Climate Change, Forced-adaptation and the Anti-open Grazing Laws in Nigeria

By

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Abstract
This study examines the dynamics of the anti-open grazing laws recently adopted by the majority of southern and a few north-central Nigerian states in the context of forced adaptation induced by adverse climate change. Adaptation to increasing climate-related crises has been a significant area of challenge, particularly for migrant herders. In attempting to cope with the numerous challenges posed by climate change, migrant herders who are confronted with problems of resource depletion, disappearance of particular species of edible grasses, and the drying up of water bodies, are moving southward due to rising desert encroachment in the Sahel. The influx of migrant herders down the south is already generating serious security challenges. In the context of forced adaptation, this study examines the 2021 Asaba Declaration, which culminated in the anti-open grazing laws, sentiments generated by both pastoral and non-pastoral communities affected by its adoption, as well as challenges of enforcement faced by southern and north-central states where the laws exist. Eco Violence Theory was applied in the study because of its suitability in depicting how resource scarcity exacerbates hitherto sociopolitical and security challenges—data used in the study comprised interviews, secondary materials, and data from Nigeria's national dailies. The data generated were analyzed through thematic and content analysis. The study concludes that, regardless of negative perceptions generated, especially among pastoral communities where the anti-open grazing laws attract notions of ''forced-adaptation, its test of success goes beyond the livelihood concerns of pastoralism and revolves around broader goals encapsulated in the objectives of the laws.

Keywords: Climate Change, Forced-adaptation, Anti-open Grazing Laws, Migrant Herders, Pastoral Communities

Introduction

A recent study by the Intergovernmental Panel on Climate Change (IPCC) indicates that prospects for the rectification and normalization of adverse climate conditions are gloomy and grave (Vigran, 2021). Frequent and extreme weather events occasioned by intense climate change are likely to result in food insecurity through poor agricultural production. This is mainly anchored on the feedback relationship between agricultural production and climate change. Agricultural production and outputs increase gas emissions and pollution of the climate. On the other hand, increased climate variations also have tremendous impacts on agricultural activities and outputs (Ogunpaimo et. al., 2021). As the 21st century unfolds, there are fears that climate change may spark more conflicts as resources and safe places become scarcer and climate disasters increase. More and more anthropogenic activities are contributing further to warming the atmosphere, lands, and oceans, and causing adverse climate change. As reports show, more than ever before, climate change is altering the ways people live and how human communities are ordered (Jayawardhan, 2017).

Based on a study on the Climate Change Vulnerability Index released by a UK-based risk company, Nigeria is rated a "high risk" country. 'Nigeria is vulnerable to the impacts of climate change largely because of the population of Nigerians that are engaged in agricultural trades; almost 90% of agricultural practices depend solidly on rainfall for farm yield' (Kwari et al.,

2015: 147). Unlike southern Nigeria, Nigeria's northern region is reportedly facing problems of excessive heat with less than 10 inches of rainfall in a year, about 25% less than that observed 30 years ago. Further rise in temperature to more than 40 degrees Celsius, as projected in the report, would amount to increased variability in rainfall, much flooding in the south, and greater droughts in the north.

The adverse impact of climate change on Nigeria's northern region is noticeable in the area of continuous and rapid desert encroachment and prolonged drought. In addition to increasing the incidence of deaths (Amaral, 2012), droughts have profound implications for agricultural infrastructure, crop production, livestock development, and food security, especially within the northern region. Some northern Nigerian states severely affected by climate change-induced droughts include Kebbi, Borno, Katsina and Kano (Mamman, 2011). Among these states and others along the Sahelian belt, desert encroachment is raging and speeding southward at the speed of 30km per hour and approximately 1,400 square miles a year (Sayne, 2011). It is also reported that Nigeria loses about 3,500 square kilometers (1,350 square miles) of land to desertification each year (Werz and Conley 2012).

Southward desert encroachment in the Sahel region drives a larger influx of migrant pastoralists from the north to the south due to the growing scarcity of pastoral resources. Part of the multiplier effect of the increasing movement of northern migrant pastoralists to southern Nigeria, where infrastructure such as pastoral corridors is unknown, is that problems of encroachment into crop and farmland rise disproportionately, causing more intergroup violence and hostility. Reactions brewing from the changing nature of intergroup relations between migrant pastoralists and sedentary communities in both north-central and southern Nigeria have raised serious debates of notable concern. The May 2021 meeting and decisions of southern Nigerian Governors in Delta state were in tandem with the general mood and sentiment of southern Nigerians regarding the growing incidence of intergroup hostilities involving migrant herders trooping down the region. On the other hand, responses coming from the affected migrant pastoral communities alleging marginalization draw attention to ways in which issues of forced adaptation are perceived as well as how such perceptions shape intergroup relations, peace, and security in the region.

Eco Violence Theory

There is a vast body of literature on the interconnections between resource scarcity and violent conflicts. Resource scarcity may arise on the heels of environmental degradation, population pressure, or unequal access. One of the prominent scholars in the study of ecological resource conflicts is Thomas Homer-Dixon. It is generally held that ecological resource conflicts emerge when disagreements or competitions over access to and management of natural resources contribute to the onset, aggravation, or perpetuation of conflicts (Nebeife et. al., 2025). Homer-Dixon posits that resource scarcity can, in combination with other social factors, contribute to violent conflicts, ethnic clashes, communal battles, and other forms of intergroup hostilities (1999). On the other hand, however, conditions of scarcity can also breed the desire for cooperation, "especially when communities facing the scarcity recognize the need for collective management systems, land-use planning, or the creation of conflict resolution mechanisms that seek to balance competing interests (Andeskebtso, Y.A., 2024).

Violent outcomes are considered the product of interactions between problems of scarcity and factors such as social inequality. As environmental depletion and resource scarcity, anchored mainly on a disproportionate rise in human population, rising energy consumption, climate change, global warming, exhaustion of crop and pasturelands, continue, the risks of violence and anarchy also grow higher. A 2009 report by the United Nations Environment Programme

showed that over 40% on internal conflicts in the past sixty years were linked to natural resources (Nebeife, et. al., 2025). Ecological violence is often associated with preexisting political, cultural, and socio-economic frustrations to exacerbate hitherto existing security crises plaguing human societies.

Though Nigeria, like many other African countries, is resource-rich, it is also experiencing increasing depletion of its natural resources. From desertification and massive water conflicts in the country's Shael region to worsening environmental degradation in the Niger Delta, threats of ecological violence continue to mount. There are ecological problems resulting in biodiversity loss, habitat destruction, desertification, and other environmental challenges. Resource depletion has engendered several violent conflicts characterized by recurring scrambles for access to available resources.

The adoption of Eco Violence theory in this study is crucial in view of the contentious issues raised by climate change-induced resource scarcity, forced adaptation, and recurring clashes between farmers and herders in Nigeria. In Nigeria, pastoral communities migrate with their herds in response to droughts (Brown, 2008; Ickowicz, 2012) as transhumance is recognized as a way to adapt to climate change. However, continuous seasonal migration of pastoral communities often triggers hostilities, as significant reductions in the wealth of host communities culminate in deprivation conflicts (Ajaero *et al*., 2015).

The anti-open grazing laws recently adopted by the majority of southern and a few north-central Nigerian states have the trappings of multiple issues associated with resource scarcity, culminating in bloodletting clashes between farmers and herders. The influx of migrant herders towards the south became chaotic and highly unregulated. There was frequent encroachment into farmland and the destruction of crops. The May 2021 *Asaba* Declaration, which birthed the anti-open grazing laws, emerged as a last resort towards correcting the failures of previous mechanisms designed to address violent conflicts involving migrant pastoral communities in Nigeria.

Perspectives on Climate Change and the Crisis of Resource Depletion

Climate change can be described as a sustained variation in global or regional climatic conditions which usually manifests in the form of alterations in the amount and patterns of precipitation, increase in average temperature, melting of snow/ice, rise in sea levels and intensification of extreme weather events such as floods and droughts (Baba 2011: 25 – 26; Onwutuebe, 2022). It involves a much longer or more stable pattern of variation in precipitation, temperature, and other meteorological variables that persists in a given region (Devlin & Hendrix, 2014, p. 29). The Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCC) describe climate change as any variation in climate, whether due to natural variability or as a result of human activity, which over time alters the composition of the global atmosphere (Antwi 2013: 1).

The growing adverse impacts of climate-related crises worldwide are enormous and manifest in diverse forms. Resource depletion of agricultural properties required for grazing and livestock production is one of the major devastations of climate change. According to Allara et. al. (2012),

> Climate change alters plant growth, thereby modifying the interactions between plants and growth-reducing factors, such as insect pests. Beneficial insects foraging on weeds are also affected by climate change. Altogether, climate change may favour the spread of many weed species into new areas. Red rice, a weedy relative

> of cultivated rice, can constrain the production of rice grown for food. It has been reported that elevated CO2 levels increased growth in both types of rice, but more so in red rice. Aggressive weeds such as cheatgrass (Bromus tectorum) and Canada thistle (Cirsium arvense) flourish when CO2 levels rise. … (Allara M, et al. 2012: 95 - 96).

Growth and invasion of wild plants and unusual weeds into vegetation areas and crop lands, induced by adverse climate change, have the potential to crowd out or choke beneficial plants and pasturelands that hitherto played valuable roles in providing agricultural support to both human and animal communities.

In the African Sahel region, the disappearance of edible grasses and vegetation essential to livestock development is a significant concern. In an interview, Hassane Baka (administrator of the Association for the Revitalisation of Livestock in Niger – AREN) emphasized the disappearance of certain grass species and the emergence of new ones that are inedible to cattle as among the most significant challenges to pastoralism in the Republic of Niger. He notes that:

> In recent years, one could find plants cattle could eat, but these days, the growth of various inedible grasses is disturbing. These new grasses, which, among others, include Sida cordifolia, hatchin maka, or garmani (known as weyche biri, kongoria in Hausa), scramble for spaces and often choke out the normal grasses that we used to know. The new grasses occupy much of the land, but our animals do not eat them (Hassane Baka, Interview, August 24, 2017).

Skuras and Psaltopoulos (2012) also noted that adverse climate change, manifested in high air temperatures, has created conditions conducive to the invasion of weeds and pests adapted to warmer climates. They stressed that the speed at which these invasive species encroach on cropland intensifies the struggle for space and survival.

Farmers also have their own experience with the impacts of climate change. In Nigeria's Guinea savannah zone, although there were other complaints ranging from irregular and insufficient rainfall to water scarcity, the late onset of rainfall was considered a significant adverse impact of climate change on farmers' activities. Joseph Edoh Adanu**,** a farmer in the Okokolo community of Agatu Local Government Area of Benue State, notes that:

> Before April, there would be rain, and we would plant our crops on time. Nevertheless, there is now an acute rainfall shortfall. We no longer plant on time, so our crops are harvested late. Food does not arrive when expected. We are now faced with hunger. Maize and yams are the main crops affected by climate change. If there is no abundance of rain, our maize and yams suffer (Interview, June 28, 2017).

Late onset of the rainy season leads to severe delays in the start of the farming season and in activities such as cultivation, planting, and harvesting.

Adoption of the Asaba Declaration: A Promotion of Anti-open Grazing Laws

Seasonal migration is a typology of free adaptation for transhumant pastoralists seeking to survive and overcome climate change-induced scarcity of grazing resources. As the Sahel region continues to experience desert encroachment and increasing drought, transhumant pastoralists have fewer options than to move towards regions and communities with available green vegetation, pasturelands, and water bodies.

From a broader perspective, the recent anti-open grazing laws adopted by a large number of states in southern and two north-central states of Nigeria were simply the outcome of a long-

running struggle aimed at addressing climate change-induced migration, unregulated transhumance pastoralism, and recurring violent intergroup hostilities involving migrant herders. Engendered by rising waves of climate change, prolonged droughts, disappearance of particular species of grasses and vegetation, as well as growing scarcity of water bodies, Nigeria's Savannah experienced an influx of migrant herders and their herds (Mamman, 2011; Ickowicz, 2012; Lunde & Lindtjorn, 2013; Hassane Baka, Interview, August 24, 2017).

Nigeria's Guinea savannah zone is resource-rich due to the region's bountiful climatic conditions, green vegetation, and arable lands (Sowunmi & Akintola, 2010). However, these enormous agricultural resources have become a frequent source of violent intergroup conflict between farmers and transhumant pastoralists in the area. A recent study by the International Crisis Group (2018) revealed that within the first half of 2018 alone, more than 1,300 lives were lost due to violence between Nigerian farmers and herders. The study also indicated that the farmer-herder clashes had taken more lives than the Boko Haram terror attacks and also displaced hundreds of thousands of people.

Regarding the anti-open grazing laws adopted by southern governors following the Asaba Declaration of 2021, there are several justifications. Some believe the anti-open grazing laws were approved as a matter of necessity to restate livestock Development and cattle breeding as a private business concern, which should not be conducted in ways that infringe on the rights and property of other businesses and landowners (Editorial Board, 2021). Owing to the continuing loss of lives and the colossal waste of property and resources, the anti-open grazing laws were considered reasonable. To a large extent, however, the adoption of the anti-open grazing law was an indirect way of expressing despair and dissatisfaction with the handling of the increasing security volatility linked to the constant invasion and heinous attacks against farming and host communities by armed transhumance pastoralists.

Prior to the Asaba Declaration of 2021, which upheld the anti-open grazing resolution of southern governors, some northern states, such as Taraba and Benue, had taken steps to restructure relations between farmers and herders within their jurisdictions. For example, Benue state (in north-central Nigeria) introduced the anti-open grazing law in November 2017 (International Crisis Group, 2018) due to constant invasion of their farmlands, perennial destruction of food crops, and wanton mass killings perpetuated by armed pastoralists ostensibly of the Fulani group. In Benue state, mass burials were carried out due to hostilities involving migrant herders (Tukur, 2018). It was also recently reported that between 2005 and the time of the report, Nigeria had lost about 8,343 persons, while hundreds of thousands were displaced due to farmer-herder clashes. In another report, it was shown that Nigeria recorded the highest number of farmer-herder fatalities in the whole of West and Central Africa (Editorial Board, 2021), killing over 2,000 persons and adjudged to be six times deadlier than those documented on account of Boko Haram insurgency. Most of the clashes occurred in 2018 in the Middle Belt region.

Anti-open grazing laws: Issues under Contestation

Despite enthusiasm for the anti-open-grazing laws, especially in southern and north-central regions, there is intense contestation over their enforcement, legality, fairness, and rationality. In a country where security matters are reserved in the exclusive list as the jurisdiction of the federal government, the question of how to enforce the law and ensure it achieves its expected goals arises. For Godwin Obaseki (Governor of Edo State, one of the southern governors), it was irrational to pass the anti-open grazing bill into law when the states involved lacked the machinery to implement or enforce the law (Premium Times and Agency Report, 2021b). Obaseki also questions the place of fairness, equity, and justice in the framing and adoption of such anti-open grazing laws, especially given that the ban failed to consider the interests of

genuine migrant herders who are not involved in hostilities but are incidentally pressed into forced adaptation.

The Miyetti Allah Cattle Breeders Association of Nigeria (MACBAN) and other sociocultural organizations sympathetic to cattle rearing in Nigeria have exerted significant effort to oppose anti-open grazing laws. Abubakar Malami (the Attorney-General of the Nigerian Federation) publicly condemned the anti-open grazing laws as an infringement on herders' constitutional right to freedom of movement (Premium Times and Agency Report, 2021a). Similarly, Atiku Abubakar maintained that the open grazing prohibition violated constitutional provisions guaranteeing freedom of movement and the right of Nigerians to reside wherever they chose in the country (Ochogwu, 2022). While there is no direct Executive Order from the presidency against the anti-open grazing laws, it is not in doubt that the presidency does not favor the promulgation of the ban by southern and north-central governors. Reacting to the ongoing attacks in places like Benue State, the federal government criticized the passage of the anti-open-grazing law and held the law responsible for the clashes (Tukur, 2018).

On the other hand, there is significant support for the adoption of the Anti-open grazing laws. In relation to its legality and constitutionality, evidence from courts of law confirms the authenticity and legitimacy of the Anti-open grazing laws. A federal high court, which recently considered the validity of the Benue State anti-open grazing law, declared that the state's ban on open grazing was in line with the provisions of the Nigerian constitution and in conformity with the country's Land Use Act (Aondofa et al., 2020). Beyond intergroup hostilities engendered by unregulated migrant herding, the general perception of populations and states in southern and north-central regions holds that nomadism is viewed as antithetical to urbanization, modern city growth, and global best practices (Editorial Board, 2021).

Arising from above, it is more important to analyze the enactment of the Anti-open grazing laws from a much broader perspective than to interpret it from a limited scope in which the interest of either the pastoral community alone or non-pastoral groups forms the basis of reasoning and judgment. Factoring in the interests of the pastoral group as well as those of the broader population, herein comprising the southern states and some north-central states, is deemed necessary.

By the by, pastoral groups are not the only group negatively affected by the endorsement of the anti-open grazing laws. Non-pastoral populations in southern communities are hugely impacted. For example, the astronomical rise in cow prices in the South-eastern region has received much attention because people in the region not only eat beef in large quantities but also use cattle for multiple religious and ritual purposes (Editorial Board, 2021). The Editorial Board notes that many migrant herders have already moved out of the region. The ban on open grazing, therefore, has a massive multiplier effect on non-pastoral communities, substantial south-eastern populations, and cultures that are poor and unable to purchase the cattle required to perform certain traditional rites.

Negative sentiments arising from the anti-open grazing laws are also significant. Controversial debates over nationality and hospitality have arisen. Some transhumant pastoral groups affected by the ban on open grazing believe that, besides the threats to their primary source of livelihood, their national identities as Nigerians are also being indirectly questioned by the prohibition. Transhumant pastoralists in this category consider relocating to other countries and threaten to withhold their cattle from importation into Nigeria (Editorial Board, 2021).

Recent mediation by southern and north-central state governments, which culminated in the adoption of anti-open grazing laws, was essentially a predisposition to chart a pathway for sustainable peace and security in their states, despite losses incurred by pastoral and non-

pastoral groups in the affected regions. While it may be acceptable to perceive the anti-open grazing laws through the lens of ‘‘forced adaptation, it would be inadequate to frame their adoption from any political discourse of marginalization or perhaps ethnic profiling designed to undermine the pastoral community.

It is important to underscore the role of anti-open grazing laws as interventionist policies of sub-national entities in southern and north-central states of Nigeria, seeking to address numerous losses associated with unregulated migrant herding in regions where necessary livestock facilities for the administration of open grazing are virtually non-existent or scarce.

The study situates the anti-open grazing laws in the context of ‘‘forced-adaptation. While the anti-open grazing laws may be criticized for their lack of inclusivity, their constitutionality, as well as the circumstances upon which they were established, cannot be ignored.

Conclusion and Recommendations

A critical review of the timing and circumstances leading to the adoption of the Anti-open Grazing Laws in Nigeria reveals its emergence as a fallout of the failure of hitherto interventions made to address climate change-induced forced migrations and resource crisis involving transhumant pastoralists. The ‘forced-adaptation’ categorization of the Anti-open Grazing Laws is an expression of the nature and character of the initiation, discussion, and adoption of the bill that birthed the legalization of such prohibition.

Arising from the literature above, the study calls for caution in the implementation of the Anti-Open Grazing Laws. Spontaneous execution of such sub-national government intervention law with the connotation of ‘forced-adaptation’ could generate worse security scenarios. The declaration and adoption of the Anti-open Grazing Laws did not lend itself to any common or national debate meant to coalesce divergent opinions, particularly those for whom it was targeted – the transhumant pastoral community. Non-inclusion of critical stakeholders from the livestock industry was the most significant pitfall and undoing of the Anti-Open Grazing Laws.

Timely as it did appear, considering the myriad loss of human and material resources in various regions of the country, the implementation of the Anti-open Grazing Laws would require a systematic approach that would essentially weigh and quantify the amount of burden to be borne by migrant herders. A key factor for a successful implementation of the Anti-Open Grazing Laws is constant dialogue with major stakeholders affected by the prohibition law. To ensure that the implementation of the Anti-Open Grazing Laws does not create new vistas of conflicts or reinforce existing vulnerability, fresh and regular discussions are essential.

A fundamental weakness in the 2021 Asaba Declaration, which birthed the anti-open grazing laws, was the failure of the governors involved to consider the prospects and possibilities of implementing the prohibition. Making haste to enact a law without any clear sense of how to enforce it is metaphorical of ‘‘putting the cart before the horse’’ and leaves much to be desired. The study recommends that states adversely affected by unregulated livestock grazing should work together towards redressing constitutional barriers limiting their capacity to enforce laws made in their territories. While state governors are literally called Chief Security Officers in their respective states, they are denied the constitutional powers required to mobilize resources and enforce laws in the interest of peace and security of their subjects. The goal and essence of the anti-open grazing laws would be a mirage if the security responsibility of the Nigerian state remains on the exclusive list of the constitution – a misnomer perpetuated during the reign of military rule, in the interest of facilitating the ‘‘command and control’’ mechanism of military administration.

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