COSMAS, TASFUED
Ijagun Journal of Social and Management Sciences

Effect of Boko Haram Insurgency on Cattle Trade in Yobe State, Nigeria: A comparative Analysis of Market Performance, Traders Income, and Profitability

[1]Ishaka, I. M.; [2]Yahamman, U. I. and [1]Eji, S. E.
[1]Department of Geography, Yobe State University, Damaturu, Yobe State
[2]Department of Geography, Nigeria Army University Biu, Biu, Borno State
Corresponding author: *ishakaimohd@gmail.com*

Abstract
The cattle trade is a crucial economic activity in Yobe State, Nigeria, particularly in rural communities whose livelihoods depend heavily on it. The *Boko Haram* insurgency has severely disrupted this trade, altering market operations, supply chains, and traders' income. This study analyzed the effect of the insurgency on cattle trade in three major markets in Yobe State before and after the conflict, describing the nature and frequency of attacks and examining traders' costs and returns across both periods. Purposive sampling was used to select the markets, while systematic sampling selected 249 cattle traders across the three markets. Quantitative and qualitative data were collected via Interview Schedule and Focus Group Discussion (FGD) and analyzed using descriptive statistics, while gross margin analysis evaluated profitability and market margins for different cattle sizes before and after the insurgency. Findings show that arson, sporadic shootings, kidnappings, suicide bombings, use of Improvised Explosive Devices, threats, and assassinations were the main forms of attack on traders, with about 96% of respondents reporting having experienced insurgency attacks, sporadic shooting being the most prevalent. Insurgent activity disrupted the cattle supply chain, affecting production, distribution, and market access, and raising costs and logistical challenges. Despite this, markets showed resilience in pricing and profitability, each displaying unique trends, with small-sized cattle emerging as the most profitable category. Transportation costs rose sharply post-insurgency due to heightened security risks, fuel price increases, and checkpoint delays. The study recommends targeted infrastructure improvements, diversified supply sources, enhanced security, and inclusive growth strategies for the cattle trade amid ongoing conflict and insecurity.

Keywords: Boko Haram Insurgency, Cattle Trade, Market Performances, Gross Margin Analysis, Livelihoods

1. Introduction

Cattle trade has long been a vital economic and cultural pillar across Africa (Blench, 2021). Cattle trade contributes significantly to the economic and social well-being of people in developing countries, offering a variety of benefits such as providing nutritious food, serving as an income source, and acting as assets for borrowing, organic fertilizer, and energy for cultivation or transport. Interestingly, while developing countries host about two-thirds of the global cattle population, developed countries account for around two-thirds of total beef production (Food and Agriculture Organization of the United Nations (FAO), 2019).

Cattle in Nigeria are ship from north to southern markets through regional and local trade corridors. Hooves conveyance (trekking), railway carriage and road trackage are the major means of transport based on western and eastern corridors. The major corridors, include Lagos – Kano – Jibiya (Lakaji), Sokoto – Lagos Kano – Benin – Warri, Maiduguri – Port-Harcourt, Yola – Calabar and Maiduguri – Abuja – Lagos. Local corridors have been generated from cattle trade between production zones and the local markets, and between the markets in Nigeria. The challenges of the trade corridors include insecurity, inadequate and poor infrastructure, expensive production, charges and barriers, cumbersome formal trade conditions, inadequate finance and defective government policies (Gambo, 2020).

The cattle trade in Yobe State, Nigeria, represents a microcosm of global trade dynamics distorted by insurgency (Bulus, 2023). *Boko Haram* insurgency, beginning in 2009, fragmented trade corridors, inflated costs, and displaced traders, eroding the north's comparative advantage (Okoli *et al.,* 2023). For instance, the Maiduguri-Abuja corridor, once a lifeline for 80% of Yobe's cattle trade, became a battleground, reducing throughput by 60% between 2010 and 2022 (Bulus, 2023). Modern trade complexities demand frameworks like economies of scale, imperfect competition, and product differentiation (Krugman, 2020).

Empirically, *Boko Haram's* rise in 2009 weaponized

Ishaka, I. M.; Yahamman, U. I. and Eji, S. E. (2026). Effect of Boko Haram Insurgency on Cattle Trade in Yobe State, Nigeria: A comparative Analysis of Market Performance, Traders Income, and Profitability, *Ijagun Journal of Social and Management Sciences (JOSMAS),* vol. 10, no.2, pp.11-19.
©COSMAS Vol. 10, No. 2, Nov 2026.

cattle trade, mirroring global patterns where insurgents exploit natural resources. Key tactics involved cattle rustling and stole about 1.2 million cattle between 2010–2023, generating ₦12 billion ($15 million) annually through cross-border smuggling (Lake Chad Basin Commission, 2024). Market attacks such as the bombings at Potiskum Market (2012) reduced throughput from 5,000 to 800 cattle weekly, displacing 60% of traders (Bulus, 2023). In Maiduguri's Kasuwan Shanu market, cattle supply dropped by 96% during peak insurgency years (2014–2020), while monthly trader incomes fell from ₦80,000+ to less than ₦80,000 for 57% of traders Mohammed *et al.* (2020). Similar disruptions occurred in Yobe State, where insecurity reduced cattle sales by 70% and forced traders to abandon markets due to insurgent extortion (e.g., ₦500,000 monthly "taxes" per truckload). These attacks fragmented regional supply chains, redirecting trade to informal networks controlled by armed groups Hassan (2020). Furthermore, insurgents impose "protection fees" in the form of forced taxation (₦50,000–₦100,000 per trader monthly), replicating *Al-Shabaab's* extortion in Somalia (Conflict Survey Initiative, 2024). Similar patterns emerge globally: in Mali, stolen cattle fund Jama'at Nusrat al-Islam wal-Muslimin (JNIM) $8.6 million operations (ADF Magazine, 2025), while Somalia's Al-Shabaab controls 30% of livestock exports (UN Security Council, 2022). In Nigeria's Middle Belt, cattle theft drives 60% of farmer-herder clashes, displacing 300,000 people (Conflict Survey Initiative, 2024).

Livestock production, particularly cattle trade, is a cornerstone of Yobe State's economy, sustaining over 60% of households engaged in agro-pastoral activities (FAO, 2016). Markets like Potiskum, Gujba Buni Yadi, and Tarmuwa Babbangida serve as critical hubs, generating employment and revenue while connecting pastoralists to regional buyers (Abdullahi, 2021). However, the *Boko Haram* insurgency has devastated this sector through targeted attacks on markets, cattle rustling, and forced displacement of traders (Abigail, 2022). For instance, Potiskum Market, once handling 5,000 cattle weekly, saw a 70% decline in trade volume post-2015 due to bombings and extortion (Yobe Agricultural Development Agency, 2020).

The recurring raids on markets like Gujba Buni Yadi where attacks spiked from 2 incidents in 2014 to 18 annually by 2022 (Conflict Survey Initiative, 2023). These highlight the need to study attack patterns. Before the insurgency, 80% of Yobe's cattle originated from local pastoralists, but by 2015, traders increasingly sourced from Cameroon and Niger to bypass insecure routes (Lake Chad Basin Commission, 2024). Understanding these shifts clarifies how supply chains adapt to conflict, a gap noted in studies of Sahelian trade networks (Okoli, 2020). Insurgent roadblocks and extortion (e.g., ₦500,000 per truckload) forced traders to abandon trucks for risky nighttime foot treks, altering transport logistics (Ibrahim, 2023). Simultaneously, hardy breeds like Red Bororo and white Fulani cattle dominate post-insurgency trade due to their resilience to long journeys and ability to thrive under different condition a survival strategy undocumented in prior studies. Furthermore, before *Boko Haram* insurgency, small-scale traders earned ₦80,000 monthly, but post-attacks, profits fell by 40% due to inflated transport costs and cattle theft (Musa, 2024). Quantifying these losses through variable cost analysis reveals the insurgency's microeconomic toll (National Bureau of Statistics, 2023).

The aim of this study was to analyze the trends in cattle trade activities before and after *Boko Haram* insurgency in Yobe state, Nigeria. The specific objectives are to:

i. Describe the nature and frequency of insurgency attacks in the study area and;
ii. Examine the costs and returns of traders before and after the insurgency in the study areas.

2. Material And Methods

Study Area

Location and Size

Yobe State, located between latitudes 11° 45'N - 13° 30'N and longitudes 9° 30'E - 12° 30'E, is significant for cattle trade due to its strategic location. It borders Borno, Gombe, Jigawa, and Bauchi States, and shares an international border with Niger Republic. The state's large area of about 45,502 km² enhances its role as a major hub for cattle rearing and trade, attracting buyers and traders from across Nigeria and neighboring countries (Musa & Shaibu, 2020). The study focuses on three LGAs, Gujba Buni Yadi, Tarmuwa, and Potiskum, each with prominent cattle markets that form key nodes in the supply chain.

Economic Activities

Agriculture, especially livestock farming, is the backbone of Yobe State's economy, contributing about 40% to the state's GDP (Yobe State Statistical Year Book, 2017). The Potiskum cattle market, renowned as one of the largest in Nigeria, serves as a critical hub in the national cattle trade network, attracting traders from across Nigeria and neighboring countries (FAO, 2016). Cattle trade not only provides direct employment to herders and traders but also supports ancillary industries such as transportation, feed supply, and cattle market services. The frequent insurgency activities in the region, however, have disrupted cattle trade, leading to reduced market attendance, cattle rustling, and significant economic losses for traders (Abigail, 2018).

Yobe state agricultural zones, including the Sahel and Sudan Savannah, provide essential resources for cattle rearing. The Sahel zone is conducive for growing millet, maize, and sorghum, which are used to supplement cattle feed, while the Sudan Savannah supports more diverse crop production, improving the livelihood of those engaged in both agriculture and livestock trade (FAO & ICRISAT, 2019). This dual

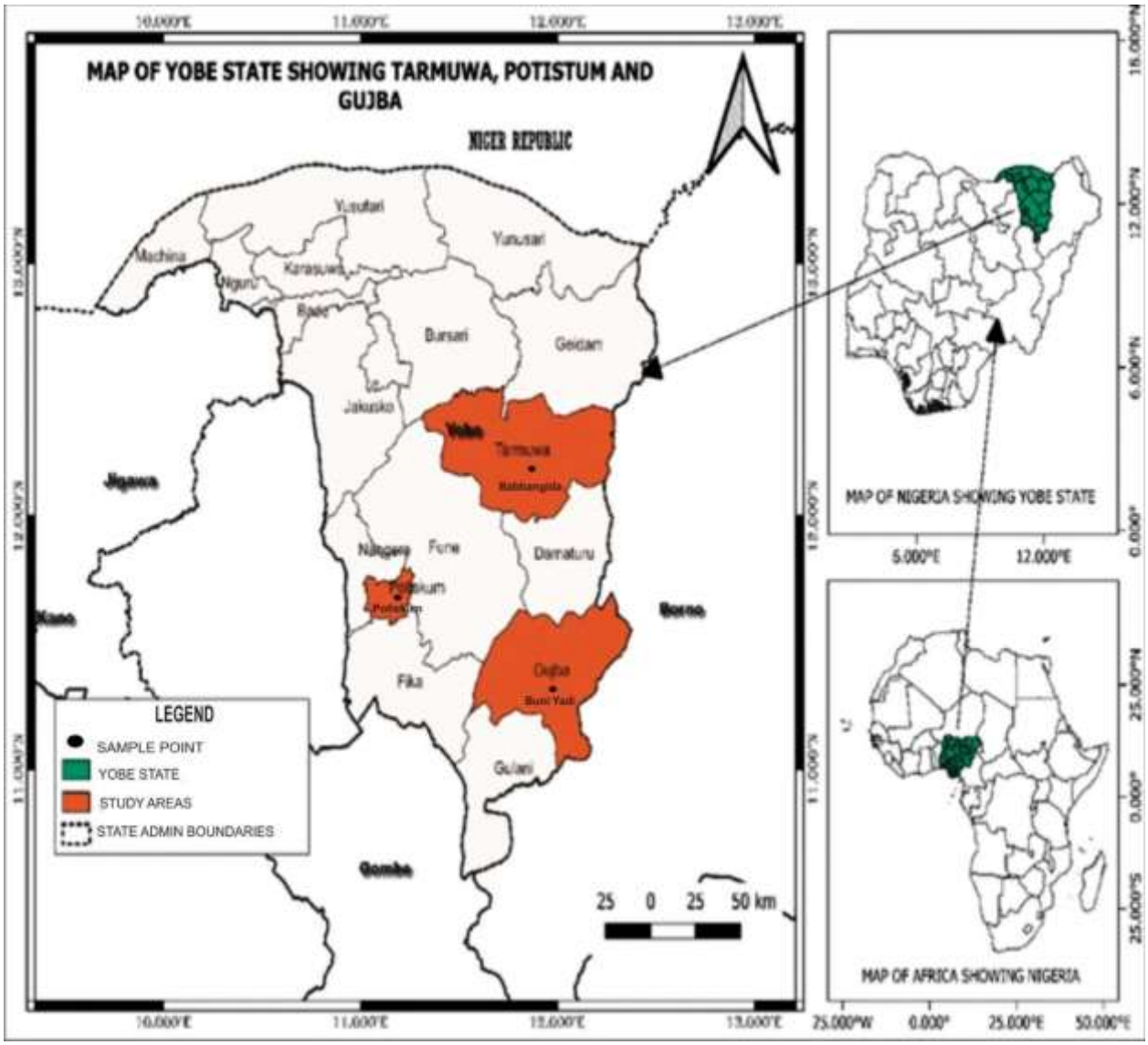


Fig 1: Map of the study area
Source: Geographic Information System Laboratory, Bayero University Kano (2021).

agricultural and livestock economy underscores Yobe's central role as a supplier of cattle to both domestic and international markets, making cattle trade a vital economic activity (Ali *et al*., 2019).

Types and Sources of Data

The study used both primary and secondary data. The primary data that were obtained from traders using interview schedule and market leaders and some representatives of traders using focus group discussion. Secondary data were sourced from the Unions Office of the three cattle markets.

Sampling Frame and Techniques

The study was conducted in Yobe State and covers three livestock markets (cattle markets) in three Local Government Areas. (Gujba Buni Yadi LGA), (Potiskum LGA) and (Tarmuwa Babbangida cattle LGA) markets. These markets were purposively selected based on the high concentration of traders and frequency of insurgent attacks in the area. They also serve as distributors to most markets within the Northern part of Nigeria, some cattle markets in the state include: Damaturu cattle market, Dawasa cattle market, Nguru cattle market, Geidam cattle market, Garin Alkali cattle market, Galda cattle market, Ganjarma cattle market among others.

Systematic random sampling was used to determine the correspondents. In Gujba Buni Yadi cattle market, 77 traders were sampled from the population of 202 traders. In Potiskum cattle market, 87 traders were sampled from population of 177 traders. In Tarmuwa Babbangida cattle market, 85 traders were sampled from population of 194 traders respectively. Table 1 presents the population and samples of the traders. Yamane (1967) formula was used to calculate the sample size with 99% confidence level.

3. Methods Of Data Analysis

Both descriptive (frequency and percentage) and (gross margin analysis) statistics were used to analyze the data

Table 1: Population and samples of the traders

STATE	L G A	CATTLE MARKT	SAMPLING FRAME	SAMPLE SIZE
Yobe	Gujba	Gujba Buni Yadi	202	77
	Potiskum	Potiskum	177	87
	Tarmuwa	Tarmuwa Babangida	194	85
TOTAL			**573**	**249**

Source: Field Work (2023).

Table 2: Nature of the Insurgents Attacks

	Gujba Buni Yadi		**Potiskum**		**Tarmuwa**	
Experience Insurgency Attack	**F**	**%**	**F**	**%**	**F**	**%**
Have not Experienced	5	7	12	14	2	2
Experienced	72	93	75	86	83	98
Total	**77**	**100**	**87**	**100**	**85**	**100**
Nature of Insurgency Attacks						
Arson	4	6	7	9	5	6
Sporadic Shooting	34	47	32	42	36	43
Kidnapping	2	3	0	0	1	1
Suicide Bombing	11	15	12	16	12	14
Bombing with IED	6	8	8	11	4	5
Threats	13	18	14	19	22	27
Others	2	3	2	3	3	4
Total	**72**	**100**	**75**	**100**	**83**	**100**

Source: Field Survey (2023)

generated from this study. The analysis is here presented according to the objectives of the study.

i. Simple descriptive statistics which comprise of percentage was used to describe the nature and frequency of insurgents' attacks. The analysis was presented in tables.
ii. Gross margin was used to analyzed trade costs and returns before and after the insurgency and it include the average variable cost, profit and market margin for small, medium and large size cattle before and after the insurgency. The analysis was presented in tables.

The Gross Margin (GM) analysis is expressed as:

GM = TR-TC
GM = Gross Margin
TR = Total Revenue = Price realized by purchase cost each of the cattle by the marketers
TC = Total Variable Cost

$$\text{Marketing Margin} = \frac{selling\ price - supply\ price}{selling\ price}$$

Focus Group Discussion (FGD) was used to analyzed transportation costs and influencing factors before and after the insurgency, distribution channels in the cattle markets, and factors affecting cattle prices. Transcripts from the Focus Group Discussion (FGD) were analyzed to identify key trends, challenges, and changes in the cattle trade.

4. Results and Discussion

This segment presented and discussed the results of the analysis of the research based on the themes such as: the nature of insurgency, their frequency and coping strategies, and the costs and returns of traders before and after the insurgency.

Nature and Frequency of Insurgent Attacks

The impact of *Boko Haram's* insurgency on the socio-economic and political structure of Yobe State has been devastating (Ali, 2016). Many businesses in the state have been severely disrupted, forcing owners to either relocate or completely abandon their operations. *Boko Har*am has employed various tactics to carry out their terrorist activities in the Northeast, including suicide bombings and sporadic shootings, aimed at terrorizing and subjugating the civilian population. This section examines the nature and frequency of insurgent attacks experienced by the cattle traders.

Nature of Insurgency Encountered by the Cattle Traders

The forms of insurgency attacks encountered by cattle traders include arson, sporadic shooting, kidnapping, suicide bombing, the use of improvised explosive devices (IEDs), threats, and assassinations. Table 2 showed that nearly all cattle traders across the markets (96%) have experienced insurgency attacks, underscoring the widespread violence in these areas.

Table 3: Average Number of the Attacks Experienced

	Gujba Buni Yadi		Potiskum		Tarmuwa Babbangida	
Average number of Occurrences	**F**	**%**	**F**	**%**	**F**	**%**
Arson						
1-5	3	4	2	3	1	1
6-10	0	0	0	0	0	0
11-15	0	0	0	0	0	0
>16	0	0	0	0	0	0
Sporadic Shooting						
1-5	7	10	10	13	14	16
6-10	10	14	10	13	6	7
11-15	13	18	11	15	16	20
>16	4	5	7	9	1	1
Kidnapping						
1-5	0	0	0	0	2	3
5-10	0	0	0	0	0	0
11-15	0	0	0	0	0	0
>16	0	0	0	0	0	0
Suicide Bombing						
1-5	12	17	8	11	12	14
6-10	0	0	1	1	2	2
11-15	0	0	0	0	0	0
>16	0	0	0	0	0	0
Bombing with IED						
1-5	6	8	7	9	4	5
6-10	0	0	0	0	0	0
11-15	0	0	0	0	0	0
>16	0	0	0	0	0	0
Threats						
1-5	11	15	6	8	20	24
6-10	4	5	11	15	3	4
11-15	0	0	0	0	0	0
>16	0	0	0	0	0	0
(Others) Assassination						
1-5	2	4	2	3	2	3
6-10	0	0	0	0	0	0
11-15	0	0	0	0	0	0
>16	0	0	0	0	0	0
Total	**72**	**100**	**75**	**100**	**85**	**100**

Source: Field Survey (2023)

Sporadic shooting is the most common form of attack, affecting about half of the cattle traders in Gujba Buni Yadi (44%). The least common form is assassination (3%). In Potiskum cattle market, sporadic shooting is again the highest form of attack (46%), with assassinations being the least common (2%). Similarly, in Tarmuwa Babbangida cattle market, sporadic shooting is the most frequent attack (43%), and assassinations are the least common (4%).

The findings suggest that across all markets, sporadic shooting is the most prevalent attack, posing significant challenges to the cattle trade. These forms of attacks align with findings by Okoli *et al.,* (2017), who reported that terrorists employ tactics such as arson, mass shootings, suicide bombings, IEDs, hostage-taking, and forced recruitment to achieve their objectives. The use of these tactics, especially suicide bombings and IEDs, instills fear, halts business activities, and erodes trust among community members, reducing interactions to mere formality except within families.

Frequency of Insurgents Attack Experienced by the Cattle Traders

The frequency of the attacks by the terrorist's differed from one form of attack to another with variation among the respondents and ranges from 1 to 5 times, 6 to 10 times, 11 to 15 times and 16 times above. Table 3 showed that in Gujba Buni Yadi cattle market, on average, cattle traders experienced sporadic shooting

approximately 11-15 times (18%). The least is arson and assassination both 1-5 times (4%). In Potiskum cattle market, the average occurrences were approximately 6-10 times for sporadic shooting (15%). The least is arson and assassinations both 1-5 (3%). In Tarmuwa Babbangida cattle market, cattle traders experienced threat approximately 11-15 times on average (20%). The least is suicide arson 1-5 times (1%).

It's evident from the findings that sporadic shooting is the most prevalent form of attack, affecting the majority of cattle traders across all markets. The findings are similar to the work of Augustine (2017), who found that, on average, respondents experienced arson once, sporadic shooting twice, kidnapping once, suicide bombing thrice, bombing with improvised devices twice, forced recruitment once. This finding aligned with the data provided by the Global Terrorism Index (Institute for Economics and Peace, 2015), in which most of the attacks carried out by *Boko Haram* were armed assaults, these types of attacks resulted in (63%) of deaths in 2014.

The Costs and Returns of Traders in the Cattle Markets Before and After the Insurgency

This section examined pre and post-insurgency costs and returns in the cattle markets. The cost of transport and factors influencing transportation costs before and after the insurgency. Channels of distribution in the cattle markets and factors influencing cattle prices.

Costs and Returns in the Cattle Markets

Tables 4 presents the purchasing price, selling price, total variable cost, profit, market margin and gross margin of small, medium, and big-sized cattle before and after the insurgency in Gujba Buni Yadi, Potiskum and Tarmuwa Babbangida cattle market. Before the insurgency across all three cattle markets, small size cattle exhibited relatively high gross margins, indicating good profitability and pricing flexibility. The average gross margin was approximately (31.96%), with a market margin of around (46.03%). (Gujba Buni Yadi: 33.33%, Potiskum: 28.89%, Tarmuwa Babbangida: 30.65%). Medium size cattle, before the insurgency, medium size cattle showed moderate gross margins across all markets, with an average gross margin of approximately (27.81%) and a market margin of around (42.21%). (Gujba Buni Yadi: 31.25%, Potiskum: 24.00%, Tarmuwa Babbangida: 25.79%). Large size cattle had lower gross margins compared to small and medium size cattle before the insurgency. The average gross margin was approximately (21.10%), with a market margin of around (32.97%). (Gujba Buni Yadi: 19.17%, Potiskum: 12.79%, Tarmuwa Babbangida: 14.49%).

After the Insurgency, small size cattle experienced a slight decrease in gross margins but remained profitable. The average gross margin decreased to approximately (29.84%), with a market margin of around (40.46%). (Gujba Buni Yadi: 31.71%, Potiskum: 26.83%, Tarmuwa Babbangida: 28.99%). Medium size cattle showed a slight decrease in gross margins after the insurgency, with an average gross margin of approximately (24.36%) and a market margin of around (33.23%). (Gujba Buni Yadi: 20.06%, Potiskum: 24.54%, Tarmuwa Babbangida: 22.48%). Large size cattle exhibited relatively lower gross margins compared to small and medium size cattle after the insurgency. The average gross margin was approximately (12.24%), with a market margin of around (15.45%). (Gujba Buni Yadi: 9.48%, Potiskum: 15.63%, Tarmuwa Babbangida: 13.62%).

The findings suggested that small size cattle consistently exhibited higher gross margins compared to medium and large size cattle across all periods and markets. This suggests that small size cattle are more profitable and resilient to market fluctuations. Medium size cattle showed relatively stable gross margins across the markets before and during the insurgency. However, there was a slight decrease in gross margins after the insurgency, indicating some challenges in maintaining profitability. Large size cattle consistently had the lowest gross margins among the three categories across all periods and markets. This suggests that large size cattle face greater pricing pressure and may be less profitable compared to smaller size categories.

Furthermore, the findings indicated that insurgent activities may have influenced consumer preferences and demand for certain cattle categories. For example, consumers may have favored smaller size cattle due to their perceived lower risk and higher profitability during periods of instability. Additionally, insurgent activities may have heightened security concerns for market participants, leading to increased costs for security measures and potentially limiting market access in certain areas. This could have further exacerbated challenges in maintaining profitability. Furthermore, consumer preferences during periods of instability may prioritize smaller cattle due to their affordability and perceived lower financial risk. Small-sized cattle are typically cheaper to purchase and maintain, making them more accessible to a broader range of buyers, especially during economic downturns caused by insurgencies. This increases demand, maintaining higher gross margins and profitability. Small-sized cattle offer more pricing flexibility, allowing sellers to adjust prices based on market conditions without significantly reducing their profit margins. In times of crisis, consumers may cut spending, and the ability to lower prices while maintaining profitability becomes critical for sellers, as seen with small cattle and also small-sized cattle typically have a faster turnover rate in markets because they are more affordable and in greater demand. This quicker turnover helps maintain steady cash flow and reduces the risk of price volatility, making them more resilient to market disruptions during insurgencies. While large-sized cattle are more expensive to maintain, transport, and sell, particularly during insurgency periods. The additional security costs, risk

Table 4: The Purchasing Price, Selling Price, Total Variable Cost, Profit, Market Margin and Gross Margin for Small, Medium, and Big-Sized Cattle Before and After the Insurgency in Gujba Buni Yadi, Potiskum and Tarmuwa Babbangida Cattle Market

Gujba Buni Yadi			
Period Before (2010/2011)			
Items	Small Size Cattle	Mediums Size Cattle	Larger Size Cattle
Purchasing Price	₦32,00	₦60,000	₦150,000
Selling Price	₦45,000	₦80,000	₦180,000
Total Variable Cost	₦2000	₦4,500	₦4,500
Profit	₦15,000	₦24,500	₦34,500
Market Margin	50.00%	44.14%	23.81%
Gross Margin	33.33%	31.25%	19.17%
Period After (2019/2020)			
Purchasing Price	₦60,000	₦145,00	₦350,000
Selling Price	₦82,000	₦173,000	₦384,000
Total Variable Cost	₦4000	₦6,500	₦6,500
Profit	₦26,000	₦35,000	₦33,500
Market Margin	46.43%	24.93%	9.74%
Gross Margin	31.71%	20.06%	9.48%
	Potiskum		
Period Before (2010/2011)			
Purchasing Price	₦35,000	₦75,000	₦175,000
Selling Price	₦50,000	₦95,000	₦200,000
Total Variable Cost	₦2000	₦3,000	₦3,000
Profit	₦15,000	₦20,000	₦31,000
Market Margin	42.86%	27.78%	18.34%
Gross Margin	28.89%	24.00%	12.79%
Period After (2019/2020)			
Purchasing Price	₦68,000	₦135,000	₦262,000
Selling Price	₦90,000	₦165,000	₦300,000
Total Variable Cost	₦4000	₦6000	₦6000
Profit	₦26,000	₦36,000	₦44,000
Market Margin	40.63%	27.91%	17.19%
Gross Margin	26.83%	24.54%	15.63%
Tarmuwa Babbangida			
Period Before (2010/2011)			
Purchasing Price	₦45,000	₦95,000	₦190,000
Selling Price	₦62,000	₦115,000	₦215,000
Total Variable Cost	₦2000	₦3,500	₦3,500
Profit	₦17,000	₦20,500	₦28,500
Market Margin	42.22%	31.07%	15.29%
Gross Margin	30.65%	25.79%	14.49%
After (2019/2020)			
Purchasing Price	₦72,000	₦134,000	₦220,000
Selling Price	₦95,000	₦165,000	₦255,000
Total Variable Cost	₦3000	₦5,500	₦6,500
Profit	₦23,000	₦36,500	₦41,500
Market Margin	33.33%	28,45%	19.43%
Gross Margin	28.99%	22.48%	13.62%

Source: Field Survey (2023)

of cattle theft, and logistical difficulties increase the total variable costs, cutting into profit margins. The high cost associated with large cattle becomes a burden during unstable times when consumers are unwilling or unable to pay higher prices. During periods of insurgency, consumers and traders are likely to prefer more economical options. Large cattle, which require significant financial investment, may experience reduced demand as buyers opt for smaller, more affordable alternatives. This shift in consumer preference leads to a decrease in large cattle prices to stimulate demand. These findings mirror the report of Mohammed *et al*., (2020) who observed the same trends at *Kasuwan* Shanu Cattle Market, Maiduguri in

Borno State during and after the insurgency. However, the activities of insurgents disrupted the cattle supply chain, affecting production, distribution, and market access for farmers and traders. This disruption could have led to increased costs and logistical challenges for market participants. Despite the challenges posed by insurgent activities, the cattle markets demonstrated resilience in pricing strategies and profitability.

This suggested that market participants were able to adapt to the changing conditions and maintain a level of economic activity despite the disruptions. The findings are also in agreement with the work of Olona *et al.,* (2020) regarding the disruptions and challenges faced by cattle producers and marketers which indicated that insurgency has led to higher costs of marketing and reduced profitability for traders. The disruptions caused by insurgent activities, such as roadblocks by security personnel, have increased transportation costs and risks for transporting cattle into markets. This has ultimately affected the volume of cattle sales and trader income, particularly during the peak of insurgency. However, despite these challenges, the studies also suggest that cattle trade remains profitable in the aftermath of insurgency.

5. Conclusion

In conclusion, the findings from the analysis shed light on the intricate interplay of factors shaping the livelihoods of cattle traders in conflict-affected regions. The insurgency has profoundly affected market dynamics, leading to increased income inequality, reduced mean incomes, and heightened transportation challenges. However, amidst adversity, traders exhibit resilience, implementing coping mechanisms such as temporary relocation and government counter insurgency.

The shortage of cattle supply due to insurgency negatively affects market stability and profitability for traders, potentially leading to price fluctuations and reduced market competitiveness. Increased costs, rising transport costs during insurgency periods contribute to reduced profit margins for traders, making the cattle trade less economically viable and sustainable. Logistical challenges, shortages of transport vehicles and the effects of security roadblocks and road blockages hinder the efficient movement of cattle to and from markets, causing delays and disruptions in supply chains. Overall, the study underscores the multifaceted nature of cattle trading in conflict-affected areas, emphasizing the need for targeted interventions to improve market infrastructure, and enhance security measures. By understanding the intricate dynamics at play, stakeholders can develop tailored strategies to promote inclusive growth, resilience, and sustainability in the cattle trade sector.

6. Recommendations

1. Create Tailored Financial Products for Cattle Traders: The State government should work with banks and microfinance institutions to develop loan products designed to meet the specific needs of cattle traders, offering flexible repayment schedules and low collateral requirements. This can be achieved by engaging financial institutions to assess the unique risks and opportunities in cattle trading and developing appropriate financial products. Launch financial literacy programs in partnership with these institutions to build trust between traders and formal financial systems.

2. Develop a Comprehensive Security Framework: Implement a national security strategy focused on safeguarding cattle markets and transportation routes, incorporating intelligence-led operations, community policing, and surveillance technology. State governments should collaborate with security agencies, private security firms and community leaders to establish a coordinated security network, including police patrols, surveillance systems, and intelligence-sharing hubs. Additionally, government funding should be allocated to strengthen the military and police presence in key cattle trading areas.

Reference

Abigail, J. (2018). The effects of insurgency on livestock markets in northeastern Nigeria: A case study of Yobe State. *International Journal of Conflict Studies*, 4(3), 120-136.

Abigail, N. (2022). Insurgency and livestock market collapse in Northeast Nigeria. *Journal of African Conflicts*, 11(3), 45–60.

Abdullahi, M. (2021). Cattle Markets and Conflict in Yobe State. Yobe: Federal University Press.

Adamu, I. & Mohammed, A. (2020). Impact of climatic conditions on livestock trade in northeastern Nigeria. *Journal of Agro-Pastoral Studies*, 8(2), 55-67.

ADF Magazine. (2025). Cattle theft finances terrorism, fuels ethnic tensions. *African Defense Review*, 18(4), 22–35.

Ali, M. S. (2016). Impact of Boko Haram insurgency on businesses in Yobe State, Nigeria. *Journal of Conflict and Peace Studies*, 8(2), 145-162.

Ali, M., Brian, A., Richard, T., & Peter, J. (2019). Geography of northeastern Nigeria: Topography, resources, and the insurgency challenge. *Journal of African Studies*, 25(1), 78-95.

Augustine Sunday Onwuarah (2017). Assessment of the Impact of Insurgency on Livelihoods of Farmers in North Eastern Nigeria. Published Ph.D Thesis submitted to the Department of Geography and Environmental Management, Faculty of Physical Sciences, Ahmadu Bello University Zaria pp- 115 - 116

Blench, R. (2021). Pastoralism, conflict, and development in the Sahel. Routledge.

Bulus, J. (2023). Economies of scale in crisis: Cattle

trade in Northeast Nigeria. *Agricultural Economics Review*, 12(4), 33–49.

Conflict Survey Initiative. (2023). Yobe State Conflict Trends: 2014–2022. Abuja: CSI Press.

Conflict Survey Initiative. (2024). Farmer-herder violence in Nigeria: 2020–2023. Abuja: CSI Press.

FAO (2016). Livestock Production and Household Livelihoods in Nigeria. FAO Report.

FAO & ICRISAT. (2019). State of livestock and crop production in arid regions: A focus on Sahel and Sudan savanna zones. Rome: Food and Agriculture Organization and *International Crops Research Institute for the Semi-Arid Tropics.*

Gambo, H. (2020). The challenges of cattle corridors in Nigeria. African Economic Review, 12(2), 211-225.

Hassan Mohammed (2020). Effects of conflict on agriculture: Evidence from the Boko Haram insurgency. World Development, 117, 184–195.

Ibrahim, A. (2023). Transport risks and informal taxation in Northeast Nigeria. Northeast Economic Review, 10(4), 88–104.

Institute for Economics and Peace (2015). Global Terrorism Index. Retrieved from: http://www.visionofhumanity.org/sites/default/files/Global%20Terrorism%20Index%20Report%202014 0.pdf

Komadugu Yobe Basin Report. (2016). Water resources management in northeastern Nigeria: A focus on Yobe Basin. Abuja: Nigerian Hydrological Services Agency.

Krugman, P. (2020). Increasing returns and economic geography. Journal of Political Economy, 99(3), 483–499.

Mohammed, H., Ahmed, F. F., & Adedeji, A. N. (2020). Effect of Insurgency on Cattle Markets in Northeast Nigeria: Appraisal of Kasuwan Shanu Cattle Market, Maiduguri, Borno State. Science Research, 8(5), 108–114.

Mohammed, A., Usman, S., & Ibrahim, A. (2022). Farmer-herder conflict and its impact on cattle supply chains in Northern Nigeria. *African Studies Review*, 65(1), 67-83.

Musa, A., & Shaibu, Y. (2020). Livestock production systems in Yobe State: Challenges and opportunities. *Journal of Sustainable Agriculture*, 9(4), 89-103.

Musa, T. (2024). Profitability collapse in Yobe's cattle trade. Journal of Agrarian Change, 24(2), 201–220.

National Bureau of Statistics. (2023). Nigeria Livestock Sector Report.

National Population Commission (NPC). (2022). Nigeria Demographic and Health Survey (NDHS): State-Specific Projections. Abuja: NPC. URL: https://nationalpopulation.gov.ng)

Okoli, A. C., Onuoha, F. C., & Uduma, O. F. (2017). Terrorism and counter-insurgency in Northern Nigeria: An analysis of Boko Haram's tactics and impact on security. *Journal of African Studies*, 12(1), 105-122.

Okoli, A. (2020). Conflict and cross-border trade in the Sahel. African Security, 13(4), 321–340.

Okoli, A., et al. (2023). Boko Haram and the collapse of comparative advantage in Northern Nigeria. Security and Trade, 8(3), 200–218.

Olona, J.F., Hassan O.S., Jinadu K.B., Ajayi F.T and Adegbeye M.J. (2020). Impact of Insurgency on Availability of Beef Cattle in Selected Markets in South-West Nigeria. *Maiden Scientific Conference*.

UNHCR. (2022). Global trends: Forced displacement in 2021. United Nations High Commissioner for Refugees.

Yamane, T. (1967). Statistics: An Introductory Analysis, 2nd Ed., New York: Harper and Row

Yobe Agricultural Development Agency, (2020). Yobe State Cattle Trade Report. National Population Commission (NPC). (2022). Nigeria Demographic and Health Survey (NDHS): State-Specific Projections. Abuja: NPC. URL: https://nationalpopulation.gov.ng

Yobe State Statistical Year Book. (2017). Economic and agricultural statistics for Yobe State. Damaturu: Yobe State Government.