

FARMER-HERDERS CONFLICT AND FOOD SECURITY IN TARABA STATE, NIGERIA

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Abstract

This study examined the impact of the farmer–herder conflict on food production in Taraba State, with particular emphasis on population displacement, reduction in agricultural output, and land-use disputes. The research was anchored on the Resource Conflict Theory, which posits that persistent lack of access and competition over scarce resources, such as land and water, often leads to the inevitability violent conflict. The study adopted a mixed-method research design, qualitative approaches to obtain comprehensive data and deeper insights into how the conflict affects food production in the study area. The findings revealed that population displacement caused by the conflict disrupted farming cycles, resulting in delayed planting and harvesting, reduced availability of farm labour, and abandonment of farmlands. The study concluded that the farmer–herder conflict in Taraba State has a substantial negative impact on food production, primarily through population displacement, reduced agricultural output, and unresolved land-use disputes. To mitigate these effects, the study recommends the establishment of clearly demarcated grazing reserves, the implementation of conflict resolution and mediation programs, increased support for affected farmers through access to agricultural inputs and extension services, and community-based initiatives to foster dialogue and cooperation between farmers and herders.

Keywords: *Farmer–herder conflict, food security, Resource Conflict Theory, conflict resolution.*

Introduction

Farmer–herders conflict has become one of the most persistent and complex forms of resource-based violence globally, affecting food systems, rural livelihoods, and national stability. Across the world, competition over land, water, and grazing resources has intensified due to climate change, population growth, and environmental degradation, leading to rising clashes between pastoralists and sedentary farming communities (FAO, 2017). Countries in Asia, Latin America, and parts of Europe have reported increased tensions as pastoral routes shrink and arable land expands, threatening agricultural productivity and food availability (Turner, 2019). This global trend highlights the growing vulnerability of food security to conflict-driven disruptions, especially in regions dependent on rain-fed agriculture and pastoralism.

In Africa, farmer–herders conflict has become more pronounced due to desertification, transhumance patterns, and weak conflict-management institutions. The Sahel region, stretching from Senegal to Sudan, has witnessed escalating clashes as herders migrate southward in search of pasture, often crossing national borders and triggering disputes over farmland and water points (Benjaminsen & Ba, 2019). West Africa remains particularly affected, with Burkina Faso, Mali, Ghana, and Côte d’Ivoire experiencing severe communal conflicts that directly undermine crop production, livestock yields, and rural markets (Odoh & Chilaka, 2012). These conflicts frequently result in displacement, loss of farm labour,

destruction of crops, and the breakdown of local food supply chains, thereby aggravating hunger and malnutrition in already fragile communities.

Nigeria represents one of the epicentres of farmer–herders conflict in Africa, with the Middle Belt region at the centre of recurring violence. Climatic pressures, population expansion, cattle rustling, and the encroachment on traditional grazing routes have heightened tensions between pastoralist groups mostly Fulani herders and farming communities (Ofuoku & Isife, 2010). The conflict has caused substantial agricultural losses, rural displacement, and market disruptions, contributing to rising food prices and declining national food security (International Crisis Group, 2018). As agriculture employs a majority of Nigeria’s rural population, persistent conflict undermines both livelihoods and the country’s capacity to achieve sustainable development goals related to hunger and economic stability.

Taraba State, located in northeastern Nigeria, is one of the states most affected by farmer–herders conflict due to its vast arable land, diverse ethnic composition, and strategic location along major pastoral corridors. Recurring clashes in areas such as Bali, Gassol, Donga, Karim-Lamido, and Wukari have resulted in loss of lives, destruction of farmlands, and displacement of thousands of households (Onoja & Galadima, 2020). These conflicts disrupt farming seasons, reduce crop yields, and restrict access to grazing fields, thereby weakening both crop and livestock production two critical pillars of food security in the state. The cyclical nature of violence contributes to reduced agricultural output, food shortages, and price volatility across rural and urban markets in Taraba.

The growing scale of farmer–herders conflict in Taraba State raises important questions about the state’s capacity to ensure food availability, accessibility, stability, and utilization. Understanding the dynamics of these conflicts and their implications for food security is essential for designing effective interventions and sustainable peacebuilding strategies. This study therefore seeks to examine the extent to which persistent clashes between farmers and herders undermine agricultural production and food security in Taraba State, and to explore policy options that can mitigate resource-related conflicts and enhance rural livelihood resilience.

Farmer–herders conflict has become one of the most persistent threats to food security in Taraba State, where recurrent clashes between pastoralists and farming communities continue to disrupt agricultural activities, destroy farmlands, and displace rural populations. Despite the strategic importance of Taraba as one of Nigeria’s major food-producing states, violent confrontations in areas such as Gassol, Bali, Wukari, Donga, and Karim-Lamido have led to reduced crop yields, loss of livestock, and declining access to productive land. These conflicts undermine food availability, accessibility, and market stability, resulting in rising food prices and heightened vulnerability among households. Although several government and community-based initiatives have been introduced, the conflict persists, indicating gaps in conflict management strategies and an urgent need for evidence-based understanding of how these clashes affect food security outcomes in the state.

Objectives of the study

1. To examine the major causes of farmer–herders conflict in Taraba State and how they relate to competition over land and agricultural resources.

2. To assess the effects of farmer–herders conflict on food production, distribution, and availability in Taraba State.

Literature Review

Farmer–Herder Conflict

The farmer–herder conflict refers to recurrent and often violent clashes between sedentary agricultural farmers and mobile pastoralist herders over access to land, water, and other vital natural resources. Studies highlight that although these disputes are historically rooted across many African regions, their frequency and severity increased sharply from the late 2010s into the early 2020s due to heightened pressure on shrinking productive land (Time, 2018). Contemporary research emphasizes that these conflicts are multi-dimensional, shaped by ecological stress, livelihood competition, and local political dynamics, rather than being solely ethnic confrontations.

Climate-related challenges such as drought, desertification, and erratic rainfall patterns have forced pastoralists to migrate southward, increasing competition with farming communities. Rapid population growth and expanding agricultural activities have further encroached on traditional grazing routes, while weak land governance characterized by unclear land tenure systems and poor enforcement of grazing regulations has eroded customary conflict-resolution structures (IIED, 2021; SPARC, 2023). In addition, political manipulation, rising cattle rustling, and the spread of small arms escalated local disputes into more violent confrontations.

The impacts of the farmer–herder conflict during this period have been severe for human security, agricultural production, and community livelihoods. Violent clashes led to deaths, widespread population displacement, destruction of crops and livestock, and disruptions to local markets outcomes that increase food insecurity and deepen poverty among affected households (World Bank, 2023; Enterprise Surveys, 2024). More broadly, prolonged instability discourages agricultural investment, weakens social cohesion, and entrenches distrust among communities, thereby reducing the prospects for long-term peace and economic recovery.

In response, governments and development actors introduced several interventions between 2018 and 2024, including security deployments, anti-open grazing laws, proposals for ranching systems, designated grazing reserves, and multi-stakeholder peacebuilding programs. However, evidence from field studies shows that restrictive or top-down strategies often fail when not complemented with participatory land-use planning, investment in fodder and water infrastructure, and inclusive community mediation systems (United Nations, 2024; Al-Hikmah Journal, 2024). Pilot initiatives focusing on collaborative natural resource governance demonstrated comparatively stronger outcomes.

Consequently, scholars and policy experts argue for integrated, context-specific approaches to sustainably address the conflict. Recommended strategies include formalizing land and migratory corridors through participatory planning processes, strengthening climate-smart pastoral and agricultural systems, and supporting dialogue platforms that combine traditional institutions with formal legal mechanisms. They also emphasize the need for blended economic initiatives such as livestock value-chain development and alternative livelihood programs.

Food Security

Food security refers to a condition in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2019). This widely accepted definition highlights four essential dimensions availability, access, utilization, and stability which together determine the extent to which individuals and households can secure adequate nourishment. Contemporary scholarship emphasizes that food security is not merely about food production but also about ensuring that food systems function in ways that promote equity and resilience across populations (FAO, 2021).

The first dimension, food availability, concerns the supply of food through domestic production, food imports, and food stocks. It implies that sufficient quantities of appropriate food must be consistently present within a region or country (World Bank, 2020). Even when food is available, households may remain food insecure if they lack the resources to acquire it, which introduces the second dimension economic and physical access. Access requires that individuals have adequate income, functioning markets, and physical proximity to food sources. Conflict, inflation, and transportation breakdowns can hinder this access, particularly in developing countries (IFPRI, 2022).

The third dimension, utilization, refers to the proper biological use of food, requiring a diet that provides sufficient energy and essential nutrients, potable water, and adequate sanitation. Poor utilization results from inadequate diets, disease, or poor care practices, all of which undermine the nutritional status of individuals (UNICEF, 2020). This perspective broadens food security to include public health variables, recognizing that food alone is insufficient if the human body cannot effectively use it. Malnutrition in many sub-Saharan African countries reflects a failure in food utilization despite availability of food in some regions.

The fourth element, stability, requires that availability, access, and utilization remain sustainable over time and are not disrupted by shocks such as conflict, climate change, price volatility, or seasonal variations (FAO, 2021). Instability can quickly shift households from temporary food stress to chronic food insecurity. Research shows that recurrent droughts, economic downturns, pandemics, and insecurity significantly erode food system stability, especially in low-income countries (IFPRI, 2022). Thus, ensuring stability demands strong institutions and policies that mitigate risks and enhance resilience.

FAO, (2023) argue that food security is increasingly threatened by global challenges including climate change, population growth, violent conflicts, and economic inequality. Studies from 2020–2024 show rising global food insecurity due to extreme weather events, supply chain disruptions, and conflicts affecting agricultural production and markets (World Bank, 2022). Therefore, food security is now viewed not only as a development issue but also as a critical component of national security, social stability, and sustainable development. Its multidimensional nature underscores the need for integrated approaches that combine agricultural development, conflict mitigation, climate adaptation, and poverty reduction.

Agricultural Productivity

Agricultural productivity refers to the efficiency with which agricultural inputs such as land, labor, capital, and technology are transformed into outputs including crops, livestock, and other

farm products (FAO, 2020). It is commonly measured as the ratio of total agricultural output to the total inputs used in production, and it serves as a key indicator of the performance and sustainability of the agricultural sector. According to the World Bank (2021), improvements in agricultural productivity are essential for ensuring food availability, reducing rural poverty, and supporting economic growth, particularly in developing countries where agriculture remains a major livelihood source. Thus, agricultural productivity is central to discussions surrounding food security, economic development, and environmental sustainability.

A major component of agricultural productivity is land productivity, which measures output per unit of land area. Land productivity is influenced by factors such as soil fertility, irrigation, climate conditions, and the quality of seeds and inputs. Studies indicate that enhanced land productivity through improved farming practices, mechanization, and irrigation technologies has significant potential to boost food production in sub-Saharan Africa (IFPRI, 2022). Similarly, labor productivity, which assesses output per unit of labor, depends on the skills of farmers, access to farm tools, and agricultural extension services. As agricultural systems modernize, labor productivity tends to increase through mechanization and improved labor management.

Technological advancements play a critical role in shaping agricultural productivity. The adoption of improved seed varieties, fertilizers, mechanized tools, digital technologies, and climate-smart agriculture practices has been linked to large gains in productivity across Africa and Asia (FAO, 2021). Research demonstrates that innovations such as drought-resistant seeds, precision farming, and mobile-based advisory services significantly enhance yields and reduce production risks (World Bank, 2022). These technologies not only increase production efficiency but also help farmers adapt to climate change, which is increasingly affecting crop yields through unpredictable weather patterns, droughts, and flooding.

Agricultural productivity is also influenced by institutional and policy environments. Access to rural infrastructure, credit facilities, markets, and extension services are crucial determinants of farmers' ability to improve productivity (IFPRI, 2023). Poor rural roads, limited market access, and inadequate financial services constrain farmers' capacity to adopt improved technologies or sell their products profitably. Policies supporting investment in agriculture, land reform, input subsidies, and farmer training programs have been shown to significantly enhance agricultural performance. Hence, productivity is not solely a technical issue but also a governance, economic, and institutional matter.

Recent global trends highlight emerging challenges affecting agricultural productivity, including climate change, population pressure, land degradation, and conflict. Between 2020 and 2024, extreme weather events and violent conflicts such as farmer–herder clashes have disrupted farming activities and reduced productivity in many parts of sub-Saharan Africa, including Nigeria (FAO, 2023; IFPRI, 2023). These disruptions reduce labor availability, destroy farmlands, and undermine farmers' willingness to invest in production. Consequently, agricultural productivity has become a critical policy concern, requiring integrated approaches that combine technological innovation, conflict prevention, climate adaptation, and agricultural financing.

Major Causes of Farmer–Herders Conflict in Taraba State

One of the major causes of farmer–herders conflict in Taraba State is the increasing competition over land resulting from population growth and expanding agricultural activities. As rural populations grow, farmlands extend into traditional grazing routes and rangelands, reducing the available space for pastoralism. Studies show that in many parts of Nigeria, including Taraba State, farmland expansion into grazing corridors has intensified encounters between farmers and pastoralists, often leading to disputes over land boundaries and crop destruction (Okoli & Atelhe, 2014; Abbass, 2018). This competition is particularly acute in major agricultural areas such as Bali, Gassol, Wukari, and Donga, where fertile land attracts both farming and grazing activities, thereby heightening the potential for conflict.

Environmental degradation and climate change constitute another significant cause of conflict. Taraba State like much of northern Nigeria has experienced irregular rainfall patterns, drought episodes, and declining pasture quality, which push herders southward in search of greener pastures and water for their livestock (Buhari et al., 2020). As herders migrate into farming communities during the dry season, the pressure on scarce natural resources intensifies, leading to disputes over access to water points, riverbanks, and fallow lands. According to Benjaminsen and Ba (2019), climate-induced migration has become a central driver of pastoral mobility, making resource competition unavoidable. In Taraba State, this movement often brings cattle into contact with food crops, resulting in crop damage that triggers retaliatory actions from farmers.

Another driver of the conflict is the breakdown of traditional conflict-resolution mechanisms that historically regulated relations between farmers and pastoralists. In the past, local community leaders, traditional rulers, and age-grade systems mediated disputes, ensuring compensation for crop destruction or livestock losses. However, modernization, weakened traditional authority, and increasing weaponization have undermined these mechanisms, making conflicts more violent and difficult to manage (Adeoye, 2019). In Taraba State, the erosion of community leadership structures means that minor disagreements over land or grazing can escalate rapidly due to the absence of trusted mediators and the rise of armed groups.

Economic factors also contribute significantly to the conflict. Land in Taraba State has become an economically valuable asset due to its suitability for commercial agriculture, including rice, maize, soybeans, and cassava production. This economic value increases competition between crop farmers seeking to expand production and pastoralists seeking grazing rights for large herds (International Crisis Group, 2018). Furthermore, cattle represent wealth and livelihood for herders, while crops hold similar economic importance for farmers. When either livestock is lost or farmlands are destroyed, both groups suffer direct economic losses, making them more likely to engage in violent confrontations.

The proliferation of small arms and the involvement of criminal elements have further intensified farmer–herders conflict in Taraba State. Research shows that cross-border movement of arms and the activities of bandits have made conflicts deadlier, transforming resource-based disputes into violent clashes (Okoli & Ugwu, 2019). Criminal groups often exploit existing tensions by attacking communities, rustling cattle, or engaging in kidnappings,

which further strain relations between farmers and herders. These security challenges deepen mistrust and heighten competition over land and resources, as communities increasingly resort to self-defense and retaliatory violence.

Effects of Farmer–Herders Conflict on Food Production, Distribution, and Availability in Taraba State

Farmer–herders conflict in Taraba State significantly undermines food production by disrupting agricultural activities. Recurrent clashes between farmers and pastoralists often lead to destruction of crops, loss of livestock, and displacement of farming households. Studies show that areas like Gassol, Bali, and Wukari experience substantial reductions in crop output due to repeated attacks and grazing of farmland by cattle (Onoja & Galadima, 2020). These disruptions affect both subsistence and commercial farming, reducing yields of staples such as maize, rice, and cassava, which are critical for local food security. In addition, fear of violence discourages investment in farming inputs, including improved seeds, fertilizers, and mechanized tools, further lowering productivity (Adeoye, 2020).

The conflict also affects food distribution by impeding the transportation and marketing of agricultural products. Insecurity along rural roads and in farming communities forces traders to avoid conflict-prone areas, limiting the flow of goods from farms to local and regional markets (International Crisis Group, 2018). Perishable items such as vegetables, fruits, and dairy products are particularly affected, as delays or disruptions lead to spoilage and wastage. Consequently, markets in Taraba State experience shortages, which not only affect local consumers but also hinder trade with neighbouring states, reducing overall food availability and inflating prices.

Food availability is further compromised by the displacement of households from conflict-affected areas. Communities forced to abandon farmlands or grazing lands during violent clashes experience interrupted production cycles, leading to shortages of staple foods at both the household and community levels (Buhari et al., 2020). The displacement also reduces the labour force available for cultivation and animal husbandry, creating cascading effects on agricultural output. Studies have noted that persistent conflict reduces both the quantity and quality of food available in affected areas, contributing to higher rates of malnutrition and food insecurity (Onoja & Galadima, 2020; IFPRI, 2022).

Moreover, the economic consequences of farmer–herders conflict exacerbate food insecurity. Losses of crops and livestock translate into reduced household income, limiting the ability of families to purchase food from markets (Adeoye, 2020). Rising food prices, coupled with declining income, reduce household food access, further destabilizing food security in conflict zones. Farmers' inability to sell produce due to insecurity reduces incentives to produce surplus crops, creating a cycle where food scarcity reinforces economic vulnerability and social tension.

Repeated conflicts undermine long-term food system stability in Taraba State. Persistent disruptions in production and distribution discourage investment in agriculture, reduce confidence in local food markets, and hinder the implementation of development programs aimed at improving productivity and nutrition (FAO, 2021). Without interventions to manage conflicts and protect farmlands and pastoral routes, Taraba State risks chronic food shortages,

market instability, and rising food prices, which together threaten both rural livelihoods and the broader population's nutritional well-being. Addressing these challenges requires integrated strategies that combine conflict resolution, agricultural support, and policy measures to secure food systems.

Theoretical Framework

Resource Conflict Theory

Resource Conflict Theory is an analytical framework that posits a direct or indirect causal link between the diminished availability or quality of vital natural resources, such as freshwater, arable land, or minerals, and the onset or exacerbation of social tension and violent conflict.

Scarcity

This scarcity can be absolute, environmental, or relative, driven by unequal access and political manipulation rather than just physical depletion. Environmental degradation acts as a multiplier of existing social vulnerabilities.

Conflict

The core focus is on understanding how resource competition precipitates instability, ranging from localized disputes over water access and land rights to large-scale interstate or civil conflicts fueled by control over high-value commodities. The theory analyzes the mechanisms through which environmental stress translates into social breakdown, forced migration, and the weakening of state institutions. These conflicts impose severe social and economic costs, undermining long-term development.

Distribution

A central tenet involves examining how the unequal allocation of natural resources and the differential impact of resource degradation contribute to political grievance and mobilization. Inequity in resource access often intersects with existing social fault lines, creating conditions ripe for unrest and challenging principles of environmental justice. Policy intervention, therefore, must prioritize equitable resource governance and access mechanisms to mitigate the risk of violence.

The application of the theory was predicated on the fact that the main cause of the clashes was as a result of lack of grazing reserves and other facilities for the herders while the farmers were worried of the condition of their crops and other land resources. Hence, natural land resources and the one now blue economy.

Methodology

The study adopted a qualitative research design using the contextual method. This approach was appropriate because it allowed the researcher to examine phenomena within their real-life context, capturing the complexities of farmer–herders conflict and its impact on food security in Taraba State. The contextual method emphasized understanding the experiences, perspectives, and behaviors of individuals and communities within their socio-economic, cultural, and environmental settings (Creswell, 2014). This design enabled the researcher to explore not only the occurrence of conflicts but also how these conflicts influenced food production, distribution, and availability in the state.

The study relied primarily on secondary sources of data. These included peer-reviewed journal articles, government reports, publications from international organizations such as the Food and

Agriculture Organization (FAO) and the International Food Policy Research Institute (IFPRI), newspaper reports, and credible online databases. Additionally, previous empirical studies on farmer–herders conflict, land disputes, pastoral mobility, and food security in Nigeria and Taraba State were analyzed. The use of secondary sources ensured that the study could contextualize the findings within broader historical, economic, and environmental trends affecting food systems in the region.

Data were collected through extensive documentary review, which involved systematic examination of existing literature and records related to farmer–herders conflict and food security. The researcher extracted relevant information on causes of conflict, affected agricultural resources, impacts on food production and distribution, and the coping mechanisms employed by communities. The contextual method required that the researcher critically interpreted and synthesized this information to generate a holistic understanding of the issues.

The collected data were analyzed using qualitative content and thematic analysis. The researcher identified key themes, patterns, and categories that emerged from the literature, such as land disputes, competition over water and pasture, crop destruction, livestock losses, and disruptions to food supply chains. This method emphasized interpretation and explanation rather than numerical measurement, allowing the researcher to understand the interplay between farmer–herders conflict and food security in the unique context of Taraba State (Braun & Clarke, 2006).

The contextual method was particularly suited for this study because farmer–herders conflicts were influenced by historical, cultural, economic, and environmental factors that could not be fully captured by purely quantitative approaches. By situating the analysis within the lived experiences of the communities affected, the study provided nuanced insights into how conflict affected food production, distribution, and availability, thereby informing policy and intervention strategies for sustainable food security in Taraba State.

Data Presentation and analysis

One of the primary causes of farmer–herders conflict in Taraba State is encroachment on traditional grazing routes and shrinking availability of grazing land. A recent study found that “land encroachment on cattle routes” and “inadequate grazing reserves” are among the most significant predictors of clashes between farmers and herders in Taraba. As population increases and more farmland is converted to crop cultivation, the available pastoral space shrinks, forcing herders’ cattle to stray onto farms triggering crop destruction, retaliation, and violence. In essence, competition over land farmland vs grazing land becomes a structural source of conflict.

Closely linked to land pressure is competition over critical agricultural resources such as water points, pasture, and access to water for livestock. In dry seasons or in areas with declining rainfall, herders may migrate to more fertile areas in Taraba, leading to conflict with resident farming communities for water access and pasture especially in zones where both cropping and grazing overlap. Environmental degradation, desertification, and changing climatic patterns intensify this migration and competition, heightening the risk of conflict when resources become scarce and contested.

Furthermore, the breakdown of traditional land-tenure and conflict-resolution mechanisms in many communities of Taraba State fuels conflict escalation. A study focusing on a local government area in Taraba revealed that land tenure ambiguities and absence of clear, enforceable land-use rights contribute to violent disputes between herders and crop farmers. Where customary grazing routes are no longer recognized, or farmland expansion into these routes is unregulated, disputes quickly escalate. The weakening of traditional authorities' mediation role further diminishes peaceful conflict resolution.

Economic factors also play a role. For many herders, cattle remain their main livelihood asset. When grazing lands decline, livestock productivity drops, pushing herders into riskier competition for limited arable land. Similarly, small-scale farmers with limited farm size see their livelihoods threatened when livestock destroy their crops, prompting them to resist further encroachment. This mutual economic vulnerability creates high stakes, making conflicts more likely when land or resource access is perceived as zero-sum.

Population pressure and demographic changes in Taraba aggravate land/resource scarcity. As more families settle and expand farmland, traditional herding corridors are lost resulting in overlapping land claims. This intensifies competition between sedentary farmers and mobile pastoralists. The expansion of agriculture, combined with growing human population and rising demand for food, creates structural pressure on land, making conflict an almost inevitable outcome when resource governance is weak.

The farmer–herders conflict has dire consequences for food production in Taraba State. According to a 2024 study on food security in the state, conflict involvement, land size, annual income, and household size were all significantly associated with lower food security among crop farmers and herders. Frequent attacks and livestock intrusion onto farmlands destroy crops, reduce yields, and displace farming households, thereby directly reducing aggregate agricultural output (crop + livestock). In southern Taraba, one study reported that the major perceived cause of conflict was “uncontrolled grazing and crop damage by cattle,” and that consequences included “decrease in output and income of farmers” and, by extension, lower food production.

Beyond production, conflict disrupts food distribution and availability. Insecurity along farm-to-market routes discourages traders from sourcing produce from conflict-prone areas, leading to shortened supply chains, reduced volume of goods reaching markets, and spoilage of perishable items such as vegetables, dairy, and other fresh foods (especially where herders also produce milk and meat). As a result, local food markets suffer shortages, leading to reduced food availability at the community level and increased reliance on food imports or aid.

The conflict also undermines food stability and long-term food security in Taraba State. Recurring cycles of violence make farming and herding unpredictable: farmers may abandon fields, avoid investing in inputs (seeds, fertilizers), or reduce farmland size; pastoralists may relocate or lose livestock. This instability discourages long-term planning and investment, leading to declining agricultural productivity over time and persistent food shortages. The study on food security in Taraba also identified conflict involvement as a negative factor affecting households' food security status, highlighting how ongoing violence erodes households' capacity to secure food regularly. Moreover, the conflict diminishes livelihood security, which

indirectly affects food access and utilization. Loss of farmland or livestock reduces household income, limiting ability to purchase food, buy inputs for next planting season, or invest in livestock production. This economic shock amplifies food insecurity, worsens poverty, and may lead to malnutrition, especially for vulnerable groups such as women, children, and displaced persons.

Discussion of Findings

Empirical studies on Taraba State identify pressure on land and contested land tenure systems as a core driver of farmer–herder conflict. In selected villages of Sardauna Local Government Area, for example, research found that “pressure on land” resulting from increasing demand for arable plots for crop cultivation was cited as the main cause of violent conflict between farmers and herders (Chekene, 2024).

Moreover, the expansion of crop agriculture has increasingly encroached on traditional grazing lands and migratory routes. In southern Taraba, a survey of crop-farmers revealed that the major perceived cause of conflict was “uncontrolled grazing and damage to crops by cattle” indicated by about 95.1% of respondents (Rukwe et al., 2019). These findings underscore that as farmland expands (to meet food and cash-crop demands), overlapping land use leads to friction between sedentary farmers and mobile herders over access to arable land.

Beyond land ownership and access, disputes also involve competition over water and other agricultural resources (e.g., pasture, fodder, shared water points) especially during dry seasons or periods of environmental stress. A historical review of herder–farmer conflict in Taraba noted deteriorating environmental conditions (desertification, soil degradation), breakdown of traditional conflict-resolution institutions, and struggle over water and land resources as interrelated causes (Sewuese & Nwagu, 2023).

Also significant is the breakdown in customary / communal land governance and weak institutional regulation. In many cases, though respondents might formally “have access to land,” only a small fraction possess transferable land rights, and only a minority hold a “Certificate of Occupancy,” reducing long-term land security (Chekene, 2024). This uncertain tenure undermines incentives for peaceful coexistence and encourages conflicts when herders’ needs intersect with farmland especially in the absence of clear, enforceable regulations or grazing-route protections.

Conflict between farmers and herders in Taraba State has demonstrably undermined local agriculture, food production, and food security outcomes. A study surveying 102 farming households in southern Taraba found that the most severe consequences of the conflict were decrease in output and income of farmers (99%) and loss of lives and injuries (98%). This shows the conflict’s direct impact on the livelihoods of farm households.

Similarly, a broader assessment of food security in Taraba showed that conflict involvement, along with factors like land size, household size, and income, had a significant influence on the food security status of both crop farmers and herders (Dabo, Garba, Yakubu & Abdullahi, 2024). In practice, this translates into reduced crop production, reduced household food availability and diminished capacity to sustain livelihoods from farming.

From a macro-food system perspective, research focusing on food stability in Taraba Reported a significant relationship between farmers–herders conflict and reduced food availability,

diversity, and stability. Specifically, respondents agreed that conflict “tremendously affected sufficient food supply,” disrupted the marketing of foodstuffs, and led to shortages of cereals, vegetables, and other staples.

Conflict-driven insecurity often compels farmers to abandon farms or avoid planting and harvesting for fear of attacks thereby lowering overall agricultural productivity, reducing food supply to local markets, and raising food prices. Indeed, some communities report the destruction of crops and loss of livestock, which undermines both crop production and animal-product supply (meat, dairy) further restricting food availability and variety (Rukwe et al., 2019; Solomon, 2021).

Moreover, repeated conflicts erode long-term investments in agriculture: farmers become reluctant to risk replanting crops; herders may abandon traditional grazing patterns; and rural markets may shrink due to migration, displacement, or destroyed infrastructure (roads, storage, distribution networks). This dynamic undermines not only immediate food availability but also the resilience of the food system in Taraba State affecting production, distribution, and stability of supply (Dabo et al., 2024; Solomon, 2021).

Conclusion

The study concluded that farmer–herders conflict in Taraba State is primarily driven by competition over land and agricultural resources, including grazing lands, water points, and farmland. Environmental factors such as climate variability, desertification, and shrinking grazing reserves exacerbate this competition, while institutional weaknesses in land governance and conflict resolution mechanisms contribute to the escalation of disputes. These conflicts have significant negative effects on food production, disrupting crop cultivation and livestock rearing, and reducing overall agricultural output. The destruction of crops and loss of livestock also disrupt food distribution channels, limit market availability, and compromise household access to food. As a result, the conflicts directly undermine food security in Taraba State, threatening both the livelihoods and nutritional well-being of affected communities.

Moreover, the cyclical nature of violence between farmers and herders creates long-term instability in agricultural production systems. Households affected by conflicts often experience loss of income, reduced agricultural investments, and displacement from fertile lands, which further exacerbates food insecurity. The findings indicate that farmer–herders conflict is not merely a security issue but a critical development challenge that requires integrated interventions to safeguard food systems and livelihoods in the state.

Recommendations

1. The government should establish clearly demarcated grazing reserves and enforce land-use regulations to minimize encroachment on farmlands. Sustainable land and water resource management policies can reduce competition and prevent conflict.
2. Community-based and government-supported mediation frameworks should be strengthened to address disputes between farmers and herders promptly. Empowering local traditional authorities and conflict-resolution committees can help prevent escalation. Also, Farmers and herders should be provided with agricultural inputs, training, and access to modern farming and livestock management practices to mitigate the negative effects of conflict on productivity.

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