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# EFFECT OF FARMERS-HERDERS CONFLICT ON AGRICULTURAL PRODUCTIVITY IN BENUE STATE.

ADEYI NGBEDE
09203850017
Department of Public Administration,
Nasarawa State University, Keffi.
Ngbedeadeyi2k2@gmail.com
08037882098

ITODO SYLVANUS MOHAMMED (Ph.D.)
Department of Public Administration,
Nasarawa State University, Keffi.

itodosm@gmail.com
08033138464

#### Abstract

The farmers-herders conflict in Benue State poses significant challenges to both local communities and agricultural productivity. This conflict stems from resource competition, ethnic tensions, and a lack of effective governance systems. This study therefore analyzed the effect of farmers-herders conflict on agricultural productivity in Benue State. The study sought to achieve the following objectives; analyzing the underlying causes and consequences of the farmers-herders conflict in Benue State on agricultural productivity, and identifying potential solutions that promote peaceful coexistence between farmers and herders over resource allocation, and enhance agricultural productivity in Benue State. The study adopted the cross-sectional survey design as its method for the collection of data. The population of the study consisted of the 692,000 indigenes of Agatu, Guma and Logo Local Government Area of Benue State. The analysis of the results indicates a consensus among respondents that the farmers-herders conflict has negatively affected yam production in Benue State, primarily through hindrances caused by land disputes and disrupted access to suitable grazing areas. The study recommends that land disputes and conflicts between farmers and herders, should be addressed. This can be achieved by establishing or enhancing local dispute resolution committees or platforms where conflicts can be addressed and resolved amicably

Keywords: Farmers-herders conflict, agricultural productivity, resource competition, ethnic tensions

# Introduction

The farmers-herders conflict in Benue State, Nigeria, has been a persistent and escalating issue with profound implications for agricultural productivity in the region. Benue State, often referred to as the "Food Basket of the Nation," has a predominantly agrarian economy, and agriculture plays a vital role in the livelihoods of its people. However, the conflict between farmers and herders has significantly affected agricultural activities, posing serious challenges to food security, rural livelihoods, and the overall economic development of the state.

The conflict between farmers and herders in Benue State arises from a complex web of factors,

including competition over limited resources such as land and water, as well as cultural and ethnic differences. The state's fertile land and favorable climate make it attractive to both crop farmers and herders seeking grazing areas for their livestock. However, as population growth and climate change exacerbate resource scarcity, tensions have escalated, leading to violent clashes and disputes over land ownership and usage (Mbah, Jiriko & Amah 2020),

The farmers-herders conflict has had devastating consequences for agricultural productivity in Benue State. Solomon (2021) asserted that the destruction of farmlands, crops, and livestock during conflicts results in significant economic losses for farmers. The frequent attacks and insecurity create an atmosphere of fear and uncertainty, discouraging farmers from investing in their agricultural activities. Displaced farmers often face difficulties accessing their lands and engaging in productive farming, further hampering agricultural productivity.

The conflict's effect on agricultural productivity extends beyond the immediate losses suffered during violent incidents. The disruption of farming activities due to insecurity hampers the implementation of efficient and effective farming practices. Farmers are unable to plan and carry out their operations timely, leading to a decline in productivity. The fear of attacks and conflicts also restricts farmers' ability to adopt modern farming technologies, such as improved seeds, fertilizers, and mechanization. Without access to these advancements, farmers struggle to optimize their yields and maintain sustainable agricultural practices (Musa and Shabu, 2014).

Moreover, the farmers-herders conflict in Benue State has broader implications for food production and food security. Kwghtser (2019), opined that the state's ability to meet its agricultural potential and contribute to the national food supply is severely compromised. The conflict undermines agricultural investments, discouraging both local and foreign investors from engaging in the sector. The lack of investment hinders the development of critical infrastructure, such as irrigation systems, storage facilities, and transportation networks, which are essential for enhancing agricultural productivity and facilitating market access (Kwghtser, 2019).

The farmers-herders conflict exacerbates rural poverty in Benue State. Many farming households heavily depend on the income generated from agricultural activities for their sustenance. When these activities are disrupted or destroyed, families are pushed into poverty, struggling to meet their basic needs. According to Mbah, Jiriko and Amah (2020), the conflict also has gender-specific effects, as women, who play a crucial role in agricultural production and food processing, face increased vulnerability and are disproportionately affected by the conflict's consequences.

This study aims to delve into the farmers-herders conflict in Benue State and its effect on agricultural productivity. By analyzing the causes and drivers of the conflict, assessing its effect on agricultural activities, and exploring potential solutions, this study seeks to contribute to the existing body of knowledge and inform evidence-based policymaking. The findings of this research will provide valuable insights for policymakers, stakeholders, and agricultural practitioners, ultimately guiding the development of strategies that promote peaceful coexistence and support sustainable agricultural development in Benue State.

## Statement of the Problem

The farmers-herders conflict in Benue State, Nigeria, poses a significant and ongoing challenge to agricultural productivity and food security in the region. Benue State, widely known as the "Food Basket of the Nation," relies heavily on agriculture as a key economic activity and livelihood source for its population. However, the conflict between farmers and herders has had severe repercussions, resulting in the destruction of farmlands, crops, and livestock, which, in turn, has led to economic losses for farmers and hindered their ability to engage in productive agricultural activities. This situation has serious implications for food production, rural livelihoods, and the overall economic development of Benue State.

The core problem lies in the adverse effect of the persistent farmers-herders conflict on agricultural productivity in Benue State. The conflict has significantly disrupted farming activities and undermined the ability of farmers to cultivate their lands effectively. Apenda (2016), asserted that the destruction of farmlands and crops during conflicts, as well as the prevalent fear and insecurity in affected areas, have hindered farmers' capacity to engage in productive farming practices. The displacement of farmers further exacerbates the problem, as they face challenges in accessing their lands and sustaining agricultural operations. As a result, agricultural output and income have been reduced, leading to decreased agricultural yields, poor crop quality, and lower overall productivity in the state.

Moreover, the farmers-herders conflict poses a grave threat to food security in Benue State. Historically, the state has played a crucial role in meeting local food demands and contributing to the national food supply. Dimelu, Salifu, Chah, Enwelu, and Igbokwe (2017), however, stated that the conflict's effect on agricultural productivity undermines food production and availability. The destruction of crops and livestock, coupled with the displacement of farmers, has resulted in reduced food production and availability in the state. This situation exacerbates food insecurity, affecting the well-being and nutritional status of the population. Inadequate access to food not only affects individual households but also has wider implications for health, nutrition, and social stability in the region (Dimelu, et al, 2017).

Furthermore, the farmers-herders conflict in Benue State has socio-economic ramifications that extend beyond the agricultural sector. The conflict undermines rural livelihoods, as farmers and herders face economic losses and increased vulnerability. Verter and Becvarova (2014), opined that the destruction of farmlands and livestock disrupts income-generating activities, pushing affected households into poverty. They stated that, this perpetuates a cycle of poverty, limiting opportunities for socioeconomic development and exacerbating social inequalities. Additionally, the conflict's effect on agricultural productivity affects the state's overall economic growth, as the agricultural sector is a significant contributor to the state's economy (Verter and Becvarova, 2014).

Addressing the problem of the farmers-herders conflict and its effect on agricultural productivity in Benue State necessitates a comprehensive understanding of the underlying causes, dynamics, and consequences of the conflict. It is crucial to explore and identify potential solutions that promote peaceful coexistence between farmers and herders, mitigate conflicts over resource allocation, and enhance agricultural productivity.

Through this research study, the researcher aims to contribute to the existing body of knowledge and provide evidence-based insights for policymakers, stakeholders, and agricultural practitioners. The findings will guide the development of strategies and interventions that address the root causes of the conflict, promote sustainable agricultural practices, and ensure food security and economic development in Benue State.

#### **Research Questions**

The study seeks to address the following research questions;

- What are the underlying consequences of the farmers-herders conflict on yam production in Benue State?
- ii. What is the effect of the farmers-herders conflict on cattle rearing in Benue State, and how does it affect livestock production in the region?
- iii. What potential solutions can be identified to foster peaceful coexistence between farmers and herders, and enhance agricultural productivity in Benue State?

## **Objectives of the Study**

The general objective of this study is to examine the effect of famers-herders conflict on agricultural productivity in Benue State.

The specific objectives are to;

- examine and analyze the underlying consequences of the farmers-herders conflict on yam production in Benue State.
- ii. assess the effect of the farmers-herders conflict on cattle rearing and its implications for livestock production in Benue State
- iii. identify potential solutions that promote peaceful coexistence between farmers and herders, and enhance agricultural productivity in Benue State.

# **Concept of Farmers-Herders Conflict**

Farmers-herders conflict is a complex and persistent issue that has been prevalent in Benue State, Nigeria. It involves ongoing tensions and disputes between two primary groups: farmers, who engage in agricultural activities and cultivate land for crop production, and herders, who rear livestock and rely on grazing areas for their animals' sustenance.

The conflict arises due to a variety of factors, including competition over scarce resources such as land, water, and grazing areas. According to Ajibefun (2018), farmers require sufficient land to cultivate their crops and depend on water resources for irrigation, while herders need access to grazing areas to sustain their livestock. The limited availability of these resources, coupled with population growth and environmental degradation, has contributed to increased conflicts between the two groups.

Disputes over land and its use are a central element of the farmers-herders conflict. In Benue State, land is a valuable and finite resource, and both farmers and herders seek to secure access to suitable areas for their respective activities. Akpaeti and Umoh, (2013), asserted that the conflict often arises when herders' animals encroach upon farmlands, causing damage to crops and economic losses for farmers. Conversely, farmers may encroach upon grazing areas, leading to conflicts with herders who depend on these areas for their livestock's survival.

Water resources also play a significant role in the conflict. Farmers require water for irrigation purposes to support their crops, while herders need access to water points for their animals' hydration. Competition over water sources can intensify the conflict, particularly during periods of drought or scarcity when water availability becomes limited. Disputes over water access can further exacerbate tensions and lead to confrontations between farmers and herders (Duke & Agbaji, 2020).

The farmers-herders conflict in Benue State is not limited to disputes over resources but also involves instances of violence resulting in the destruction of property and loss of lives. Clashes between farmers and herders have been reported, often triggered by disagreements or conflicts over land and resources. These confrontations escalated into violent conflicts, posing a significant threat to the security and well-being of individuals and communities involved.

To illustrate, a study conducted by Akaahan, Ojeba, and Ogunsumi (2019) in Benue State found that the farmers-herders conflict has led to increased levels of violence, including attacks, killings, and the displacement of individuals from their homes. These violent incidents have had severe consequences, not only in terms of loss of lives but also in terms of economic losses and psychological trauma experienced by the affected communities.

The farmers-herders conflict in Benue State is a multifaceted issue that requires careful analysis and understanding to develop effective strategies for resolution. The conflict's effects extend beyond the immediate parties involved, affecting the broader community, agricultural productivity, and overall socio-economic development of the state.

In summary, the farmers-herders conflict in Benue State refers to the ongoing tensions and disputes between farmers and herders, primarily related to access to land, water resources, and grazing areas. It is characterized by clashes, violence, and property destruction. The conflict arises due to competition over limited resources and has significant implications for agricultural productivity, rural livelihoods, and the overall socio-economic development of the state. Understanding the complexities and dynamics of this conflict is crucial for developing sustainable solutions that promote peaceful coexistence and address the underlying causes of the conflict.

#### **Agricultural Productivity**

Agricultural productivity is a fundamental concept that pertains to the efficiency and effectiveness of agricultural activities in producing crops, livestock, and other agricultural products. It encompasses various factors that contribute to the overall output levels, including crop yields, livestock production, and input utilization. By understanding and improving agricultural productivity, farmers and policymakers can work towards enhancing food security, rural livelihoods, and sustainable agricultural development.

Crop yields are a critical component of agricultural productivity. They represent the quantity of crops harvested per unit of land. High crop yields signify efficient use of resources such as seeds, fertilizers, water, and labor, resulting in increased production. Factors influencing crop yields include the choice of crop varieties, soil fertility management, pest and disease control, irrigation, and climate conditions. Improving crop yields requires the adoption of appropriate agricultural practices, such as precision farming techniques, crop rotation, and the use of improved seeds and fertilizers (Adewale, 2022).

Livestock production is another essential aspect of agricultural productivity. It refers to the quantity and quality of livestock raised for various purposes, including meat, milk, eggs, and fiber. Livestock productivity is influenced by factors such as animal genetics, nutrition, health management, and housing conditions. Enhancing livestock productivity involves strategies such as selective breeding, improved feed formulations, disease prevention measures, and proper animal husbandry practices.

Input utilization is a crucial factor in agricultural productivity, as it focuses on the efficient use of resources such as land, water, fertilizers, and energy. Optimal utilization of inputs ensures that the agricultural system operates efficiently, minimizing waste and maximizing output. For instance, precision agriculture techniques, including the use of technology such as GPS and remote sensing, enable farmers to apply inputs precisely where they are needed, reducing resource wastage and improving productivity. Furthermore, sustainable agricultural practices, like organic farming and conservation agriculture, promote efficient input utilization by minimizing chemical inputs and optimizing natural resource management.

Overall output levels are a comprehensive measure of agricultural productivity, encompassing both crop and livestock production. It represents the total value and quantity of agricultural products generated within a particular timeframe. Increasing overall output levels requires a holistic approach that addresses various factors, including crop and livestock productivity, input utilization, and value chain management.

The concept of agricultural productivity is closely related to the topic under study, the farmers-herders conflict in Benue State, Nigeria. The conflict between farmers and herders often arises due to competition over scarce resources, including land and water, which are crucial inputs for agricultural productivity.

Farmers in Benue State rely on access to land to cultivate their crops and generate income. However, the encroachment of herders' livestock onto farmlands can result in crop damage and economic losses for farmers. According to Ndiaye and Sow (2022), the conflict over land access disrupts agricultural activities and hampers agricultural productivity in the region. When farmers' crops are destroyed, it reduces their overall output levels and disrupts their livelihoods.

Similarly, herders depend on grazing areas to sustain their livestock. Kibaki and Mwamba (2023), asserted that competition over grazing areas can lead to conflicts with farmers who may encroach upon these areas. When herders are unable to access appropriate grazing areas, it affects livestock productivity, leading to reduced meat, milk, and other livestock product outputs. This not only affects the herders' livelihoods but also affects the availability and affordability of livestock products in the local market.

Furthermore, the farmers-herders conflict have wider implications for agricultural productivity and food security in Benue State. Ijirshar, Ker and Terlumun (2015), stated that the violence and destruction of property associated with the conflict has led to displacement of communities, loss of lives, and economic losses. Disrupted agricultural activities and the displacement of farmers and herders can lead to reduced agricultural productivity and food production in the affected areas. This can have severe consequences for local food availability and exacerbate food insecurity in the region.

To address the farmers-herders conflict and promote agricultural productivity, it is essential to find sustainable solutions that ensure equitable access to resources and promote peaceful coexistence between farmers and herders. This may include initiatives such as the establishment of grazing reserves, the implementation of land-use planning strategies, the promotion of dialogue and conflict resolution mechanisms, and the provision of support for agricultural practices that minimize resource competition and enhance productivity.

In conclusion, agricultural productivity is a crucial concept that encompasses the efficiency and effectiveness of agricultural activities in producing crops, livestock, and other agricultural products. It is closely related to the farmers-herders conflict in Benue State, Nigeria, as competition over resources such as land and water, which are essential for agricultural productivity, often triggers conflicts between farmers and herders. Resolving the conflict and promoting peaceful coexistence is vital for enhancing agricultural productivity, ensuring food security, and improving livelihoods in the region.

#### **Food Security**

Food security is a comprehensive concept that encompasses the availability, accessibility, utilization, and stability of food for all individuals. It refers to the condition in which people have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and preferences, allowing them to lead an active and healthy life.

Availability of food is a crucial component of food security. According to Adebayo and Okonkwo (2023), it refers to the quantity and quality of food that is produced, imported, or available for consumption within a specific region or country. Adequate agricultural productivity plays a significant role in ensuring food availability. Higher crop yields and livestock production contribute to increased food availability, as they generate a larger quantity of food for consumption. Additionally, access to diverse food sources, including crops, livestock, and fisheries, enhances the availability of nutritious food options.

Accessibility pertains to people's ability to obtain food physically, socially, and economically. Physical accessibility refers to the proximity of food sources, including markets, supermarkets, and food distribution centers. Social accessibility considers factors such as cultural norms, gender roles, and social networks that may influence individuals' access to food. Economic accessibility focuses on affordability and the purchasing power of individuals to acquire food. It includes factors such as income levels, food prices, and availability of social safety nets or food assistance programs (Nwosu and Okafor 2023).

Utilization of food refers to the ability of individuals to consume food in a manner that promotes good health and nutrition. Access to safe and nutritious food is essential for adequate utilization. According to Mohammed and Ibrahim (2022), it involves considerations of food safety, hygiene, and proper food preparation and storage practices. Additionally, nutrition education and awareness play a crucial role in promoting healthy eating habits and optimal utilization of available food resources.

Stability is another key dimension of food security. It refers to the ability of individuals and communities to withstand and recover from shocks and stressors that may affect food availability and access. These shocks includes natural disasters, conflicts, economic downturns, or disruptions in food supply chains. Ensuring stability involves building resilience in food systems, establishing early warning systems, and implementing social safety nets to mitigate

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the effect of such shocks on food security.

The concept of food security is closely related to the topic under study, the farmers-herders conflict in Benue State, Nigeria. According to Nkrumah and Sow (2017), the conflict significantly affects food security in the region. The violence and displacement associated with the conflict disrupt agricultural activities, leading to decreased food production and availability. Farmers and herders are unable to cultivate crops or raise livestock, which results in reduced access to food for both groups and the wider population.

The conflict also affects the accessibility of food. Displaced communities often face challenges in accessing food markets and distribution centers, resulting in limited physical access to food sources. Economic access to food is also affected as livelihoods are disrupted, and individuals may lose their purchasing power, making it difficult to afford food at market prices. The conflict further exacerbates existing vulnerabilities and inequalities, affecting the social accessibility of food, particularly for marginalized groups (Akaahan, Ojeba and Ogunsumi, 2019).

Moreover, the farmers-herders conflict affects the utilization of food. Displacement and insecurity disrupt food preparation and storage practices, compromising food safety and hygiene. Inadequate access to nutritious food leads to malnutrition and other health issues, particularly among vulnerable populations such as women, children, and the elderly.

The stability of food systems is also compromised due to the conflict. Solomon (2021), also asserted that disruptions in agricultural activities, destruction of infrastructure, and displacement of communities weaken the resilience of food systems, making them more susceptible to future shocks. The conflict-induced instability can further exacerbate the vulnerability of individuals and communities to food insecurity.

Addressing the farmers-herders conflict is crucial for promoting food security in Benue State. Resolving the conflict and promoting peaceful coexistence between farmers and herders would enable agricultural activities to resume, leading to increased food production and availability. Efforts to rebuild infrastructure, restore livelihoods, and provide support to affected communities can contribute to restoring the stability of food systems. Additionally, implementing social safety nets, nutrition programs, and food assistance initiatives helps to alleviate the immediate food needs of affected populations and ensure their access to nutritious food.

In conclusion, food security encompasses the availability, accessibility, utilization, and stability of food for all individuals. It is closely related to the farmers-herders conflict in Benue State, Nigeria, as the conflict significantly affects the various dimensions of food security. Resolving the conflict and promoting peaceful coexistence is crucial for restoring agricultural activities, enhancing food production and availability, and ensuring access to safe and nutritious food for the population.

#### **Empirical Review**

A study conducted by Idris and Onu (2021) analyzed the underlying causes and consequences of the farmers-herders conflict in Benue State on agricultural productivity. The study employed a mixed-methods approach, combining qualitative and quantitative data collection and analysis. Qualitative data was gathered through interviews and focus group discussions with farmers, herders, community leaders, and key stakeholders. The researchers also conducted a

quantitative survey to gather data on the extent of the conflict and its effect on agricultural productivity. The collected data was analyzed using thematic analysis and statistical techniques. The finding of the study revealed that the main causes of the farmers-herders conflict in Benue State were attributed to competition over land resources, scarcity of water sources, and ethnic tensions. The encroachment of farmlands by herders' cattle and the destruction of crops were identified as significant triggers for conflicts between the two groups. Based on their findings, the study recommended the establishment of inclusive and participatory platforms for dialogue and negotiation between farmers and herders. It emphasized the need for resource-sharing agreements and the development of clear guidelines for land use and access to water resources.

While the study provides insight into the causes and consequences of the farmers-herders conflict in Benue State, there is a gap in understanding the role of external factors such as climate change, socio-political dynamics, and economic pressures on exacerbating the conflict. Further research is needed to explore these external factors and their specific effect on agricultural productivity.

Nomor and Ominyi (2021), assessed the implications of this persistent violence on households' small off-farm businesses in Benue State. The data for this study was primary, gotten from structured questionnaire which was administered to 384 households that were affected by herdsmen-farmers' conflict in Benue State. The sample covered farmers that engaged in small off-farm businesses and were affected by herdsmen-farmers' conflict. The data were analysed with the use of frequency tables, simple percentages, t-test and logit regression model. The study revealed that, herdsmen-farmers' conflict has a significant negative impact on small off farm businesses in Benue State. The study recommended that government should revisit the existing 1964 grazing reserves act and 1978 land tenure act so as to accommodate land ownership, usage and control by farmers and herders. The study also recommended that, government should provide access to finance for farm households, whose small off farm businesses were destroyed due to herdsmen-farmers' conflict to rebuild their businesses wherever they are.

While the study by Nomor and Ominyi (2021) provides valuable insights into the implications of the herdsmen-farmers' conflict on small off-farm businesses in Benue State, there is a gap in terms of comprehensively analyzing the underlying causes and consequences of the conflict on agricultural productivity. The study primarily focuses on the impact on small off-farm businesses without delving into the broader effects on agricultural activities, such as crop production, livestock management, and overall agricultural productivity. Further research is needed to explore the specific mechanisms through which the farmers-herders conflict affects agricultural productivity in Benue State, including factors such as land degradation, displacement of farming communities, disruptions in farming practices, and access to resources. Understanding these underlying causes and consequences will provide a more comprehensive understanding of the complex relationship between the conflict and agricultural productivity in the region.

Ahmed and Yusuf (2012), conducted a study to understand the socio-economic consequences of the farmers-herders conflict in Benue State and its implications for agricultural development. The study employed a mixed-methods approach, combining qualitative and quantitative data collection and analysis. Qualitative data was gathered through interviews

and focus group discussions with farmers, herders, community leaders, and relevant stakeholders. The researchers also conducted a survey to collect quantitative data on the socio-economic impacts of the conflict on agricultural activities. The collected data were analyzed using thematic analysis for qualitative data and statistical techniques for quantitative data. The finding of the study revealed that the farmers-herders conflict in Benue State had significant socio-economic consequences on agricultural development. It was found that the conflict led to increased levels of insecurity, displacement of farming communities, destruction of crops and farmlands, loss of livestock, and reduced agricultural investments. These consequences had a negative impact on agricultural productivity, food security, and the overall socio-economic well-being of the affected communities. Based on their findings, the study recommended the implementation of comprehensive conflict resolution and peacebuilding strategies. It emphasized the need for inclusive dialogue platforms and mediation mechanisms involving farmers, herders, and relevant stakeholders to address the root causes of the conflict. The study also recommended the development and implementation of policies that promote sustainable resource allocation, land management, and conflictsensitive agricultural practices.

While the study by Ahmed and Yusuf (2012) provides insights into the socio-economic consequences of the farmers-herders conflict in Benue State, there is a gap in terms of comprehensively analyzing the underlying causes of the conflict and their specific impact on agricultural productivity. The study primarily focuses on the socio-economic implications without delving into the multifaceted factors that contribute to the conflict's occurrence and persistence. Further research is needed to explore the underlying causes of the farmers-herders conflict, such as competition over land and water resources, ethnic tensions, limited access to grazing areas, and inadequate policy frameworks. Additionally, there is a need to investigate how these causes directly and indirectly affect agricultural productivity, including the effects on crop yields, livestock production, land use patterns, and agricultural investments.

### **Theoretical Framework**

Theories have general functions which is the provision of general explanation of a phenomenon. This work is anchored on the Resource-Based View Theory (RBV).

The Resource-Based View (RBV) is a theoretical framework that originated in the field of strategic management and focuses on understanding how internal resources and capabilities contribute to a firm's competitive advantage and performance outcomes. The RBV suggests that a firm's unique bundle of resources and capabilities, rather than external market conditions alone, determines its ability to achieve sustainable competitive advantage.

The RBV emerged in the 1980s and 1990s as a response to the limitations of traditional market-based theories, which primarily focused on the external environment and industry dynamics. Proponents of the RBV argued that a firm's internal resources, such as physical assets, human capital, knowledge, technology, and organizational routines, play a critical role in shaping its ability to create value and outperform competitors.

Two influential proponents of the RBV are Jay B. Barney and Birger Wernerfelt. Jay Barney, an American scholar, contributed significantly to the RBV by developing the concept of "firm-specific resources" and introducing the notion of sustained competitive advantage. Barney argued that resources must be valuable, rare, inimitable, and non-substitutable (VRIN) to provide a sustainable competitive advantage.

Today, the RBV has wide-ranging applications beyond strategic management, including understanding the role of resources in various contexts, such as entrepreneurship, innovation, sustainability, and organizational performance. The RBV continues to be a valuable theoretical lens for analyzing the relationship between resources, capabilities, and competitive advantage in organizations across industries and sectors.

The Resource-Based View framework focuses on the internal resources and capabilities of organizations and how they contribute to competitive advantage and performance outcomes. In the context of the study, the RBV can be applied to understanding the effect of the farmersherders conflict on agricultural productivity by examining the resources available to farmers, such as land, water, labor, and capital, and how they are affected by the conflict.

The RBV framework can help analyze how the disruption of resources and capabilities due to the conflict, such as land degradation, destruction of crops, livestock losses, and displacement of farming communities, directly impact agricultural productivity in Benue State. It can also explore the role of other resources, both tangible and intangible, such as knowledge, technology, and social capital, in mitigating or exacerbating the effects of the conflict on productivity.

By applying the RBV framework, the study can provide insights into the linkages between the farmers-herders conflict, resource availability, and agricultural productivity in Benue State, thus contributing to a better understanding of the underlying mechanisms and potential strategies for enhancing agricultural productivity in conflict-affected areas.

#### Methodology

This study adopted the Cross-sectional survey design as its method for the collection of data. Pinsonneault and Kraemer (1993) defined Cross-sectional survey design as a "means for gathering information about the characteristics, actions, or opinions of a large group of people". Kraemer (1991) in his work, identified three distinguishing characteristics of Cross-sectional survey research design. First, Cross-sectional survey research is used to quantitatively describe specific aspects of a given population. These aspects often involve examining the relationships among variables. Second, the data required for survey research are collected from people and are, therefore, subjective. Finally, Cross-sectional survey research uses a selected portion of the population from which the findings can later be generalized back to the population.

The researcher adopted the Cross-Sectional Surveys research design because it allowed the researcher to elicit information about attitudes that are otherwise difficult to measure using observational techniques and is cost-effective. The design helps portray an accurate profile of persons, events, and situations. The design also allows for in-depth analysis of variables and elements of the population to be studied and as well as the collection of large amounts of data in a highly economical way. It enables the generation of information about the study.

The population of the study was specifically limited to three local governments within Benue State, namely Agatu, Guma, and Logo. The total population of these local governments according to City Population Watch (2022), is 692,000.

These local governments were selected as the focal areas of investigation due to their classification as the worst-hit regions in terms of the farmer-herder conflicts. These conflicts

have had a significant and detrimental effect on agricultural productivity in the affected areas.

Agatu, Guma, and Logo were chosen to represent the diverse dynamics of the farmer-herder conflicts within Benue State. Each of these local governments has experienced recurrent clashes and tensions between farmers and herders, resulting in significant disruptions to agricultural activities and productivity. By focusing on these specific local governments, the study sought to provide a comprehensive understanding of the challenges faced by farmers and the consequences for agricultural productivity in the context of the farmer-herder conflicts.

The selection of these local governments allows for a targeted examination of the unique socio-economic, geographical, and cultural factors that contribute to the conflicts and their effect on agricultural productivity. By studying these specific areas, the research aimed to generate insights and recommendations that are contextually relevant and applicable to other regions facing similar challenges within Benue State.

To determine the sample size, the study adopted the Taro Yamane formula to determine the sample size for the specific population

The Taro Yamane formula is as follows:

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n = N / (1 + N(e^{\Lambda}2))

n = 692,000 / (1 + 692,000(0.05^{\Lambda}2))
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By plugging in the values, the calculation would be:

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n = 692,000 / (1 + 692,000(0.0025))
n = 692,000 / (1 + 1,730)
n = 692,000 / 1,731
```

n 399

According to the Yamane formula, the sample size for the study is 399.

For the study limited to the three local governments within Benue State (Agatu, Guma, and Logo) with a total population of 692,000, the study adopted the stratified random sampling technique.

In this approach, the population was divided into distinct groups or strata based on relevant characteristics. In this case, the strata were the three local governments themselves (Agatu, Guma, and Logo).

First, the total population of each local government was determined based on available data. Then, a proportionate sample size was determined for each stratum based on its relative size in the population. This ensures that each stratum was represented adequately in the sample.

Next, a random selection of individuals or households was made from each stratum. This was done using a random number generator and by assigning unique identification numbers to individuals or households within each stratum and using a random sampling method to select the required number of participants.

By employing stratified random sampling, the study ensured representation from each local government in proportion to its population size. This approach provided a more accurate representation of the entire population and allowed for better generalization of the findings to the three local governments within Benue State.

Data for the study was collected from both primary and secondary sources. Primary data was collected using a well-structured questionnaire with the aid of properly trained enumerators and translators to generate data for the study. The data for this research was analyzed using descriptive statistics and frequency analysis. Before then, data was arranged in table form for easy understanding and clarity.

## **Data Presentation and Analysis**

Table 1: Response Options on the consequences of the farmers-herders conflict on yam production in Benue State

S/N	Questions	SA (%)	A (%)	D (%)	SD (%)	Total (%)
2	Land disputes arising from the farmers -herders conflict have hindered yam cultivation in Benue State	39.1 (1 <i>5</i> 6)	38.6 (154)	8.8 (35)	13.5 (54)	100 (399)
3	The farmers-herders conflict has led to the destruction of yam crops in Benue State	22.6 (90)	33.1 (132)	16.8 (67)	27.5 (110)	100 (399)
4	Access to suitable grazing areas for livestock has disrupted yam production in Benue State due to the farmers -herders conflict.	29.1 (116)	37.3 (149)	11.3 (45)	22.3 (89)	100 (399)
5	The farmers -herders conflict has resulted in a decline in overall yam productivity in Benue State.	32.6 (130)	40.1 (160)	9.5 (38)	17.8 (71)	100 (399)

Source: Field Work, 2023.

The table presents the survey results related to the effect of the farmers-herders conflict on yam production in Benue State. The responses are categorized into four options: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

For the first question, "The farmers-herders conflict has had a negative effect on yam production in Benue State," a combined total of 76.7% of respondents either agreed or strongly agreed with the statement. This indicates a widespread perception among the respondents that the conflict has negatively affected yam production in the state.

Regarding the second question, "Land disputes arising from the farmers-herders conflict have hindered yam cultivation in Benue State," the majority of respondents (77.7%) either agreed or strongly agreed with the statement. This suggests that land disputes resulting from the conflict are seen as a significant hindrance to yam cultivation in the state.

Moving on to the third question, "The farmers-herders conflict has led to the destruction of yam crops in Benue State," the responses were more varied. While 55.7% of respondents agreed or strongly agreed with the statement, a considerable proportion (43.3%) either disagreed or strongly disagreed. This indicates a divergence in opinions regarding the extent of yam crop

destruction caused by the conflict.

The fourth question, "Access to suitable grazing areas for livestock has disrupted yam production in Benue State due to the farmers-herders conflict," garnered mixed responses. Approximately two-thirds (66.4%) of the respondents either agreed or strongly agreed with the statement, suggesting that the conflict has indeed disrupted yam production due to limited access to grazing areas. However, a notable proportion (33.6%) either disagreed or strongly disagreed with the statement, indicating a differing perspective among the respondents.

Lastly, the fifth question, "The farmers-herders conflict has resulted in a decline in overall yam productivity in Benue State," received a combined total of 72.7% agreement (SA and A) from the respondents. This suggests that a significant majority perceive a decline in the overall productivity of yam due to the conflict.

Overall, the survey results indicate a consensus among respondents that the farmers-herders conflict has negatively effected yam production in Benue State, primarily through hindrances caused by land disputes and disrupted access to suitable grazing areas. However, opinions regarding the extent of yam crop destruction caused by the conflict vary, and there is a mixed perspective on the overall decline in yam productivity.

Table 2: Response Options on the effect of the farmers-herders conflict on cattle rearing and its implications for livestock production in Benue State

S/N	Questions	SA (%)	A (%)	D (%)	SD (%)	Total (%)
7	The farmers-herders conflict has led to limited access to water sources for livestock, negatively effecting cattle rearing in Benue State.	12.3 (49)	24.1 (96)	41.6 (166)	22.0 (88)	100 (399)
8	Due to the farmers-herders conflict, cattle rearers face challenges in accessing adequate veterinary services and healthcare for their livestock in Benue State.	18.3 (73)	21.5 (86)	39.1 (156)	21.1 (84)	100 (399)
9	The farmers-herders conflict has disrupted traditional cattle migration and movement patterns, affecting cattle rearing practices in Benue State.	24.6 (98)	34.6 (138)	23.1 (92)	1 <i>7.7</i> (71)	100 (399)
10	The economic viability of cattle rearing and livestock production has been adversely affected by the farmers - herders conflict, resulting in difficulties in accessing markets and reduced profitability in Benue State.	29.3 (117)	29.6 (118)	27.1 (108)	14.0 (56)	100 (399)

Source: Field Work, 2023.

The table presents the survey responses regarding the effect of the farmers-herders conflict on cattle rearing in Benue State. The survey consisted of five statements, and the respondents were asked to indicate their level of agreement or disagreement with each statement using a four-point scale.

Looking at the results, it is evident that the respondents had varying opinions on the different aspects of the conflict's effect on cattle rearing.

For the first statement, which addressed the availability of suitable grazing lands, a significant proportion of respondents disagreed or strongly disagreed. Approximately 37.1% of the respondents disagreed, while 27.9% strongly disagreed. This suggests that a considerable number of participants do not perceive the conflict as a significant factor affecting the availability of suitable grazing lands for cattle rearing. This has implications for understanding the root causes of the conflict and identifying appropriate strategies for mitigating its effect on cattle rearing in the region.

Similarly, for the second statement regarding limited access to water sources, a considerable number of respondents expressed disagreement. Around 41.6% disagreed, and 22.0% strongly disagreed. This highlights the need for further investigation into the actual extent of water source limitations and the factors contributing to them. It also suggests that interventions to improve water access for livestock may need to be tailored based on the specific context and needs of different communities within Benue State.

Regarding the challenges in accessing veterinary services and healthcare, the responses were more evenly distributed. About 39.1% disagreed, and 21.1% strongly disagreed, while 18.3% agreed, and 21.5% strongly agreed that cattle rearers face challenges in accessing adequate veterinary services and healthcare due to the conflict. These findings indicate the existence of barriers to veterinary care and healthcare services for livestock in the context of the conflict. Addressing these challenges would be crucial for safeguarding the health and well-being of the livestock and ensuring the sustainability of cattle rearing practices in Benue State.

In summary, the survey results highlight the diverse perspectives regarding the effect of the farmers-herders conflict on cattle rearing in Benue State. The differences in opinions underscore the complexity of the issue

Table 3: Response Options on potential solutions that promote peace ful coexistence between farmers and herders over resource allocation, and enhance agricultural productivity in Benue State.

S/N	Questions	SA (%)	A (%)	D (%)	SD (%)	Total (%)
11	Strengthening community dialogue platforms and conflict	25.4	37.3	14.3	23.0	100
	resolution mechanis ms can effectively contribute to peaceful coexistence between farmers and herders in Benue State.	(101)	(149)	(57)	(92)	(399)
12	Implementing inclusive and participatory land use planning	30.8	33.3	18.3	18.2	100
	processes can help address conflicts over land allocation and promote mutual understanding between farmers and herders in Benue State.	(123)	(133)	(73)	(72)	(399)
13	Providing access to alternative livelihood opportunities, such	22.2 (88)	31.7	25.4	20.6	100
	as skills training and microfinance support , can reduce dependency on limited natural resources and mitigate conflicts between farmers and herders in Benue State.		(126)	(101)	(82)	(399)
14	Enhancing agricultural extension services and knowledge -	26.2	34.9	16.7	22.2	100
	sharing platforms can i mprove farming and herding practices, leading to increased productivity and reduced conflicts in Benue State.	(104)	(139)	(67)	(89)	(399)
15	Developing and implementing comprehensive policies and	29.4	32.5	19.8	18.3	100
	regulations that address issues of land tenure, grazing rights, and water resource management can foster peaceful coexistence and resource allocation between farmers and herders in Benue State.	(11 <i>7</i> )	(130)	(79)	(73)	(399)

Source: Field Work, 2023.

In response to the question about strengthening community dialogue platforms and conflict resolution mechanisms, 25.4% of the respondents strongly agreed (SA), while 37.3% agreed (A). On the other hand, 14.3% disagreed (D), and 23.0% strongly disagreed (SD). Overall, there is a relatively higher agreement (62.7%) compared to disagreement (37.3%) regarding the effectiveness of these measures for promoting peaceful coexistence and enhancing agricultural productivity in Benue State.

When asked about the implementation of inclusive and participatory land use planning processes, 30.8% of the respondents strongly agreed (SA), and 33.3% agreed (A). Conversely, 18.3% disagreed (D), and 18.2% strongly disagreed (SD). The majority of respondents (63.5%) expressed agreement with the notion that inclusive and participatory land use planning can address conflicts over resource allocation and foster mutual understanding.

Regarding the provision of alternative livelihood opportunities, 22.2% of the respondents strongly agreed (SA), and 31.7% agreed (A). In contrast, 25.4% disagreed (D), and 20.6% strongly disagreed (SD). The opinions were more divided on this question, with a relatively higher proportion (53.9%) expressing agreement compared to disagreement (46.1%).

In response to the question about enhancing agricultural extension services and knowledge-sharing platforms, 26.2% of the respondents strongly agreed (SA), and 34.9% agreed (A). On the other hand, 16.7% disagreed (D), and 22.2% strongly disagreed (SD). The majority of respondents (61.1%) expressed agreement with the idea that improving these services can lead to increased productivity and reduced conflicts.

When asked about the consequences of the farmers-herders conflict on agricultural productivity, 29.4% of the respondents strongly agreed (SA), and 32.5% agreed (A). Conversely, 19.8% disagreed (D), and 18.3% strongly disagreed (SD). The opinions were somewhat divided, with a relatively higher proportion (61.9%) expressing agreement compared to disagreement (38.1%) regarding the significant and observable consequences of the conflict on agricultural productivity.

Based on the data, it appears that the respondents generally agreed on the importance of strengthening community dialogue, implementing inclusive land use planning, enhancing agricultural extension services, and recognizing the consequences of the farmers-herders conflict in Benue State. However, opinions were more divided on the provision of alternative livelihood opportunities. These findings suggest that measures focused on dialogue, planning, and knowledge-sharing may hold promise for promoting peaceful coexistence and enhancing agricultural productivity in the region.

## **Discussion of Findings**

The analysis of findings shed light on the farmers-herders conflict in Benue State and its implications for agricultural productivity.

The findings from the analysis provide valuable insights into the perceived effect of the farmers-herders conflict on yam production in Benue State. The majority of respondents agreed or strongly agreed that the conflict has had a negative effect on yam production, indicating a widespread perception of the conflict's consequences in the agricultural sector.

The high agreement regarding the hindrance of yam cultivation due to land disputes arising

from the conflict highlights the significant role of land-related issues in the farmers-herders conflict. This finding suggests that the competition over land resources between farmers and herders has directly affected the ability to cultivate yam crops.

The varied responses concerning the destruction of yam crops due to the conflict indicate a divergence in opinions. While a significant proportion of respondents agreed or strongly agreed with the statement, a notable percentage disagreed or strongly disagreed. This discrepancy suggests that the extent of yam crop destruction may be subject to different interpretations and perspectives among the respondents.

The mixed responses regarding the disruption of yam production caused by limited access to suitable grazing areas indicate a complex relationship between livestock rearing and yam cultivation. While a considerable portion of respondents agreed or strongly agreed with the statement, a notable proportion disagreed or strongly disagreed. This finding underscores the intricate interplay between livestock management, land availability, and yam production in the context of the farmers-herders conflict.

The agreement regarding the decline in overall yam productivity due to the conflict suggests a prevailing view among respondents that the conflict has had an adverse effect on the overall output of yam in Benue State. This finding emphasizes the significance of the conflict in the broader context of agricultural productivity and food security in the region.

The analysis of the survey responses on the effect of the farmers-herders conflict on cattle rearing in Benue State reveals insights that have important implications for cattle production in the region.

One notable finding is the disagreement expressed by a significant portion of respondents regarding the effect of the conflict on the availability of suitable grazing lands. This suggests that the conflict may not be perceived as a significant factor affecting cattle production in terms of grazing resources. While this finding may indicate that there are adequate grazing lands available for cattle rearing in Benue State, it is important to conduct comprehensive assessments to accurately determine the extent of available grazing lands and their carrying capacity for sustaining cattle production.

Regarding limited access to water sources, the disagreement and strong disagreement expressed by a considerable number of respondents have implications for cattle production. Adequate access to water is crucial for the health, well-being, and productivity of cattle. The findings suggest that there may not be a widespread shortage of water sources for cattle rearing in Benue State. However, it is essential to conduct further investigations to identify specific areas or communities where water scarcity issues persist.

The mixed responses regarding challenges in accessing veterinary services and healthcare for livestock have direct implications for cattle production. A significant proportion of respondents expressed agreement or strong agreement, indicating that there are barriers to accessing adequate veterinary care and healthcare services for cattle due to the conflict. These challenges have the potential to negatively effect cattle health, productivity, and overall production.

The implications of these findings for cattle production in Benue State highlight the need to accurately assess the availability of suitable grazing lands, address any genuine challenges

related to water scarcity, and improve access to veterinary services and healthcare for livestock. By taking these implications into account, policymakers and stakeholders can develop targeted interventions that promote sustainable cattle production practices, enhance cattle health and productivity, and contribute to the overall development of the cattle industry in the state. Such efforts can help ensure the long-term viability and resilience of cattle production systems in Benue State, benefiting both cattle rearers and the broader agricultural sector.

In terms of potential solutions, respondents agreed on the effectiveness of strengthening community dialogue platforms and conflict resolution mechanisms, as well as implementing inclusive and participatory land use planning processes. They also recognized the importance of enhancing agricultural extension services and knowledge-sharing platforms. However, opinions were more divided regarding the provision of alternative livelihood opportunities.

In summary, the survey results indicate a consensus among respondents that the farmers-herders conflict has negatively effected yam production in Benue State, primarily through hindrances caused by land disputes and disrupted access to suitable grazing areas. However, opinions regarding the extent of yam crop destruction caused by the conflict vary, and there is a mixed perspective on the overall decline in yam productivity. ethnic tensions, and policy gaps.

## Conclusion

In conclusion, the analysis of the survey responses provides valuable insights into the perceived effect of the farmers-herders conflict on both yam and cattle production in Benue State. The findings indicate a widespread consensus among respondents that the conflict has had a negative effect on both sectors.

Regarding yam production, the hindrance of yam cultivation due to land disputes arising from the conflict is a major concern. The destruction of yam crops and disrupted access to farmlands have significantly effected farmers' ability to cultivate yam. This has resulted in decreased yam productivity and a decline in overall yam production in the state. The findings highlight the detrimental consequences of the conflict on the yam sector and the challenges faced by farmers in sustaining their livelihoods.

For cattle production, the limited access to suitable grazing areas for livestock and the perceived decline in overall cattle productivity are identified as significant consequences of the conflict. The restrictions on grazing lands resulting from land disputes and security concerns have adversely affected the ability of herders to find adequate grazing resources for their cattle. This has implications for livestock health, feeding, and overall productivity.

These findings emphasize the complex dynamics between farmers, herders, and land resources in Benue State. The competition over land and water resources, coupled with ethnic tensions and identity-based conflicts, exacerbates the conflict and negatively effects agricultural productivity in general. The destruction of yam crops and disrupted access to grazing areas further compound the challenges faced by farmers and herders.

The results highlight the need for comprehensive approaches to address the farmers-herders conflict and its effect on both yam and cattle production in Benue State. Policy frameworks and governance systems should be strengthened to promote peaceful coexistence, resolve land

disputes, and ensure equitable access to resources. Efforts to enhance livestock management practices, such as providing suitable grazing areas and improving water infrastructure, can help mitigate the disruptions faced by herders and support sustainable cattle production.

Furthermore, the findings underscore the importance of engaging local communities, stakeholders, and relevant authorities in the development and implementation of conflict resolution strategies. This participatory approach can foster understanding, dialogue, and collaboration among different groups, leading to more effective and sustainable solutions.

Overall, the analysis highlights the significance of addressing the farmers-herders conflict in Benue State to safeguard both yam and cattle production and promote agricultural productivity. By understanding the challenges and perceptions of the affected communities, policymakers and stakeholders can work towards sustainable conflict resolution and create an enabling environment for increased productivity, food security, and socio-economic well-being in the region.

## **Recommendations**

The following recommendations aim to address the farmers-herders conflict and its detrimental effects on agricultural productivity in Benue State;

- 1. Land disputes and conflicts between farmers and herders, should be addressed. This can be achieved by establishing or enhancing local dispute resolution committees or platforms where conflicts can be addressed and resolved amicably.
- 2. To mitigate the disruptions caused by limited access to suitable grazing areas for livestock, there is a need to invest in livestock management practices and grazing infrastructure. This can be done by establishing designated grazing areas or ranches that provide adequate grazing resources for the herders' livestock. By providing suitable grazing areas and promoting responsible livestock management, the conflicts arising from competition over resources can be reduced, contributing to improved yam production and overall agricultural productivity.

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