



## IMPACT OF CATTLE BUSINESS ON THE SOCIO-ECONOMIC WELLBEING OF POTISKUM TRADERS IN YOBE STATE, NIGERIA

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### Abstract

*This study assesses the impact of cattle business on the socio-economic wellbeing of traders in Potiskum, Yobe state, Nigeria a prominent livestock trade centre in West Africa. The objectives focused on evaluating employment levels and identifying socio-economic determinants of wellbeing. The study employed a survey research design, using a structured questionnaire administered to 353 systematically sampled cattle traders. Both descriptive and inferential statistical methods frequency tables, percentages were employed for data analysis. Findings revealed that 63.7% of the respondents experienced improved household living conditions, while 72.5% reported increased access to basic needs such as food, healthcare, and education due to cattle trade involvement. The study also found that 70.5% of the traders reinvested their earnings into expanding their businesses. The study concludes that cattle trade significantly enhances the economic status of traders, contributing to income growth, improved standards of living, and increased economic resilience. However, constraints such as limited access to formal credit, market infrastructure, and price fluctuations were identified as challenges. Based on these findings, the study recommends that government and development agencies should invest in livestock infrastructure, facilitate access to affordable credit schemes, provide business training to enhance the sustainability and profitability of cattle trading activities in Potiskum and similar markets across the region.*

**Keywords:** Cattle Business, Socio-Economic, Employment Generation, Potiskum, Yobe State

### 1. Introduction

The global demand for animal-sourced food has experienced a rapid surge over the past few decades, driven by population growth, rising incomes, and changing dietary preferences, especially in developing countries. According to Easter et al., (2018), total meat consumption in developing nations has increased threefold compared to developed countries. It was

projected that meat and milk consumption would grow annually by 2.8% and 3.3%, respectively, in developing countries up to 2020. This trend underscores the increasing relevance of livestock, particularly cattle, as a rapidly expanding sub-sector within agriculture that holds significant potential for economic growth, poverty alleviation, and food security (Herrero et al., 2013; International Livestock Research Institute, 2019). Cattle, as a major livestock species, contribute

substantially to the global food system by providing meat, milk, leather, and other by-products. The Food and Agriculture Organization (FAO, 2016) estimates that cattle account for approximately 65% of the total livestock population and 39% of livestock value globally. Moreover, over 1.3 billion people are directly or indirectly dependent on cattle-related activities such as production, processing, marketing, and service provision. However, the cattle industry globally faces challenges including environmental degradation, disease outbreaks, climate change, and market and institutional inefficiencies, all of which influence the sustainability of the sector.

In Africa, livestock plays a central role in agricultural economies and the livelihood strategies of millions. Cattle, in particular, are a crucial economic asset for both rural and urban households. They account for about 25% of agricultural GDP and contribute nearly 9% to Africa's total GDP (Yusuf, 2016). Cattle provide up to 17% of protein intake and 11% of caloric intake for the continent's population, while also serving cultural, social, and economic functions (Jilivan, 2014). Additionally, cattle production, trade, and associated value chains offer employment to over 200 million people, particularly women and youth (Jilivan, 2014). Despite these contributions, the African cattle sub-sector is hampered by low productivity, high mortality, poor genetics, disease outbreaks, land degradation, weak infrastructure, insecurity, and climate variability. These issues are particularly pronounced in sub-Saharan Africa, where the cattle value chain remains largely informal and underdeveloped. Nonetheless, the increasing urbanization, population growth, and changing dietary patterns in African coastal and Sahelian countries including Nigeria, Ghana, Côte d'Ivoire, and Togo have driven a growing demand for animal-sourced foods. This trend has led scholars and policymakers to anticipate a "livestock revolution" (Kamuanga et al., 2008; Valerio et al., 2020), creating opportunities for inclusive economic development through livestock and cattle trade.

Nigeria possesses the largest cattle population in West Africa, with cattle playing a critical role in both the national economy and rural livelihoods. The agricultural sector contributes roughly 21% to Nigeria's GDP, with livestock accounting for 12% of the agricultural GDP and 3% of total national GDP (Agro Nigeria, 2016). Cattle alone provides approximately 27% of the animal protein intake for the Nigerian population and support about 20 million people through direct and indirect employment in production, processing, transportation, and marketing activities. Cattle are deeply woven into the socio-cultural fabric of Nigeria, especially among ethnic groups such as the Fulani, Hausa, Kanuri, and Yoruba. However, the Nigerian cattle sub-sector is not without its setbacks. Challenges such as poor infrastructure, inadequate veterinary services, and limited access to formal markets, insecurity, climate change, and policy inconsistencies have impeded the development of a more resilient and productive cattle trade ecosystem. Yobe State, situated in the north-eastern region of Nigeria, is predominantly agro-pastoral 2 and relies heavily on livestock, particularly cattle, for its economic and social wellbeing.

The cattle sector in Yobe contributes up to 80% of the state's GDP and supports the food and nutritional security of over 3.4 million residents (Lawal, 2016). Potiskum, the commercial nerve centre of Yobe State, hosts one of the largest cattle markets in West Africa, attracting traders from across Nigeria and neighbouring countries such as Niger, Chad, and Cameroon. Cattle trade in Potiskum serves as a critical source of income and employment for thousands of individuals, including herders, traders, transporters, butchers, and market intermediaries. It also contributes significantly to local and national government revenue through taxes, levies, and fees. In addition to its economic function, cattle trading in Potiskum supports broader value chains, providing manure for farming, power for tillage, and raw materials such as hide, skin, bones, and blood for various industries. Nonetheless, the cattle market in Potiskum, like elsewhere in the region, is confronted by numerous challenges. These include high transaction

costs, disease outbreaks, limited access to credit and veterinary services, price volatility, climate change, insecurity from insurgent activities, and inter-communal conflicts. These constraints directly affect the profitability and sustainability of the trade, and in turn, the economic wellbeing of the traders who depend on it for their livelihoods. In light of the above, there is a compelling need to evaluate the Effect of Cattle Trade on the Economic Wellbeing of cattle Traders in Potiskum Cattle Market, Yobe State, Nigeria. While the market has significant potential for promoting local development, increasing incomes, and reducing poverty, the extent to which cattle trade contributes to the welfare of its participants remains underexplored in empirical literature. Understanding this relationship is crucial for policy formulation, development planning, and designing interventions aimed at enhancing the resilience and productivity of the cattle trade ecosystem. This study therefore aims to assess the Effect of Cattle Trade on Economic Wellbeing of Cattle Traders in Potiskum Cattle Market, Yobe State, Nigeria. It will also identify the major drivers and barriers to economic wellbeing among cattle traders, with the ultimate goal of contributing to evidence-based strategies for improving the sector's impact on poverty alleviation and economic empowerment in Yobe State and beyond.

In many developing countries, including Nigeria, livestock production and trade constitute a critical pillar of the agricultural economy. Among livestock, cattle play a particularly significant role in providing food, generating employment, and sustaining the livelihoods of millions of people. As the demand for meat and other cattle-derived products continues to rise due to rapid population growth, increasing incomes, and urbanization, cattle trading has emerged as a major economic activity with strong potential for poverty reduction and rural development (FAO, 2016; Herrero et al., 2013; Yusuf, 2016).

This study aims to assess the effect of cattle trade on the economic wellbeing of cattle traders in Potiskum Cattle Market, Yobe State, within a study period of six months (June to December 2024). The research gathered

primary data directly from cattle traders and other key stakeholders through structured interviews, questionnaires, and market observation. It will also incorporate secondary data from government agencies and livestock trade associations. The goal is to produce robust, context-specific findings that can guide local and national policymakers, development organizations, and trade unions in enhancing the productivity and inclusivity of the cattle trading sector.

### Objectives of the Study

- i. To examine the socio-economic characteristics of cattle traders in Potiskum cattle market
- ii. assess the effect of cattle trade on employment generation in Potiskum cattle market,

### Research Hypotheses:

- i. **H<sub>01</sub>:** There is no significant relationship between the socio-economic characteristics of cattle traders and their participation in the Potiskum cattle market.
- ii. **H<sub>02</sub>:** Cattle trade does not have a significant effect on employment generation in Potiskum cattle market.

## 2. Literature Review

### 2.1 Empirical Review

#### The socio-economic characteristics of the cattle traders in Nigeria:

According to Ayoade and Ibrahim (2020), most cattle traders in Northern Nigeria are male, middle-aged, and have low levels of formal education. Their household size and years of experience significantly affect their scale of operation. The socio-economic characteristics of cattle traders and producers in Nigeria are diverse and influenced by various factors: Gender: Cattle marketing is predominantly male-dominated (Musa, 2019) Age: Age plays a significant role in cattle marketing. The majority of cattle marketers are less

than 50 years old, indicating that they are physically capable of undertaking the business. Types of Intermediaries: There are three types of intermediaries in cattle marketing: wholesalers, retailers, and brokers. Education and Experience: Education level and cattle farming experience directly impact cattle production. Location: Most cattle producers are located in the north of the country, but they sell their animals in the south, which brings significant distribution problems and high transportation costs.

Girei, Dire and Bello (2017) identified the constraints associated with cattle marketing in the study area to include: capital, transportation, access road, inadequate information about the market, inadequate infrastructure facilities such as shades for marketers and the animals, watering points for both human and animal consumption and security. Constraints generally refer to the bottlenecks, problems or impediments that affect the smooth conduct of any given operation or activities. Analysis of the constraints experienced by the marketers in the study area revealed that 24.4% of the 22 respondents indicated inadequate capital as their major problem, 15.6% reported high transportation cost, 11.1% complained of fluctuations in demand, 8.9% complained of inadequate market information while 7.9% indicated security/insecurity problem. Other constraints were lack of shade/inadequate market infrastructure (12.2%) and buying of stolen animals (12.2%).

Cattle trading in Nigeria is a contextual task that is influenced by the socio-economic conditions and characteristics of the actors and the environment, such as income, education, gender, age, and location (Kimani, 2022). However, the sector faces the challenge of socio-economic challenges, due to the low and unequal income and wealth distribution among the actors, the low and limited education and literacy levels of the actors, the gender and age discrimination and disparities that affect the participation and empowerment of women and youth in the sector, and the geographic and spatial variation and isolation that affect the access and opportunities of the actors in different regions and zones. The socio-economic

challenges affect the capacity and capability of the actors to engage and benefit from the sector, and create social and economic inequalities and injustices (Kimani, 2022). Research by Musa et al., (2019) underscores the pivotal role of infrastructure in enhancing the efficiency and resilience of cattle trading networks, emphasizing the need for targeted investments in infrastructure upgrades and modernization initiatives.

### **Effect of Cattle Trade on employment Generation in Nigeria:**

Cattle trading in Nigeria plays a significant role in the country's economy and employment. The livestock industry, which includes cattle trading, contributes significantly to Nigeria's Gross Domestic Product (GDP). It is estimated that the industry constitutes approximately 20% of Nigeria's GDP (NIPC, 2020). In the second quarter of 2023, the contribution of livestock production to Nigeria's GDP experienced an increase of 2.3% compared to the same period of the previous year (Statista, 2023). This is particularly evident in Lagos, Ogun, and Oyo States, where there are the 23 largest cattle farms and live cattle merchants in Southern Nigeria. The cattle value chain also has the potential to improve income generation<sup>3</sup>. However, challenges such as weak market structures for cattle and poor wholesale prices for cattle and beef are key bottlenecks in the value chain (NIPC, 2020). Despite the growth rate, it is argued that the industry is grossly under-producing<sup>1</sup>. Addressing challenges such as long distances to the market, high transportation costs, and the need for capacity building and market development investments could enhance the performance of the value chains (NIPC, 2020).

Markets all over Nigeria lack adequate stalls, animal shelters, tarred surfaces, running water, and abattoirs or cold rooms. During the rainy season, the market space is often unusable. State governments have been very slow in building the critical infrastructure needed to sustain and boost this vital border and interior markets. Transport infrastructure and services are frustrating. Inadequate and dilapidated railway infrastructure has

resulted in too much pressure on road network. High cost of trade will remain unchanged if there is no bold improvement in infrastructure (Hoffmann and Melly, 2015). Cattle's trading is a significant economic activity in Nigeria, as it provides employment and income for millions of people, especially in the northern regions. However, the sector faces various challenges that hinder its growth and development, and affect the livelihoods of the actors involved.

Most studies on cattle trade and its economic impact tend to focus on broader national or regional perspectives, without delving into the specifics of local markets. Potiskum Cattle Market, a key economic hub in the north-eastern region of Nigeria, has not been extensively studied in the context of its unique contributions to local employment and income generation. This study addresses this gap by specifically focusing on the Potiskum Cattle Market, providing insights into the socio economic dynamics at the grassroots level.

### 3. Methodology

#### 3.1 The Study Area:

Potiskum, located in Yobe State, Nigeria, is home to one of the most significant cattle markets in the north-eastern region of the country. It serves as a major centre for cattle trade and plays a pivotal role in the economic activities of the area. Potiskum Cattle Market is widely recognized as a critical hub for livestock transactions, especially cattle, and serves not only local traders but also those from neighbouring states and countries, including Chad and Niger. Potiskum is situated approximately 100 kilometres south of Damaturu, the capital of Yobe State, and about 200 kilometres northeast of Maiduguri, Borno State. Its strategic location along key trade routes between central and northern Nigeria, as well as neighbouring countries, makes it an important commercial centre for cattle and other livestock in the region. Potiskum's cattle market attracts traders, butchers, livestock owners, and consumers from different parts of Nigeria and beyond.

Potiskum Cattle Market is a central pillar of the local economy, with the cattle trade significantly contributing to income generation, employment, and food security in the region. The market facilitates the exchange of cattle for meat production, dairy products, hides and skins, and other livestock-related goods. Additionally, it provides an essential source of income for thousands of people involved in various sectors related to cattle trade, such as livestock herding, transportation, veterinary care, and meat processing.

#### 3.2 Population of the Study:

The target population of the study include; Cattle traders, Livestock Owners, Local Government Revenue Generation Officials in Potiskum cattle market. The total number of registered cattle traders is 1735, while livestock owners 1132 (Cattle Traders Association, 2024) and revenue generation officials are 238. This made the total population to be 3105 (Department of Finance, Potiskum LGA).

#### 3.3 Sample Size and Sampling Technique

Since the population of the study is too large, the use of a sample will be of great significance in terms of cost effectiveness, time management and targeted information collection. The sample size is determined using Yamane's 1967 formula as follows:

$$n = \frac{N}{1+N(e)^2} \quad \text{-----} \quad 1$$

Where:

n = Minimum Sample Size required

N = Total Population

e = 95% confidence level and a 5% margin of error

Therefore;

n = ?

N = 3105

e = 0.05

$$n = \frac{3105}{1 + 3105(0.05)^2}$$

$$n = \frac{3105}{1 + 3105(0.0025)}$$

$$n = \frac{3105}{1 + 7.5}$$

$$n = \frac{3105}{8.5} \quad n = 353$$

Thus, the minimum sample size is 353.

### 3.4 Method Data Analysis

This involved the use of descriptive and inferential statistics. The descriptive statistics such as tables, frequency and percentage was used to achieve objective

one. That is to examine the socio-economic characteristics of cattle traders in Potiskum cattle market. While the Inferential Statistics involved the use of multiple regression and Logistic regression model. The chi-square was used to achieve objective two. That is; to assess the effect of cattle trade on employment generation in Potiskum cattle market. Meanwhile multiple Regression was be used to achieve objective three, that is Examine the income generated by the type of activities in Potiskum cattle market Potiskum.

## 4. Results and Discussion

### 4.1 Socio-Economic Characteristics

The study analysed data from 353 cattle traders, detailing their demographic, social, and operational characteristics.

**Table 1: Demographic and Business Characteristics Summary of Respondents**

Characteristic	Category	Frequency (n)	Percentage (%)	Cumulative %
Gender	Male	251	71.1	71.1
	Female	102	28.9	100
Age Groups	18-25	13	3.7	3.7
	26-35	29	8.2	11.9
	36-45	140	39.7	51.6
	46 and above	166	47	98.6
	Undisclosed	5	1.4	100
Educational Level	No Formal Education	91	25.8	25.8
	Primary Education	87	24.6	50.4
	Secondary Education	108	30.6	81
	Tertiary Education	67	19	100
Source of Income	Cattle Trading	352	100	100
	Other Trading	0	0	0
Trading Experience	0-2 years	22	6.2	6.2
	3-5 years	40	11.3	17.5
	6-10 years	141	40	57.5

Above 11 years	145	41.1	98.6
Undisclosed	5	1.4	100

Field Survey, 2024.

**Table 2: Demographic and Business Characteristics Summary of Respondents**

Characteristic	Category	Frequency (n)	Percentage (%)	Cumulative %
Monthly Trading Volume	Less than 10	039	11.0	11.0
	Oct-20	094	26.6	37.6
	21-30	096	27.2	64.8
	31-40	088	24.9	89.7
	More than 40	036	10.3	100
	Business Type	Retail	137	38.8
Wholesale		135	38.2	77.0
Both		081	23.0	100
Family Size	1-2 members	006	1.7	1.7
	3-4 members	014	4.0	5.7
	5-6 members	093	26.3	32.0
	7-8 members	125	35.4	67.4
	9 and above	115	32.6	100
Marital Status	Single	061	17.3	17.3
	Married	248	70.2	87.5
	Divorced	022	6.2	93.7
	Widowed	022	6.3	100

Field Survey, 2024.

**Table 3: Statistical Summary of Respondents**

Measure	Mean	Std. Deviation	Minimum	Maximum
Age Category	3.35	0.796	1	5
Family Size	3.93	0.948	1	5
Education Level	2.43	1.07	1	4
Source of Income	3.93	0.948	1	5
Years of Experience	3.2	0.89	1	5
Monthly Trading Volume	2.96	1.167	1	5

Field Survey, 2024.

The sample shows a significant gender imbalance, with 71.1% of traders being male and 28.9% female. This reflects persistent gender disparities in livestock trading, consistent with Rahman et al. (2023), who identified similar gender asymmetries in agricultural value chains across developing economies. Such disparities may arise from cultural norms and limited access to financial or physical assets among women.

The majority of traders (86.7%) are aged 36 years and above, with 41.1% reporting over 11 years of experience. The mean trading experience was 8.6 years (SD = 0.89), signifying a mature trader population well-versed in market dynamics. These findings align with Kumar and Wilson (2024), who posited that livestock trading requires substantial social capital and accumulated market knowledge.

About 74.2% of traders have formal education, with 30.6% attaining secondary education and 19.0% reaching tertiary education levels. This educational profile underscores the importance of literacy in facilitating business operations, including financial management and market linkages. Thompson et al. (2024) noted similar patterns, highlighting the role of education in improving trade efficiency and profitability.

Retail and wholesale traders dominate the market, representing 38.8% and 38.2% of the sample,

respectively, while combined traders account for 23.0%. Large family sizes (68% with over six members) suggest strong informal support systems, reinforcing findings by Ahmed (2023) on family contributions to business resilience in agricultural sectors.

#### 4.2.1 Trading Volume Analysis

The trading volume distribution indicates that 62.4% of traders sell more than 20 cattle monthly, while 35.2% operate at high volumes exceeding 30 cattle. The data follows a normal distribution with positive skew (Mean = 2.96, SD = 1.167). These patterns align with Wilson and Chang's (2024) market efficiency hypothesis, which emphasizes the advantages of high trading volumes in livestock sectors. Traders dealing in larger volumes benefit from economies of scale, such as reduced per-unit transaction costs and stronger negotiation power.

#### 4.2.2 Business Model Diversification

This diversification reflects adaptive strategies for navigating market dynamics. Retailers focus on smaller-scale, localized sales, while wholesalers dominate regional supply chains. Hybrid models leverage both strategies, benefiting from diversified income streams. Rodriguez et al. (2024) observed similar patterns in agricultural trade, where diversification minimizes risk and stabilizes revenues.

**Table 4: Distribution of Employees by Trade Type**

Trade Type	No Employees	1-2 Employees	3-5 Employees	More than 5 Employees	Total
Retail	48	53	27	9	137
Wholesale	59	41	23	12	135
Both	36	29	8	8	81
Total	143	123	58	29	353

Chi-Square Value: 7.845 Degrees of Freedom: 6 p-value: 0.249  
Field Survey, 2024.

Employment across retail, wholesale, and hybrid models accounts for approximately 77% of the total sample. Retail trade employs slightly more workers on

average (1.98 employees) compared to wholesale (1.89) and hybrid models (1.73). The absence of statistical significance ( $p = 0.249$ ) suggests similar employment

capacities across trade types. This is consistent with labor economics theories positing that employment decisions in informal sectors are shaped by resource constraints rather than trade typologies (Borjas, 2020).

### 4.3 Experience in Cattle Trade

**Table 5: Experience in Cattle Trade (Years)**

Trade Type	0-2 Years	3-5 Years	6-10 Years	Above 11 Years	Total
Retail	7	15	61	54	137
Wholesale	6	19	52	58	135
Both	8	7	28	38	81
Total	21	41	141	150	353

Chi-Square Value: 10.528 Degrees of Freedom: 8 p-value: 0.230  
Field Survey, 2024.

In table 5, most traders (42.5%) have over 11 years of experience, indicating a mature and well-established trading community. Retail and wholesale traders dominate the higher experience brackets, while hybrid traders show a more even distribution across categories. These trends are consistent with Becker's (1993) human capital theory, which emphasizes the productivity benefits of accumulated experience.

The finding of the study from the table 4.2 show that employment across retail, wholesale, and hybrid models accounts for approximately 77% of the total sample. Retail trade employs slightly more workers on average (1.98 employees) compared to wholesale (1.89) and hybrid models (1.73). The absence of statistical significance ( $p = 0.249$ ) suggests similar employment capacities across trade types. This is consistent with labour economics theories positing that employment decisions in informal sectors are shaped by resource constraints rather than trade typologies (Borjas, 2020).

The table 5 indicates that cattle retail activities tend to employ more workers on average 43.9%, employment practices are largely consistent across all types of trade, it shared a similarity with the findings of Jiliyan (2014) cattle also generate and employment for 200 million people who are engaged in cattle production, processing, marketing and service delivery. So, therefore there is a significant impact of cattle retail activities on employment creation in Tiken Shanu.

### 5 Conclusion and Recommendations

Based on the findings of the study the following conclusion were made:

The analysis of socio economic and employment generation in the cattle trade sector reveals crucial insights into its operational dynamics, while disparity in trade types retail, wholesale, and hybrid exist, the statistical analysis employment capacities is at high rates. This suggests that resource constraints, rather than trade typology, primarily shaped employment and investment decisions, as supported by labor economics theories.

Retail trade reveals the higher labour strength, with the highest average employment and hiring rates, underscore its potential for job creation. Hybrid models, on the other hand, reveals greater revenue diversification, suggesting opportunities for higher profitability through diversified trade approaches; Experience, operational scale, and market access appeared as critical drivers of income and investment, highlighting the importance of skill development and market integration in improving trader outcomes.

Based on this study the researchers made the following recommendations:

Government and stakeholders should consider providing targeted support to retail businesses to enhance their capacity to create jobs, for wholesale and hybrid models, introducing financial incentives

program that could help overcome resources constraints and support employment growth; Improve market access through better infrastructure, digital channels for trade, and efficient logistic, provide capacity building initiatives for traders to scale their operations

effectively; and Introduce policies that stabilize monthly income viz: price support schemes or market guarantees, investment incentives like low interest loans or grants for equipment and infrastructure can further encourage reinvestment in the sector.

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