

Climate Change, Herder-Farmer Conflict and Food Security In Yewa North, Ogun State, Nigeria.

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Abstract

One of the challenges confronting the global system is the persistent increasing change in climate causing environmental issues like drought, warming rising ocean, forest fires, flooding, forced displacement, increasing health risks, hunger and violent conflicts. One of the climate-change induced violent conflict is herder-farmer conflict. The persistent climate change affecting availability of environmental resources compels the herders to move across national territories in search of water and grasses. In Yewa North, Ogun state, there have been perennial conflicts between crop farmers and herders in Yewa North affecting agricultural productivity. Adopting eco-violence theory, the paper interrogated how herder-farmer conflict has affected food security in the local government area. The paper argued that that hotter temperature, increased drought and desertification have led to the migration by the herders into Yewa North, causing violent conflicts between the two groups, portending a threat to agricultural production. The crop farmers face the problems of drought occasioned by climate change and influx of migrant herdsmen contending for land resources. It further argued that apart from loss of lives, displacement of people, there is an imminent food insecurity in the area due to persistent clashes between the two agricultural groups. It is recommended that there is need for inter-agency collaboration between the security agents and community security providers in addressing perennial violent crises between the two groups. Ranches based on private-partnership collaboration are to be created in the home states of the herders to curb consistent mobility by the herders. Strict border control facilitated by modern satellite technology along the Nigerian borders is necessary. Farmers should be trained in climate-smart adaptation to increase agricultural productivity.

Keywords: Farmers, migrant herdsmen, conflict, security, conflict resolution.

Introduction

Herder-farmer conflict that has been occurring since time immemorial that has also threatened the security of the nation is the herdsman and farmers conflicts that have been occurring in some parts of the country which have unleashed hardship on the communities affected and seemingly defying a lasting solution. Herder-farmer conflict had been in existence since the time of agriculture. As reported by Odoh and Chilaka (2012), conflicts between the nomadic herdsman and farmers go back earlier societies.

Right from the ancient time down to the present modern period, herders and farmers have always been at loggerheads over natural environmental resources. In Ghana, Cameroon, Kenya, Chad, Mali, Cote d'Ivoire, Benin Republic, Nigeria, to mention a few, the conflicts have increased between the two agricultural groups. As argued by Malachy (2012), Africa is characterized by violent and destructive conflicts making it to be termed as a continent of uncertainties as conflicts with decades of experiences have been witnessed in countries like Somalia, Rwanda, Liberia, Democratic Republic of Congo, Sierra Leone, to mention a few.

Herder-farmer conflicts have been prevalent in the Nigeria's fourth republic. Killings and destruction of property occurred due to herder-farmer conflicts in North Central, North West, South East and some states in South West. For instance, in Desina, Adamawa state, 28 people were killed while about 2,500 farmers became homeless due to the conflict in 2005 (Nwese, 2005). 19 community members were killed and 42 sustained injuries due to violent clashes between the two groups. Herder-farmer conflict accounted for 35% of the violence reported (Fasona & Omojola, 2005). In the South-South Nigeria, cases of violent clashes have been experienced between the herders and farmers, particularly in Delta and Edo states. More than 40 million worth of crops are usually lost annually due to invasion of cattle (Ofem, Ofem, 2014). Also, in Bauchi and Gombe states respectively, there have been recorded cases of 28 and 112 incidences and human losses account for 101 and 20 respectively (Fasona & Omojola (2005). In Jigawa state, the menace of herder-farmer conflict is at higher rate. In Miga, Kaugama, Birnin Kudu, Garki and Maigatari Local Government areas, lives, properties and varying degrees of injuries were inflicted on the people. T In Nasarawa state, there have been occurrences of the herder-farmer conflicts in Udeni Gida village which led to the death of 30 people with many houses, crops and properties destroyed (Daily Trust, 2009). In states like Oyo, Kebbi, Plateau, herder-farmer conflict has become much more alarming as the days pass by. Herder-farmer

conflict is much prevalent in North Central Nigeria but spreading to the Southern parts as a result of the migration of the herdsmen occasioned by ecological factors occasioned by climate change. States like Taraba, Yobe, Plateau, Benue, Enugu, Nasarawa, Delta, Imo, Niger, Kaduna, Katsina, Zamfara, Gombe, to mention a few, have witnessed incessant violent conflicts between the two agricultural groups.

A devastating attack was carried out by suspected migrant herders on 25th April, 2016, where 40 people were killed at Ukkoibi Limbo town in Enugu state (Adebajo & Adebajo, 2023). In Kaduna state in 2016, there was an imposition of curfew due to herder-farmer violent clashes. Cattle rustling does not even help the situation in some of the aforementioned states. Conflict of this nature has also been occurring in some communities in the South West states like Oyo, Ogun, Ekiti and Ondo. Ogun state has been experiencing the incessant and perennial conflict between the migrant herdsmen and farmers who migrate from Benin republic, Niger and Chad for market and green pastures. During the dry season, some communities in Yewa have witnessed violence between herders and crop farmers since the 1990s posing serious threat to food security. Yewa North has been the hotbed of the conflict which houses 60% of the cattle population in Ogun state with a major market attracting cattle merchants from Mali, Chad, Burkina Faso and Togo (Lamidi & Ogunkunle, 2015). Apart from conflicts such as the ones between forest land users, communal conflict, boundary dispute, religious conflict, herder-farmer conflict has affected peaceful co-existence between people in the two local government areas.

Conceptual Clarifications

Herder-Farmer Conflict

Herder-farmer conflict is a type of violent conflict between herders and farmers over arable land resources mostly between Muslim Fulani and Christian non-Fulani farmers. As it applies to Nigeria, it is mostly prevalent in the North Central between Adara, Berom, Jukun, Tiv, Tarok and Hausa farmers and Fulani Bororo herders. It is important to note that herders in Northern Nigeria belong to the tribes of Baggara, Shuwa, Uled Suliman whose ethnic group is Arab, Bokolooji, Maare, Sankara, Uda'en, Woodabe who are of the Fulbe ethnic extraction. While Badawaii, Jetko, Kanuri, Koyam, Manga are Kanuris and Kuburi and Sugurti belong to Kanembu, Teda is of Tubu ethnic extraction and Yedima belongs to Buduma group.

Climate Change

Definitions of climate change have been proposed by academics with varying points of view. According to the US Environmental Protection Agency (2023), climate change is defined as a change in a region's temperature, precipitation, and windiness. Natural processes and human activities that connect the atmosphere, ocean, and land, as well as changes in the sun's heat output, are the main causes of climate variability. Human activities such as burning fossil fuels for energy and heat, clearing forests, fertilizing crops, disposing of waste in landfills, rearing livestock, and manufacturing industrial goods all contribute to greenhouse gas emissions, which in turn cause global warming (United States Environmental Protection Agency, 2023).

Another way to describe climate change is as a wide range of worldwide occurrences brought about mostly by the burning of fossil fuels, which increases the number of gases in the atmosphere that trap heat (Environmental Climate Change Canada, 2020). Global warming has caused remarkable changes, such as rising sea levels, melting ice masses in Greenland, Antarctica, the Arctic, and mountain glaciers around the world, changes in floral and plant blossoming, and extreme weather events (NASA, 2021). Human activity is the primary cause of the ongoing climate change, as it releases greenhouse gases into the atmosphere. Additionally, the energy from the sun warms the planet and releases heat into the atmosphere.

Water vapor, carbon dioxide, and methane are examples of greenhouse gases, which are gases in the atmosphere that trap heat and function similarly to a greenhouse's glass. The greenhouse effect, which is exacerbated by human activities that raise the amounts of greenhouse gases in the atmosphere, particularly carbon dioxide, is the result of greenhouse gases absorbing heat and radiating some of it back to the earth, boosting surface temperatures. The earth warms as a result of the atmosphere's increased capacity to retain heat due to the presence of greenhouse gases.

Carbon dioxide is generated through the burning of fossil fuels such as coal, oil and gas. Literature has established that the global warming and climate change will continue to increase in the level of carbon dioxide generation due to human activities like emissions from fossil fuel combustion including coal, oil, and gas are used to produce carbon dioxide. According to research, human activities such as emissions from burning fossil fuels, changes in land use, particularly deforestation, and the production of cement will cause carbon dioxide emissions to rise further as a result of global warming and climate change (Bello et al., 2021).

Food Security

Although there is no widely accepted definition, food security is one of the aspects of human security that has drawn different ideas. Food security is the state in which people regularly have access to enough safe, nourishing food that satisfies their dietary needs and preferences for a healthy life, according to the Food and Agriculture Organization (FAO) (2002). Stability, which denotes the capacity of food systems to endure shocks, whether natural or man-made, was included to the definition of food security during the 2009 World Summit (FAO, 2009).

According to Nfzai, Ahmad, Imran, Khan, Zubair, Akram, and Khalid (2023), food security entails nutritious diets, a more sustainable food supply chain, appropriate food choices, fair prices, improvements in food safety, and accessibility to open and competitive markets. The use, availability, accessibility, and stability of food are all related to food security. Environmental issues that might impact food security include trade contracts, political disputes, HIV/AIDS, climate change, economic collapse, currency volatility, water contamination, and more. Furthermore, issues including unemployment, poor income, poverty, lack of education, high food prices, limited property rights, and limited market access do contribute to food insecurity. Food security includes accessibility, affordability, and availability (World Bank, 2007). Food availability for households refers to the production of enough food to meet their needs.

Theoretical Framework

The theory used in anchoring the paper is the eco-violence. The eco-violence theory was propounded by Homer-Dixon in which he argued that in the developing countries, people depend on environmental resources such as water, land and forests for crop production. As a result of scarcity of the highly contested and heavily dependent shrinking environmental resources, which different users need, conflicts often result. As postulated by Homer-Dixon, reduction in the quality and quantity of renewable environmental resources leads to violent conflicts among different users. Arguing further Homer-Dixon was of the opinion that increasing population coupled with unequal resource access to natural resources can easily predispose users to violent conflicts. The eco-violence theory's fundamental premise is that resource scarcity results from inadequate supply brought on by environmental risks, which pushes certain societal segments into a state of deprivation and violence. Homer-Dixon (1994) further postulated that resource depletion constitutes a challenge people are confronted with in different societies due to climate

change. It is believed that reduction of natural resources will lead to different types of violence in the developing countries. Homer-Dixon (1994) argued that disputes could occur due to local environmental degradation caused by construction of infrastructures. Also, Homer-Dixon (1999) further opined that there would be ethnic clashes based on well entrenched social sentiments and cleavages, population migration and environmental scarcity in developing nations. He further perceived that scarcity of resources such as land and water will lead to struggle among different ethnic groups which will affect the stability of the countries. In addition, he posited that there would be scarcity of which environmental resources caused by increased population, economic development, pollution and climate change (Homer-Dixon, 1999). Masara (2021) supports the theory put forth by Homer-Dixon (1999) that a lack of environmental resources will limit agricultural and economic productivity, leading to a disruption of economic livelihoods, poverty, and migration. Furthermore, he contended that environmental scarcity can cause disputes between industrialized and developing countries. The incapacity of eco violence to explain the world events that would result in conflicts between rich and developing nations is one of its intrinsic flaws. Because eco-violence theory oversimplifies scarcity as a result of climate change, it might be critiqued for reductionism. Certain structural drivers of scarcity that are fundamentally linked to the exclusionary politics and governance that exist in some emerging nations and have the potential to spark violent conflicts are not adequately explained by the theory. Due to its explanation of how environmental shortage can lead to violent conflicts, especially between herders and farmers, the theory is pertinent to the study. It is important to note that the theory recognizes and explains how the herders' forced relocation due to a lack of environmental resources leads to issues like crop devastation and livestock killing, among other things, which incite violent conflicts.

Herder-Farmer Conflict in Yewa-North Local Government Areas: Explaining the Multifarious Causal Factors.

Herder settled in Ogun state basically because of increased population pressure in the North due to upsurge in both human and animal production, persistent droughts due to climate change which regularly pitched them against the settled farming groups. Also, the herders found out there were some communities in the state there were environmentally friendly to their cattle by having abundance of water, grasses, market and free from cattle disease (trypanomiasis) (David,

2016). Access to and use of the available natural resources were regulated by the community organisations in order to ensure peaceful existence among the various users. As population increased in the North, same was the experience in Ogun state where a large number of people ventured into farming activities for extra income, driven by government agricultural and infrastructural development driven policies. Hence, there was an upsurge in competition among users of land for agricultural and infrastructural development purposes. There have been negative biophysical implications and ecological crisis threatening food security in the communities in Ogun state.

One of the causes of conflict includes migration of the Bororo herdsmen from Republics of Benin and Niger and Chad to the communities during the dry season between November and April in search of pastures. Migration was brought about by climate change that has led to desertification making green pastures unavailable to the herdsmen. Also, availability of markets for the sale of cattle encouraged the herders' movement, and as they move the cattle from one territory to the other, buyers are readily available. Drought, water scarcity, disease infestations, grass shortage and climatic change forced the herdsmen to move in the country in search of water, green pastures and conducive environment for their cattle (Benjaminsen & Ba, 2021; Wiederkehr et al, 2022). Although, Nassef, Islam, Djohy & Flintan (2023) argued contrarily that securitizing and politicizing climate change linking migration to conflict and insecurity lacks enough empirical evidence. Shortage of water due to increasing desert encroachment by climate change in the Sahel region particularly lake Chad has caused increased mobility by the herders (Akinpelu & Aroriode, 2021)

It is important to state that cattle do not follow the established grazing routes but indiscriminately, which allows the cattle to stray into the farms destroying crops. This is coupled with the fact that under-aged pastoralists are often allowed to lead cattle for grazing leading to crop destruction, traffic blockage and dropping of dungs on the roads. Farming along the cattle routes designated for the passage and grazing of cattle predisposes to violence as some farmers plant along the cattle pathways. This often leads to destruction of farmlands which is a trigger of conflicts. In Yewa North communities, the farmers practice shifting cultivation which could warrant them to plant along the cattle routes. In communities like Eselu, Owode, Oja – Odan, Ketu, Ayetoro, Eggua in Yewa North, killings, rape, assault and destruction of crops was experienced due to

herder-farmer conflicts. The unguarded straying of the cattle into the farmlands of the local farmers on many occasions has led to conflict in the area. On many occasions, the cattle stray into the farmlands and destroy the crops planted by the farmers. The unrestricted movement of the herdsmen into the state in search of markets, water and pastures has caused a lot of damage to the farmers' crops and most often results in violent clashes. Many times, crops are eaten up by the cattle without any compensation and the herdsmen intentionally allow their cattle to feed on yam tubers, cassava, potatoes, legumes, etc. As pointed out by David (2002), herders graze on the farmlands without prior agreement with the farmers when the farmers meet them

In Yewa communities where there is always violent confrontation between herders and farmers, there is a pastoral leader who is the oldest among men (Jawwmu Saare) who is saddled with the responsibility of enforcing rules on grazing field and cattle routes after they have been demarcated by Fulani Sarkin or Ardo and Mawdo (camp controller) (David, 2016). Most of the time, the camp controllers fail in carrying out their responsibilities of monitoring and enforcing the grazing rules during the dry season which most of the time leads to crop destruction. During dry season, cattle tend to extend their frontiers in search of any available pasture and water. The migrant herders also bring in cattle from the neighbouring countries like Benin Republic which further complicates monitoring and enforcement of grazing rules. Once the migrant herders (Bokoloji) destroy crops, they vacate the scene immediately and it becomes a difficult task to identify who is to be held accountable between the resident and migrant herdsmen. For instance, between 2012 and 2013, in Eggua community in Yewa North, two Yoruba and six Fulani people were respectively killed during the violent herder-farmer conflict. Both the herders and farmers were affected by the conflict but in disproportionately in communities like Igan-Alade, Agbon – Ojodu, Oroibi Korole and Asa. There were abductions of people who were later found dead (David, 2016). It is important to state that Yoruba farmers were not merely victims, they were active participants in the conflict by burning herders' camps (Gaa), leading to closure and withdrawal of all children from the community schools. Consequently, the pastoralists children experienced a setback in terms of accessing quality education aside the nomadic education. In Imoto and Eggua, sixty herders' camps were burnt down (David, 2016). In Agbon Ojodu, Oroibi Korole, Asa, Igbo Nla, Ibeku, Igan Alade, Moro, Komi, Owode Yewa, people lost their lives between 2000 and 2015 (David, 2016).

The collaboration that exists between the community, the resident and migrant herdsmen contribute a lot in engendering the conflict. This is as a result of the fact that some of the leaders pay the herders residing in the communities to rear animals for them and are usually bought at cheaper prices. The resident herdsmen also buy cattle from the migrant ones at cheaper rates. Most of the time when herdsmen from the Chad or Niger wreck havoc on the farmlands of the local farmers, the resident herdsmen will not be able to condemn the acts because of the trading relations between them. As argued by David (2022), herders graze on the farmlands without prior agreement with the farmers. When the farmers meet them on the farm, they drive the cattle away which most of the time leads to violent conflict. Residents of Asa, Agbon, Ojodu, Moro, Isiku, Okosho, Igbo Oro and Oguba - Ayefon had to flee to Benin Republic. Also, when the reports get to the Yoruba community leaders, nothing tangible will come out of it because of the relationship between them and the resident herdsmen. Additionally, the farmers do mistake the resident herdsmen for the migrant ones that are always on the move. According to Ogunyemi (2019), on a yearly basis the herdsmen destroy the crops of the local farmer and also molest the women on their way to the farms and streams. When the report gets to the herdsmen leaders (Seriki Ardo) living in the communities, nothing good comes out of it. What the youths resort to is burning down of the dwelling places (Kara) of the resident herdsmen as retaliation. The economic interdependence between the leaders in the community could not allow them to take a decision on how to check the migrant herdsmen invasion of farmlands during the dry seasons.

Sexual molestation and killing of the women in the community by herders trigger herder-farmer conflict. Cases of women raped on the farm, abound in the affected communities in Yewa North. As argued by Odeyinka (2021), rape in any part of Africa is a taboo. Also, women lost their husbands, children and close relatives and many of them become 'emergency breadwinners' fending for the needs of the family. The militancy of the migrant herdsmen and the reign of terror unleashed on the communities during the dry seasons has become much more alarming in the recent times. When women were raped in the communities, the youths retaliated by destroying the settlements of the herders residing in the communities because often times, the migrant herdsmen would have left the farmlands after perpetrating the heinous activities (Akande & Adekunle, 2024).

Contamination of streams, defilement of rivers and dropping of dungs by the cattle indiscriminately often angers the host communities and when the attention of the herdsmen are called to it, they often disregard it (Akande et al, 2024). The cattle indiscriminately defecate in the streams where villagers get their drinking water. The stiff competition over shrinking water by the two agricultural groups predisposes them to violent conflict. But it should be pointed out that cattle dung can be a great nutrient to the soil for farmers to improve their productivity if it could be adequately utilized and this requires collaboration and cooperation between the two land users, the farmers and herders. As opined by Odeyinka (2021) indiscriminate bush burning, crop destruction, erosion of traditional authority, defecating on the roads, contamination of streams, zero grazing of fallow, stealing of stray cattle, harassment of nomads by host youths, cause the conflicts. Despite the involvement of traditional institutions of Fulani such as Fulani Traditional Council, Fulani Herders Association through their leadership like Sarkin Fulani and host community leaders like Oba and Baale, the conflict remains unresolved.

The conflicts have been handled by the State Government by deploying the security agents to ensure peace reign in the communities without paying attention to the remote and precipitating factors that have caused the conflicts all this while. What the security agents do is to enforce a 'graveyard peace' on the communities affected. Rather than resisting the movement of the migrant herdsmen into the communities which often triggers conflict, peace is forced on the communities when things get out of hands. In addition, the activities of the leaders of the herdsmen (Ardo/Seriki) and host communities were not critically examined in managing the conflict. Attempts have not really been made to bring all stakeholders to the conflict together to find a lasting solution. Until in December, 2013 when a Memorandum of Understanding was signed by the actors involved particularly in the Ketu communities where the conflict is more pronounced (Ogunyemi, 2019).

Challenges the herder-farmer conflicts pose to food security in Yewa North, Ogun State

The insecurity engendered by herder-farmer conflict has affected food security in Yewa North. It is important to state that one of the basic elements of human security and sustainable development goals is food security. Herder-farmer conflict has affected every dimension of food security in the Yewa North. Bringing it to the fore, the four basic dimensions of food security are food availability, access, utilization and stability (FAO, 2006) and additional dimensions of

agency and sustainability (Mockshell & Ritter, 2024). It is imperative to state that in Yewa North, herder-farmer conflict has constituted a serious challenge to food availability. Food availability starts from cultivation of crops to the final harvest stage where they will be made available for consumption . But in a situation where farmers cannot go to their farms for the fear of being killed by herders, this threatens the first dimension of food security which is availability. In Yewa North, food crops that are mainly produced include cassava, yam, cocoyam, beans, melon, beans, maize, potato, rice, plantain, banana and vegetables of different types apart from cash crops like rubber, cocoa, kolanut, citrus, cashew and oil palm. The conflict has affected planting of food crops that the farmers grow for subsistence and cash economy. As argued by Osabuohien, Okorie and Osabohien (2018), apart from challenges of finance, land, labour, aging population, tractorisation, herder-farmer conflict occasioned by constant migration of herders into various communities in Ogun State, including Yewa North, has aggravated the food insecurity.

Food access is under threat as farmers have abandoned their farmlands due to the conflict as many of them were displaced to the neighboring countries like Benin Republic where they even find it more difficult to practice farming which is their means of livelihood. In a conflict situation, all stages of economic activities are always affected, so, creating access to food becomes very difficult also. As argued by Osabuohien, et al (2018), the herder-farmer crisis has had negative impact on food security and brought about hardship to the inhabitants of the affected communities in Yewa North. The incursion of farmlands by the herders' cattle led to crop destruction making food items unavailable. Most of the crops planted by the farmers are nutritious to the cattle and their sustenance. Persistent crop destruction by the cattle and loss of income arising therefrom demoralize the farmers (Ogunyemi, 2019). Consequently, virtually all the farmers have abandoned farming to seek for perceived better means of livelihood.

It is instructive to note that abandonment of farmland due to herder-farmer conflict has led to another security issue like kidnapping, human trafficking and rural banditry. In communities affected by the conflict, Osabuohie, et al (2018), argued that the conflict has a multiplier effect in form of loss of farmlands, crops, incomes, livelihoods and lives. Also, the input of herders in food security is also affected as their cows are denied access to grasses due to conflict which leads to their death. In revenge for crop destruction and non-compensation by the herders, cattle are killed by the youths in reprisal attacks, affecting animal husbandry in the communities. Also,

in a situation where grasses and streams are poisoned in order to evict herders from the communities, it affects animal production.

Herders who sell cows, milk and other products to the community members, giving room for complementarity in terms of food production cannot do so any longer because of the violent conflict. Drop in the supply of animal products has put pressure on the costs of other sources of proteins like chicken, goats and bush meats, causing skyrocketing prices, making availability, accessibility and utilization difficult (Adeleye, Osabuohien, Adeogun, Fashola, Tasie & Adeyemi, 2020). The overall low agricultural productivity either in terms of crop farming or animal rearing, has affected income generation in particular and food security in general (Akinde & Adekunle, 2024). The herder-farmer conflicts in the communities in Yewa North, Ogun state, have no doubt imposed some socio-economic challenges on the communities, and the state as a whole. Both farmers and herders have suffered the effects of the conflict as human lives and property are destroyed as a result of the frequent clashes. Internal displacements have occurred as the herdsmen relocated to other places particularly those that have been living in the communities for several decades (David, 2022). Food insecurity is prevalent in the communities producing agricultural products and are conflict ridden. The reduced yield of crops as a result of destruction of farm lands has brought about food scarcity in the state. Also, the urban dwellers who engage in selling farm produce experience reduction in savings or income and of course increased cost of agricultural products (Akinde et al, 2024).

Conclusion

The paper analysed the incessant clashes between the migrant herdsmen and crop farmers in communities in Yewa North, Ogun state. It argued that migration, natural resource scarcity, proliferation of light weapons, defilement and contamination of streams and rivers, sexual molestation of the females, among others, predispose the members of the communities to violence between the herders and farmers. However, the management of the conflict has not been adequately handled as the relationships between the farmers and herders are that of the cat and mouse. The paper concluded that herder-farmer conflict has affected all dimensions of food security in Yewa North, Ogun state. Therefore, the paper recommends that there is a need for seriousness on the part of the state and local authorities to take drastic steps to solve the recurrent conflicts to make the communities safe to practice agricultural production. The activities of the

herdsmen particularly the migrant ones coming to the communities need to be checked and this requires the effort of the security agents, vigilante groups and immigration officers to ensure that local production and influx of small arms are checkmated to reduce preponderance to violent clashes. Any destruction of the crops or farmlands should attract a stiff penalty within a very limited time which will be in form of paying compensation by the herdsmen involved. Collorary to that, any farmer or youth that kills cattle should be made to pay compensation to serve as a deterrence against aggression. Farming activities along the cattle pathways should be discouraged to prevent crop destruction when the cattle are moving. Also, there should be demarcation of grazing lands/reserves for the herdsmen to use for feeding their cattle to avoid their encroachment on unassigned lands.

Both the state and local governments should be ready to implement any decisions taken fairly and firmly to ensure peace is entrenched. There is a need for a standby and well-funded security outfits which will work with the local security agents such as Vigilante Groups, properly positioned at all the flashpoints in the local government to instil peace. Peace education needs to be encouraged in the communities through constant meetings and dialogues with the parties to the conflict. There is a need for functional monitoring and enforcement task force which will constitute of the resident herders and farmers that will monitor and enforce grazing rules in the communities and in case of crop destruction, compensation will be made accordingly. Lastly, modernization of pastoral farming is needed by creating ranches where cattle will be kept rather than moving them around for grazing. Grazing reserves should be rehabilitated for feeding the cattle in order to prevent them from feeding from the crops of local farmers.

References

- Adebajo, A. A., & Kunle, O. (2023). Climate change, trans-border migration and Fulani herdsman violence in Nigeria. *VUNA Journal of History and International Relations*, 7(1), 1-13.
- Adebajo, A. A., & Adebajo, A. O. (2023). Community leaders and management of pastoralist-farmer conflicts in Benue and Nasarawa states, Nigeria. *Journal of Community Development Research (Humanities and Social Sciences)*, 1316(1), 13-26.
- Adeleye, N., Osabuohien, E., Adeogun, S., Fashola, S., Tasie, O. & Adeyemi, G. (2020). Access to land and food security: Analysis of 'priority crops' production in Ogun State, Nigeria. In E. Osabuohien. (Ed.) *The palgrave handbook of agricultural and rural development in Africa* (pp. 291-311). Palgrave Macmillan.
- Akinde, A. A., & Adekunle, C. P. (2024). Effects of farmers- herders conflict on the technical efficiency of cassava-based farmers in Yewa North, Ogun State, Nigeria. *Research Gate*. <https://www.researchgate.net/publication/38127314>.
- Akinpelu, I. L., & Aroriode, R. O. (2021). Conflict management strategy of farmers–herders crises in Ogun State, Nigeria. *World Journal of Innovative Research (WJIR)*, 10(2), 1-7.
- Bello, O. B., Ganiyu, O. T., Wahab, M. K. A., Afolabi, M. S., Oluleye, F., & Abdulmalik, S. Y. (2021) . Evidence of climate change impacts on agriculture and food security in Nigeria. *International Journal of Agriculture and Forestry*, 2, 49-55.
- Benjaminsen, T.A., & Ba, B. (2021). Fulani-Dogon killings in Mali: Farmer–herder conflicts as insurgency and counterinsurgency. *African Security*, 14(1): 4–26.
- Daily Trust (2009). 30 dies as farmers, cattle rearers clash. *Daily Trust*.
- David, O. A. (2016). Relevance of indigenous institutions in conflict resolution and sustainable land use management among settled Fulani agro-pastoral communities of Ogun State. *Nigerian Journal of Rural Sociology*, 16(3). 87-96.

- David, O. (2022). Hounded by agents of death at home, Ogun victims of herders' attacks locate shelter in Benin Republic. *The Punch*. <https://punch.com>
- Environmental Climate Change Canada (2020, Nov. 6). *Climate change concepts*. ECCC. <https://www.canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services/basics/concepts.html>
- Food and Agriculture Organisation (2002). *Food security: The state of food insecurity in the world 2002*. FAO. <https://www.fao.org>>
- Food and Agriculture Organization (2009, Nov. 16-18). *Declaration of the world summit on food security*. World Summit on Food Security organized by the Food and Agriculture Organization of the United Nations, Rome.
- Homer-Dixon, T. C. (1994). Environmental scarcities and violent conflict: Evidence from causes. *International Security*, 19(1), 5-40.
- Lamidi, A., & Ogunkunle, T. (2015). Occurrences of resources conflicts among the Fulani's herdsman and arable farmers in Yew Area, Ogun state, Nigeria. *Research Journals of Agriculture*, 1(1), 1-11.
- NASA (2022). *2021 Tied for 6th warmest year in continued trend, NASA analysis shows*. National Aeronautics and Space Administration. <https://www.nasa.gov/news-release/2021-tied-for-6th-warmest-year-in-continued-trend-nasa-analysis-shows/#:~:text=For%20example%2C%202021%20was%20a,Applied%20Science%20in%20New%20York.&text=Goddard%20Space%20Flight%20Center%2C%20Greenbelt%2C%20Md>
- Odeyinka, O. (2021). Farmers-herders crisis: Killings reprisals persist in Ogun communities.
- Ofem, O. O. (2014). Livelihood and conflict dimension among crop farmers and Fulani herdsman in Yakurr region of Cross River state. *Mediterranean Journal of Social Sciences*, 5(8), 1-17.
- Ofuoku, A.U., & Isife, B. I. (2010). Causes, effects and resolution of farmers- nomadic cattle herders conflict in Delta State, Nigeria. *Agricultural Tropica Et Subtropica*, 43(1).
- Ogunyemi, O. (2019). *Farmers and herdsman crisis: A major threat to food production in Nigeria. A case study of Yewa North local government in Ogun state*. Hangle Media. <https://humanglemedia.com>farmers-herders-crisis-killing in yewa north>
- Ojoye, T. C. (2022). Herdsmen occupy Odu'a tomato factory plotting attacks – Ogun monarch. *The Punch*. <https://punchng.com>ogun-com>.
- Homer-Dixon, Percival T. V. (1995). *Environmental scarcity and violent conflict: the case of South Africa*. American Association for the Advancement of Science, University of Toronto. <http://www.academicjournals.org/ajpsir>
- Malachy, C. E (2012). Exogenic factor and the futility of conflict prevention in Africa: The Darfur experience. *African Journal of Political Science and International Relations*, 2, 33-42.

- Masara, W.B. (2021). Environment-conflict nexus: The relevance of Thomas Homer-Dixons environmental conflict theory in Africa. *African Journal of Empirical Research*, 2(2), 170-175.
- Mockshell, J. & Ritter, T. N. (2024). *Applying the six-dimensional food security framework to examine a fresh fruit and vegetable programme implemented by self-help groups during the COVID-19 lockdown in India*. <https://www.sciencedirect.com/science/article/pii>.
- Nassef, M., Eba, B., Islam, K., Djohy, G., & Flintan, F. E. (2023). *Causes of farmer–herder conflicts in Africa: A systematic scoping review*. Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises.
- Nfzai, M. F., Ahmad, M. H., Imran, M., Khan, M. K., Zubair, M., Akram, S., & Khalid, M. A. (2023). *Food security challenges and approaches*. Intehcopen. <http://www.intehcopen.com/chapters>
- 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, 2005.
- Odoh, S. I. & Chilaka, F. (2012). Climate change and conflict in Nigeria: A theoretical and empirical examination of the worsening incidence of conflict between Fulani herdsman and farmers. *Oman Chapter of Arabian Journal of Business and Management Review*, 2(1), 110-124.
- United States Environmental Protection Agency (2023). *Definition: Climate change*. US Environmental Protection Agency. <https://www.epa.gov/definition-climate-change>
- Wiederkehr, C., Ide, T., Seppelt, R., & Hermans, K. (2022). It’s all about politics: Migration and resource conflicts in the global south. *World Development*, 157(2022), 105938.
- World Bank (2007). *What is food security?* World Bank. <https://www.worldbank.org/en/topic/agriculture/brief/food-security-update/what-is-food-security>