



## FINANCIAL INCLUSION AND PERFORMANCE OF LIVESTOCK

### MARKET IN NIGER STATE

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**DOI:** <https://doi.org/10.70382/mejfrbd.v7i7.023>

#### Abstract

The Naira redesign policy, despite its intended excellence, has exacerbated business stagnation and heightened the suffering of the masses. This policy, implemented without a corresponding infusion of the new notes after removing over 70% of the cash in circulation, resulted in significant financial losses and a downturn in business performance. In response to this pressing issue, this study assesses the impact of financial inclusion on the sales performance of livestock market stakeholders in Niger South Senatorial Area. The evaluation of financial inclusion encompasses access to financial services, usage of financial services, and the quality of financial services.

Data collection employed a structured closed-ended questionnaire, with research instrument validity assessed using the Average Variance

**Keyword:** Financial Inclusion, Livestock Market Performance, Niger South Senatorial Zone, Access to Financial Services, Financial Service Quality, Technology Adoption Theory.

Extracted at the 0.5 level, and reliability verified through a Cronbach's alpha value of 0.7 for all constructs. Structural Equation Modeling on Smart PLS 4.0 was employed for data analysis. Results unveiled

a positive and significant relationship for access, usage, and quality at p-values of 0.037, 0.000, and 0.025, with corresponding path coefficients of 0.126, 0.536, and 0.099, respectively. The study further revealed an R-square value of 48.0%, signifying that financial inclusion, through its dimensions, explains a substantial 48% change in the performance of livestock market stakeholders in Niger South Senatorial Area. As a recommendation, emphasis on the usage of financial services is advocated for, as it stands out as a crucial driver for achieving higher performance among livestock market stakeholders.

## **Introduction**

**T**he agricultural industry plays a pivotal role in global economic development, contributing significantly to employment, revenue generation, and Gross Domestic Product (GDP), especially in developing countries where it accounts for over 25% of GDP (Montalbano & Nenci, 2022; Mngumi et al., 2023). In Africa, agriculture provides employment for approximately 67% of the workforce, sustaining economies by offering food security, poverty alleviation, and economic stability. Nigeria exemplifies this trend, with agriculture contributing 24% to GDP and employing over 60% of the workforce, despite the nation's heavy reliance on oil since the 1970s. Within Nigeria's agricultural sector, livestock production holds a crucial yet underexplored role, contributing 1.55% to GDP in the first quarter of 2022 (Sikiru et al., 2024). Livestock farming ensures food security, generates income, and creates job opportunities in rural and urban areas. However, the sector faces significant challenges, including limited access to finance, reliance on cash-based transactions, and low adoption of innovative financial solutions.

The interplay between financial inclusion and agribusiness performance has garnered attention as financial systems are pivotal in enabling economic activities. Financial inclusion providing affordable and accessible financial services has shown to enhance the productivity of small and medium-scale enterprises, including agribusinesses. Yet, in sub-Saharan Africa, financial

inclusion rates remain low, with only 63.8% of the population having access to formal financial services (Global Partnership for Financial Inclusion, 2021). This gap underscores the importance of exploring the impact of financial inclusion on livestock market performance, particularly in Niger State, where the sector faces unique economic and operational challenges.

Recent events, such as Nigeria's Naira redesign policy, have further exacerbated these challenges. The cash scarcity resulting from the policy disrupted livestock markets, leading to drastic declines in sales and financial losses for farmers and traders. The reluctance to adopt alternative payment methods and the lack of financial literacy highlight the need for targeted interventions to enhance financial inclusion and innovation in the sector.

This study is significant in three key areas: knowledge, practice, and policy. First, it contributes to knowledge by expanding the existing literature on financial inclusion and performance, focusing on the livestock market segment of the agricultural industry in Niger State. Second, it contributes to practice by presenting empirical evidence on the importance of financial inclusion competencies in enhancing the performance of livestock SMEs. This evidence can guide industry leaders in promoting financial literacy and swift adoption of financial inclusion practices among their members. Finally, the study contributes to policy by providing actionable recommendations to the Ministry of Agriculture. These recommendations aim to better inform livestock market players about financial inclusion strategies and support them with policy initiatives that facilitate the adoption of innovative financial solutions.

By addressing these aspects, the research aims to assess the effect of financial inclusion on the performance of the livestock market in Niger South Senatorial Zone, with a focus on financial access, usage, and service quality. The findings will not only fill a critical gap in the literature but also provide practical and policy-relevant insights to drive economic growth in the livestock sector.

## **Literature review**

### **Financial Inclusion**

Financial inclusion ensures that individuals and businesses have access to affordable, sustainable financial products and services that meet their needs, such as transactions, credit, savings, and insurance (World Bank Group, 2020). Key factors influencing financial inclusion include accessibility, affordability, sufficiency, and user knowledge. It benefits underserved communities by offering credit, improving savings opportunities, and enhancing financial literacy, fostering economic growth and reducing poverty (Babu, 2018). For example, providing formal banking services to farmers allows them to save, invest, and access credit, which enhances productivity and financial stability (International Financial Corporation, 2017). Governments and financial institutions play critical roles in creating supportive environments through affordable and innovative financial products, such as the use of fintech in Pakistan's agricultural sector to improve access and utilization of financial services (World Bank Group, 2020).

The benefits of financial inclusion for Small and Medium Enterprises (SMEs) are extensive, addressing financial resource constraints and enhancing operational efficiency. Financial inclusion provides SMEs with access to formal financial services, increases credit availability, and fosters better financial management, savings, and investment opportunities (International Financial Corporation, 2017; World Bank Group, 2020). Additionally, it mitigates risks through insurance products, facilitates secure digital transactions, and supports inclusive economic growth by integrating marginalized communities into formal economic activities. For SMEs, this leads to improved financial stability, growth prospects, and sustainability, particularly in regions with limited access to traditional banking services (Evans, 2018).

In the context of Niger South Senatorial Zone, financial inclusion emphasizes comprehensive accessibility and the effective utilization of financial services to enhance the performance of livestock market operators. It ensures access to quality financial products and services that drive improved sales, reduce transaction costs, and support business expansion, particularly in rural and

underserved areas (Abiara & Arosanyin, 2014). By promoting secure transactions, convenience, and financial empowerment, financial inclusion fosters job creation, economic empowerment, and sustainable development, enabling livestock market operators to contribute meaningfully to economic growth (Moses-Ashike, 2023).

The dimensions of financial inclusion provide a framework to evaluate how individuals and businesses access and utilize formal financial services. These dimensions include access to financial services, usage and utilization, affordability, service quality, financial literacy, consumer protection, digital and technological access, inclusive policy, gender inclusion, geographical inclusion, and the inclusion of marginalized groups (Koomson et al., 2018). Access to financial services is fundamental, focusing on the availability and accessibility of products like bank accounts, credit, savings, and insurance. Research highlights that improving access enhances financial stability and economic well-being (Demirgüç-Kunt et al., 2015). Studies such as those by Arzubiaga et al. (2023) in Spain and Hossain et al. (2023) in Bangladesh underscore that financial access, combined with literacy, significantly boosts SME performance and economic empowerment.

Usage and utilization delve deeper into the active participation of individuals and businesses in financial systems, measuring the frequency, volume, and diversity of transactions. This dimension highlights the importance of proactive engagement for maximizing the benefits of financial inclusion. Prodanova et al. (2023) found that mobile financial services enhance customer satisfaction and business outcomes, while Lee et al. (2023) demonstrated that digital financial inclusion aids poverty alleviation in China. These findings emphasize that encouraging active usage is critical for achieving comprehensive financial inclusion and driving sustainable development.

Quality of services is another crucial dimension, emphasizing the effectiveness, reliability, and satisfaction derived from financial services. High-

quality services are essential for fostering customer trust and engagement. Kar et al. (2023) identified that in India, superior service quality attracts and retains customers, directly impacting financial inclusion outcomes. Similarly, the World Bank's Financial Inclusion Global Initiative (2021) stresses that improving service quality is vital for promoting greater customer participation and satisfaction (Mushtaq et al., 2023). By focusing on these dimensions, this study aims to explore the accessibility, usage, and quality of financial services to assess their impact on the performance of livestock market operators in Niger South Senatorial Zone.

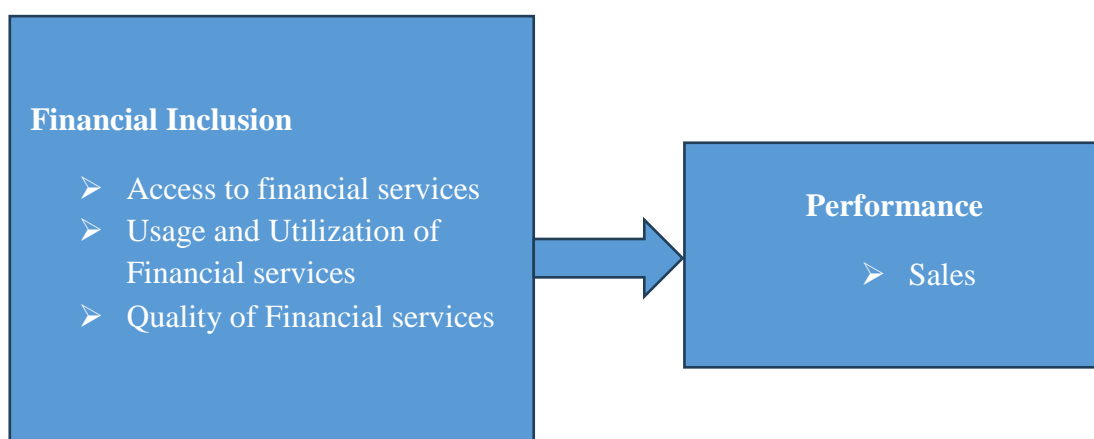
### **Business Performance**

Business performance is a multifaceted concept that evaluates a company's success and operational efficiency through financial and non-financial indicators. Financially, it includes metrics such as profitability, liquidity, solvency, and efficiency, which assess a company's ability to generate profits, manage resources, and meet financial obligations (Kotane & Kuzmina-Merlino, 2017). Operationally, it evaluates aspects such as production efficiency, customer satisfaction, and resource utilization, providing insights into how well the company manages its day-to-day processes (Manavalan & Jayakrishna, 2019). Strategically, business performance reflects a company's progress toward long-term goals, including market share growth, competitive advantage, and alignment with its vision and mission (Mahdi et al., 2016). These evaluations collectively provide a comprehensive understanding of a company's health and effectiveness.

For micro, small, and medium-sized enterprises (MSMEs), business performance incorporates unique financial and non-financial indicators tailored to their scale and challenges. Financial metrics, such as revenue growth, profitability, and financial stability, are critical, but non-financial measures like customer satisfaction, employee productivity, and market competitiveness are equally significant. MSMEs play a vital role in economic

development by creating jobs, fostering innovation, and distributing income (Johnson-Hart, 2023). However, they face unique challenges, including limited access to finance, resource constraints, and scalability issues. These challenges necessitate customized strategies to enhance performance, ensuring the long-term sustainability of these enterprises while acknowledging their contributions to local economies.

This study adopts sales performance as a measure of business success for livestock market operators. Given the informal nature of MSMEs in this sector, formal financial records are often unavailable, and security concerns deter the disclosure of financial figures. Thus, assessing sales trends provides a subjective yet meaningful perspective on business performance. The use of sales as a non-financial metric aligns with the characteristics of the study population, offering insights into the effectiveness of financial inclusion initiatives and their impact on business growth and sustainability. By examining sales trends, this study captures the operational realities of livestock market operators, contributing to a nuanced understanding of business performance within the context of financial inclusion.



**Figure 1: Study's conceptual framework**

**Source: Author's Computation, 2025**

As it can be observed in figure 1, financial inclusion measured through three dimensions and is expected to have a direct effect on the performance of livestock market operators' performance measured by subjective self-reported level of sales over three years.

On the theoretical basis, the Technology Adoption Theory is highly relevant to the study as it focuses on the adoption and usage of technological financial services, such as mobile banking and digital payment platforms, which are central to the study's concept of financial inclusion. This theory suggests that when individuals or businesses, such as livestock farmers, adopt technological financial services, it can streamline financial transactions, enhance access to finance, and improve financial management. These benefits can contribute to increased productivity and efficiency, ultimately leading to improved sales performance. The theory also provides valuable policy implications, emphasizing the need for targeted interventions to promote the adoption of technological financial services, thereby enhancing financial inclusion and benefiting farmers' performance. In the context of this study, the Technology Adoption Theory offers insights into how technology can influence the financial and performance outcomes of livestock farmers in Nigeria.

Based on the extant studies reviewed, this study addresses two key gaps identified in the existing literature. The first is a knowledge gap, as prior research on financial inclusion has primarily focused on industries such as banking and manufacturing, with limited empirical evidence regarding its impact on the performance of livestock MSMEs in Nigeria. Given the critical role of agriculture in the Nigerian economy, particularly the livestock sector, this study seeks to fill this gap by exploring how financial inclusion influences the performance of livestock markets in Niger South Senatorial Zone, Niger State. The second gap is methodological, as most previous studies have relied on regression analysis, which may not fully capture the complexities of the relationship between financial inclusion and performance. To overcome this limitation, this study employs Structural Equation Modelling (PLS-SEM), a



more robust and comprehensive analytical tool, to establish clearer causality between the two variables and provide a more nuanced understanding of their interplay in the context of livestock markets.

## **METHODOLOGY**

This study adopts a quantitative survey design to determine the effect of financial inclusion on the performance of the livestock market in the Niger South Senatorial Zone of Niger State. A cross-sectional approach is employed, focusing on a particular phenomenon at a specific point in time, with data collected once from respondents between August 2023 and March 2024 (O'Reilly, 2019)

### **Population of the Study**

The population consists of various stakeholders in the three major livestock markets in the Niger South Senatorial Zone: Karra Market (Jebba, Mokwa LGA), Wuya Market (Lavun LGA), and Tungan Mallam Market (Lapai LGA). The total population of livestock producers, dealers, retailers, and brokers registered with the market union is 17,260 (Market Union, MACBAN, 2023).

### **Sample Technique**

A cluster sampling technique was employed to select representative samples from each of the three livestock markets, with the sample size distributed proportionally among the clusters. The proportionate sample for each market was determined as follows: Karra Market (44%), Wuya Market (25%), and Tungan Mallam Market (31%).

### **Sample Size**

Using the Taro Yamane formula for sample size determination, the sample size for the study was calculated as 391 stakeholders. To mitigate attrition, an adjusted sample size of 435 was used, accounting for potential non-responses (10%).

### **Method of Data Analysis**

Descriptive statistics (frequency, percentages, mean, and standard deviation) were used to analyze the demographic characteristics of the respondents. The hypotheses were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM), a robust analytical tool that establishes causation between variables. Data was collected using a 5-point Likert scale, with responses ranging from "strongly disagree" (1) to "strongly agree" (5).

### **Data Collection**

Data was collected using a structured questionnaire with three sections: demographic information, financial inclusion, and sales performance. The questionnaire was administered to 435 livestock market stakeholders, and an introductory letter was included to ensure transparency and confidentiality. An interpreter was employed to ensure inclusivity, particularly for respondents who could not read or understand English.

### **Variable Specification and Measurement**

The independent variable, financial inclusion, was measured across three dimensions: Access, Usage and Utilization, and Quality of Service. These dimensions were adapted from previous studies (Thatsarani & Jianguo, 2022), and respondents were asked to rate 19 items on a 5-point Likert scale. The dependent variable, sales performance, was also assessed using standardized items.

### **Validity and Reliability**

To ensure the validity of the research instrument, the questionnaire was reviewed by scholars from the Entrepreneurship and Business Studies Department at the Federal University of Technology, Minna, Nigeria, for face and content validity. Corrections were made based on their feedback. The reliability of the instrument was assessed using a test-retest method and

validated with the Price Statistics Unit of the Niger State Bureau of Statistics. Additionally, the Cronbach's alpha coefficient was used to determine the internal consistency of the instrument. This methodology provides a comprehensive approach to understanding the impact of financial inclusion on the performance of livestock market stakeholders in Niger South Senatorial Zone.

### **Model Specification**

$$SP = \beta_0 + \beta_1 AS + \beta_2 US + \beta_3 QL + \mu$$

Where:

SP= Sales performance

AS = Access

US = Usage

Quality = Quality

$\beta_0$  = Constant (the value of SP when all other variables are equal to zero)

$\beta_1, \beta_2, \beta_3$  = Parameter estimates of Financial Inclusion on sales performance

U = error term

A priori expectation AS, US, QL  $\geq 0$ .

## **RESULTS AND DISCUSSION**

### **Demographic composition of respondents**

The demographic composition of the respondents reveals key insights into the livestock market stakeholders in the Niger South Senatorial Zone. A significant majority of the respondents (93.86%) are male, highlighting the predominance of male participation in the livestock market, while females make up a small proportion (6.14%), indicating possible gender disparities. The educational qualifications of respondents show diversity, with the largest group (47.57%) falling under the "Other Certificates" category, suggesting a mix of educational backgrounds. This variation emphasizes the need for tailored financial inclusion strategies that cater to different educational levels. The majority of respondents (64.96%) are retailers, followed by

brokers/agents (27.88%) and producers (7.16%), which reflects the multi-tiered structure of the livestock market. In terms of market representation, Karra Market Jebba is the most represented, accounting for 43.99% of respondents, followed by Wuya Market Lavun (25.06%) and Tungan Mallam Market Lapai (30.95%), highlighting the diverse market landscape in the region. The average age of respondents is 38.4 years, indicating a relatively young and dynamic workforce. This demographic profile provides valuable context for understanding the unique characteristics of livestock market stakeholders and the need for financial inclusion interventions that address their specific requirements, preferences, and market dynamics.

### **Confirmatory factor Analysis for the study**

Table 1 presents the final factor analysis for the study captures items with the items with 0.7 standardized coefficients for the initial pooled factor analysis for the outer model (Hair et al., 2019).

**Table 1: Confirmatory Factor Analysis for the Constructs**

Constructs' Observed Variables	Coefficients	Coefficients	Coefficients	Comments
AFS <sub>2</sub> <- Access to Financial Services	0.750			Accepted
AFS <sub>3</sub> <- Access to Financial Services	0.603			Rejected
AFS <sub>4</sub> <- Access to Financial Services	0.750			Accepted
AFS <sub>5</sub> <- Access to Financial Services	0.701			Accepted
AFS <sub>6</sub> <- Access to Financial Services	0.411			Rejected
AFS <sub>7</sub> <- Access to Financial Services	0.310			Rejected
QFS <sub>1</sub> <- Quality of Financial Services	0.706			Accepted
QFS <sub>2</sub> <- Quality of Financial Services	0.816			Accepted
QFS <sub>3</sub> <- Quality of Financial Services	0.656			Rejected
QFS <sub>4</sub> <- Quality of Financial Services	0.270			Rejected
QFS <sub>5</sub> <- Quality of Financial Services	0.561			Rejected
QFS <sub>6</sub> <- Quality of Financial Services	0.738			Accepted
QFS <sub>7</sub> <- Quality of Financial Services	0.526			Rejected
S <sub>1</sub> <- Sales Performance			0.771	Accepted
S <sub>2</sub> <- Sales Performance			0.849	Accepted
S <sub>3</sub> <- Sales Performance			0.604	Rejected
UFS <sub>1</sub> <- Usage of Financial Services		0.816		Accepted
UFS <sub>2</sub> <- Usage of Financial Services		0.758		Accepted
UFS <sub>3</sub> <- Usage of Financial Services		0.861		Accepted

UFS4 <- Usage of Financial Services		0.799		Accepted
UFS5 <- Usage of Financial Services		0.562		Rejected
UFS6 <- Usage of Financial Services		0.396		Rejected

**Source: Author’s Computation, 2025.**

The table therefore indicated that items with the strongest relationship with the underlying constructs are captured with the structural equation therefore achieving reliability and interpretability of the model.

**Table 2: Summary of Reliability for the Constructs of Financial Inclusion and Performance**

Constructs	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Access to Financial Services	0.775	0.786	0.869
Quality of Financial Services	0.798	0.813	0.881
Sales Performance	0.788	0.791	0.904
Usage of Financial Services	0.885	0.891	0.920

**Source: Researcher’s Field Work, 2025.**

Table 2 provides insights into the reliability of constructs related to financial inclusion and performance within the livestock farming community in ZONE A. Following the structural equation modeling approach as delineated by Hair et al. (2019), the internal consistency of the research instrument is statistically examined using both composite reliability and Cronbach's alpha, with a benchmark set at 0.7. As depicted in Table 2, constructs such as financial service usage, quality, access, and sales performance all exhibit reliability scores surpassing the 0.7 benchmark for both composite reliability and Cronbach's alpha. This alignment with the reliability benchmark indicates a robust internal consistency within the research instrument. Hence, it can be

concluded that the reliability quality criteria are met, affirming the trustworthiness of the obtained results for the model.

**Table 3: Summary of Convergent Validity for the Constructs of Financial Inclusion and Performance**

Constructs	Average variance extracted (AVE)	Comment
Access to Financial Services	0.689	Strong
Quality of Financial Services	0.711	Strong
Sales Performance	0.825	Strong
Usage of Financial Services	0.743	Strong

**Source: Researcher’s Field Work, 2025.**

Table 3 illuminates the convergent validity for this study, a metric that elucidates the relationships between constructs within a measurement model. Convergent validity gauges the extent to which observed variables elucidate the underlying constructs within the model. In the evaluation of this quality criterion within the measurement model of the structural equation model, the Average Variance Extracted (AVE) is considered, with a benchmark of 0.5 (Cheung *et al.*, 2023). The analysis results in an AVE of 0.689 for the access to financial services construct, 0.711 for quality of financial services, 0.825 for sales performance, and 0.743 for the usage of financial services construct. These outcomes signify a robust convergent validity for all constructs within the measurement model, underscoring the strength of relationships between observed variables and their underlying constructs. Overall, the study demonstrates a compelling convergent validity, contributing to the overall robustness of the model assessing the impact of financial inclusion on the performance of the livestock market in ZONE A Senatorial District, Niger State.

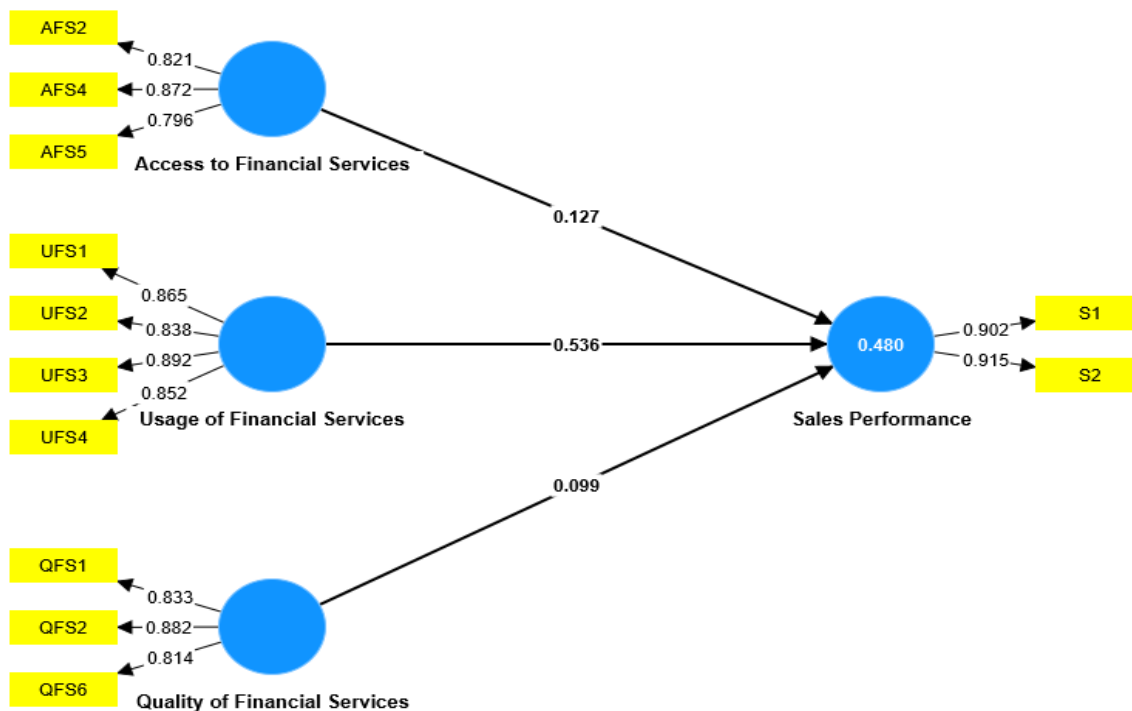
**Table 4: Summary of Multi collinearity Variance Inflated Factor Matrix**

Constructs	VIF value	Comment
Access to Financial Services	2.226	Strong

Quality of Financial Services	1.606	Strong
Usage of Financial Services	2.037	Strong

**Source: Researcher’s Field Work, 2025.**

Table 4 presents the multicollinearity values for the study, using Variance Inflation Factor (VIF) to assess relationships between financial inclusion and livestock market performance. The VIF values for Access to financial services, Quality of financial services, and Performance are 2.226, 1.606, and 2.037, respectively, all below the recommended thresholds of 5.0 or 10.0. These low VIF values indicate no significant multicollinearity, ensuring the model's stability and reliability. The results demonstrate the robustness of the model in analyzing the constructs with high reliability.



**Figure 2: Schematic Diagram for the Study**

**Table 5: Path Coefficient and Significant of Path Coefficient**

Constructs	Path Coefficient	T statistics	P values	Comment
Access to Financial Services -> Sales Performance	0.126	2.081	0.037	Supported

Usage of Financial Services -> Sales Performance	0.536	9.368	0.000	Supported
Quality of Financial Services -> Sales Performance	0.099	2.236	0.025	Supported

**Source: Researcher’s Field Work, 2025.**

Table 5 presents the path coefficients for the study, quantifying the influence of financial inclusion dimensions of Access to financial services, Usage of financial services, and Quality of financial services on the performance of livestock market stakeholders in ZONE A Senatorial District, Niger State. The path coefficients are 0.126, 0.536, and 0.099, respectively, with the Usage of financial services showing the strongest relationship with performance. The table also provides the p-values for these coefficients: Access (0.037), Usage (0.000), and Quality (0.025), all of which are below the 0.05 significance threshold, confirming the statistical significance of these relationships. These results highlight the strength and reliability of the associations between financial inclusion and livestock market performance, supporting the study's hypotheses.

**Table 6: Summary of R Square for the Study**

Construct	R-square	R-square adjusted
Sales Performance	0.480	0.476

**Source: Researcher’s Field Work, 2025.**

Table 6 reveals an R-square value of 0.480, indicating that 48% of the variance in livestock market performance is explained by the dimensions of financial inclusion. This demonstrates the model's substantial effectiveness in capturing and explaining performance variability in ZONE A Senatorial District, Niger State.

The positive and significant relationship between financial technological access and livestock market performance in Niger South Senatorial Zone highlights the critical role of technological infrastructure in facilitating access



to financial products and services. Technological advancements streamline transactions, improve security, and increase efficiency in financial mobility, benefiting market participants such as livestock purchasers. Studies by Jawad and Naz (2023) and Appah (2023) emphasize the importance of technology in enhancing financial access and market performance, aligning with the findings of this study. The integration of technology optimizes financial interactions and promotes improved outcomes within the livestock market, enabling stakeholders to mobilize capital efficiently and invest in operational enhancements, thus boosting overall market productivity.

Similarly, the positive relationship between financial usage and livestock market performance further underscores the transformative impact of active financial service engagement. As demonstrated by Liu et al. (2023) and Huang et al. (2023), active financial usage, such as credit utilization and insurance adoption, enhances the efficiency and effectiveness of the livestock market. This active engagement allows market participants to manage risks and navigate uncertainties, contributing to a more resilient and productive market. Practical strategies, such as financial literacy programs and incentives for responsible financial behavior, can support the active usage of financial services, improving market performance and fostering sustainable growth within the sector.

Finally, the study reveals a positive and significant relationship between the quality of financial services and livestock market performance, echoing the findings of Islam et al. (2023). High-quality financial services, characterized by trustworthiness and appropriateness, play a pivotal role in shaping economic outcomes by encouraging active engagement among market participants. The reliability and suitability of financial services contribute to the development of a robust, trust-based economic ecosystem, fostering increased market performance. Policymakers and stakeholders should focus not only on increasing access to financial services but also on enhancing their quality to ensure a more resilient and efficient livestock market. This dual focus on access and quality can foster a trustworthy and effective financial environment, driving long-term economic development in the region.

## **CONCLUSION AND RECOMMENDATION**

The study concludes that financial inclusion significantly influences the performance of the livestock market in Niger South Senatorial Zone, with 48% of the variation in market performance explained by financial access, usage, and service quality. The findings highlight the positive relationship between these dimensions of financial inclusion and market outcomes, suggesting that improving financial inclusion can enhance the overall economic development of the livestock sector. The research also contributes to the existing knowledge by integrating the Technology Adoption Theory with Structural Equation Modeling (SEM), providing a deeper understanding of how financial technologies impact livestock market participants and their performance. In light of these findings, several recommendations are proposed to enhance financial inclusion in the region. These include fostering collaboration with local financial institutions, promoting financial literacy programs, and expanding digital financial solutions to increase access. Additionally, encouraging the active usage of financial services through incentives and expanding credit facilities, along with promoting agricultural insurance, can improve market participation. To ensure the quality of financial services, strengthening regulatory frameworks and investing in digital platforms are crucial. The study also suggests areas for further research, including examining the impact of microloans, insurance, and savings on market performance, as well as assessing government policies and regulatory frameworks in promoting financial inclusion.

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