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# CLIMATE CHANGE, FARMER-HERDER CONFLICTS IN NIGERIA AND THE QUEST FOR SUSTAINABLE PEACE

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## ABSTRACT

In a bid to achieve sustainable peace between farmers and herders, there is a need to consider the interplay between climate change and the farmer-herder conflicts, which is currently a critical challenge in Nigeria. Against this background, this study investigates the impact of climate change-induced migration on farmer-herder conflicts, analyzing socio-economic and environmental drivers while proposing adaptive strategies for sustainable peace. This study, using a Socio-ecological System theory and data collected through secondary sources, examines how climate change has significantly impacted agricultural production in Nigeria, leading to declining crop yields, reduced livestock productivity, and altered migration patterns. Accordingly, the conflicts between farmers and herders have become increasingly common, often arising from competition over land and water resources. By analyzing the socio-economic and environmental drivers of these conflicts, this study finds that there is a complex relationship between climate change, migration, and farmer-herder conflict. It is in this regard that the study recommends, among other things, the need for adaptive strategies to address climate change-induced farmer-herder conflicts. This could be achieved by integrating climate adaptation, land-use planning, and community-led conflict resolution strategies, through this medium, as well as recommendations that will bring about sustainable peace.

**Keywords:** Climate Change, Peace, Conflicts, Herder-Farmer, Migration, Nigeria

## 1.0 INTRODUCTION

The complex interplay between climate change, farmer-herder conflicts, and peace poses significant challenges in Africa. In Nigeria, as well as other parts of West Africa, climate change has posed a serious threat to survival, created crises, and has brought hardship on people, as it destroys means of livelihood, making it extremely difficult for farmers to meet domestic food production. In this regard, it is argued that yields of major crops like cassava, yam, maize, rice and sorghum will likely decline in the year 2050 due to climate change (Iguisi, 2022). Agricultural activities affected by climate include, but are not limited to, livestock rearing, fisheries, forest products extraction, etc. The impact of climate change on agricultural activities becomes possible through increased temperature, flooding, weather fluctuations,

  

extreme weather events, drought conditions and so on. This situation has led to the migration of people from one place and region to another, resulting in several conflicts and the destruction of lives and properties (Ladan, 2014).

One of the main causes of ongoing migration and farmer-herder disputes is climate change. In Nigeria and other West African countries, the agriculture industry faces numerous challenges, including poverty and land degradation (Mikailu, 2016; Akinwotu, 2016; Omoleye and Segun, 2018). In the socioeconomic and political vocabulary of Central and West African nations like South Sudan, Mali, the Democratic Republic of the Congo, and Nigeria, conflicts between herdsmen and farmers resulting from migration are not new (Tonah, 2006). Even worse, millions of people have died as a result of this conflict. Fulani herders killed 63 individuals in 2013, according to the 2015 Global Terrorism Index. In less than a year, the number of killings later rose to 1,229 in 2014 (GTI, 2015:22). The number of killings increased to 1,229 in 2014 in less than a year (GTI, 2015:22). Unfortunately, no suitable measures have been implemented to prevent these killings, which have not only continued but also escalated in 2020, 2021, 2022, and 2023 (Godwin, 2018; Clark 2018; Omotayo 2010; Abbass 2016).

The new aspect of these confrontations, which have claimed countless lives and destroyed a great deal of property, is creating serious security concerns. For example, these issues have gotten worse and expanded throughout Nigeria, where the states of Benue, Taraba, Plateau, and Nasarawa have seen the most deaths. Given these complexities, it is therefore reasonable to ask: What innovative and region-specific strategies can be developed to mitigate conflict and promote sustainable peace between the farmers and herders? What are the socio-economic and environmental drivers of farmer-herder conflicts? What could be done differently to the climate change-induced migration that has caused conflicts in Nigeria? What new adaptation strategies to climate change could be utilised by communities? Against this background, this paper investigates the multifaceted relationships, causative factors, and potential solutions for fostering sustainable peace. It identifies adaptive strategies and innovative methods of dealing with the crisis of climate change-driven migration and conflicts in Nigeria.

## 2.0 CONCEPTUAL AND THEORETICAL FRAMEWORK

In the Social or Behavioural Sciences, most concepts lack a universally accepted definition as scholars and authors tend to define concepts based on their ideological leaning and orientation. A brief clarification of the concepts that featured prominently in this study is important. One of those concepts is climate change. Most policy organisations and scholars have defined the concept of climate change. In the literature, there are two competing groups whose definitions stand out clearly, though they express contrasting or contradictory views. The first is by the Framework Convention on Climate Change (FCCC). According to FCCC, climate change is defined as "a change of climate that is attributed directly or indirectly to human activity, that alters the composition of the global atmosphere, and that is in addition to natural climate variability over comparable period". However, the Intergovernmental Panel on Climate Change (IPCC) defined it as "any change in climate over time whether due to natural variability or as a result of human activity" (IPCC, 2001, 2007; Pielke, 2004).

Pielke claims that these categories are based on disparate ideologies in "What is Climate Change." The IPCC's definition is thought to have an impact on scientific evaluation, whereas

  

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the FCCC's is said to concentrate on international policy. As a result, the two definitions are irreconcilable, have significant ramifications for the creation and application of policies, and obstruct effective action to combat climate change. He continued by pointing out the several issues with the definition of climate change given above by the IPCC and FCCC. He maintained that various definitions raise more issues than solutions and have distinct policy decisions regarding climate change. He accused the definition by the FCCC of creating bias against adaptation and providing the basis for contentions and the politicization of climate change science. This is because it considers climate change as a unilineal problem that requires a single solution, which is to reduce greenhouse gas emissions. One significant benefit of the IPCC's definition of climate change is that it takes complexity and uncertainty into account. According to the IPCC, climate change is defined as "any change in climate over time, whether owing to natural variability or as a result of human activities." This study embraced this definition.

Another concept that requires our attention is conflict. Conflict is a disagreement or misunderstanding between two or more persons or groups who have, or believe they have, incompatible interests, needs, or objectives (Dennen, 2005). It is an inevitable part of human interaction, arising from differences in values, beliefs, goals, or access to resources. However, conflict in itself is not inherently positive or negative but neutral—it can lead to positive change, growth, and innovation when managed constructively. The problem arises when parties involved seek to resolve their differences through force, coercion, or violence, turning the conflict into a destructive force. As Burton (1990) emphasizes, destructive conflict often stems from unmet basic human needs and a failure to address underlying grievances. When conflict escalates without resolution, it can damage relationships, disrupt communities, and lead to long-term social, economic, and political instability.

This is especially noticeable in areas where injustice, marginalization, and structural inequality are still present. Conflict tends to solidify in these situations and can feed vicious cycles of revenge and intense mistrust. Constructive conflict resolution, on the other hand, can foster understanding, mend relationships, and advance peace and development through discussion, negotiation, mediation, and inclusive procedures. Thus, to properly manage conflict, it is necessary to comprehend the underlying causes and larger context in addition to resolving the current problems. This entails valuing different viewpoints, maintaining justice and equity, and making sure that everyone is treated fairly. By doing this, conflict can be turned from a cause of division into a force for good in society and the development of more resilient and strong communities.

The final concept needed to be considered is migration. Migration refers to the movement of people from one place of residence or locality to another. Akinbami (2021) noted that migration patterns of communities are expected to experience significant changes due to climate change. This is due to an increase in the frequency of severe environmental hazards and sudden-onset disasters. According to Akinbami et al (2019), natural resources and the rural environment are under severe pressure resulting from climate change impacts. This underscores the fact that climate change, in addition to leading to frequent extreme weather events such as increases in temperature, irregular rainfall patterns, drought, rising sea levels and flooding, places more pressure on environmental resources as people move their boundaries or habitat to a new location -migrations (Akinbami, 2021).

  

On the intersection between climate change and environmental challenges, Warner et al (2019) posited that climate change will have a progressively increasing impact on environmental degradation and environmentally dependent socioeconomic systems, with the potential to cause substantial population displacement (migration). Implicit in the foregoing is that climate change creates an atmosphere of environmental challenges that eventually leads people to migrate from such an environment. Thus, the intersection between climate change, migration, and environmental challenges is a logical outcome. Indeed, the dynamics of these intersections are more complex as migration caused by environmental challenges resulting from climate change will also cause more environmental challenges in the new location where these displaced people are migrating. This is done through the exertion of more pressure on environmental resources, urbanization and environmental pollution (Michael, 2024). Indeed, people are constantly shifting their borders as they are being impacted by the challenges of climate change, which pose environmental challenges that will overpower the resilience and adaptive capacity of the people. However, the level of environmental degradation that is being perpetuated by migrants too on their new site poses a great threat to an increase in the severity and the longevity of climate change impacts, as these environmental challenges tend to exacerbate climate change.

This paper adopted the Socio-Ecological Systems theory. This theory recognizes the importance of the interconnectedness of environmental, social, and economic factors in shaping conflict situations (Ostrom, 1990). Additionally, this framework offers a complete lens for analyzing the interactions between human societies and ecological systems, especially within the context of environmental stressors such as climate change. It underscores the imperativeness of participation and resilience to promote sustainable peace in the face of environmental and socio-political challenges (Folke et al., 2005; Ostrom, 2009). This theory is particularly relevant in this study. Climate-induced environmental changes—such as droughts, desertification, and extreme weather events—can undermine livelihoods, increase competition over scarce resources, and trigger population displacement, all of which may contribute to conflict, particularly in fragile and resource-dependent communities. This explains the farmer-herder conflict. Migration, often a coping mechanism in response to climate stress, can further strain host communities, potentially escalating tensions as we have witnessed between farmers and herders.

By adopting the socio-ecological systems perspective, we can see the comprehensive view of the multi-layered relationships among environmental degradation, socio-economic vulnerabilities, and conflict dynamics. It has helped to analyze how the breakdown or resilience of social and ecological systems influences patterns of displacement and the emergence or escalation of conflict. No doubt, this study provides insights that can inform integrated policies and community-based strategies for conflict prevention and sustainable peacebuilding in the context of the farmers-herders conflict.

## 3.0 METHODOLOGY

This study utilized qualitative data and theoretical analysis to discuss the interplay between climate change and the farmer-herder conflicts, which present a critical challenge in Nigeria. Content analysis was chosen in the analysis of the qualitative data. Excerpts from the literature were also used to investigate the motives and cure for this trending phenomenon in our political

  

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history. According to Bhattacherjee (2012:115), content analysis "is the systematic analysis of the content of a text (regarding who says what, to whom, why and to what extent and with what effect)".

### 3.1 Climate Change Impacts on Agriculture and Migration

Nigeria's agricultural output has been greatly impacted by climate change. Crop yields, livestock production, and migratory patterns have all been impacted by rising temperatures, shifting rainfall patterns, and an increase in the frequency of extreme weather events (Mikailu, 2016). The ensuing disputes between farmers and herders, which frequently originate from rivalry for water and land resources, have grown more frequent. Herders' typical migration patterns have changed due to climate change, which has heightened conflicts with farmers over resources and land access.

Climate change has emerged as a critical threat to survival, engendering a poly-crisis that exacerbates the hardship on communities. This environmental phenomenon devastates livelihoods and significantly hampers farmers' ability to meet domestic food production demands. Projections indicate a likely decline in yields of major crops such as cassava, yam, maize, rice, and sorghum by 2050 due to climate change (Iguisi, 2022). Agricultural sectors, including livestock rearing, fisheries, and forest product extraction, are severely impacted by climate-related issues like severe flooding, increased temperatures, weather fluctuations, extreme weather events, and drought conditions.

Widespread migration has been brought on by the negative consequences of climate change, which has exacerbated farmer-herder disputes and resulted in the loss of lives and property (Ladan, 2014). These disputes, which are especially common in Nigeria's Middle Belt, are made worse by poverty and land degradation (Mikailu, 2016; Akinwotu, 2016; Omoleye and Segun, 2018). The number of fatalities from the violence linked to these conflicts has tragically increased, rising from 63 in 2013 to 1,229 in 2014 as a result of Fulani herdsmen's attacks (GTI, 2015:22). The situation has gotten worse in the years that have followed (Godwin, 2018; Clark, 2018; Omotayo, 2010; Abbass, 2016).

### 3.2 Towards Tackling Farmer-Herder Conflicts in Nigeria and the Quest for Peace

Farmer-herder conflicts have become increasingly common in Nigeria's middle belt region. The conflicts often arise from competition over land and water resources, exacerbated by climate change-induced migration (Akinwotu, 2016). The conflicts have resulted in significant human and economic losses, including loss of lives, livestock, and crops. The conflicts have also led to increased displacement and migration, further exacerbating the humanitarian crisis.

The existing body of research on farmer-herder conflicts reveals recurring patterns and root causes that are deeply intertwined with socio-economic and environmental factors. Yanda et al. (2019) and Homewood et al. (2009) provide comprehensive analyses of the dynamics between farming and herding communities. This study highlights land use conflicts, resource scarcity, and competition as primary drivers of tensions. Key patterns include seasonal migrations of herders, encroachment on farmlands, and retaliatory violence.

  

Climate change is increasingly recognized as a significant factor exacerbating these conflicts. Changes in rainfall patterns, prolonged droughts, and extreme weather events have disrupted traditional grazing routes and agricultural cycles, leading to heightened competition for dwindling resources. Yanda et al. (2019) emphasized the correlation between climate variability and the intensification of farmer-herder conflicts. Homewood et al. (2009) further elucidate how environmental stressors compound existing socio-economic vulnerabilities, triggering conflicts over access to water and pasture.

Climate change has significant and varied effects on Africa's water and agricultural resources. Comprehensive examinations of the effects of rising temperatures, shifting precipitation patterns, and an increase in the frequency of extreme weather events on agricultural output and water availability may be found in research by Adger et al. (2007) and the IPCC (2014). These studies demonstrate how susceptible African agriculture, which mostly depends on rain-fed farming, is to stressors brought on by the climate. A serious problem that has a big impact on food security and rural livelihoods is water scarcity.

The literature underscores the disproportionate impact of climate change on vulnerable populations in Africa. Adger et al. (2007) discuss how socio-economic factors such as poverty, lack of access to technology, and limited institutional support exacerbate the vulnerabilities of smallholder farmers and pastoralists. The IPCC (2014) report further details the projected impacts of climate change on various sectors, emphasizing the need for adaptive strategies to mitigate these risks.

The effectiveness of community-based solutions and inclusive conflict resolution mechanisms is crucial for successful peace-building efforts in this region. Zartman (2008) and Anyang' Nyong'o (2008) offer important insights into the effectiveness of these approaches in these contexts. It is important to emphasize the role of civil society organizations in facilitating peace-building processes and advocating for policies that support community resilience and conflict prevention. Additionally, it is important to emphasize the role of traditional leaders in mediating conflicts, the importance of local knowledge, and participatory processes.

## 4.0 CONCLUSION AND RECOMMENDATIONS

This study examined the interplay between climate change and the farmer-herder conflicts, which present a critical challenge in Nigeria. It highlights the critical need for adaptive strategies to address climate change-induced conflicts between farmers and herders in Nigeria. The paper argues that a multi-faceted approach is required to tackle these conflicts, which includes, but is not limited to, integrating climate adaptation, land-use planning, and community-led conflict resolution strategies. The study's findings have significant implications for policy and practice, emphasizing the need for governments, civil society organizations, and local communities to collaborate in promoting sustainable agricultural practices, improving water management, and supporting economic alternatives for both farmers and herders. It is recommended, among other things, that governments, civil society organizations, and local communities must work together to implement sustainable agricultural practices, enhance water management, and promote economic alternatives for both farmers and herders.

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