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Evaluating the socio-economic implications of intercommunal conflicts between farmers and herders on food security in Nigeria

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ABSTRACT

This study aims to evaluate the socio-economic implications of inter-communal conflicts between farmers and herdsmen on food security in Nigeria. The ongoing clashes between these two groups have had a significant impact on the nation's food production and availability, leading to food scarcity in some areas. The conflicts arise from competition over scarce resources such as water and grazing lands. The study reviews existing literature on the subject and identifies the causes and consequences of these conflicts. It also explored the implications of the conflicts for small-scale farmers and food security in Nigeria. The study adopts a political ecology theoretical framework to examine the complex interplay between political, economic, and social forces in the context of environmental issues and transformations. The researcher found that the socio-economic implications of inter-communal conflicts between farmers and herders include loss of lives, properties, and food security, displacement, poverty, economic losses, decline in GDP, increased tensions, and environmental impacts such as soil damage and water pollution. Based on the above findings, the researchers recommended that Sustainable grazing practices can improve crop productivity and plant reproduction by reducing soil damage caused by livestock. Religious organizations should promote peace and coexistence to prevent conflicts between different denominations, particularly between Muslim herders and Christian farmers. The government should provide insurance for rural farmers affected by crop damage and take legal action against perpetrators to deter similar acts

Keywords:

Conflicts, Economy, Farmers, Herders, Nigeria

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1. INTRODUCTION

Agriculture is a crucial sector of the economy, contributing significantly to the nation's Gross Domestic Product (GDP), providing employment opportunities, generating income, and serving as a primary source of food for the country's growing population. However, despite the immense potential of the agricultural sector, there is an alarming threat of hunger and poverty in the country. The majority of the population, approximately 70%, live on less than N100 (US \$ 0.7) per day, indicating a widespread poverty problem. Furthermore, smallholder farmers make up 80% of all farm holdings, but their production systems are inefficient, leading to a shortfall in national domestic production. These issues exacerbate the problem of poverty and contribute to the ongoing hunger crisis (Anigbogu et al., 2015). The ongoing clashes between herdsmen and farmers in some parts of the country have undoubtedly had a significant impact on the nation's food production and availability, leading to food scarcity in some areas. These clashes have been a long-standing issue in Nigeria, often resulting from competition over scarce resources such as water and grazing lands.

The pervasive nature of herdsmen-farmers conflicts has transcended beyond Nigeria's borders, as similar conflicts have been reported in other African countries such as the Democratic Republic of Congo, Central African Republic, and Mali, causing disruptions and instability in affected communities. While conflicts between farmers and nomadic cattle herders have been a longstanding feature of economic activities in West Africa, the scale and severity of the crisis in Nigeria has reached unprecedented levels (Tonah, 2006; Okoro, 2018). The conflict has spread from the North Central region to other parts of the country, including the Northeast, Southeast, Northwest, and South-South, leading to a breakdown of community relationships and a widespread perception of Fulani people as enemies. This has been exacerbated by the recent acquisition of modern weapons and communication devices, which have made the conflict even

more dangerous and difficult to resolve (Okoro, 2018). The escalation of violent conflicts related to cattle grazing in Nigeria has become a pressing issue. According to research conducted by Idowu and Okunola (as cited in Olayoku, 2014), there has been a disturbing surge in violent deaths, with the Nigerian Watch database reporting at least 615 fatalities. Shockingly, the number of fatalities classified as violent has reached an alarming 61,314, highlighting the gravity of the situation.

Competition for land and water resources between farmers and herders has been a persistent source of conflict throughout history. In contemporary times, this competition has intensified due to various factors such as drought, desertification, and increasing populations of both humans and animals. In Nigeria, this competition has resulted in frequent clashes between farmers and herdsmen, with devastating consequences for both sides. According to Ndubuisi (2018), the attacks by herdsmen on farmers and citizens in Nigeria have reached alarming levels. Adetula (as cited in Ndubuisi, 2018), confirms that the rate of these attacks has increased exponentially in recent years, posing a grave threat to peace, security, and unity in the region. These conflicts not only jeopardize the livelihoods of both farmers and herders but also hinder the economic growth and development of the nation as a whole. Despite the significant economic contributions made by both groups, these conflicts persist, and their negative impact on the gross national product cannot be ignored. While various studies have been conducted on the farmers and herders' crisis in Nigeria, most of them have focused on the demographic, socioreligious, and political factors underlying the clashes and their effects on food production, leaving other important aspects unexplored. Therefore, it is crucial to evaluate the socio-economic implications of inter-communal conflicts between farmers and herders in South Eastern Nigeria, with a focus on how these conflicts affect small-scale farmers and food security. This study aims to contribute to this effort by providing insights into the socio-economic implications of inter-communal conflicts between farmers and herders in South Eastern Nigeria.

2. REVIEW OF RELATED LITERATURE

As precious human and animal lives are lost and crop yields damaged, food security is not only hampered, but precious manpower to support economic growth is also reduced. Again, as the animals are taken around through the open grazing system, they not only pollute a few available water sources for the local people but also (through their destructive activities) bring their breeders and the settled farming communities into conflicts that heighten inter-ethnic tensions in the country. As all these happen, analysts are of the view that there is ominous danger to national integration and overall sustainability, especially as these happenings are perceived by people in the south and north-central regions of the country as signs of failure, imperialism, and favoritism by the President, Muhammad Buhari, to his tribesmen, the Fulani, over other ethnic nationalities in Nigeria (Chukwuemeka et al., 2018). Conflicts between farmers and nomadic cattle herders have been a common feature of economic livelihood in West Africa (Tonah, 2006; Ofuoku&Isife, 2019). In the period before the beginning of the 20th century, the problem was mainly restricted to the savanna belts of West Africa. Cattle rearing was mainly prevalent in the Guinea, Sudan, and Sahel savanna belts, where crop production was carried out only on a small scale during the short rainy season. This gave the cattle herders access to a vast area of grassland. As time went on, and with the introduction of irrigated farming in the Savanna belt of Nigeria and the increased withering of pasture during the dry season, less pasture was available to cattle herders. The herdsmen had to move southward to the coastal zone, where the rainy season is longer and the soil retains moisture (Ofuoku&Isife, 2019). Tonah (2006) is of the view that since the Sahelian drought of the 1970s and 1980s and the accompanying migration of a huge number of pastoralists into the fringes of the humid forest zone of West Africa, there has been a massive increase in the incidence of farmers-herders' conflict. Cases of farmer-herder conflict abound and have become widespread in Nigeria in recent times. For instance, in Densina Local Government of Adamawa State, 28 people were feared killed, and about 2,500 farmers were displaced and rendered homeless in the hostility between cattle rearers and farmers in the host community in July 2005. Nweze (2005) stated that many farmers and herders have lost their lives, herds, farm land, and crops, while others have experienced dwindling productivity in their herds. This was supported by Ajuwon (2004), as cited by Nweze (2005) in his observation that in Imo State, for instance, between 1996 and 2005, nineteen (19) people died and forty-two (42) people were injured in this rising incident of farmersherders conflict, and the violence that often accompanies such conflict is an issue that can be regarded as being of national concern. Recent studies conducted by Okereke (2012) and Kasarachi (2016) have shown that serious conflict erupts between Fulani herdsmen and farmers, leading to the loss of lives, valuable properties, and vast expanses of arable agricultural farmlands, thereby posing a serious threat to food security since farmers, for fear of attack, can no longer go to farms to harvest their farm produce.

Ajibo et al. (2018) examined the dynamics of farmers and herdsmen conflict in Nigeria: the implications for social work policy intervention. This study adopted a descriptive research design with a systematic review of the literature. Findings revealed that some fundamental causes of farmers and herdsmen conflict in Nigeria include land use, which also involves scarcity of land resources, and ethnic and religious differences. Other identified causes of clashes between farmers and herdsmen include the destruction of crops by cattle, the burning of rangelands, the increasing rate of cattle theft, a decline in internal discipline and social cohesion, and the inadequacy of grazing resources. Imo (2017) examined the demographic implications of nomadic herdsmen and farmers clashes in Nigeria. The study relied on an extensive literature review. Findingsrevealed that Nigeria's population is dynamic and growing at a very rapid rate compared to land that is relatively static, which constitutes the most important cause of pressure and demand for food resources. Whenever violent clashes occur and the nomadic herdsmen attack and kill scores of villagers in the course of a contest for grazing fields and water, there are usually reprisal attacks. It is also discovered that this scenario has, time without number, thrown up tribal, ethnic, regional, religious, and political sentiments that threaten the corporate existence of Nigeria. Olayoku (2014) carried out a study on the trends and patterns of cattle grazing and rural violence in Nigeria, relying on the Nigeria Watch database from June 2006 to May 2014 to specifically investigate the root causes, dynamics, evolution, and politicization of cattle grazing conflicts in Nigeria. Findings revealed that herdsmen, farmers, community members, vigilantes, security operatives, government officials, local or foreign

"mercenaries," and, in rare cases, religious leaders also played a role. It is also fundamentally economic and centered around land issues, showing that the government's creation of grazing routes did not mitigate the problem. In the final analysis, the study revealed that violence from cattle conflicts was not restricted to specific periods of the year and occurred during all months, with the highest number of fatalities recorded in both the rainy (June) and dry (December) seasons. Using two-way factorial analysis of variance (ANOVA) and mean separation at the 5% probability level, Ajah (2012) investigated small-scale farmers' perceptions of the impact of grazing livestock animals on crop production in Abuja, Nigeria. Findings revealed that there was a significant difference in the perceived impact of the grazing livestock animals on crop production. The mean response indicated that the impact of cattle on crop production was perceived as serious and was significantly higher than the impact of goats, sheep, and domestic fowl. The results also revealed that the crop farmers in the eastern and western agricultural zones of Abuja felt the impacts of the grazing animals more than the crop farmers in the other two zones.

Oladotun and Awosusi (2019) examined herders-farmers' communal conflict in Nigeria: an indigenized language as an alternative resolution mechanism. The study relied on a review of the available literature. Findings revealed that ethnic plurality, among other things, is responsible for the increase in ethno-religious conflict in Nigeria. These crises have led to the wanton destruction of lives and properties across the nation. Notable among such conflicts are the recurring herders-farmers' clashes in north-central and north-east Nigeria, with brutal attacks and reprisal attacks in villages in Borno, Adamawa, Benue, Plateau, and Taraba States. Efforts to manage the conflicts have largely focused on mediation, the payment of compensations, and the creation of grazing reserves or cattle colonies in some states of the federation. The conflicts portend harmful effects on the country's cultural and social values, ethnic cohesion, social integration, stability, and nation-building. The most recent and recurring communal violent conflicts are the socio-political upsurge in north-central Nigeria, specifically in Taraba, Adamawa, and Benue States, between the herders and farmers. The origin of herders-farmers' communal conflict dates back to the beginning of agriculture in Africa. Notable among the factors responsible for the recurring conflict between herdsmen and farmers in north-central Nigeria are socio-cultural and linguistic-related differences. Previous attempts to solve these incessant clashes have largely focused on communication, compensation, the creation of a cattle colony, the proclamation of bans on grazing, and so on.

Erondu and Nwakanma (2018) examined new dimensions of the farmers and herdsmen crisis in Nigeria and the implications for development using secondary data from extant literature. Findings revealed that factors responsible for the conflict include political, religious, and ethnic drivers. Added to these are also the enormous human and material losses as well as the loss of social capital in the form of the breakdown of social relationships that have been built over the years between these groups and neighboring communities. Relationships that are known to be fragile have further nosedived, and the development status of the country is deeply affected by this perennial crisis. The herdsmen's and farmers' crisis is a manifestation of the failure of the Nigerian state to provide good governance and contain contestations within its territory. Shehu et al. (2017) examined the menace of cattle rustling and banditry in North-West Nigeria: A Case Study of Katsina State using descriptive statistics. Findings revealed that: unwillingness to share grazing land; rampant drought and famine in the area; lack of sensitization of people to apply the Land Use Act of 1978; claim for scarce resources and ownership position of land; Grazing fields account for conflict among herders and farmers; Decline in internal discipline and social cohesion among Fulani and farmers. Ibeogu et al. (2019) examined inter- and intra-community conflicts in selected communities in the States of Nigeria and their implications for the socio-economic development of the areas. The study relied on a review of existing literature. Findings indicate that too many factors breed inter- and intra-communal crises, one of which is supremacy among the feuding communities and the quest or struggle for resource

Ndubuisi (2018) examined conflicts between herdsmen and farmers in Nigeria: causes, socio-religious, and political effects on national development. The study adopted qualitative and phenomenological approaches in its investigation and analysis of data drawn from existing literature and oral interviews with selected individuals. The study discovered that many people have lost their property and lives; that many people have been displaced from their homes; and that the peace, security, and unity of the country as a federation are being seriously threatened.

Agbu et al. (2020), Insurgency, Armed Herdsmen, and Instability in Nigeria: A Search for the Way Forward Using Descriptive Statistics The study found that the Boko-Haram insurgency and armed herdsmen attacks in the north-eastern region of Nigeria have led to social, political, and economic instability, not only in the northern region but in Nigeria as a whole. The various perspectives from which the Nigerian people see the phenomenon have placed the stability of the country under question. Apart from the deaths of thousands of people and the destruction of communities and property, the phenomenon affected food production in the fertile regions of northern Nigeria, thus impacting negatively on the economy of not only the farmers but the entire nation. Protests and counter-protests, calls and counter-calls from all over the nation for either state or regional security structures or even the division of the country along regional lines have become very serious issues of concern due to the foregoing development.

2.1 Theoretical Framework

Political ecology theory involves examining the intricate interplay between political, economic, and social forces and their impact on environmental issues and transformations. Unlike its apolitical counterpart, political ecology explicitly acknowledges the inherently political nature of environmental issues and phenomena. As an interdisciplinary field, political ecology draws on ecological and social sciences, as well as political economy, to explore a diverse range of topics such as environmental degradation, marginalization, conflicts, conservation, and control. Moreover, the discipline also investigates how environmental Kiranmayi B. (n.d.). The interplay between social identities and collective movements, as well as the broader socio-political and economic dynamics, mutually shape and influence one another. This concept of interconnection and interdependence has been referred to as "political ecology". While the term was initially coined by Frank Thone in 1935 and has been utilized in the fields of human geography and ecology, it lacked a comprehensive definition. It was not until anthropologist Eric R. Wolf reintroduced the concept in his 1972 article "Ownership and Political Ecology", where he explored how local systems of ownership and inheritance act as mediators between societal pressures and local ecosystems. This notion was further developed by scholars such as Michael J. Watts, Susanna Hecht, and other pioneers of the 1970s and 1980s. In the context of evaluating the socio-economic implications of inter-communal conflicts between farmers and herdsmen on food security in Nigeria, political ecology can provide a useful lens for understanding the underlying causes of the conflict and the socio-economic implications of the conflict. Political ecology can help to understand the power dynamics at play in inter-communal conflicts between farmers and herdsmen. The conflict between farmers and herdsmen in Nigeria is often attributed to the competition for resources such as land and water. However, political ecology suggests that the conflict is not just about competition for resources but also about the distribution of power and access to resources. This is because farmers and herdsmen have different economic, social, and political power, which influences their access to resources and their ability to control and use them. Understanding the power dynamics involved can help to identify the root causes of the conflict and develop more effective strategies for resolving it. Also, political ecology can be useful in evaluating the socio-economic implications of inter-communal conflicts between farmers and herdsmen on food security in Nigeria. The conflict can have significant implications for food security, as it often leads to loss of crops and livestock, displacement of farmers and herdsmen, and disruption of food supply chains. Political ecology can help to identify the social, economic, and political factors that contribute to food insecurity in the context of the conflict. This can inform the development of policies and programs aimed at addressing the socio-economic implications of the conflict on food security.

3. METHOD

This study relied heavily on secondary sources of data, it means that the majority of the information and data used in the research came from sources other than the primary data collected by the researchers themselves. Secondary sources refer to information that has been previously collected, analyzed, and published by other researchers or organizations. Examples of secondary sources of data included in this research are books, academic journals, government reports, online databases, and news articles.

 $Socio-Economic \ implications \ of \ Inter-Communal \ Conflicts \ between \ Farmers \ and \ Herders$

Inter-communal conflicts between farmers and herders in Nigeria have been a recurring issue for several years. These conflicts are often characterized by violence, destruction of properties, and loss of lives. The socio-economic implications of these conflicts are significant and farreaching, affecting not only the affected communities but also the country as a whole. One of the most significant impacts of these conflicts is the loss of lives and properties. Okereke (2012); Kasarachi (2016); Nweze (2005) and Ajuwon (2004), asserted that the conflict often erupt between Fulani herdsmen and farmers leading to loss of lives, valuable properties and destruction of vast expanse of arable agricultural farmlands thereby posing serious threat to food security since farmers for fear of attack could no longer go to farm to harvest their farm produce. The violence and destruction associated with these conflicts have resulted in the death of thousands of people and the destruction of homes, farmlands, and livestock. These conflicts have had a significant impact on the affected communities, resulting in displacement, poverty, and food insecurity. The displacement of people from their homes and communities has also been a significant impact of these conflicts. Many people have had to flee their homes due to the violence and destruction, leading to the creation of internally displaced persons (IDPs) camps across the country. The displacement and migration of people have significant socio-economic implications, including the loss of livelihoods, increased poverty, and social

The conflicts between farmers and herders have also resulted in significant economic losses for both communities. Farmers have lost their crops and farmlands, leading to a decline in agricultural production and food insecurity. On the other hand, herders have lost their livestock, which is their primary source of income. The economic losses resulting from these conflicts have had significant implications for the country's economy, leading to a decline in GDP and an increase in poverty rates. Inter-ethnic tensions have also been on the rise due to these conflicts. According to a study conducted by Imo (2017), it was found that whenever violent clashes occur, the nomadic herdsmen attack and kill scores of villagers in the course of a contest for grazing fields and water, there are usually reprisal attacks. It is also discovered that this scenario has, time without number, thrown up tribal, ethnic, regional, religious and political sentiments that threaten the corporate existence of Nigeria. The tensions between farmers and herders have led to a breakdown in social cohesion and trust between different ethnic groups in the country. This has had significant implications for national unity and cohesion, making it difficult to address other socio-economic challenges facing the country. The conflicts has contributed to the general insecurity and crime rate in Nigeria. The violence and destruction associated with these conflicts have created a conducive environment for criminal elements to operate, leading to an increase in kidnapping, armed robbery, and other criminal activities.

Livestock-induced soil damage, resulting from overgrazing pressure and compaction of soil, significantly impacts both the livestock industry and agricultural productivity, leading to reduced plant growth, changed botanical composition and soil moisture properties, poor soil aeration, reduced plant diversity and productivity, and ultimately a negative effect on the ecosystem's ability to support animal and plant life, including adverse consequences on crop yield and soil surface compaction. The practice of open grazing has been a significant source of tension and conflict between pastoralists and farmers in many parts of the world. One of the primary environmental impacts of this system is the pollution of available water sources for local people and farmers. Open grazing system allows grazing animals to access water sources, which can lead to overgrazing, trampling of riverbanks, and destruction of vegetation (Ukhurebor and Adetunji, 2020). As a result, water quality can be severely compromised, posing a threat to human health and the environment. There is substantial concern that microbial and nutrient pollution by cattle on public lands degrades water quality, threatening human and ecological health. According to Centre for Disease Control and Prevention (2022), cattle feces and urine contain high levels of bacteria, viruses, and parasites, which can contaminate water sources, leading to the spread of water-borne diseases. Moreover, the deposition of nutrients from animal waste into the water can lead to algal blooms, eutrophication, and oxygen depletion, which can have devastating effects on aquatic life and water quality.

4. CONCLUSION

The inter-communal conflicts between farmers and herders in Nigeria have significant and far-reaching socio-economic and environmental implications. These conflicts have resulted in loss of lives, destruction of properties, displacement, poverty, and food insecurity. The

conflicts have also had significant economic losses for both communities, resulting in a decline in agricultural production and food insecurity. Furthermore, the tensions between farmers and herders have led to a breakdown in social cohesion and trust between different ethnic groups in the country, making it difficult to address other socio-economic challenges facing the country. Additionally, the livestock-induced soil damage resulting from overgrazing and open grazing has negative environmental impacts on the ecosystem's ability to support animal and plant life and poses a threat to human health and the environment. Thus, there is a need for urgent measures to address these conflicts and find a sustainable solution that promotes peaceful coexistence between farmers and herders while also protecting the environment and promoting economic development.

5. RECOMMENDATIONS

- Reducing grazing pressure within a grazing system through sustainable practices such as rotating grazing lands and allowing sufficient time for land recovery can mitigate negative impacts of livestock-induced soil damage on crop productivity and enhance plant reproduction.
- Religious organisation should train their members on the importance
 of peace for co-existence with other non-denominations and evil that
 trails with violence since the crises is most times between the Moslem
 herders and Christian farmers.
- 3. The government should insure that rural farmers are protected from agricultural credit, after their crops have been damaged to enable them repay their loans and the perpetrators of such acts should be apprehended and brought to book to serve as detriment to others.

REFERENCES

- Agbu, D. A., Musa, H. &Zhema, S. (2020). Insurgency, armed herdsmen and instability in nigeria: a search for the way forward. *Global Journal of Arts, Humanities and Social Sciences*. 8(6), 63-81.
- Ajah, J. (2012). Small-scale farmers' perception on the impact of grazing livestock animals on crop production in Abuja, Nigeria. *Trends in Agricultural Economics*, 5(4),115-123.
- Ajibo, H. T., Onuoha, E. C., Obi-Keguna, C. N., Okafor, A. E. &Oluwole, I. O. (2018). Dynamics of Farmers and Herdsmen Conflict in Nigeria: The Implication to Social Work Policy Intervention. *International Journal of Humanities and Social Science*, 8(7), 157-163.
- Ajuwon, S. S. (2004): Conflict in Fadama Communities, Case Study: In
 Anigbogu, T. U., Agbasi, O. E. & Okoli, I. M. (2015). Socioeconomic Factor
 Influencing Agricultural Production among Cooperative Farmers in
 Anambra State, Nigeria. International Journal of Academic
 Research in Economics and Management Sciences, 4(3), 43-58.
- Centre for Disease Control and Prevention (2022).Germs that can contaminate tap water. https://www.cdc.gov/healthywater/drinking/contamination/germs. html
- Chukwuemeka, E.E.O., Aloysius, A. & Eneh, M.I. (2018). The logic of open grazing in Nigeria: Interrogating the effect on sustainable development. *International Journal of Family Business and Management Studies*, 2(1), 1-17.

 Driven Development.
- Erondu, C. I. & Nwakanma, E. (2018). New Dimensions of the Farmers and Herdsmen Crisis in Nigeria and the Implications for Development. *International Multi-Disciplinary Journal Bahir Dar, Ethiopia*, 12 (4), 16-27.
- Ibeogu, A. S., Abah, E. O. & Chukwu, O. N. (2019). Inter and Intra Community Conflicts in Selected Communities in the States of Nigeria, implications to socio-economic development of the areas. *IOSR Journal of Business and Management*, 21(10), 65-72.
- Idowu, A. J. & Okunola, B. T. (2017). Pastoralism as a new phase of terrorism in Nigeria. Global Journal of Human-Social Science: H Interdisciplinary, 17 (4), 50-54.
- Imo, C. K. (2017). The demographic implications of nomadic herdsmen and farmers clashes in Nigeria. *International Journal of Development and Management Review*, 2(1), 45-58.
- Kiranmayi, B. (n.d.). Environmental Sociology: Nature and Scope. *Ignou, the people's University*. https://egyankosh.ac.in/bitstream/123456789/79098/1/Unit-9.pdf
- Ndubuisi, C.I., (2018). A critical analysis of conflicts between herdsmen and farmers in Nigeria: Causes and socio-religious and political

- effects on national development. *HTS Teologiese Studies/Theological Studies* 74(1), 1-6. a5065. https://doi.org/10.4102/hts.v74i1.5065
- Nweze, N. J. (2005): Minimizing farmer-herder conflicts in Fadama Areas Ofuoku, A. U. & Isife, B. I. (2019). Causes, effects and resolution of farmersnomadic cattle herders conflict in Delta state, Nigeria. *International Journal of Agricultural Extension and Rural Development*. 7 (1), 001-008.
- Okoro, J. P. (2018). Herdsmen/farmers conflict and its effects on socioeconomic development in Nigeria. *Journal of Peace, Security, and Development*, 4(1), 143-158.
- Oladotun, Olagbaju O. & Awosusi, O. E. (2019). Herders-Farmers' Communal Conflict in Nigeria: An Indigenised Language as an Alternative Resolution Mechanism. *International Journal of Multidisciplinary and Current Research*, 7: 615-623.
- Olayoku, P. A. (2014). Trends and patterns of cattle grazing and rural violence in Nigeria (2006 2014). IFRA-Nigeria epapers series Nigeria Watch Project.
- Shehu, S. A., Victor, E. & Binta, M. (2017). The menace of cattle rustling and banditry in north-west Nigeria: A Case Study of Katsina State. *IOSR Journal of Research & Method in Education*, 7(6), 40-47.
- Tonah S (2006). Managing Farmer-Herder Conflicts in Ghana's Volta Basin. Ibadana Journal of Social Sciences 4(1), 33-45.
- Ukhurebor, K. E. & Adetunji, C. O. (2020). Environmental impact of open grazing in Nigeria. *Nigerian Journal of Food, Drug and Health Law*, 9, 8-15. https://www.researchgate.net/publication/345726822.