
FODDER AND FORAGE PRODUCTION FOR SUSTAINABLE RANCHING AS A MEANS FOR SUSTAINABLE PEACE BUILDING AND CONFLICT RESOLUTION AMONG AND BETWEEN FARMERS AND HERDERS COMMUNITIES IN NIGERIA

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Introduction

Peace, as an indispensable and vital element in community development, is intrinsically tied to harmonious and serene life dimensions. The nurturing and preservation of peace inherently hinge upon the redirection and enhancement of social relationships. For an extended period, the relationship between farmers and herders in Nigeria, notably in the North-western, North-eastern, and North-central regions, has been marred by clashes resulting in grim situations and bloodshed.

According to All Africa (2018), the conflict between herders and farmers in Nigeria, centred in the Middle Belt but spreading southward, has escalated sharply. The Middle Belt is a loosely defined area between the Muslim and Hausa-dominated north and the predominantly Christian Igbo and Yoruba areas of the south, broadly comprising Niger, Kwara, Kogi, Benue, Nasarawa and Plateau states. Many of the region's numerous ethnic groups share a history of resistance to the Sokoto caliphate, which ruled much of it from 1804 to 1903. Since September 2017, at least 1,500 people have been killed, over 1,300 of them from January to June 2018, roughly six times the number of civilians killed by Boko Haram crisis over the same period. The first half of 2018 has seen more than 100 incidents of violence and more fatalities than any previous six-month period since the conflict started worsening in 2014. The surge of violence is concentrated in Plateau, Benue and Nasarawa states in the North Central geopolitical zone and in the adjoining Adamawa and Taraba states in the North East zone.

Amnesty International (2018), as cited in Adichie (2021), elucidates that the conflict between farmers and herders has evolved over time and is presently causing extensive devastation, particularly in Christian areas. Between 2016 and 2018, a staggering toll emerges: 3,641 individuals killed, 406 wounded, 5,000 houses destroyed, and 182,530 people displaced due to clashes between herders and farmers. The majority of these incidents are concentrated in Nigeria's northern region.

Adichie (2021) explains further that, the conflict between farmers and herders is not a newcomer in the history of Nigeria. The 18th and 19th centuries witnessed a time when people involved in manual farming suffered from herder's domination. This supremacy over lands and farms were tied to religion, ethnicity, and politics. The fight for power and land ownership gave rise to herding polities where herders take up settlement through military and political means. In the 1970s, there were conflicts between farmers and their neighbouring herders who were sedentary. Thus, in the

post-colonial era, the dominance of herders prevailed in villages, mainly in the northern part of Nigeria. This elaboration indicates that farmers-herders clash has been perennial in Nigeria.

The violent clashes between nomadic pastoralist and sedentary farmer communities in Nigeria have resulted in significant loss of lives and economic devastation. This conflict has intensified in recent years due to increased access to weapons and communication devices by the conflicting parties. Traditional negotiation methods between these groups have largely collapsed, leading those with superior weaponry to pursue their objectives without engaging in dialogue with the opposing factions. The root cause of the conflict lies primarily in resource scarcity. However, this scarcity didn't abruptly emerge in the region; it's a culmination of various factors, including ineffective state mechanisms, Nigeria's oil boom, lingering effects of colonialism, climate change, and the continual proliferation of arms among non-state groups (Gürsoy, 2020).

This illustrates a shift in the conflict's nature, intensifying due to increased access to weaponry and communication tools. Traditional negotiation methods have become ineffective, compounded by scarcity of resources caused by a burgeoning population's demand for increased food production. This pursuit of more farmland by farmers has encroached upon grazing lands designated for herders and their cattle. The underlying causes of this conflict encompass infrastructure development, climate change, governance inefficiencies, cattle theft, transformation challenges in agriculture and pastoralism. Ultimately, the emergence of the farmers-herders conflict in Nigeria can be attributed to a multitude of interconnected factors (Gürsoy, 2020).

Saleh (2022) suggests that countries like Tanzania, Kenya, and Nigeria, grappling with intense farmers-herders conflicts, experience significant GDP effects. In the broader context of Africa and the Middle East, the economic toll of violent conflicts between 2011 and 2016 amounted to a staggering loss of over \$1.50 trillion, accompanied by the tragic loss of over one million lives. Particularly in Nigerian regions such as Adamawa, Kaduna, Taraba, Benue, and Zamfara states, numerous conflicts led to the destruction of villages, significant cattle losses, and the displacement of farmers due to herders' attacks. A multitude of factors contribute to these conflicts, including the rapid expansion of small farms, heightened banditry, inadequate knowledge about grazing regulations, insufficient security measures, cattle theft, climate change, rampant unemployment, desertification, land disputes, water pollution, damage to crops and farmlands by grazing cattle, as well as intimidation of farmers by herders, among others. Beyond the loss of lives, these conflicts significantly impact the economy of affected areas and Nigeria as a whole.

This is therefore, the trend in farmers-herders crisis and the relationship that exists between the two crucial compartments in the Nigerian Food Basket and agro-inclined sector of the economy. Thus the author is prompted to write the paper to propose a way in which the conflict can be addressed.

Physical and Socioeconomic Environment of Nigeria

Nigeria is located in West Africa, roughly between Latitude 4°N and 14°N and Longitudes 4°E and 15°E. The country's most southerly point is near Brass in the

Niger Delta, which is roughly north of the Equator. The country's northern boundary is approximately at 14°N. Her westerly boundary runs roughly along Longitudes 3°E. Her easterly boundary runs from a point to the south west of the estuary of the Cross River to northwards almost to Longitude 15°E, South of Lake Chad. Nigeria has a total land area of 923,768 square kilometers. The location and size of the country are very important for a number of reasons: Because of its location close to the equator and the Atlantic Ocean, Nigeria enjoys a hot tropical climate. Rainfall decreases from over 4000mm in the Niger Delta to less than 250mm in the extreme Northeast. (National Open University of Nigeria, nd).

The environmental position of Nigeria in Africa makes her important and significant in socio-political and economic relations among African nations; her geography also buttresses this fact. This is because the Nigerian land is richly endowed with natural and human resources that have high potentials of developing Nigeria and even the whole of Africa if ideally and ingeniously exploited.

This is as clearly explained by Ofoche (2012) as follows: Nigeria is Africa's most populous country with an estimated population of about 150 million and a land mass of 923,768 square kilometers which is more than twice the size of California in the United States of America (U.S.A.). It has abundant natural resources and is the fourteenth largest exporter of crude oil in the world. From 2009 estimates, the country has a Gross Domestic Product (GDP) of \$377.6 billion and per capita GDP of \$2,400. Nigeria is estimated to have a population growth rate of 2.3%. With these enormous natural and human resources, the country ought to be one of the world leading economies but, unfortunately, Nigeria is still entrapped in a web of socio-economic problems which hinder her growth. For example, about 54.7 % of Nigeria's population lives below the poverty line. Previous research work reveals that most governments in Africa are faced with difficult economic environments due to inadequate road infrastructure, inefficient ports, severe power outages and, worst of all, endemic corruption in government. The frequent changes in Nigeria's leadership does not allow for continuity in governance and a process of smooth transition to a new government. Since the restoration of democracy in May, 1999, civilian administrations have had to grapple with numerous socioeconomic problems and the attendant social malaise in a volatile, uncertain, complex and ambiguous environment. As common with most of the new states of Africa and Asia, no problem has more fiercely challenged political order in Nigeria than ethno-religious conflicts.

Therefore, Nigeria's socio-economic dimension is favourable if not for the obstacles of ethno-religious insecurity and political instability that hinder the country to prosper. One of such obstacles is farmers/herders clashes.

Causes of Farmers-herders Conflict in Nigeria

The identified causes of the conflict, as outlined by Ofuoku and Isifi (2010), encompass various facets that contribute to the tensions between farmers and herders. These include crop destruction, contamination of streams by cattle, land overgrazing, disregard for local traditional authorities, harassment of women, nomads being harassed by host community youths, indiscriminate bush burning, cattle defecation on roads, cattle theft, and cattle straying. Additionally, other factors, as highlighted by Aliyu (2015), involve the pursuit of more pastures due to increased herd sizes, the

expansion of farming activities driven by population growth encroaching upon areas traditionally utilized by cattle herders for livestock production, insufficient grazing resources, declining internal discipline and social cohesion among communities, and the impacts of climate change. In essence, all these causes revolve significantly around economic activities aimed at meeting the economic needs of both farmers and herders, illustrating the complex interplay between livelihoods and resource utilization that fuels this conflict.

Selected Generic Consequences of Herders-Farmers' Conflicts

Herders-farmers conflict resulted in so many unfavorable situations that are implicated in loss of lives and properties, retardation in agricultural production, heated ethnocentrism and insecurity situation.

This is as Komolafe, Bankole and Aderogba (2021) explained that, the community of Igbo-Ora has suffered greatly from the hands of their guests, Fulanis. Domestic terrorism, it is. On the farms, in the markets, at homes, and others, irrespective of sex and age, it is incredibly dreadful. As explained by Komolafe *et al* (2021), a farmer narrated his ordeal this way:

I was uprooting cassava [tuber], and my wife was doing the collection. All of a sudden, I heard my wife shouting and screaming Jagun, Jagun; e gba'mi o, e gba'mi o! When I looked up, I saw two men running after her with cutlass and herder's rod in their hands. One of them has a danegun hung on his shoulder. Before I could say Jack, the cutlass descended on my lower arm, and half way removed. ran into the bush and he continued pursuing me; the other one was following my wife in the other direction. He threw the cutlass, and it hits my thigh and it hung there for some seconds before it dropped off. The other mercilessly beat my wife. Our shout for help attracted neighboring farmers and passer byes on the major road. They came and rescued us. Otherwise, I would have been dead now. What was our offence? They were cutting the tubers into pieces; and the animals were feeding on them. She only told them to stop. I spent four weeks in the hospital at my own expense. It is better imagined than experienced..... In my cousin's farm, they ate six bunches of banana. They are too much for this community. Last year, they killed my uncle, who was coming from his farm. We are living in fear, day and night.

It's concerning how frequent and severe these incidents have become in the community. Kidnappings, crop destruction, poisoning of water sources, and deadly confrontations between security forces and suspected criminals are distressingly regular occurrences.

Adejumo, cited in Komolafe *et al* (2021), provided a detailed account of gun battles between Herdsmen and the security operatives known as Amotekun in the Ibarapa axis. The report describes a raid across four Local Government Areas where alleged kidnappers were being sought. Tragically, seven people were reported killed during the Amotekun operatives' visit to a village. Clearance operations were conducted in response to the escalating kidnappings and killings in the forested regions of these areas. In one encounter, three attackers were killed, and an Amotekun member sustained injuries. Additionally, arrests were made, and a double-barrel rifle was recovered in another instance.

The gravity of the situation, including constant kidnappings, rampant destruction of lives and property, prompted the planning and execution of these clearance operations in various areas across the affected Local Government Areas. All apprehended suspects and recovered weapons were handed over to the Divisional Police Officer (DPO) at the Magoro Police Station. The cycle of violence and security threats appears to be a deeply entrenched issue that necessitates urgent attention and resolution.

Aderogba (2019) further elaborates on the generic repercussions of conflicts between herders and farmers, citing Human Rights Watch (2013), which reported that violence between Fulani herders, farmers, and local communities had claimed 3,000 lives since 2010. The persistent clashes stem from the increased demand for grazing lands by Fulani herders, conflicting with farmers' expansion into traditional corridors used by the Fulani. Farmers accuse the herders of allowing their animals to damage growing crops and pollute community watering sources. Conversely, herders accuse farmers of denying access to grazing areas when alternatives are scarce. This conflict intensifies daily and spans across numerous states in the federation.

Recent events have underscored that Boko Haram is no longer the nation's primary internal security threat. The middle belt has been repeatedly rocked by attacks from suspected Fulani herders in a new wave of violence primarily driven by disputes over grazing areas. Communities have been decimated, and structures destroyed.

States like Taraba, Gombe, Benue, Kogi, Bauchi, Enugu, Rivers, Ekiti, Plateau, Ondo, and others have witnessed severe clashes between herders and locals, resulting in mass casualties, property destruction, and loss of farmlands (Aderogba, nd).

In essence, these conflicts, as detailed above, revolve around the control of land—either by farmers for agricultural activities and expansion or by Fulani herders for adequate grazing space. Ultimately, these struggles reflect an ongoing quest for economic dominance.

Concept of Fodder and Forage

Fodder Farm (nd) explains fodder as a feed that is harvested and taken to the animal, while forage is browsed on by the animal while still on the land. This means that fodder is deliberately planted and cultivated for production of animal feed and forage is mostly the plants that naturally grow on the land that the animal feeds on it as roams about for grazing. An example of fodder and forage includes: 1. grasses, like Signal grass, Buffel grass, Rhode grass, Woolly finger grass, Guinea grass, Elephant grass, Columbus grass, Vetiver grass and Giant star grass 2. Legumes, like Groundnut, Calopo, gadagi, *Desmodium*, Soybean, Pigeon pea, Shrubby stylo, Cook stylo, Verano stylo, Townsville stylo, Siratro, Cowpea, beans and Zonia and 3. Grains Dried stalks (Muhammad, 2019).

Khan, Singh, Subash and Singh (2013) explain that the term fodder and forage carries similar meaning in all practical purposes, there is no clear cut demarcation because they are primarily used for livestock feeding. Forage include plant species directly or indirectly consumed by animals. Forage and fodder crops include forage sorghum, pennisetum, millet, lablab, cowpeas, soybeans, grain sorghum and maize. In essence,

sometimes forage and fodder are not segregated but lumped together as one since the both of them are animal feeds.

Fodder/forage has the following characteristics as posited by Centurion University (nd): It should be succulent and juicy and easy palatable; it should have more number of leaves i.e. high leaf-stem ratio, less shattering of leaves; it should contain high amount of carbohydrates or proteins; resistance to pests and diseases; it should have regeneration (ratooning) capacity; it should also have quick growth and smother weeds; more number of tillers and fine stem; should be photo insensitive and give more number of cuts; should have shorter life cycle so that it can fit in cropping systems; it should tolerate shade, drought resistant so best suited for agri, silvi pastoral conditions; should be suited to different soil classes from III to VII; it should be free from hairs and thorns and it should be free (or) less concentration of anti-nutritional factors. Principally, the fodder/forage should be convenient, palatable and nutritional to the animal.

Fodder and Forage Production for Sustainable Ranching as a Means for Sustainable Peace Brokering

The causes outlined for the farmers-herders conflict indicate that the pursuit of more pastures due to increased herd sizes and the expansion of farming activities resulting from population growth have led to conflicts over land utilization. Introducing an alternative source of fodder/forage production emerges as a viable solution. This would cater to the herders' need for more pastures to accommodate their growing herds. Consequently, it could address the conflict arising from the competition for grazing land between herders and farmers due to increased farming activities driven by population growth.

By ensuring herders have sufficient fodder/forage to sustain their animals and allocating ample farming land to meet the food demands of growing populations, the conflict between these groups could be managed and resolved. This strategic approach might significantly contribute to fostering sustainable peace among farmers and herders in Nigeria, offering a path toward lasting harmony and coexistence.

This will be clearer as explained by Muhammad and Abubakar (2004), cited in Muhammad (2019) as follows: “For a country ranked 15th in the world in cattle with the national estimated population of 20, 529, 190 million, 5TH in sheep (42,091, 042 million) and 3rd in goat (73, 879,561 million) and 17th in camel (279, 802), (FAO 2016), extensive system of production may not be viable option since land area for grazing and feed availability are severely limiting factors in the high livestock producing zones of Nigeria. There is however, the need to increase fodder/forage production to accommodate the feed requirements of Nigeria’s livestock. Increment in fodder/forage production can be achieved by increasing yield per unit area of land not by expansion of grazing areas, because of the trend in competitive land use and demographic changes”. Hence, fodder/forage production will be the answer.

Conclusion

In conclusion, the conflict between farmers and herders arises from the farmers' necessity to expand farmland due to the ongoing population explosion in the country,

juxtaposed with the herders' crucial need for increased grazing land to ensure adequate pasture for their livestock. If an alternative approach were established, enabling farmers to expand their agricultural land for increased yields while simultaneously providing sufficient grazing areas for herders' livestock, it could significantly ameliorate the strained relationship between the two groups.

Offering fodder and forage production as a sustainable ranching solution emerges as a viable means to resolve this conflict. Implementing such measures, as highlighted in this paper, holds immense importance in brokering sustainable peace among and between farmers and herders' communities in Nigeria. This approach could play a pivotal role in fostering enduring peace within Nigerian communities, particularly those involving herders and farmers.

Recommendations

The paper presents recommendations based on the preceding discussions:

1. Initiate projects focused on promoting fodder/forage production, designing and implementing them effectively.
2. Engage experts in animal science to devise viable methods for fodder/forage production, specifying types, methods, and optimal timing for production.
3. Conduct orientation and sensitization programs for herders, encouraging their involvement in fodder/forage production.
4. Educate herders on the advantages of fodder/forage production, highlighting its benefits.
5. Ensure active governmental participation and serious political commitment in promoting fodder/forage production to foster peace.
6. Develop a legal and operational framework that emphasizes fodder/forage production, along with livestock rearing and production, as a cornerstone for promoting sustainable peace in Nigeria.

References

- Aderogba, K. A. (2019). Fulani herdsmen-farmers bedlams and postulates towards sustainable development in Nigeria. In M. Nwaneri and P. Vande (Eds.) *History and Management of Farmers-Herder Conflicts in Nigeria*. Society for Peace Studies and Practice (SPSP-FCT Chapter) in Association with Center for Peace and Development. Abuja: Veritas University, pp. 201-219.
- Aderogba, K. A. (nd). Community of Fulani herdsmen, challenges and sustainable community development in Ibarapa Region, Southwestern Nigeria: need for lifelong Learning Practice. *Unpublished paper*
- Adichie, G. A. (2021). Religion as a transformative agent in the conflict between farmers and Fulani herders. <https://www.researchgate.net/publication> accessed on 16th October, 2023
- Aliyu, A. S. (2015). Causes and resolution of conflict between cattle herders and crop farmers in Katsina state. Unpublished Master of Science degree dissertation, School of Graduate Studies, Ahmadu Bello University, Zaria, Nigeria
- AllAfrica (2018). Nigeria: Stopping Nigeria's spiraling farmer-herder violence. <https://allafrica.com/stories/201807270076.html> accessed on 22nd February, 2019
- Fodder Farm (nd). Fodder and forage. <https://fodderfarm.co.nz/fodder-and-forage> accessed on 16th October, 2023
- Gürsoy, G. (2020). Farmers-herders conflict in Nigeria: an analysis of the root causes and the effects of the conflict. <https://www.researchgate.net/publication/347948827> accessed on 16th October, 2023
- Khan, M. A., A. K. Singh, Subash, N. and Singh, K. M. (2013). *Forages and fodder*. Daya Publishing House; Astral International Pvt Ltd
- Komolafe, B. O., Bankole, M. O. and Aderogba, K. A. (2021). Fulani hegemony, forest attractions, terrorism and security situations: Prodigious threat to community development in Nigeria. In A. S. Gbadegesin, F. O. Oderinde, G. O. Enaruvbe and H. D. Olaniran (Eds.) *Towards Achieving a Sustainable Environment: Perspectives from Geography, Ecology and Environmental Science. A Festschrift for Professor Albert Orodona Aweto*. Ibadan: Department of Geography, Faculty of The Social Sciences, University of Ibadan, Nigeria, pp. 61-84
- Muhammad, I. R. (2019). *Forage and fodder production in Nigeria: Its sensitivity in sustainable ranching* [professorial inaugural lecture No. 36]. Bayero University, Kano, Nigeria
- National Open University of Nigeria (nd). *Geography of Nigeria*. School of Arts and Social Science
- Ofoche, C.O. (2012). Socio-economic problems in Nigeria: causes and remedy. *Unpublished Master of Strategic Studies, United States Army War College*
- Ofuoku, A. U. and Isifi, B. I. (2010). *Cause, effects and resolution of farmers-nomadic cattle herders' conflict in Delta State, Nigeria*. Jice Publishers
- Saleh, M. (2022). Role of interfaith mediation centre in managing conflict between farmers and herdsmen in Bauchi State, Nigeria. *Journal of African History, Culture and Arts*, 2 (2), <http://journals.jozacpublishers.com/jahca> accessed on 16th October, 2023 Studies, Ahmadu Bello University, Zaria, Nigeria.