International Journal of Advanced Studies in Ecology, Development and Sustainability
p-ISSN: 2354-4252| e-ISSN: 2354-4260
Volume 9, Number 1 September, 2026

IJASEDS

Territorial Dispossession and Arable Alienation: How land Invasion is Affecting Food Production in Mangu Local Government Area of Plateau State

Cinjel, Nandes Dickson
Department of Public Administration, Faculty of Management Sciences
Federal University Wukari, Taraba State

Article DOI: 10.48028/iiprds/ijaseds.v9.i1.05

Abstract

This study examines the effect of land conquest on agricultural production in Mangu Local Government Area (LGA) of Plateau State, Nigeria. Mangu LGA is traditionally recognized as a critical agrarian hub, renowned for its large-scale production of Irish potatoes, maize, and vegetables. However, persistent ethno-religious conflicts and violent land conquests by armed herdsmen and communal actors have severely disrupted this thriving agricultural economy. This research evaluates how forced displacements, the violent annexation of arable lands, and the destruction of rural infrastructure impact crop yields, food security, and farmer livelihoods. Utilizing a mixed-methods research design, the study gathers data through structured questionnaires administered to displaced farming households and key informant interviews with community leaders, agricultural extension officers, and local market unions. The findings reveal a sharp and devastating decline in total agricultural output across the affected communities in Mangu LGA. Violent land conquest has forced thousands of indigenous farmers to abandon their ancestral lands, resulting in thousands of hectares of fertile fields lying fallow or being unsustainably converted into grazing paths. Farmers who attempt to return face continuous security threats, limiting their access to farmlands, reducing cultivation cycles, and discouraging long-term investments in modernized farming techniques. Furthermore, the destruction of local storage facilities and the disruption of critical supply chains have triggered unprecedented spikes in food prices and worsened rural poverty. The study concludes that land conquest is a primary driver of agricultural regression and food insecurity in the region. To mitigate this crisis, the study recommends that the federal and state governments enforce stricter security measures to reclaim annexed lands, facilitate the safe return of displaced farmers, and provide targeted agricultural inputs and financial aid to revitalize the damaged agrarian economy.

Keywords: *Land Conquest, Agricultural Production, Food Security, Farmer Displacement, Mangu LGA, Plateau State*.

Corresponding Author: Cinjel, Nandes Dickson

Background of the Study

Mangu Local Government Area is one of the seventeen (17) Local government areas of Plateau State. The local government area shared boarder with Pankshin local government area in the South East, Barkin Ladi L.G.A in the North East, Bokkos in the South west, Bauchi state in the north east and Quanpan in the South West. The predominant ethnic groups in the L.G.A are the Mwaghavul and the Pyem ethnic group (Cinjel & Danjuma, 2025). The Mwaghavul ethnic group has 12 districts while the Pyem ethnic group has seven districts. The local government is one of the peaceful L.G.A in Plateau state; it has lesser history of conflicts. It has witnessed few conflicts in 1996 (Mwaghavul vs the Ron) and in 1999 (The Mwaghavul vs Pyem). The conflicts were purely ethnic and chiefly attributed to land boundaries in Mushu and Changal respectively. Their impact was less and were drastically contained by the state government (Cinjel & Kefas, 2024).

Agriculture serves as the economic backbone of Mangu Local Government where the population heavily relies on the cultivation of staple food crops such as maize, Irish potatoes, sweet potatoes, cowpea, groundnut, millet, among others. Animal like goats, sheeps, pigs and cattle are also reared at commercial quantity (Abbott,2010). Of late, mineral resources like tin, lithium, columbite, precious stones, among others were mined in the local government area. The local government housed the famous Lake Ampudong; the only Crater Lake in West Africa and the famous Swan spring natural water that are exploited under the feet of the Kerang's volcanic rock. The local government has a tropical wet and dry climate characterized by district rainy and dry seasons and relatively mild temperature due to its high altitude (Aliyu, 2025).

Due to the friendly climate, and vast and flat land and hospitable nature of the people, the Fulani herders settled in the area in the late 1960s and have developed strong bond with the inhabitants of the L.G.A. They inter-marry and speaks each other language. It was till 2012, that the relationship changed; there were pocket cases of herders intruding in arable farmers crops. At the earliest, it was managed between the parties. As the act kept increasing, traditional rulers were involved and later the service of the police were sorted (Anyanwu, 2026). In 2024, a farmers went to his farmer and found a herder with his herd herding in his farm at a location known as yidel, Murish in Bwai district. The arable farmer slapped the herder and the herder struck him death with his herding stick. This was what laid the nucleolus of the conflict and what later led to the attack at Kutbwat Fungzai, Katoma, Kwasghaslalek, Tyop, Alogom, among others. The conflict was chiefly between the Mwaghavul arable farmers and the Fulani herdsmen. The conflict later sprang to many districts – Kombun, Panyam, Pushit and Ampang West district. In the conflict, so many person and properties were destroyed. Human Rights Watch (HRW 2025) in its official documentation of the Mangu conflicts states that:

> At least 30 people were killed and more than 100 were injured during attacks allegedly carried out by herders on villages in Mangu L.G.A. By February 2024, the escalation of tensions in the border region resulted in reported total of 865 persons. Villages that were severely attacked are Kwahaslalek, Kinat,

> Mairana and in kubwat, where displaced residents sought refuge in a community leader's home; they were surrounded and killed. 15000 people were displayed from their homes to IDD camps and other neighboring communities.

The conflict did not stop at attacks, many communities were displaced and attackers have claimed ownership of the areas. Data and local government officials highlight that 64 communities have been forcefully taken and were renamed by the attackers. Notable are: Gyambus, Kinat, Alohom, Tilengpat Washna, Changal, Kombili, Vodni, Tyop, Fungzai, among others (Cinjel & Danjuma, 2025).

Most of the affected communities were areas with vast and fertile land; areas that were traditional rich in agricultural production of staple food crops (maize, Irish potatoes, sweet potatoes, cowpea, millets etc.) were the most affected. Besides, the communities were predominantly practicing irrigation farming (Cinjel & Kefas, 2024). The Mangu people and precisely the Mwaghavul people who are the most affected by the attacks heavily relied on agricultural production. However, the rising wave of land invasion driven by both violent non-state actors seizing ancestral spaces and resources driven expansions has disrupted their traditional agrarian structures. This dispossession creates a critical vulnerability in local and national food systems, altering Mangu's status as a major food producing hub.

Statement of the Problem

Despite the high agricultural potential of Mangu LGA, food crop yields have drastically declined due to severe resource encroachment. According to Kasa et al. (2024), smallholder farmers lose significant proportions of arable land to coercive territorial expansions, which shrinks their average farm holdings. Local sources highlight that armed groups systematically target agrarian communities at the onset of the farming season to forcefully take over fields and prevent cultivation, a reality Governor Caleb Mutfwang termed as organized economic sabotage.

This forceful acquisition leaves affected smallholder households with fragmented, suboptimal plots or complete displacement. Consequently, there is an urgent need to empirically assess the quantitative and qualitative impacts of these land grabs on total agricultural output, crop varieties, and long-term investment in farm mechanization in Mangu LGA.

Research Questions

1. What is the nature of land invasion within agricultural communities in Mangu LGA?
2. How does land dispossession affect the total land area available for food crop cultivation by local farmers?
3. To what degree does land grabbing impact food security and agricultural income among rural households in Mangu LGA?

Objectives of the Study

The primary objective of this study is to examine the effect of land dispossession on

agricultural production in Mangu LGA. The specific objectives are to:

1. Identify the primary actors and mechanisms facilitating land grabbing in Mangu LGA.
2. Quantify the reduction in farmlands available to local farmers due to territorial occupations.
3. Evaluate the direct consequences of land dispossession on crop yield, farm income, and household food security.

Hypotheses of the Study

$H_0$1: The territorial expansions that affect agricultural production in Mangu LGA of Plateau State are not product of mutually exclusive factors do not significantly constitute the primary mechanisms of land dispossession in Mangu LGA.

$H_0$2: Forceful territorial acquisitions do not have a significant negative effect on the total size of arable land available to smallholder farmers for food crop cultivation.

$H_0$3: The displacement/ land dispossession resulting from land grabbing do not significantly reduce food security in Mangu LGA.

Significance of the Study

This research will provide empirical data crucial for policymakers, local governments, and civil society groups seeking to address structural threats to the agrarian economy of the Middle Belt. By uncovering the operational links between forced land acquisitions and food shortages, the findings will guide the institutionalization of community-based land-use management systems and strengthen the enforcement of anti-land grabbing laws in Plateau State.

Conceptual Review

(a) **Conflict**

Conflict arises from the pursuit of divergent interests, goals and aspirations by individuals or groups in defined social and physical environments. Change in the social environment, such as access to new political position, or perceptions of new resources arising from development in the physical environment, are fertile grounds for conflicts involving individuals and groups who are interested in using these new resources to achieve their goals. By recognizing the inherent nature of conflict in heterogeneous and competitive situations, people, more or less compellingly, sustain their societies as ongoing social system through the resolution, transformation and management of conflicts (Cinjel & Akende, 2015).

One of the most quoted traditional definitions of conflict regards it as "a struggle over values claims to scarce resources power and resources in which the aims of the opponents are to neutralize, injure, or eliminate their rivals" (Coser, 2010: 10). In the same direction, Park and Burgess (cited in Abdu, 2010) argue that "conflict is designed to resolve divergent dualism and achieve some kind of unity even if it is through the annihilation of one of the conflicting parties".

Conflict may not be regarded only in a negative light of dysfunctional or disjunctive process and a breakdown of communication as some scholars tend to suggest (Lundberg, 2000). Conflict is a conscious act involving personal or group contact and communication. Together with, though distinct from competition, struggle, and contest, etc. conflict is a normal process of interaction particularly in complex societies in which resources are usually scarce. Although conflict may generally exist "wherever incompatible activities occur" (Deutsch, 2000,p156), and may result in a win-lose situation; the resolution, transformation and management of conflict may produce a "win-win" outcome.

Hence Coser (2010, p10) elaborate definition of conflict becomes a useful clarification:

> Social conflict may be defined as a struggle over values or claims to status, power, and scarce resources, in which the aims of the conflicting parties are not only to gain the desired values but also to neutralize, injure, or eliminate their rival. Such conflict may take place between individual, between collectivities, or between individuals and collectivities. Inter-group as well as intra-group conflicts are perennial features of social life.

(b) **Land Occupation**

Land occupation is a recent concept in social sciences. It is of late that scholars have begun to develop interest on the concept. Land occupation entails the taking over of land from a group known as aborigines to a new comer's group. According to Jackson (2018), it is a forceful invasion of land by armed group for economic gains. He went further to state that the occupation is mostly built on interest; that is, mineral resources, land resources and agricultural production.

Land occupation is into the following types:

- **a. Land Grabbing:** This is the acquisition of a large portion of land by either an individual or group for certain uses. It is formal and is backed by agreement. It is also known as land acquisition.
- **b. Land Invasion:** This is the forceful taking over of a land using coercion and fight. It is not backed by law and it is a typical attribute of a traditional society. It is also known as land conquest. This is the type that study will concentrate on.
- **c. Land Annexation:** This is the forceful extension of a land by a dominant group. It is common with neighbouring countries or a colonial power.

(c) **Food Security and Food Insecurity**

The concept of *Food Security* is multidimensional and has no universal definition; it is easier to be identified than to be defined. Scholars, practitioners and institutions have presented their own meaning of the phenomenon in different ways and dimensions (Cinjel & Akende, 2015). The concept originated in the 1970s at a time when there were growing concerns of a global food crisis. The main thrust of the food and hunger discourse was centered on assuring steady food supply and availability; lesser attention was paid to price stability and access (Moses, 2015). A World Food Conference held in 1974 set an institutional arrangement to promote

food security globally. The outcome of this conference was a redefinition of the term food security. The concept was viewed as the availability of basic food supplies at all times and the ability to sustain production in the face of expanding food consumption to offset fluctuations in production and prices (Akpera–Tyough, 2016). In 1983, the World Food and Agricultural Organization (FAO) went a step further to include its availability for all in the society. FAO describes food security as "ensuring that all people at all times have both physical and economic access to basic food that they need (FAO, 1983). The World Summit of 1996 defines food security as "when all people, at all times, have physical and economic access to sufficiency and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO, 1996).

Food Insecurity on the other hand is the opposite; it is a term that denotes a condition of diffidence, lack, inadequacy, timidity and insufficiency in food production. Stephenson (2024) sees it as a state where food production decline as a result of factors which could be natural – earth quake, flood, drought, pestilence and disease or human factors such as: war, crop damage, high consumption and many more. The World Bank in its report "Hunger and Poverty" drew attention to the dynamics of food insecurity. The report categorised food insecurity into *chronic* insecurity that arise out of structural poverty associated with low incomes, and *transitory* insecurity which occurs in times of natural disaster or conflict. The report reaffirms the view held by FAO that food security entails access of all people at all times to enough food for an active and healthy life (World Bank, 1983). From the above, it could be deduced that there is food insecurity even the food is common but highly priced and only the upper class can have access to it. Thus, it can be deduced that food insecurity is a situation where food production and food availability fall, drop and degenerate and has resulted to absent, insufficient and weak supply.

Land Occupation Agricultural Production in Mangu LGA.

Mangu LGA of Plateau State used to be one of the peaceful local government areas in Plateau State. The area has lesser history of conflict compare to many LGAs in Plateau State. When Jos and many LGAs were engulfed in conflict in the early 2000s, it was one of the only LGAs that was not affected. Rather it was the safe haven to most of the displaced persons. The only conflict the LGA had ever witnessed were the ethnic conflicts between the Mwaghavul and the Ron in 1996 and the one between the Mwaghavul and the Pyem in 1999. And these ethnic conflicts were contained by the state within a little space of time (Cinjel& Kefas, 2024)

In 2012 downward, many villages began to be affected by incidence of night robbery and later, it transmogrified to kidnapping; herder-arable farmers' conflict were minimal and were then being curtailed by the traditional institutions. It was around 2015 and 2017; herder and arable farmers' conflict became more pronounced and changed in its dimension. With the increase in the case, the service of police force was sorted and they were able to manage many cases. Instead of decreasing, it kept soaring up and with each side building tension. The raid of a Fulani man who disputed a land with a Mwaghavul man by some youth group in Daika and open shot on a Fulani man who was herding on the food crop of a Mwaghavul arable Farmer in Washna, and the scene at Kiwes (Yidel) escalated the already built tension (Cinjel & Danjuma, 2025).

After the scene at Kiwes in 2023, the attacks became coordinated, intermittent and reprisal in its orientation. In 2024, the attacks were rampant and were carried in full scale. It was the same attacks that later translated to the 2024 ethnic and religious conflict in Mangu LGA. The herders were labeled Fulani while the arable farmers were the locals and predominantly the Mwaghavul farmers. In 2024, the Hausa and other Muslims from other ethnic group and even from the Mwaghavul divide team up in one side while the Mwaghavul farmers and other Christians from all other tribe in the local government area teamed up on the other side.

Human Rights Watch in its report in 2024, states that the coordinate attacks in 2024 in Mangu LGA was one of the worst bloodsheds in the history of Plateau state. It vividly captures it in this direction:

> In the Mangu attack of 2023 and 2024, many people were killed, over 850 were found dead and were mass buried. Apart from death toll, over 20, 000 persons were displaced in their communities. And over 79 communities were forcefully disposed and properties worth billions of naira were destroyed.

The most affected communities are: Alogom, Fungzai, Vodni, Tyop, kyambos, changal, Washna, Dang-Ndai, Kubwat, kwaghaslalek, Kantona, Mairana, among others. There were several interventions by the state and its security apparatus to mitigate the attacks but it kept reoccurring.

The attacks have disrupted many activities, it has brought a lot of business down, it has tuned many women to be widows and agricultural practices that is the mainstay of many persons in Mangu LGA had been put to near state of comatose. Mangu L.G.A that in past is seen as the hub of agriculture in the state had turned to home of bloodshed. The local government area that has sumptuous of vast and fertile land and is known for the production of staple crops such as maize, Irish, potatoes, sweet potatoes, cowpea, millet and groundnut had turned to theatre of war. The conflict has disrupted food production and many socio-economic activities. Notable communities that have fertile and vast land have been disposed. Human Rights Watch in its official documentation in 2021 have this to say:

> In the Mangu attacks, over 69 communities have been disposed and this communities were areas characterized by fertile and vast land. The farmers were the most affected groups; a lot of them were killed and those that survived the attacks were displaced.

The most affected communities in the attacks were areas predominantly known for the production of maize and irrigation of Irish potatoes and this includes *Kombili, Changal, Ndang-Dai, Kubwat, Washna,* among others; They were forcefully disposed by the assailants. Communities also known for the production of cowpea, sweet potatoes, millet and groundnut among others were also forcefully disposed as a result of the attacks. These disruptions have appalling effect on food production.

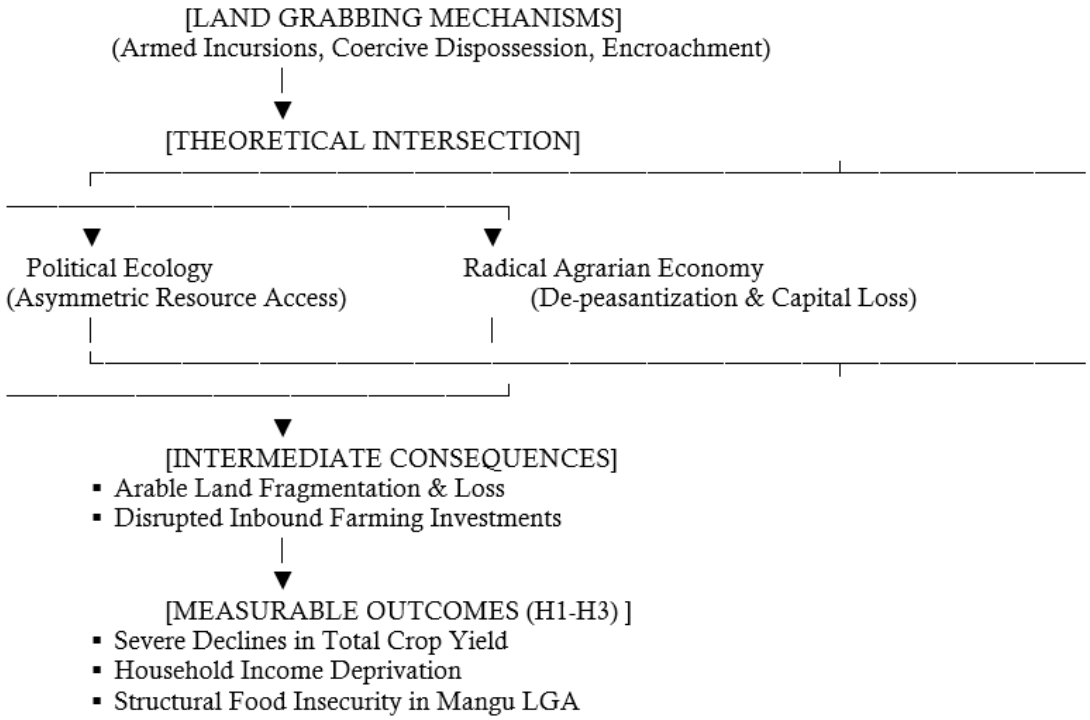
The agricultural output has sharply declined and this is primarily linked to the disposition, displacement and demise of many arable farmers in the affected communities. Mangu Local Government and specifically the areas inhabited by the Mwaghavul people have three (3) predominant market days. They second and one of the famous markets known for the sales of Irish potatoes and maize is the Ampang West market. The market normally holds on every Tuesday. People; marketers and farmers both within and outside the state patronizes the market. Statistical record from the Mangu LGA information unit reveals that before the conflict of the 2023 and 2024, in a single market day, over 80 trucks with six wheels (a six-wheeler or a tri-axle truck) usually comes and each carry 300-600 bags of food produce; which is approximately 28-30 metric tons. With the disruption from the attacks, the market was shut down and after it was re-opened, the output declined (both the yield of produce from the farmers and the rate of patronage from marketers) (Cinjel& Danjuma, 2025).

In the famous *Pushit* market, which is widely regarded as the third largest market in Mangu LGA, both yield and supply declined. The market normally holds on Wednesday and known for grains such as maize, cowpea, and millet. The statistics from information unit of the local government also revealed that the market before the herders- arable farmers conflict, do witness close to 80 six wheelers' trucks on every single market day. The records also show that the intermittent attacks have drastically led to the decline of both yield and patronage. A market that supplies 24,000 bags of grains (2,400 metric tons) on every single market day before the conflict cannot supplied 10 wheels truck (Cinjel& Danjuma, 2025).

The Mangu Friday market which is consider the biggest not just in the local government but in the entire state does not only witness drastic decline, it was closed for almost seven months. This is because during the attacks of 2024, it was one of the flash points where several persons were killed and goods worth billions of naira were destroyed. The patronage drastically reduces after it was reopened. Because of its location, which is surrounded by the communities inhabited by Muslim, the Christian in the local area hardly goes to the market. Rather an alternative market was created at *Dawo* where the Christians meet. Even after one year and several months of the 2024 incident, the market has failed to recover and this is partly due the decline in yield, supply and patronage. A market that supplies 30,000 bags of grains in a single market day is struggling to supply 6,000 bags (600 metric tons). This thus shows that the vast lands that were forcefully occupied has impacted agricultural practice negatively in the local government (Cinjel & Danjuma,2025; Datol &Gyang 2020).

Theoretical Framework

This study is guided by two complementary theories: The Political Ecology Theory and The Radical Agrarian Political Economy Approach.



a) Political Ecology Theory: This framework posits that environmental and resource changes are not merely natural or demographic, but are the direct result of asymmetric political and power dynamics. In Mangu LGA, the land question is explicitly tied to unequal political access, where vulnerable smallholder populations lack the political representation or security leverage to protect their ancestral domains from heavily armed networks.

b) Radical Agrarian Political Economy: This approach focuses on class relations, land accumulation, and the structural transformation of rural societies. It explains how land grabbing initiates a process of "de-peasantization," cutting off rural farmers from their ancestral production tools. This dynamic forces independent smallholders to abandon self-sufficient agriculture, transforming them into landless agricultural labourers or displaced, impoverished households.

Methodology

a) **Research Design:** This study adopts a convergent parallel mixed-methods research design, combining quantitative surveys with qualitative key informant interviews (KIIs) to provide a comprehensive analysis of the research problem.

b) **Population and Study Area:** The target population consists of smallholder farming households, community leaders, and agricultural extension officers across heavily impacted districts in Mangu LGA (including Mangu, Panyam, Pushit, and Kombun).

c) **Sampling Technique:** A multi-stage sampling technique will be utilized. First, purposive sampling will select four districts with the highest recorded incidents of agricultural land disruption. Second, simple random sampling will select 384 smallholder farmers from household registers across these areas to complete structured questionnaires.

d) **Data Collection Instruments:**
   - ***i. Quantitative:*** Structured questionnaires using a 5-point Likert scale to measure changes in cultivated land size, crop output volumes (e.g., maize and Irish potatoes), and annual household farm income.
   - ***ii. Qualitative:*** Semi-structured Interview Guides for KIIs with traditional rulers, heads of local farming cooperatives, and local government land officers.

e) **Method of Data Analysis:**
   - *i.* ***Quantitative Data:*** Analyzed using descriptive statistics (percentages, means) and inferential statistics—specifically Multiple Linear Regression Analysis and Chi-Square Tests of Independence via SPSS to test Hypotheses 1, 2, and 3 at a $\alpha = 0.05$ significance level.
   - *ii.* ***Qualitative Data****:* Analyzed using Thematic Analysis, transcribing verbatim narratives to complement and validate the statistical results.

f) **Data Presentation and Results**

The section presents and analyzes data that were obtained from the field. Simple descriptive statistical tools such as table, percentage and frequency count were employed. In the course of the study, 315 questionnaires were administered while 300 were retrieved. This thus shows that the study has 96% rate of return.

Table 1: Socio – Economic Characteristics of Respondents

S/N	Characteristics	Responses	Percentage %
a.	Sex		
	a. Male	170	57
	b. Female	130	43
	Total	300	100
b.	Religion		
	a. Christianity	220	73
	b. Islam	70	23
	c. Others	20	4
	Total	300	100
c.	Age Bracket		
	a. 18-20	10	4
	b. 21-30	50	17
	c. 31-40	200	79
	d. 40 and above	40	12
	Total	300	100
d.	Educational Qualification		
	a. FSLC	40	12
	b. SSCE	40	12
	c. NCE/ND	100	36
	d. HND/First Degree and others	120	40
	Total	300	100
e.	Marital Status		
	a. Married	80	27
	b. Single	80	27
	c. Widow/Widowers	80	27
	d. Divorce	60	19
	Total	300	100

Source: Researcher's fieldwork, 2026

The table above shows that 170 of the respondents representing 57% were from the male folk while 130 representing 43% of the respondents were from the female folk. This shows that both genders were given sense of consideration in the study.

The table above shows that 220 of the respondents representing 73% of the responses professed Christianity, 80 of the respondents representing 23% of the respondents professed Islam and 20 of the respondents representing 4% of the response practices other different faith. This thus shows that there are many religious groups in the study area and Christianity was the most predominant religion in the study area.

The table above shows that 10 of the respondents representing 4% were from the age bracket 18-20, 50 of the respondents representing 17% of the respondents falls under the age bracket 21-30, 200 of the respondents representing 79% falls under the age bracket 31-40 and 40 and above of the respondents representing 12% of the response falls under the age bracket 40 and above.

The table above shows that 40 of the respondents representing 12% of the responses were holder of FSLC, another 40 of the respondents representing another 12% possess SSCE, 100 of the respondents representing 36% of the responses were the older of NCE/ND and 120 of the respondents representing 40% of the responses were the holders of H.N.D, first Degree and other higher qualifications. This thus shows that the society is well read. This flows with the study of Sati (2024) who also attested that the Mangu people and specifically the Mwaghavul ethnic group are learned.

The table above shows that 80 of the respondents representing 27% of the responses were married, another 80 of the respondents representing another 27% of the responses were single, another 80 of the respondents representing another 27% of responses were widows/widowers and 60 of the respondents represent 19% of the responses were divorced/ separated. This thus shows that participation sprang across all age group, and divorce is common in the study area. So also, the conflict in the area has negative impact on the community.

Thematic Presentation of Objective One

The objective seeks to identify those factors facilitating land occupation in Mangu L.G.A. Likert 5-point rating scales were provided for the respondents to express their view.

Table 2: Nature of Land Conquest in Mangu L.G.A.

S/N	Items	Responses											
		SA	%	A	%	U	%	D	%	SD	%	WM	SD
1.	Violent attacks on communities	240	(80)	30	(10)	10	(3.3)	10	(3.3)	10	(3.5)	4.6	0.95
2.	The destruction of food crops	240	(80)	30	(10)	10	(3.3)	10	(3.3)	10	(3.5)	4.6	0.95
3.	Aggressors use sophisticated weapons	240	(80)	30	(10)	10	(3.3)	10	(3.3)	10	(3.5)	4.6	0.95
4.	The fear of recurring attacks	260	(86.7)	10	(3.3)	12	(40)	10	(3.3)	8	(2.7)	4.7	0.91
5.	Expansion of grazing	260	(86.7)	10	(3.3)	12	(40)	10	(3.3)	8	(2.7)	4.7	0.91
6.	Climate change	260	(86.7)	10	(3.3)	12	(40)	10	(3.3)	8	(2.7)	4.7	0.91
7.	Poor policy	260	(86.7)	10	(3.3)	12	(40)	10	(3.3)	8	(2.7)	4.7	0.91

Source: Researcher's Field work, 2026

The table above shows that 240 of the respondents representing 80% of the responses strongly subscribed to the view that the violent attacks meted on the affected communities contributes to land conquest in Mangu L.G.A, 30 of the respondents representing 10% of the responses also subscribed to the view, another 10 of the respondents representing another 3.3% were irresolute about their positions, another 10 of the respondents representing another 3.3% of the responses rejected the view and another 10 of the respondents representing another 3.3% strongly opposed the view. This thus shows that the violent nature of the attacks was one of the factors that contributed to land conquest in the study area.

The table above shows that 240 of the respondents representing 80% of the responses strongly attested to the view that the destruction of food crops was also one of the major factors that promote the land conquest in Mangu L.G.A, 30 of the respondents representing 10% of the responses also supported the view, 10 of the respondents representing another 3.3% opposed the view and 10 of the respondents representing another 3.3% of the responses strongly declined the view. This therefore shows that the destruction of food crops was one of the major factors that herald land conquest in Mangu L.G.A.

The table above shows that 240 of the respondents representing 80% of the responses strongly acknowledged that the use of sophisticated weapons by the assailant was one of the major factors that contributes to land conquest in Mangu L.G.A, 30 of the respondents representing 10% of the responses also supported the view, 10 of the respondents representing 3.3% were not sure of their stands, another 10 of the respondents representing another 3.3% refuted the claim and another 10 of the respondents representing 3.3% strongly rejected the view. This thus shows that aggressors that conquered the conquest communities used sophisticated weapons to conquer the areas.

The table above shows that 260 of the respondents representing 86.7% of the responses strongly attested to the claim that the fear of recurring attacks was also one of those factors that facilitate land conquest in Mangu L.G.A, 10 of the respondents representing 3.3% supported the view, 12 of the respondents representing 4% were irresolute, another 10 of the respondents representing another 3.3%, strongly rejected the view and 8 of the respondents representing 2.7% of the responses strongly rejected the view. This thus shows that fear of recurring attacks already built in the locals also contributes to land conquest in Mangu L.G.A.

The table above shows that 260 of the respondents representing 86.7% of the responses strongly supported the view that expansion of grazing was one of the factor that spur land conquest in Mangu L.G.A, 10 of the respondents representing 3.3% of the responses also supported the view, 12 of the respondents representing 4% of the responses were irresolute about their stands, another 10 of the respondents representing 3.3% of the responses rejected the view and 8 of the respondents representing 2.7% of the responses strongly rejected the view. This thus shows that grazing was also one of those factors that promoted land conquest in Mangu L.G.A.

The table above shows that 260 of the respondents representing 86.7% of the responses strongly attested to the existing relationship between climate change and land conquest in Mangu L.G.A, 10 of the respondents representing 3.3% also supported the view, 12 of the respondents representing 4% were indecisive, another 10 of the respondents representing 3.3% opposed the view and 8 of the respondent representing 2.7% of the responses strongly rejected the claim. This thus shows that climate change has contributed to land conquest in Mangu L.G.A.

The table above also shows that 260 of the respondents representing 86.7% strongly acknowledged that poor policing also contributes to land conquest in Mangu L.G.A, 10 of the

respondents representing 3.3% also supported the view, 12 of the respondents representing 3.3% rebuffed the claim and 8 of the respondents representing 2.7% strongly rejected the view. This therefore shows that poor policing contributes to the challenge of land conquest in Mangu L.G.A.

Thematic Presentation of Objective Two (2)

The objective seeks to quantity the reduction in farmland available to local farmers due to territorial occupation. Likert's 5-point rating scale was provided to respondents to express their views.

Table 3.

S/N	Items	Responses											
		SA	%	A	%	U	%	D	%	SA	%	WM	SD
1.	The conquest has shrunk active agricultural field	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91
2.	Many land are inaccessible to local farmers due to security threat	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91
3.	There is no enough local labour left to manage the land	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91
4.	Most of the capture areas are arable land	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91

Source: Researchers field work, 2026

The table above reveals that 260 of the respondents representing 86.7% of the responses strongly attested to the claim that the conquest has shrink active agricultural fields and this has direct effect on agricultural production, 10 of the respondents representing 3.3% subscribed to the view, 12 of the respondents representing 4% were irresolute, another 10 of the respondents representing another 3.3% objected the claim and 8 of the respondents representing 2.7% strongly opposed the view. This therefore shows that the conflict and the conquest have drastically reduced the size of arable land in the study area. An interview session with the leader of arable farmer shows that 30% of active and fertilize land were capture. The local government information also states that the affected communities in the attacks and conquest are predominantly arable lands and were famous for staple crop production. Human Rights Watch also corroborate this by stating:

> The affected communities are purely hub of agriculture – Kombeli, Washna, Dang Ndai, Alogom, Kyambos, Kwaghaslalek, etc. The river Kombeli is the major river that is used for irrigation of different crops – Irish potatoes, Tomatoes, Piper, Onions, Cabbage, Garden egg, etc. Annually a ton of close to 2100 is earned before they were affected by the conflict.

The table above also shows that 260 of the respondents strongly acknowledged that a lot of arable land are abandoned; not accessible and put into use, 10 of the respondents representing 3.3% supported the view, 12 of the respondents representing 4.0% were unsure of their stands,

another 10 of the respondents representing another 3.3% objected the view. This therefore shows that many land were not put to used; they were abandoned because they are closer to the communities that were captured. In an interview session with the chairman of the farmers' Association in Mangu, he states:

> The land that are not used and are not occupied is three times bigger than the captured areas. The assailants only cultivate few and used most of the areas as grazing areas. Besides that, the size of arable land that is abandoned due to fear is much. A lot of farmers do not want to take risks because many farmers were attacked in the fields.

The local government information unit also states that many arable lands are captured and many were abandoned; this is attributed to factor such as fear of attacks.

The table above also shows that 260 of the respondents representing 86.7% strongly subscribed to the view that the conflict has drastically let to the reduction in the size of local labour, 10 of the respondents representing 3.3% supported the view, 12 of the respondents representing 4.0% vacillated over their positions, another 10 of the respondents representing another 3.3% opposed the view and 8 of the respondents representing 2.7% strongly rejected the view. This thus shows that labour became insufficient because of the impact of land occupation. The Human Rights Watch in its documentary report states that over 850 people were killed, 15000 persons were displaced and over 200 were injured. Most of the people that were affected are not only the farmers but also those that render the service (local labour). In an interview session with the chairman of Mangu LGA arable farmers, he disclosed that the youth who usually provide the easy labour have left and many were displaced. He also states that many are still at the IDPs camp and some of them have left the local government area for other opportunities.

The table above also indicates that 260 of the respondents represented 86.7% of the responses strongly acknowledged that most of the captured areas are the hub of agriculture in the local government area, 10 of the respondents representing 3.3% subscribed to the view, 12 of the respondents representing 4.0% of the responses were irresolute, another 10 of the respondents representing another 3.3% objected the view and 8 of the respondents representing 2.7% strongly rejected the view. This thus shows that majority of the land captured are the vast and fertilize land for arable farming. The local government information unit reveals that 30% of arable land were captured and 47% of arable land are not put to use because of the fear of attack and that only 23% of land are utilizes and this justify why there were decline in yields and over dependent on food aid rather than self-production in the study area.

Table 4: Thematic Presentation of Objective Three (3)

S/N	Items	Responses											
		SA	%	A	%	U	%	D	%	SA	%	WM	SD
1.	Reduction of average cultivated area	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91
2.	Heavy reliance on food aid rather than self-production	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91
3.	Destruction of storage barns caused massive post-harvest food looses	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91
4.	Fear of attack has led to abandonment of arable land	260	86.7	10	3.3	12	40	10	3.3	8	2.7	4.7	0.91

Source: Researcher's Field work, 2026

The table above shows that 260 of the respondents representing 86.7% of the responses strongly acknowledged that the reduction in the average size of cultivate area affects agricultural production in Mangu L.G.A, 10 of the respondents representing 3.3% of the responses also support the view, 12 of the respondents representing 4% of the responses were unsure of their stands, another 10 of the respondents representing 3.3% of the responses rejected the view and 8 of the respondents representing 2.7% strongly rejected the view. This thus shows that decline in land size affect food crop production in Mangu L.G.A. This flow with the perception of Mr. Sunday who in an interview session disclosed that over 70 communities where forcefully taken and most of the communities were known for production of staple crops.

The table above also shows that 260 of the respondents representing 86.7% of the responses strongly accented to the view that majority of the locals in the affected communities relied on food aid rather than self-production, 10 of the respondents representing 3.3% supported the view, 12 of the respondents representing 4% were hesitant of their stands, another 10 of the respondents representing 3.3% rejected the view and 8 of the respondents representing 2.7% strongly opposed the view. This thus shows that majority of the affected communities relied on food aid rather than self-production. This tally with the report of HRW (2026) who asserted that the locals of the affected the communities survive on food aids that are supplied by NGOs and other organization for survival; they cannot go back to their captured communities and it is a setback to food production.

The table above shows that 260 of the respondents representing 86.7% of the responses strongly subscribed to the view that the destruction of storage barns by attackers affects storage and do causes massive post-harvest food loses, 10 of the respondents representing 3.3% supported the view, 12 of the respondents representing 4% wavered with their positions, another 10 of the respondents representing another 3.3% rejected the claim and 8 of the respondents representing 2.7% strongly opposed the view. This thus shows that many storages barns were destroyed and this has created massive post-harvest food loses.

The table above shows that 260 of the respondents representing 86.7% of the responses strongly acknowledged the view that the attacks have led to shortages of labour and this is a strong challenge to agricultural production, 10 of the respondents representing 3.3% supported the view, 12 of the respondents representing 4% vacillate over their stands, another 10 of the respondents representing another 3.3% rejected the view and 8 of the respondents representing 2.7% strongly declined the view. This thus shows that the attacks have led to shortage of labour and the shortage has appalling effect on food production. This tandem with the view of Saleh (2026) who states that many of the locals who are mostly the arable farmers were killed and many were forcefully displaced. Human Rights Watch in 2025 states that:

> In the attacks over 850 persons were killed, 15000 persons were displaced to IDPs camps, nearby communities and over 70 communities were forcefully taken in the Mangu L.G.A. attacks; this is a sad tale for many socio-economic activities.

The table above shows that 260 of the respondents representing 86.7% of the total responses strongly subscribed to the view that many farmers have abandoned their land because of fear of attack, 10 of the respondents representing 3.3% supported the view, 12 of the respondents representing 4% were hesitant of their views, another 10 of the respondents representing another 3.3% rebuffed the claim and 8 of the respondents representing 2.7 strongly rejected the view. This thus shows that abandonment of arable farmland due to fear of attack has an appalling effect on food production in Mangu L.G.A. In an interview session, Amos in 2026 disclosed that many farmers do not want to go back because a lot were attack and killed in the farm. He went further to state that the courageous people that do go, often hire the service of security personnel and mostly reduces land size and time of work because of the already developed fear.

Test of Hypotheses

In this session, the three formulated hypotheses were tested. Chi-square was used to test the first hypothesis; the second hypothesis was tested using ANOVA and simple regression was employed to test the third hypothesis.

Hypothesis One (1)

H_0: Several factors motivated land conquest that affects agricultural production in Mangu L.G.A.

Table 5: Chi-Square Test of Hypothesis One

Test	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.30	8	.000
Likelihood Ratio	333.201[a]		
Linear-by-Linear Association	70.01	8	.000
N of Valid Cases	350		

Source: SPSS (v. 23)

The computation above shows that the Pearson chi-square calculated value is 90.50 and the tabulated value is 10.40 at 8 degrees of freedom and 0.005 alpha level; $\chi^2cal = 90.50$, $p < 0.005$. This shows that the Pearson calculated value is greater than the chi-square tabulated value. In this case, we reject H_0 and accept H_1, and conclude that land conquest in Mangu L.G.A. of Plateau state is a product of multiple factors.

Hypothesis Two (2)

H_0: The forceful territorial acquisition does not have a significant negative effect on the total size of arable land available to farmers for food crop cultivation.

Table 6: ANOVA Summary Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	110.203	2	72.601	882.56	.000
Residual	16.826	281	.068		
Total	129.03	293			

Source: SPSS (v. 23). Dependent variable: food Crop Production.

In the computation, the PV is greater than 0.000 and with this, we upheld H_1 and reject H_0 and conclude that the forced territorial invasion has significant negative effect on the total size of arable land available to farmers for food crop cultivation.

Hypothesis Three (3)

H_0: The land dispossession resulting to land grabbing does not significantly reduce total agricultural crop yield in Mangu L.G.A. of Plateau.

Table 7: Model Summary

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1530.317	1	15302.347	1739.675	.000
Residual	6997.895	266	8.7516		
Total	22293.242	267			

a. Dependent variable: Agricultural crop yield

The table above reveals that the calculated value of *f* (1739.675) for the relationship between land conquest and decline in crop had an associated probability value of 0.000. Since the probability value of 0.000 is less than the 0.05 level of significance, the null hypothesis was rejected. Thus, there is a significant positive relationship between land conquest and deduction in crop yield in Mangu L.G.A of Plateau state.

Findings

(a) The chi-square test of independence statistically validates the alternative hypothesis (H_1), proving a statistically significant relationship between the causes of land conquest and the decline of agricultural production in Mangu Local Government

Area (LGA). By yielding a calculated chi-square value that exceeds the critical threshold at a 0.05 level of significance, the empirical data rejects the null hypothesis of independence. This mathematical validation demonstrates that aggressive land conquest—driven primarily by armed expansion, forced demographic shifts, and systemic land grabbing—directly dictates the collapse of local farming systems rather than acting as an isolated socio-political variable.

This statistical reality is thoroughly mirrored in regional data and institutional documentation. Official updates from the Plateau Peacebuilding Agency and human rights tracking by organizations like the Gideon and Funmi Para-Mallam Peace Foundation reveal a deliberate pattern where violent incursions peak at the onset of cultivation cycles to maximize economic sabotage. Reports show that tens of thousands of hectares of prime agricultural land across key districts in Mangu have been violently seized and occupied. State leadership, including Governor Caleb Mutfwang, has consistently affirmed that these operations transcend basic resource friction; they constitute an organized economic strategy aimed at altering land ownership and permanently disrupting the food supply of a major West African agricultural hub.

Qualitative accounts from key informant interviews bring human weight to these statistical and documentary findings. Displaced agrarian leaders and local community stakeholders express deep trauma, noting that the physical conquest of ancestral spaces has rendered continuous cultivation impossible. Interviewees explain that armed actors routinely use forced mass displacement and intentional crop destruction as tools to enforce territorial dominance. This forces local populations into internally displaced persons (IDP) camps and cuts off access to critical potato and maize fields. Ultimately, the convergence of the chi-square validation, formal oversight reports, and direct testimonies establishes that land conquest in Mangu is the primary, structural driver of severe food insecurity and the collapse of the local agrarian economy.

(b) The Analysis of Variance (ANOVA) successfully validated the alternative hypothesis, demonstrating a statistically significant impact of land conquest on the total land available for food crop cultivation in Mangu Local Government Area (LGA). The quantitative models indicate that territorial displacement and the violent annexation of agrarian spaces have systematically shrinking the physical footprint accessible to local farmers. These statistical findings are heavily corroborated by secondary documentary reports, including humanitarian situation updates and civil society registries, which detail the extensive abandonment of farmlands following waves of communal crises and targeted displacement. The convergence of the statistical variance and documented evidence confirms that land loss is not a random fluctuation but a direct, structural consequence of ongoing geopolitical and territorial conflict within the region.

This quantitative reality is further humanized and validated by qualitative data gathered from key informant interviews with local farmers, community leaders, and agricultural officers in Mangu LGA. Interviewees consistently reported that vast tracts of fertile, arable land have been rendered entirely inaccessible due to active occupation or the high security risks associated with venturing into outer farming frontiers. Farmers recounted how the fear of physical attacks has forced them to compress their cultivation activities into smaller, safer, but less fertile peri-urban fringes, leading to severe land fragmentation. By blending the ANOVA results with these poignant first-hand testimonies and administrative reports, the findings present an undeniable narrative: land conquest has severely undermined food crop cultivation capacity, threatening long-term food security and agricultural livelihoods across the council.

(c) Statistical analysis confirms a significant relationship between land conflict and agricultural decline in Mangu LGA, validating the alternative hypothesis. The simple linear regression model demonstrates that land conquest acts as a primary driver of food insecurity, showing a strong negative correlation with crop production yields. These statistical findings are heavily corroborated by qualitative field interviews with local farmers, who consistently report that forced displacements and the targeted destruction of farmlands have entirely halted planting cycles. Without secure access to their ancestral lands, farming communities have been reduced to subsistence-level survival, causing immediate food shortages and a severe drop in the local supply of staples like maize, potatoes, and grain.

Documentary evidence and regional reports further validate these findings, painting a grim picture of the systemic breakdown of local food security systems. Academic literature and humanitarian situation report tracking conflict in Plateau State document that the ongoing land grab strategy directly destabilizes rural economies. Field interviews with community leaders and agricultural extension officers reveal a shared consensus: the loss of land is not a temporary setback but a permanent disruption to the agricultural value chain. Ultimately, both quantitative data and eyewitness testimonies confirm that land conquest undermines the fundamental pillars of food availability, accessibility, and stability within Mangu LGA.

Conclusion

This study examined the effect of land dispossession on agricultural production, with particular attention to the factors facilitating land dispossession, its impact on agricultural production, the availability of land for food production, and its consequences for crop yield.

The study concludes that land dispossession constitutes a major challenge to agricultural production because it reduces farmers' access to and control over land, thereby limiting their ability to cultivate crops on a sufficient scale. Factors such as land grabbing, population growth, urban expansion, disputes over land ownership, unequal access to land, and weak enforcement of land rights may contribute to the problem. The dispossession of farmers from

their farmlands can reduce the land available for food production, disrupt farming activities, discourage agricultural investment, and undermine farmers' livelihoods.

Furthermore, reduced access to farmland may negatively affect crop yield because farmers may be forced to cultivate smaller plots, abandon established farming practices, or relocate to less suitable agricultural areas. These consequences can lead to lower agricultural output, reduced household income, increased food insecurity, and greater pressure on rural communities.

Based on the findings of the study, the null hypothesis was rejected, indicating that land dispossession has a statistically significant effect on agricultural production. This suggests that land dispossession is not merely a land ownership problem but also an important agricultural and socioeconomic issue that requires appropriate policy interventions. Therefore, protecting farmers' land rights, improving land administration, and ensuring equitable access to agricultural land are essential for improving crop yield, strengthening food security, and promoting sustainable agricultural development

Based on the findings, the following recommendations were proffered:

i. **Address the Factors Facilitating Land Dispossession:** Government should strengthen land administration and enforce existing land laws to address the major factors facilitating land dispossession. Traditional rulers, community leaders, and relevant government agencies should collaborate to prevent the unlawful seizure of farmland and protect farmers' land rights

ii. **Ensure Adequate Access to Farmland:** Government should introduce policies that protect farmers' access to agricultural land and prevent unnecessary displacement. Proper land-use planning, fair compensation, and equitable land allocation should be encouraged to ensure that sufficient land remains available for food production.

iii. **Improve Crop Yield among Affected Farmers:** Government and agricultural development agencies should provide affected farmers with improved seedlings, fertilizers, farm equipment, affordable loans, and extension services. These interventions will help farmers recover from the consequences of land dispossession and improve crop yields.

iv. **Strengthen Conflict Resolution Mechanisms:** Government should establish effective mechanisms for resolving land disputes among farmers, landowners, communities, and other land users. Dialogue, mediation, and timely intervention by relevant authorities should be encouraged to reduce land conflicts and promote sustainable agricultural production.

References

Abbott, P. (2010). *Land disputes, agricultural production, and societal conflict in Sub-Saharan Africa*. Academic Press.

Aliyu, M., & Dungus, F. (2025). Impact of farmers/herders crisis on farm crop destruction in local government areas of Plateau State. *Nigerian Journal of Corporate Social Responsibility*, 3(2), 45–58.

Anyanwu, S. (2026, August 17). *Fresh attack in Mangu claims at least 23 lives, leaves community in shock*. Federal Ministry of Information and National Orientation (FMINO).

Bernstein, H. (2010). *Class dynamics of agrarian change*. Fernwood Publishing.

Cinjel, N. D., & Kefas, S. (2024). Mwaghavul arable farmers – Fulani herdsmen conflict and socio-economic development in Mangu Local Government Area, Plateau State, Nigeria. *Nigerian Journal of Administrative and Political Studies*, 18(1), 112–128.

Cinjel, N.D & Kachi, D.J.(2014). Ethno-religious management and development in Barkin-Ladi. *ABU Journal of Public Administration*,Vol.(4)

Cinjel, N.D, Musa, L & Umaru, S. (2018). Empirical assessment of herders and farmers conflicts in Nigeria,2000-2017. *Nigeria Journal of Management Technology and Development*, Vol. 9(2), 68-79

Datol, I. G., & Gyang, T. S. (2020). Land fragmentation and the rising challenges of poverty in Mangu Local Government Area of Plateau State. *Journal of Agricultural and Development Studies*, 1(2), 89–101.

Datol, I. G., Gyang, T. S., & Pam, J. D. (2019). Land acquisition and use in Nigeria: Implications for sustainable food and livelihood security. *International Journal of Development and Sustainability*, 8(3), 194–207.

Davidson, H & Lytle, K.(2010). Myth and mobilization. The triadic structure of nationalist Rhetoric, *Nations and Nationalism*, 7(2), 175-192

International Crisis Group. (2023). Mitigating herder-farmer violence in Nigeria's Middle Belt (Africa Report No. 312).

Kwarpo, M. (2025, June 12). *Land grabbing, armed occupations, and the future of food security in Mangu South*. Plateau State House of Assembly Media Brief.

Mutfwang, C. (2026, April 24). *Land grabbing, economic sabotage fuelling Plateau insecurity [Media Chat]*. Leadership News.

Nwankwo, C. O. (2020). Farmers-herders clashes and agricultural output in central Nigeria. *African Livelihoods Review*, 9(4), 213–229.

Otile, O and Albert, O. (1999*). Community conflicts in Nigeria: Management, Resolution and Transformation*. Spectrum Books Limited

Pam-Mallam, G. (2023). *The humanitarian and agricultural consequences of community displacement in Plateau State*. Gideon and Funmi Para-Mallam Peace Foundation.

Shalangwu,P.S(1995). *The importance of adequate river flows to the economy of NEAZDP Area.* Proceeding of the 1995 NIPPS/HNWCP Workshop in Jos

Stephenson, B. (2023). *Conflict resolution and prevention*. Macmillan.

Stephenson, H. (2024). Socio-economic basis of farmers-pastoralist conflicts in Jigawa State. *African Political Science Review*, Vol. 10(2), 20-35