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Review of Climate Change and Resource Scarcity in the Escalation of Farmer–Herder Conflicts in Yewa North Local Government Area, Ogun State

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Abstract

The interaction of climate change and resource scarcity has become a major driver of farmer–herder conflicts in Yewa North Local Government Area of Ogun State. This study examined how climate-induced environmental changes and increasing competition over land and water resources contribute to the persistence and escalation of conflicts between farmers and herders. Guided by Eco-Violence Theory and Political Ecology Theory, the study adopted a qualitative case study design based on documentary analysis of secondary data sourced from peer-reviewed journal articles, government publications, policy documents, conference papers, and reports from relevant national and international organizations. The findings revealed that climate change has contributed to environmental degradation, reduced availability of grazing land and water, and increased pastoral migration into Yewa North. The study also found that weak conflict-resolution mechanisms, poor resource governance, and ineffective land-use management have sustained and escalated these conflicts. Furthermore, the conflicts have negatively affected agricultural productivity through crop destruction, and disruption of farming activities, thereby threatening food security and rural livelihoods. The study concludes that farmer–herder conflicts in Yewa North result from the combined effects of climate-induced resource scarcity and governance deficiencies rather than environmental factors alone. It recommends the establishment of designated farmer–herder resource management zones, develop early warning signals, mediation mechanisms, and sustainable natural resource management to promote peaceful coexistence and enhance rural security.

Keywords: Climate change; Resource scarcity; Farmer–herder conflict; Eco-Violence; Political Ecology;

1. Introduction

Climate change has emerged as a major global challenge with significant implications for environmental sustainability, human security, and socio-economic development. Rising temperatures, irregular rainfall patterns, droughts, and other forms of environmental degradation have affected the availability of natural resources, thereby intensifying competition over land, water, and grazing areas among resource-dependent communities (Homer-Dixon, 1999; Benjaminsen et al., 2012). In Africa, particularly within the Sahel region, these

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environmental pressures have contributed to the degradation of grazing lands and water sources, increasing competition between pastoralists and farming communities and, in many cases, resulting in violent conflicts (Tonah, 2006).

In Nigeria, farmer–herder conflicts have become one of the most persistent rural security challenges. While interactions between farmers and pastoralists have historically involved both cooperation and conflict, recent confrontations have become increasingly frequent and violent. Scholars attribute this trend partly to climate-induced environmental changes that have intensified competition over scarce natural resources (Blench, 2010; Abbass, 2014). Environmental challenges such as drought, desertification, and shrinking grazing resources have increased pressure on land and water resources, contributing to tensions between farmers and herders (Audu, 2013).

Yewa North Local Government Area of Ogun State has emerged as one of the areas experiencing recurrent farmer–herder conflicts in southwestern Nigeria. The area's agricultural potential and availability of land resources have attracted pastoral groups, resulting in increased interactions with farming communities. Existing studies indicate that climate-induced migration, competition over land and water resources, crop destruction, and weak conflict-management mechanisms have contributed to the persistence of conflicts in the area (Adebajo, Akinsola, & Salako, 2025; Akinde & Adekunle, 2024; Ajayi et al., 2025; David, 2016). These conflicts have negatively affected agricultural productivity, rural livelihoods, and food security. Although previous studies have examined the effects of climate change, food security, agricultural productivity, and conflict management in Yewa North, limited attention has been paid to how climate change and resource scarcity interact to escalate farmer–herder conflicts. This study therefore examines the interaction of climate change and resource scarcity in the escalation of farmer–herder conflicts in Yewa North Local Government Area, Ogun State. Drawing on Eco-Violence Theory and Political Ecology Theory, the study explores how climate-induced environmental changes contribute to resource scarcity, how resource competition shapes relations between farmers and herders, and how these dynamics contribute to conflict escalation in the study area.

Statement of the Problem

Farmer–herder conflicts have become a recurring challenge in Yewa North Local Government Area of Ogun State, with significant consequences for agricultural productivity, food security, and rural livelihoods. Existing studies have identified climate-induced migration, competition over land and water resources, crop destruction, and weak conflict-management mechanisms as major drivers of the conflict (Adebajo et al., 2025; Akinde & Adekunle, 2024; Ajayi et al., 2025). Despite these contributions, most studies have examined climate change, resource competition, agricultural productivity, and food security as separate issues. Consequently, limited attention has been given to how climate change and resource scarcity interact to intensify competition between farmers and herders and contribute to the escalation of conflicts in Yewa North. This gap necessitates a more integrated analysis of the climate–resource–conflict nexus within the study area.

Objectives of the Study

The broad objective of this study is to examine the interaction of climate change and resource scarcity in the escalation of farmer–herder conflicts in Yewa North Local Government Area, Ogun State.

The specific objectives are to:

1. Examine how climate change contributes to resource scarcity in Yewa North Local Government Area.

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2. Assess how resource scarcity influences competition between farmers and herders in the study area.
3. Analyse the role of governance and conflict-management mechanisms in the escalation of farmer–herder conflicts.
4. Evaluate the effects of farmer–herder conflicts on agricultural productivity and food security in Yewa North Local Government Area.

Literature Review

Farmer–herder conflicts have attracted considerable scholarly attention because of their implications for security, agricultural productivity, and social stability. Existing studies have examined the conflict from environmental, political, economic, and governance perspectives, with most scholars agreeing that competition over land and water resources lies at the centre of the conflict. Blench (2010) argues that although farmer–herder conflicts are not new, they have intensified due to agricultural expansion, population growth, and increasing pressure on natural resources. Similarly, Ofuoku and Isife (2009) identify crop destruction, competition over land, bush burning, and blockage of stock routes as major sources of conflict, often resulting in economic losses and deteriorating social relations.

From a political ecology perspective, Okoli and Atelhe (2014) contend that environmental pressures, livelihood struggles, and weak state institutions collectively shape conflict dynamics. Likewise, Audu (2013) links freshwater scarcity and changing climatic conditions to increased competition between farmers and pastoralists. These arguments are consistent with Homer-Dixon's (1999) Eco-Violence Theory, which posits that scarcity of renewable resources can generate migration, social stress, and violent competition. However, Benjaminsen, Alinon, Buhaug, and Buseth (2012) caution against attributing conflict primarily to climate change, arguing that governance failures, land-tenure arrangements, and socio-economic inequalities often play a more decisive role in determining conflict outcomes.

Beyond environmental explanations, scholars emphasize governance and security dimensions. Okoli and Lenshie (2018) argue that weak institutions and ineffective conflict-management mechanisms contribute significantly to the persistence of violence, while Nte (2016) highlights the role of insecurity and the proliferation of small arms. Similarly, the International Crisis Group (2017) identifies shrinking grazing reserves, agricultural expansion, and ineffective land administration systems as major drivers of farmer–herder tensions.

Recent studies have focused on the consequences of farmer–herder conflicts. Nnam (2025) observes that the conflicts undermine human security, livelihoods, and community well-being. Aloba and Omenka (2025) found that persistent violence negatively affects food production and food security, while Akosu and Edward (2024) linked recurring attacks to forced migration and displacement. Likewise, Ijirshar, Udaah, Mile, Vershima, and Adaudu (2025) demonstrated that insecurity significantly reduces agricultural output and household incomes. Collectively, these studies show that farmer–herder conflicts have evolved beyond resource disputes into broader development and security challenges.

Empirical Studies on Farmer–Herder Conflicts in Yewa North Local Government Area

Studies conducted in Yewa North provide important insights into the local dynamics of farmer–herder conflicts. Adebajo, Akinsola, and Salako (2025) linked climate change-induced migration to increasing competition over land resources, conflict escalation, and food insecurity in the area. Akinde and Adekunle (2024) found that farmer–herder conflicts significantly reduce the technical efficiency of cassava farmers through crop destruction, displacement, and economic losses. Similarly, Ajayi, Ogunsina, Ajayi, Johnson, and Bankole



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(2025) identified competition over land and crop destruction by cattle as major causes of conflict, with negative implications for agricultural production and food security.

David (2016) highlighted the weakening effectiveness of traditional conflict-management institutions in resolving disputes between farmers and herders, while Ajose, Akingbade, and Sabitu (2025) found that resource competition, weak conflict-resolution mechanisms, and identity-related perceptions contribute to conflict escalation in Ogun State. Collectively, these studies demonstrate that climate change, migration, resource competition, agricultural losses, food insecurity, and governance challenges are important dimensions of the conflict in Yewa North.

Literature Gap

Despite the growing literature, significant gaps remain. Many studies examine climate change, resource competition, food security, agricultural productivity, and conflict management as separate issues rather than exploring their interconnectedness. While studies such as Adebajo et al. (2025) acknowledge the role of climate change and migration, they provide limited analysis of how climate-induced environmental changes translate into resource scarcity and conflict escalation. Similarly, studies by Akinde and Adekunle (2024) and Ajayi et al. (2025) focus largely on the consequences of conflict rather than its environmental drivers. Consequently, limited attention has been devoted to understanding how climate change and resource scarcity interact to escalate farmer–herder conflicts in Yewa North. This study addresses this gap by examining the climate–resource–conflict nexus through an integrated analytical framework.

Theoretical Framework

This study is anchored on Eco-Violence Theory and Political Ecology Theory. Eco-Violence Theory, developed by Homer-Dixon (1991, 1994, 1999), argues that environmental degradation and scarcity of renewable resources such as land, water, and pasture can generate migration, competition, and violent conflict. The theory is relevant to this study because climate-induced environmental changes have increased pressure on natural resources and intensified competition between farmers and herders in Yewa North. Studies by Adebajo, Akinsola, and Salako (2025), Akinde and Adekunle (2024), and Ajayi et al. (2025) show that migration, crop destruction, and competition over land and water resources are major drivers of conflict in the area. However, Benjaminsen et al. (2012) argue that environmental scarcity alone cannot adequately explain conflict outcomes.

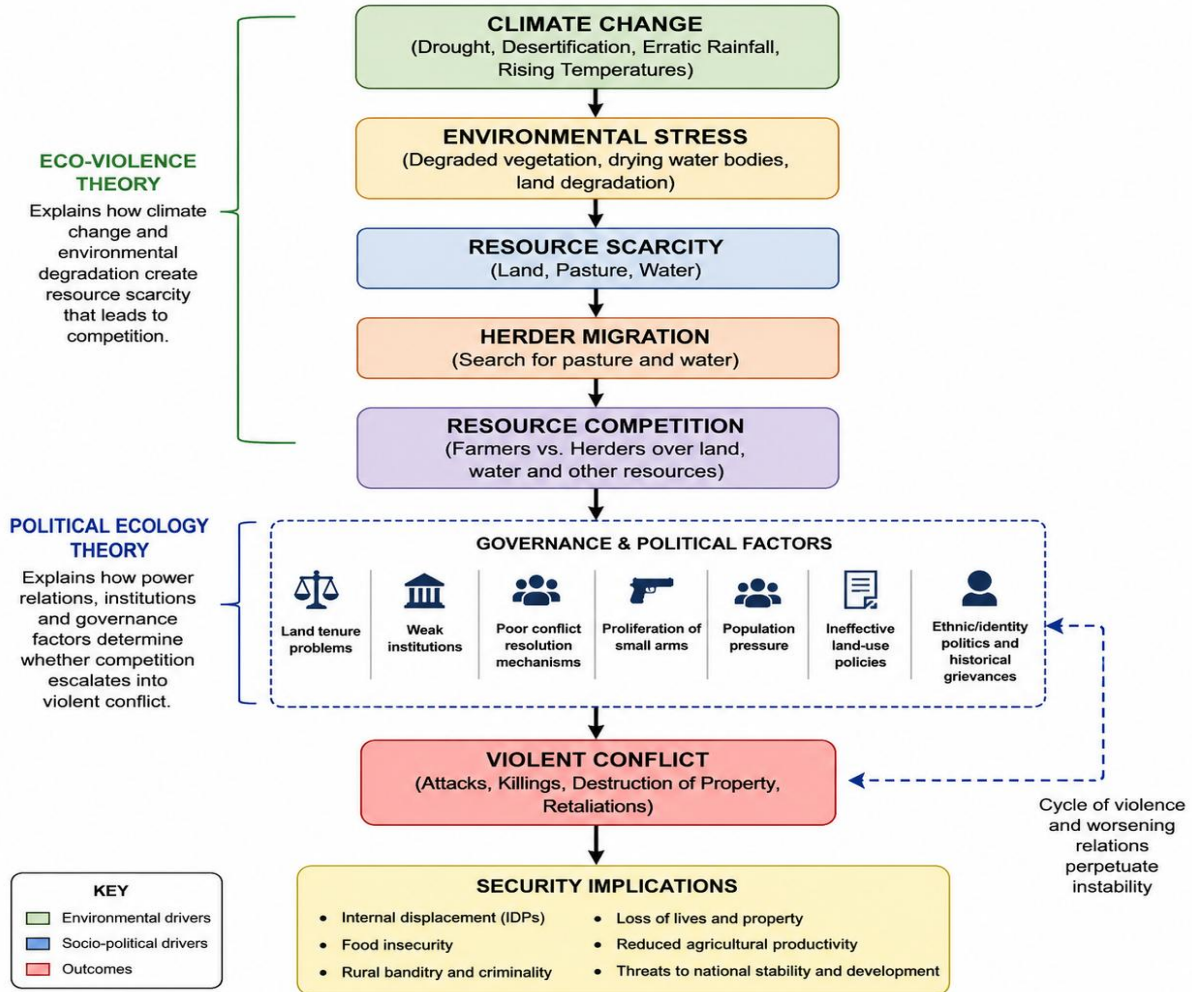
To address this limitation, the study adopts Political Ecology Theory, which emerged from the works of Blaikie and Brookfield (1987), Bryant and Bailey (1997), and Robbins (2012). The theory emphasizes that environmental conflicts are shaped by governance structures, institutional arrangements, and power relations. In Yewa North, David (2016) and Ajose, Akingbade, and Sabitu (2025) found that weak conflict-resolution mechanisms and resource governance challenges contribute significantly to the persistence of farmer–herder conflicts.

The integration of the two theories provides a comprehensive explanation of the conflict. While Eco-Violence Theory explains how climate-induced resource scarcity generates competition over land and water resources, Political Ecology Theory explains how governance deficits and institutional weaknesses influence the escalation of disputes into violence. Together, the theories provide a suitable framework for understanding the climate–resource–conflict nexus in Yewa North Local Government Area.



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Figure 1: Integrated Theoretical Framework - Eco-Violence and Political Ecology



Source: Adapted from Homer-Dixon (1999); Blaikie & Brookfield (1987); Bryant & Bailey (1997)

2. Methodology

This study adopted a qualitative research design and employed a case study approach focusing on Yewa North Local Government Area of Ogun State. The study relied exclusively on secondary data obtained from peer-reviewed journal articles, books, conference papers, government publications, policy documents, and reports from reputable organizations such as the International Crisis Group (ICG), Food and Agriculture Organization (FAO), and United Nations Development Programme (UNDP). Particular attention was given to studies on farmer–herder conflicts in Yewa North, including Adebajo, Akinsola, and Salako (2025), Akinde and Adekunle (2024), Ajayi et al. (2025), David (2016), and Ajose, Akingbade, and Sabitu (2025). Data were analysed using documentary and thematic content analysis. Relevant information from the reviewed literature was categorized into themes including climate change, resource scarcity, pastoral migration, resource competition, governance challenges, agricultural productivity, and food security. The analysis was guided by Eco-Violence Theory and Political Ecology Theory to explain the relationship between climate-induced environmental changes, resource scarcity, and farmer–herder conflicts in Yewa North. To enhance credibility, findings were triangulated across multiple scholarly and institutional sources.



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3. Results and Discussion

The analysis of secondary data revealed six interrelated themes: climate change and pastoral migration, resource scarcity and competition over land and water resources, agricultural expansion and restriction of grazing routes, governance deficits, agricultural productivity, and food security.

Climate Change and Pastoral Migration

The findings indicate that climate change has contributed to pastoral migration into Yewa North through environmental degradation, declining pasture availability, and increasing pressure on natural resources (Adebajo, Akinsola, & Salako, 2025). This supports Eco-Violence Theory, which links environmental scarcity to migration and increased competition among resource users (Homer-Dixon, 1999). Consistent with Audu (2013), the study found that climate change acts as a threat multiplier by increasing interactions between farmers and herders.

Resource Scarcity and Competition over Land and Water Resources

The study found that competition over land and water resources remains a major driver of farmer–herder conflicts in Yewa North. Ajayi et al. (2025) identified competition over land and crop destruction by cattle as major causes of conflict, while Akinde and Adekunle (2024) highlighted cattle encroachment on farmlands as a recurring source of disputes. These findings support both Eco-Violence Theory and Political Ecology Theory, which emphasize the role of resource scarcity and access to resources in conflict dynamics.

Agricultural Expansion and Restriction of Grazing Routes

The findings further revealed that agricultural expansion has reduced available grazing spaces and restricted traditional grazing routes, thereby increasing tensions between farmers and herders. This finding aligns with Blench (2010), who argued that the encroachment of farming activities into grazing corridors increases the likelihood of conflict. The evidence suggests that changing land-use patterns have intensified competition over limited land resources in Yewa North.

Governance Deficits and Conflict Escalation

The study found that weak conflict-management mechanisms and ineffective resource governance contribute significantly to the escalation of disputes. David (2016) and Ajose, Akingbade, and Sabitu (2025) observed that traditional conflict-resolution institutions have become less effective in managing farmer–herder disputes. This finding supports Political Ecology Theory, which emphasizes the role of institutions and governance structures in shaping environmental conflicts.

Effects on Agricultural Productivity

Farmer–herder conflicts were found to negatively affect agricultural productivity through crop destruction, displacement of farmers, abandonment of farmlands, and disruption of farming activities. Akinde and Adekunle (2024) reported that exposure to conflict reduces the technical efficiency of cassava farmers, while Ajayi et al. (2025) found that persistent clashes undermine agricultural output and rural livelihoods.

Food Security Implications

The findings revealed that farmer–herder conflicts have significant implications for food security in Yewa North. Adebajo et al. (2025) and Ajayi et al. (2025) found that conflict-related disruptions reduce agricultural production, weaken household incomes, and limit food availability. The study therefore demonstrates a clear link between climate change, resource scarcity, conflict, and food insecurity in the study area.



Discussion of Findings

The findings reveal that farmer–herder conflicts in Yewa North Local Government Area are driven by the interaction of climate change, resource scarcity, migration, and governance challenges. Evidence from the reviewed literature indicates that climate-induced environmental changes, including drought, desertification, and declining pasture availability, have encouraged pastoral migration into the area, thereby increasing interactions between herders and farming communities. This finding supports Eco-Violence Theory, which links environmental degradation and resource scarcity to migration and competition over natural resources (Homer-Dixon, 1999). Studies by Adebajo, Akinsola, and Salako (2025) similarly show that climate-induced migration has increased tensions between farmers and herders in Yewa North.

The study further found that competition over land and water resources constitutes the immediate trigger of conflict. As agricultural activities expand and traditional grazing routes become increasingly restricted, competition over scarce resources has intensified. Ajayi et al. (2025) identified competition over land and crop destruction by cattle as major causes of conflict, while Akinde and Adekunle (2024) found that cattle encroachment on farmlands remains a recurring source of disputes. These findings suggest that resource scarcity serves as the mechanism through which climate-induced environmental pressures are translated into local conflicts.

Beyond environmental factors, the findings demonstrate that governance deficits play a critical role in conflict escalation. Weak conflict-resolution mechanisms, inadequate resource governance, and ineffective land-use management reduce the ability of communities and institutions to manage competing claims over resources. David (2016) and Ajose, Akingbade, and Sabitu (2025) found that institutional weaknesses contribute significantly to the persistence of farmer–herder conflicts in the area. This supports Political Ecology Theory, which emphasizes the importance of governance structures and resource management systems in shaping conflict outcomes.

The study also revealed that farmer–herder conflicts have significant implications for agricultural productivity and food security. Persistent clashes have resulted in crop destruction, displacement of farmers, disruption of farming activities, and reduced agricultural output, thereby weakening rural livelihoods and food availability (Adebajo et al., 2025; Akinde & Adekunle, 2024; Ajayi et al., 2025). Overall, the findings establish a clear relationship between climate change, resource scarcity, migration, governance challenges, and conflict in Yewa North. They further validate the combined application of Eco-Violence Theory and Political Ecology Theory in explaining the climate–resource–conflict nexus in the study area.

4. Conclusion

The study examined the interaction of climate change and resource scarcity in the escalation of farmer–herder conflicts in Yewa North Local Government Area of Ogun State. The findings revealed that climate-induced environmental changes have contributed to pastoral migration and intensified competition over land and water resources, while weak governance structures, ineffective conflict-resolution mechanisms, and inadequate resource management have facilitated the escalation of disputes into violence. The study further found that the conflicts have negatively affected agricultural productivity, food security, and rural livelihoods. Drawing on Eco-Violence Theory and Political Ecology Theory, the study concludes that farmer–herder conflicts in Yewa North are driven by the interaction between environmental pressures and institutional weaknesses, highlighting the need for context-specific interventions that promote effective resource management, conflict resolution, and peaceful coexistence between farmers and herders.



5. Recommendations

Based on the findings of the study, the following recommendations are proposed:

1. **Establish Farmer–Herder Resource Management Zones:** The Ogun State Government should designate and develop structured grazing and watering areas in suitable locations within Yewa North to reduce cattle movement through farmlands and minimize resource-based conflicts.
2. **Develop Community-Based Early Warning Mechanisms:** Local authorities should establish community-based early warning and rapid response committees comprising traditional rulers, farmer representatives, Fulani leaders, youth groups, and security agencies to identify and address emerging disputes before they escalate into violence.
3. **Strengthen Traditional Conflict-Resolution Institutions:** Traditional institutions should be formally integrated into local conflict-management frameworks and supported to facilitate regular dialogue between farmers and herders on issues relating to land use, cattle movement, and resource access.
4. **Establish a Farmer–Herder Claims Verification and Mediation Committee:** A multi-stakeholder committee involving government officials, traditional leaders, farmer associations, and pastoral representatives should be created to investigate complaints, verify damages, and facilitate negotiated settlements, thereby reducing reprisals and promoting peaceful dispute resolution.

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