second, the study finds a weak correlation between climate change and the farmers/herdsmen conflicts largely due to its reliance on limited data. Like many studies, the data is inconclusive. This study, therefore, agrees with Cattaneo and Massetti (2015 :17) that, even though there are manifests damages caused by climate change, data on its impacts as a causative factor in the patterns of the conflicts have not been "statistically significant" to make such connection(s). However, the study finds some connections between the frequencies of land disputes in the Middle-Belt (North-Central) and the farmers/herdsmen conflicts in the region may be attributed to desertification, land scarcity, climate-induced migration etc which are all effects of climate change. This may have created the scarcity (caused by the continuous shrinking of land resources) attributed to the increasing conflicts between both communities in recent times. the compression of land space which brings both communities unusually close also can be an indicator of the increased conflicts between both communities. The fact that most Nigerians are not even aware of the effect(s) of climate change on their environment may also be a factor in why it is hardly reported in the media because it is difficult to connect climate change to the farmers/herdsmen's conflicts. This partly explains why most reports on the conflicts have been given either ethnic or religious causation, as promoted by identity politicians and other vested interests even though the recent arrests of some of the perpetrators do not necessarily portray these narratives as it is often widely reported in the media. It may be difficult at present to connect climate change to the farmers and herdsmen conflicts, but this researcher is confident future research will firmly establish these connections.

The question of the contentious access to land and land tenure issues remain central to exacerbating these conflicts. While vested interests may have genuine fears about losing their lands, this study finds that denying other Nigerians (non-indigenes/settlers) access to land for economic purposes under the guise of being "non-indigenes" or "settlers" may account for the growing intensity of the conflicts especially with several states banning open grazing while at the same time making access to land needlessly difficult. This study further finds the Land Use Act (1978) to have outlived its usefulness as it has failed to fairly allocate land to those who may legitimately need it as it gives government the power to

11 Nigerian media under scrutiny over herder-farmer conflict (2018, April 17) *The Vanguard* Accessed on <https://www.vanguardngr.com/2018/04/nigerian-media-scrutiny-herder-farmer-conflict/>

12 NASS out to demonize PMB, security team over herdsmen/farmers crisis (2018, April 29) *The Vanguard* Accessed on <https://www.vanguardngr.com/2018/04/nass-out-to-demonize-pmb-security-team-over-herdsmen-farmers-crisis/>

allocate land while at the same time gave local feudal lords the power to allocate what it calls “customary land”. This is allowed vested interests deny Nigerians who are not indigenes the right to have access to land. This is the case with the Middle-Belt in the North (the region with the most reported cases of land disputes) and minority areas in the South. It is, therefore, not surprising that these areas are some of the worst hit in the recent patterns of farmers and herdsman conflicts. Also, the role of vested interests come to play in this case because, in the case of farmers/herdsman conflicts, many see it as a means of electoral, economic, and other pecuniary gains thereby escalating the conflicts.

REFERENCES

- Adams, M., & Bradbury, M. (1995). *Conflict and development: organisational adaptation in conflict situations*. Oxfam Discussion Paper No.4. Oxford: Oxfam (UK and Ireland).
- Adisa, R. S. (2012). Land use conflict between farmers and herdsman- implications for agricultural and rural development in Nigeria. *Rural Development – Contemporary Issues and Practices*, (pp.99-118). Available on: http://cdn.intechopen.com/pdfs/34416/InTech-Land_use_conflict_between_farmers_and_herdsman_implications_for_agricultural_and_rural_development_in_nigeria.pdf
- Agbakwuru, J., & Erunke, J. (2018, January 7). Don't politicize herdsman killings, Osinbajo warns Nigerians *The Vanguard* accessed on <https://www.vanguardngr.com/2018/01/dont-politicize-herdsman-killings-osinbajo-warns-nigerians/>
- Agbakwuru, J. (2018, April 1). Presidency cautions leaders against inciting comments *The Vanguard* Accessed on <https://www.vanguardngr.com/2018/04/danjuma-killer-herdsman-military-presidency-cautions-leaders-inciting-comments/>
- Ahmed-Gamgum, W. A. (2018). Herdsman and farmers conflict in Nigeria: Another dimension of insecurity. *Journal of Public Administration and Social Welfare Research*, 3(1), 35-62.
- Allison, I., Bindoff, N. L. Bindschadler, R. A., Cox, P. M., et al. (2009). *The Copenhagen diagnosis, 2009: updating the World on the Latest Climate Science*. Sydney, Australia: The University of the New South Wales Climate Change Research Centre.
- Aluko, M. A. O. (2006a). Social organisations. In K. Ogunbameru and W. R. Rotimi (Eds), *Man and his social environment* (pp.87-100). (Ibadan: Spectrum Books).
- Aluko, M. A. O. (2006b) The environment, ecosystem and social life. K. A. Ogunbameru & W. R. Rotimi (Eds), *Man and his social environment* (pp.298-315) (Ibadan: Spectrum Books).
- Awogbade, M. (1987). Grazing reserves in Nigeria. *Nomadic Peoples*, 23(1), 19-30.
- Baidoo, I. (2014). *Farmer-herder conflicts: a case study of Fulani herdsman and farmers in the Agogo traditional area of the Ashanti region* MA Thesis, University of Ghana.
- Bassett, T. J. (1986). Fulani herd movements. *The Geographical Review*, 76(3), 233-248.
- Bello, A. U. (2013). Herdsman and farmers conflicts in north-eastern Nigeria: causes, repercussions and resolutions. *Academic Journal of Interdisciplinary Studies*, 2(5), 128-139. Doi:10.5901/ajis.2012.v2n5p129.
- Bennett, O. (Ed.) (1991). *Greenwar: environment and conflict*. Budapest, London, Paris, Washington, DC: Panos Institute.
- Breusers, M., Nederlof, S., & van Rheenen, T. (1998). Conflict or symbiosis? disentangling farmer herdsman relations: The Mossi and Fulbe of the central plateau, Burkina Faso. *The Journal of Modern African Studies*, 36(3), 357-380.
- Cabot, C. (2017). *Climate change, security risks and conflict reduction in Africa: a case study of farmer-herder conflicts over natural resources in Côte d'Ivoire, Ghana and Burkina Faso 1960–2000*. Hexagon Series on Human and Environmental Security and Peace 12, Springer-Verlag Berlin Heidelberg DOI 10.1007/978-3-642-29237-8_2.
- Carr, M., Brash, K., & Anderson, R. F. (2010). *Climate change: addressing major sceptic arguments*. DB Climate Change Advisors, Deutsche Bank Group, September. Available at: http://www.climateaccess.org/sites/default/files/Carr_Addressing%20Skeptic%20Arguments.pdf. (Accessed: Dec. 10, 2014).
- Cattaneo, C., & Massetti, E. (2015). Migration and climate change in rural Africa. In Carraro, C. (Ed.), *Climate Change and Sustainable Development*. Georgia: Fondazione Eni Enrico Mattei (FEEM).
- Clement, F. E., & Shelford, E. (1939). *Bio-ecology*. New York: John Wesley and Sons.
- Cohen, M. (2009). *Urbanization and conflict: trends, impacts, and challenges for development assistance*. International Affairs Working Paper, New School, December Retrieved from https://milanoschool.org/wp-content/uploads/2013/04/Cohen_2009-09.pdf on 16 April 2018
- Conroy, S. (2014). *Land conflicts and lethal violence in Nigeria: Patterns, mapping, and evolution (2006-2014)*. Working Paper, No. 38. Ibadan: French Institute for Research in Africa. Available online <http://www.ifra-nigeria.org/IMG/pdf/land-conflict-lethal-violence-nigeria.pdf>
- Dafinger, A., & Pelican, M. (2006). Sharing or dividing the land? land rights and farmer-herder relations in Burkina Faso and North West Cameroon. *Canadian Journal of African Studies*, 40(1), 121-151.
- de Soysa, I. (2002). Ecoviolence: shrinking pie, or honey pot? *Global Environmental Politics*, 2(4), 1-34.
- Diethelm, P. A., & Mckee, M. (2009). Denialism: What is it and how should scientists respond?. *European Journal of Public Health*, 9(1), 2-4.
- Dokos, T. (Ed.) (2008). Climate change: addressing the impact on human security. Hellenic Foundation for European and Foreign Policy (ELIAMEP) and Hellenic Ministry of Foreign Affairs. May.
- Dougherty, J. E., & Pfaltzgraff, R. L. (1996). *Contending theories of international relations: A comprehensive survey*. New York, Longman.

- Fayinka, F. A. (2004). *Food security in Nigeria: Challenges under democratic dispensation*. Paper Presented at 9th ARMTI Annual Lecture, March 24, 2004.
- Gleditsch, N. P., & Urdal, H. (2002). Ecoviolence? Links between population growth, environmental scarcity and violent conflict in Thomas Homer-Dixon's work. *Journal of International Affairs*, 56 (1), 283–302.
- Homer-Dixon, T. F. (1999). *Environment, scarcity and violence*. Princeton, NJ: Princeton University Press.
- Hussein, K., Sumberg, J., & Seddon, D. (1999). Increasing violent conflict between herders and farmers in Africa: Claims and evidence. *Development Policy Review*, 17(1), 397–418.
- Ichite, C. (2015). *Land conflicts, population pressure and lethal violence in the Niger Delta (Akwa Ibom, Rivers, Bayelsa, Delta) 2006-2014*. Working Paper, No. 48, Ibadan: French Institute for Research in Africa. Available online <http://www.ifra-nigeria.org/IMG/pdf/land-conicts-population-violence-delta.pdf>
- Integrated Regional Information Network (2009). *Nigeria: curbing farmer-nomad clashes and protecting livestock routes*. A publication of the Integrated Regional Information Networks (IRIN) United Nationals. Available at <http://www.preventionweb.net/english/professional/news/v.phd>
- Integrated Regional Information Network (2017). *Climate change? What climate change? Nigerian farmers not being reached on awareness*. Accessed on www.irinnews.org/feature/2017/07/05/climate-change-what-climate-change-nigerian-farmers-not-being-reached-awareness?utm_source=IRIN+-+the+inside+story+on+emergencies&utm_campaign=9054dce6e4-RSS_EMAIL_ENGLISH_ALL&utm_medium=email&utm_term=0_d842d98289-9054dce6e4-15757289
- International Crisis Group (2017). *Herders against farmers: Nigeria's expanding deadly conflict*. Available online <https://www.crisisgroup.org/africa/west-africa/nigeria/252-herders-against-farmers-nigerias-expanding-deadly-conflict>
- IPCC, Working Group II (2007). Glossary of Terms. IPCC Fourth Assessment Report: Climate Change 2007. Working Group II: Impacts, Adaptation and Vulnerability. http://www.ipcc.ch/publications_and_data/ar4/wg2/en/annexessglossary-a-d.html. Accessed, August, 2014.
- Isiugo, P. N., & Obioha, E. E. (2015). Understanding theoretical underpinning of wildlife resource based conflict in Oban Hills, Nigeria. *Kamla-Raj Journal of Human Ecology*, 49 (1-2), 153-161.
- Kaplan, R. D. (1994). The coming anarchy. *The Atlantic Monthly*, 2(2), 44–76.
- Lenshie, N. E. (2014). 'Ties that bind and differences that divide': exploring the resurgence of ethno-cultural identity in Nigeria. *Africa Development*, 39(2), 153-212.
- McIntyre, S., & McKittrick, R. (2003). Corrections to the Mann et al. (1998) proxy data base and northern hemispheric average temperature series. *Energy and Environment*, 14 (6), 751-771.
- Nigeria Watch (2016). *Fifth report on violence in Nigeria 2015*. Ibadan: Nigeria Stability and Reconciliation Programme.
- Nigeria Watch (2017). *Sixth report on violence in Nigeria 2016*. Ibadan: Nigeria Stability and Reconciliation Programme
- Nwaiwu, C. (2018, April 20). FG trivialising killings by herdsmen —Christian Council. *The Vanguard* Accessed on <https://www.vanguardngr.com/2018/04/fg-trivialising-killings-herdsmen-christian-council/>
- Nweze, N. J. (2005). *Minimizing farmer-herder conflicts in Fadama Areas through local development plans: implications for increased crop/livestock productivity in Nigeria*. Paper presented at the 30th Annual Conference of the Nigerian Society for Animal Production, held 20th – 24th March.
- Nzeadibe, T. C., Egbule, C. L., Chukwuone, N. A., & Agu, V. C. (2011). *Climate Change Awareness and Adaptation in the Niger Delta Region of Nigeria*. Working Paper Series | No. 57. Nairobi: African Technology Policy Studies Network.
- Odjugo, P. A. O. (2013). Analysis of climate change awareness in Nigeria. *Scientific Research and Essays*, 8(26), 1203-1211.
- Odoh, S. I., & Chidozie, F. C. (2012). Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani herdsmen and farmers in northern Nigeria. *Arabian Journal of Business and Management Review*, 2(1), 110-124.
- Odunsi, W. (2018, March 19). Climate change: 140 million people to migrate within Nigeria, others – World Bank alerts *Daily Post* Retrieved from <http://dailypost.ng/2018/03/19/climate-change-140-million-people-migrate-within-nigeria-others-world-bank-alerts/>
- Ojetunde, D. (2017, November 2). *How climate change is fueling conflicts in Nigeria* International Centre for Investigative Reporting Retrieved from <https://www.icirnigeria.org/how-climate-change-is-fueling-conflicts-in-nigeria/>
- Okoli, A. C. (2013). The political ecology of the Niger Delta crisis and the prospect of lasting peace in the post-amnesty period. *Global Journal of Human Social Science*, 13(3), 37-46.
- Okoli, A. C. & Atelhe, A. G. (2014). Nomads against natives: A political ecology of herder/farmer conflicts in Nasarawa state, Nigeria. *American International Journal of Contemporary Research*, 4(2), 76-88.
- Olayoku, P. A. (2016). Trends and patterns of cattle grazing and rural violence in Nigeria (2006-2014). M. P. Montclos (Ed.), *Violence in Nigeria: A qualitative and quantitative analysis* (pp.61-75). Ibadan: French Institute for Research in Africa.
- Paul, S., Onwuegbuchulam, C., & Mtshali, K. (2017). To be or not to be? a theoretical investigation into the crisis of national identity in Nigeria. *Africa Today*, 64(1), 75-97.
- Peet, R., & Watts, M. J. (Eds.) (1996). *Liberation ecologies: environment, development and social movement*. Routledge.
- Pelissier, P. (1977). Competition and the integration of agriculture and cattle raising in Sahelian and Soudano-Sahelian Africa. In G. H. Cannell (Ed.), *Proceedings of an*

- international symposium on rainfed agriculture in semiarid regions*. Riverside: University of California
- Percival, V., & Homer-Dixon, T. (1998). Environmental scarcity and violent conflict: the case of South Africa. *Journal of Peace Research*, 35 (3), 279-298.
- RealClimate (2005). What if...the "Hockey Stick" were wrong?. January, 27. Available at: <http://www.realclimate.org/index.php/archives/2005/01/what-if-the-hockey-stick-were-wrong/> (Accessed 20 May, 2015).
- Silent killings of herdsmen ongoing in Adamawa, Fulani group alleges (2018, January 3) *The Vanguard* Accessed on <https://www.vanguardngr.com/2018/01/silent-killings-herdsmen-ongoing-adamawa-fulani-group-alleges/>
- Toulmin, C. (1983). *Herdsmen and farmers or farmer-herders and herder-farmers*. Pastoral Development Network Paper 15d. London: ODI, January.