2026 Volume: 02 Issue: 06 www.ijrpa.com ISSN 2456-9995 Research Article

International Journal Research Publication Analysis

Page: 01-25

OPTIMIZING AGRIBUSINESS PERFORMANCE THROUGH EFFECTIVE SUPPLY CHAIN MANAGEMENT PRACTICES: EVIDENCE FROM UGANDA

Obbo Simon Peter*[1], Dr. Albert Tambo[2]

[1]*Research Scholar, Maseno University, Kenya.*

[2]*Lecturer, Department of management Science, Maseno University Kenya.*

Article Received: 30 April 2026
Article Revised: 19 June 2026
Published on: 08 July 2026

***Corresponding Author: Obbo Simon Peter**
Research Scholar, Maseno University, Kenya.

DOI: https://doi-doi.org/101555/ijrpa.1966

ABSTRACT

Agribusiness remains a cornerstone of economic growth, food security, and employment in Uganda, yet many agribusiness firms continue to experience operational inefficiencies characterized by supply disruptions, poor supplier coordination, inadequate information sharing, weak customer management, delayed deliveries, and high post harvest losses estimated at between 20 and 40 percent of agricultural production. These challenges undermine organizational performance despite the sector contributing about 24.7 percent of the country's Gross Domestic Product and employing nearly 70 percent of the workforce. This study examined the effect of supply chain management practices on the performance of registered agribusiness firms in Uganda. The study was anchored on Agency Theory and employed a correlational research design. A target population of 38,528 registered agribusiness firms was considered, from which a sample of 396 firms was selected using proportionate stratified random sampling based on Yamane's formula. Data was collected using structured questionnaires, and 371 valid responses representing a response rate of 93.7 percent were analyzed using correlation and multiple regression analysis. The findings revealed that supply chain management practices have a positive and statistically significant effect on the performance of agribusiness firms. The regression model explained 51.6 percent of the variation in firm performance. The study concludes that effective supply chain management practices are critical drivers of agribusiness firm performance and that strengthening supplier relationships, improving information sharing, and enhancing customer management significantly contribute to improved organizational outcomes. The study recommends that policymakers develop supportive policies that promote collaboration

and digital information exchange across agribusiness supply chains, while agribusiness managers should prioritize strategic supplier partnerships, strengthen customer management, and invest in effective information sharing systems to enhance firm performance.Future research should examine additional supply chain management practices and investigate mediating and moderating variables that may further explain variations in agribusiness firm performance.

KEYWORDS: Supply chain management practices, supplier relationship, customer management, information sharing, agribusiness firms, firm performance.

1.0 INTRODUCTION

Agribusiness has emerged as one of the most important sectors driving economic transformation, food security, employment creation, and industrial development across the world. The sector encompasses a broad range of activities including agricultural input supply, production, processing, storage, transportation, marketing, and distribution of agricultural products. Globally, agribusiness contributes approximately 4.3% of global gross domestic product (GDP) and provides livelihoods for more than 1.2 billion people directly and indirectly involved in agricultural value chains (World Bank, 2025). In developing economies, agribusiness plays a particularly critical role in supporting economic growth and poverty reduction due to its extensive linkages with manufacturing, trade, logistics, and rural development (FAO, 2023). The increasing globalization of agricultural markets, changing consumer preferences, and rapid technological advancements have heightened the need for agribusiness firms to improve their operational performance in order to remain competitive and sustainable (Chopra *et al*., 2019).

In Africa, agribusiness contributes nearly 17% of the continent's GDP and employs approximately 52% of the labour force, making it one of the largest economic sectors (African Development Bank, 2024). Despite its significance, the sector continues to face operational inefficiencies characterized by supply chain disruptions, post-harvest losses, poor logistics infrastructure, inadequate information flows, and weak market coordination among value chain actors (Reardon *et al,* 2018). These challenges negatively affect operational performance by increasing costs, reducing productivity, limiting product quality, and constraining firms' ability to respond effectively to market demands. Consequently, improving operational performance has become a strategic priority for agribusiness firms seeking to enhance competitiveness and long-term sustainability.

Uganda's economy remains heavily dependent on agriculture and agribusiness activities. The sector contributes approximately 24.7% of national GDP and employs between 65% and 70% of the country's workforce (Uganda Bureau of Statistics [UBOS], 2025; World Bank, 2025). Uganda hosts thousands of registered agribusiness firms engaged in coffee processing, grain handling, dairy production, horticulture, livestock products, agro-processing, export marketing, and agricultural input distribution. These firms play a vital role in generating export earnings, supporting industrialization, and enhancing food security. However, despite their strategic importance, many registered agribusiness firms continue to experience operational performance challenges that hinder their growth and competitiveness. According to the Uganda Investment Authority (2025), many agribusiness enterprises operate below optimal production capacity due to inefficiencies in procurement, inventory management, supplier coordination, and product distribution systems.

Evidence indicates that post-harvest losses remain one of the most serious operational problems facing Ugandan agribusiness firms. The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF, 2024) estimates that post-harvest losses account for between 20% and 40% of agricultural output depending on the commodity, resulting in substantial financial losses for producers, processors, and distributors. Cereals, fruits, vegetables, and dairy products are particularly vulnerable to losses arising from inadequate storage facilities, poor transportation systems, and inefficient inventory management practices. These losses directly reduce operational efficiency and profitability while limiting firms' ability to meet customer demand consistently.

Furthermore, Ugandan agribusiness firms continue to experience supply disruptions arising from weak supplier relationships and fragmented value chains. Many firms rely on dispersed smallholder farmers who often face challenges related to production variability, inconsistent quality standards, and delayed deliveries (Reardon *et al*., 2018). Such challenges increase procurement costs, create production delays, and negatively affect product quality. Studies have shown that unreliable supplier networks contribute significantly to stock shortages, production interruptions, and reduced operational performance among agribusiness firms in developing economies (Nazifi,Muhammad,Aliyu& Musa,2025). In addition, inadequate collaboration between firms and suppliers limits opportunities for joint planning, quality improvement, and risk-sharing initiatives that could enhance supply chain efficiency.

Customer-related challenges also continue to affect the operational performance of agribusiness firms in Uganda. Increasing competition in both domestic and international markets has heightened customer expectations regarding product quality, safety, availability,

and responsiveness. However, many agribusiness firms struggle to collect and utilize customer information effectively, resulting in poor demand forecasting, product mismatches, delayed deliveries, and reduced customer satisfaction (Alawode,2025). The inability to understand changing customer requirements often leads to inventory imbalances, lost sales opportunities, and weakened market competitiveness. Effective customer management practices are therefore increasingly viewed as critical for improving operational efficiency and market responsiveness.

Additionally, limited information sharing among supply chain partners remains a significant operational constraint. Information asymmetry between suppliers, processors, distributors, and customers often results in poor coordination, delayed decision-making, inaccurate demand forecasts, and inefficient resource allocation (Lee& Mangalaraj, 2022). Although digital technologies offer opportunities for real-time information exchange and enhanced supply chain visibility, their adoption remains relatively low among many agribusiness firms in Uganda due to infrastructure limitations and resource constraints. Consequently, firms frequently experience delays, inventory inaccuracies, quality inconsistencies, and elevated operating costs.

Agency Theory developed by Jensen and Meckling (1976) provides a useful theoretical lens for understanding these operational performance challenges and the role of supply chain management practices in addressing them. The theory explains how information asymmetry, conflicting interests, and monitoring difficulties arise when one party (the principal) delegates responsibilities to another party (the agent). Within agribusiness supply chains, principals and agents may include agribusiness firms, suppliers, distributors, transporters, and customers. Information gaps and misaligned incentives among these actors often contribute to inefficiencies, opportunistic behavior, quality problems, delayed deliveries, and increased transaction costs. Agency Theory suggests that effective governance mechanisms can minimize these challenges by improving coordination, transparency, and accountability among supply chain participants.

From an Agency Theory perspective, supplier relationship management serves as a mechanism for reducing agency costs by promoting trust, collaboration, performance monitoring, and long-term partnerships between agribusiness firms and suppliers(Whipple& Roh, 2010). Strong supplier relationships facilitate timely delivery of quality inputs, improve procurement efficiency, and reduce supply uncertainty (Chopra *et al,* 2019). Similarly, customer management practices help firms better understand customer needs, align production activities with market requirements, and enhance demand forecasting accuracy,

thereby reducing operational inefficiencies and improving responsiveness. Information sharing further minimizes information asymmetry by enabling real-time communication, transparency, and collaborative decision-making among supply chain actors(Smith,2024). Through effective information exchange, firms can improve inventory control, reduce delays, enhance visibility, and strengthen operational performance(Ramayah& Omar, 2010). Consequently, supplier relationship management, customer management, and information sharing are expected to serve as critical supply chain management practices capable of improving the operational performance of registered agribusiness firms in Uganda.

Several studies have examined the relationship between supply chain management practices and organizational performance in different contexts, although important gaps remain regarding agribusiness firms in Uganda. Kwamega,Li&Abrokwah, (2018) investigated the effect of supply chain management practices on agribusiness firms in Ghana and found that supplier partnerships, customer relationships, and information sharing significantly improved financial and internal process performance, with supply chain integration acting as a mediator. However, the study focused on overall firm performance rather than operational performance and was conducted in Ghana, limiting its applicability to Uganda's agribusiness sector. Similarly, Maina, Njehia&Eric,(2020) examined supply chain management practices among dairy cooperatives in Kenya and established that strategic supply chain practices positively influenced organizational performance. Nevertheless, the study concentrated on dairy cooperatives and organizational performance broadly, without specifically examining supplier relationship management, customer management, and information sharing as distinct predictors of operational performance.

In Ethiopia, Aredda,Kero& Abegaz, (2025) found that information sharing, customer relationship management, strategic supplier relationships, and supply chain responsiveness significantly enhanced agribusiness firm performance, with information sharing emerging as the strongest predictor. Despite its relevance, the study focused on overall business performance and was conducted in Oromia, Ethiopia, thereby presenting contextual limitations for Ugandan agribusiness firms. Odongo,Dora, Molnar,Ongeng&Gellynck,(2017) examined the role of power in supply chain performance among agribusiness SMEs in Uganda and established that power relationships significantly influenced supply chain performance. However, the study emphasized governance and power dynamics rather than supply chain management practices, leaving unanswered questions regarding how specific practices such as supplier relationship management, customer management, and information sharing affect operational performance. Obonyo (2025) investigated information sharing and

sustainable supply chain performance in Kenya's meat supply chain and reported that effective information exchange improved supply chain outcomes through enhanced coordination and decision-making. Nevertheless, the study focused on sustainability outcomes rather than operational performance and examined a single supply chain practice.

Mwangi and Muli (2025) established that supplier relationship management significantly improved operational performance among food and beverage manufacturing firms in Kenya by reducing lead times and improving material quality. However, the study was confined to manufacturing firms and did not incorporate customer management and information sharing within an integrated framework. Likewise, Maina (2025) found that supplier relationship management positively influenced delivery reliability, inventory turnover, and cost efficiency in Kenyan supply chains, but the study was based on a desk review and lacked primary evidence from agribusiness firms. Furthermore, Nyakundi and Mutia (2025) demonstrated that warehousing and inventory management practices enhanced supply chain performance among agricultural firms listed on the Nairobi Securities Exchange, yet the study focused on listed firms and excluded critical relational dimensions such as customer management and supplier relationship management.

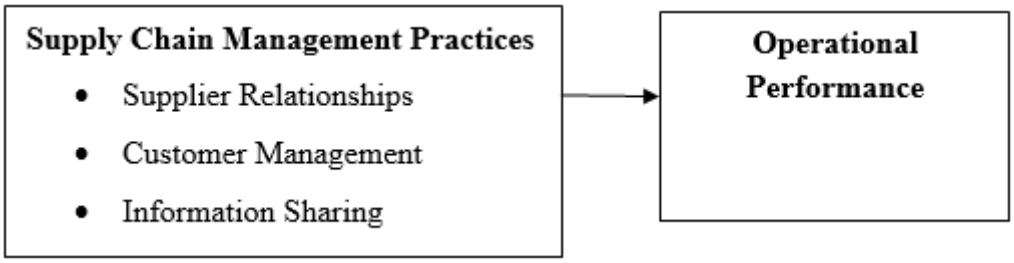
The reviewed studies demonstrate that supply chain management practices positively influence firm performance; however, they reveal several gaps. Conceptually, most studies have focused on overall organizational, financial, or supply chain performance rather than operational performance. Contextually, much of the evidence originates from Ghana, Kenya, and Ethiopia, with limited empirical attention given to registered agribusiness firms in Uganda. Methodologically, many studies examined individual supply chain practices in isolation rather than integrating supplier relationship management, customer management, and information sharing within a single model. Consequently, the effect of these key supply chain management practices on the operational performance of registered agribusiness firms in Uganda remains insufficiently understood, thereby necessitating the current study.

1.1 Statement of the Problem

Operational performance has become a major determinant of competitiveness and sustainability among agribusiness firms worldwide, yet substantial inefficiencies continue to undermine the ability of many firms to achieve optimal productivity, cost efficiency, quality standards, and customer responsiveness. In Uganda, agribusiness contributes approximately 24.7% of GDP and employs nearly 70% of the workforce, making it one of the most important sectors of the economy. Despite this strategic importance, registered agribusiness firms continue to experience significant operational performance challenges manifested

through high post-harvest losses estimated at between 20% and 40% of production, frequent supply disruptions, delayed deliveries, inconsistent product quality, inventory inefficiencies, rising operating costs, and limited responsiveness to customer demands. These challenges persist despite increased investments in agricultural production, agro-processing, and market development initiatives. Existing evidence suggests that weak supplier relationships, inadequate customer management systems, and poor information sharing among supply chain actors contribute substantially to these operational inefficiencies by creating coordination failures, information asymmetries, and fragmented decision-making processes across agribusiness value chains. Although numerous studies have examined supply chain management practices in manufacturing and general business settings, limited empirical attention has been directed toward understanding how specific supply chain management practices influence the operational performance of registered agribusiness firms within the Ugandan context. Consequently, the extent to which supplier relationship management, customer management, and information sharing contribute to improved operational performance among registered agribusiness firms in Uganda remains insufficiently understood. This study therefore seeks to examine the effect of supply chain management practices on the operational performance of registered agribusiness firms in Uganda.

1.2 Conceptual Framework



2.0 LITERATURE REVIEW

2.1 Agency Theory

This study is anchored on Agency Theory, which was developed by Jensen and Meckling (1976). The theory explains the relationship between principals and agents, where one party delegates responsibilities to another party, often resulting in information asymmetry, conflicting interests, and monitoring challenges. In agribusiness supply chains, principals and agents may include agribusiness firms, suppliers, distributors, processors, and customers whose interactions influence operational outcomes. Agency Theory posits that ineffective coordination and inadequate information exchange among these actors can lead to

opportunistic behaviour, increased transaction costs, delayed deliveries, poor product quality, and operational inefficiencies (Jensen & Meckling, 1976). The theory is relevant to this study because supply chain management practices such as supplier relationship management, customer management, and information sharing serve as governance mechanisms that reduce information asymmetry and align the interests of supply chain partners. Strong supplier relationships enhance trust, collaboration, and monitoring of supplier performance, while effective customer management facilitates better understanding of market requirements and demand patterns. Similarly, information sharing improves transparency, coordination, and decision-making across the supply chain (Chopra *et al*., 2019; Ivanov & Dolgui, 2021). By reducing agency-related challenges, these practices are expected to improve operational performance through enhanced efficiency, delivery reliability, product quality, responsiveness, and cost effectiveness among firms.

2.2 Empirical Literature Review

2.2.1 Effect of Supply Chain Management Practices on Performance of firms

Aredda, Kero and Abegaz (2025) carried out a study to explore how supply chain management practices affect the performance of agribusiness companies. The goal of their research was to understand how these practices influence the performance of agribusiness firms in the Oromia region of Ethiopia. The study identified four key areas to assess supply chain management practices: information sharing, customer relationship management, strategic supplier relationships, and supply chain responsiveness. They used a mixed-methods approach, combining descriptive and explanatory research designs, and focused on quantitative data collection. Data was gathered from 265 agribusiness firms in the Oromia region through structured questionnaires and was analyzed using multiple regression techniques. The findings showed that supply chain management practices have a significant positive impact on performance, with information sharing being the most influential factor, followed by customer relationship management, strategic supplier relationships, and supply chain responsiveness.

Banu and Ramya (2025) carried out a study to examine how supply chain management practices affect the performance of agribusiness firms, with a focus on the role of supply chain integration as a mediator. The research used a mixed-methods approach, which involved surveys, interviews, and statistical analysis to collect data from 100 medium to large agribusiness companies. The findings show that procurement practices, inventory management, and supplier collaboration have a significant impact on both financial and operational performance. Among these, procurement practices had the most positive effect on

profitability and operational efficiency. The study also found that supply chain integration plays a mediating role between supply chain management practices and performance outcomes. Firms with higher levels of integration achieved better financial results and greater operational effectiveness. The research emphasizes the value of integrated and collaborative supply chains in enhancing the ability of agribusiness firms to respond to and adapt to changes. However, challenges such as limited use of technology and poor coordination between supply chain partners were identified as obstacles to achieving the best possible performance.

Wahdan and Emam (2017) carried out a study to examine how supply chain management affects financial performance, with a focus on agribusiness in Egypt. The study explored how implementing supply chain management (SCM) in the agribusiness sector can enhance productivity, reduce costs, and ultimately improve the organization's net income. The research was guided by two primary questions: first, does supply chain management have a significant effect on financial performance? Second, is there a significant connection between supply chain management and financial performance, as well as responsibility accounting? To address these questions, data was gathered from the financial records of an agribusiness case in Egypt, and a survey was also conducted. The study's results showedthat supply chain management significantly influences financial performance by boosting productivity, cutting costs, and increasing profitability. Additionally, the effective use of supply chain management can strengthen the application of responsibility accounting by promoting better budg*et al*location for crop production.

Chileshe (2022) carried out a study to examine how supply chain management practices affect the performance of small and medium enterprises in the agro-dealer sector in Lusaka. The main purpose of the study was to assess how these practices influence the performance and competitive advantage of SMEs in the agro sector, with a specific focus on Lusaka. The target population consisted of all small and medium agro dealers in Lusaka who were registered under the Patents and Companies Regulatory Act (PACRA) as of April 2020. Primary data was gathered using questionnaires distributed to the SMEs. A total of 245 SMEs in the agro sector were registered with PACRA. Out of these, 171 questionnaires were distributed, and 151 were returned. Based on the literature review, the key dimensions that represent supply chain management practices were identified, including strategic supplier relationships, customer relationships, quality of information sharing, level of information sharing, and the significant variables involved. The researcher used these dimensions to evaluate the impact of SCM practices. The findings from the regression analysis indicated

that the implementation of supply chain management practices had a positive effect on the performance of SMEs in the agro sector.

Al-Shboul, Barber, Garza-Reyes, Kumar & Abdi (2017) examined how supply chain management practices influence the performance of supply chain and manufacturing firms. The aim of their study was to develop a framework based on seven key dimensionsstrategic supplier partnership, extent of information sharing, quality of information sharing, customer service management, internal lean practices, postponement, and total quality managementinto a comprehensive construct of supply chain management practices. They then explored the causal links between these practices and two performance measures: supply chain performance and manufacturing firm performance.Theresearchers gathered data through a survey distributed to 249 Jordanian manufacturing firms. Their findings revealed that supply chain management practices have a positive impact on supply chain performance, which subsequently also positively affects manufacturing firm performance. Even though the influence of supply chain management practices on manufacturing firm performance is partially mediated through supply chain performance the study also found that supply chain management practices have a direct, positive effect on manufacturing firm performance.

Firmansyah and Siagian (2022) examined how information sharing influences supply chain performance, focusing on supplier quality management, supply chain agility, and supply chain innovation.To gather data, they used a questionnaire with a 7-point Likert scale, available both online via GoogleForm and in printed format.The survey was distributed through various channels including social media, email, WhatsApp, and postal mail.Out of a total population of 266, 112 responses were collected and deemed valid for further analysis.The researchers employed the partial least square method (PLS) using SmartPLS software for data analysis.The findings indicated that information sharing has a direct positive impact on supplier quality management, supply chain agility, and supply chain innovation.Additionally, these three factors; supply chain agility, supplier quality management, and supply chain innovation also directly influence operational performance.A notable finding of the study is the indirect effect of information sharing on operational performance, which is mediated by supply chain agility, supplier quality management, and supply chain innovation.This insight provides practical guidance for professionals aiming to enhance operational performance by promoting information sharing, supplier quality management, supply chain agility, and supply chain innovation.Theoretical-wise, this research contributes by highlighting the mediating roles of supply chain agility, supply chain

innovation, and supplier quality management in the relationship between information sharing and operational performance.

Shetty (2019) examined how supply chain management practices influence the performance of companies. This research paper investigates the effect of supply chain management (SCM) practices on corporate performance, focusing on aspects like supply chain efficiency and effectiveness. The study also includes companies that have made substantial improvements in their internal operations and now recognize the importance of engaging with external customers and suppliers within the supply chain to achieve further operational enhancements. Data was gathered from 75 respondents across manufacturing companies. The findings reveal that three specific supply chain practicesmanagement practices (MP), customer relationship management, and logistics processhave a significant and positive relationship with output performance. Among these three practices, the logistics process was found to be more effective than management practices and customer relationship management in driving performance improvements. Additionally, the study highlights that the impact of these three supply chain practices varies depending on the type of product and the size of the company.

Emon, Khan & Siam (2024) examined the impact of supplier relationship management on supply chain performance, focusing on the manufacturing and service industries in Bangladesh.The study aimed to understand how specific Supplier Relationship Management (SRM) practices, such as Supplier Collaboration, Supplier Development, Supplier Evaluation and Selection, and Long-Term Supplier Relationships, affect cost efficiency within supply chains.The research was conducted in the context of Bangladesh's evolving business environment.A quantitative method was used, involving regression and correlation analyses based on data collected from a structured survey of 270 participants across the manufacturing and service sectors.The study took a cross-sectional approach, offering a snapshot of the relationships between SRM practices and cost efficiency.The results showed that Supplier Collaboration and Long-Term Supplier Relationships have a significant and positive effect on cost efficiency.Together, these practices explain about 64.2% of the variation in cost efficiency, highlighting their importance in improving supply chain performance.

Gandhi, Shaikh &Sheorey (2017) examined the impact of supply chain management practices on firm performance, with empirical evidence from a developing country.The study aimed to explore how the adoption and implementation of supply chain management practices (SCMPs) influence both supply chain performance (SCP) and firm performance (FP) within the organized retail sector in a developing economy such as India.The researchers conducted an empirical analysis based on data collected from 125 responses provided by supply chain

managers in organized retail companies across India.A theoretical framework was proposed to illustrate the relationship between SCMPs, SCP, and FP.This model was validated through the use of multiple mediation regression analysis.The findings indicated that supply chain management practices have a positive effect on both supply chain and firm performance.Among the various SCMPs, customer relationship management and supplier relationship management were identified as the most significant factors, exerting the greatest influence on firm performance in the context of organized retailing in India.

The reviewed studies generally show that supply chain management practices positively influence organizational performance. Aredda, Kero and Abegaz (2025) found that information sharing, customer relationship management, and strategic supplier relationships significantly improved agribusiness performance in Ethiopia, while Banu and Ramya (2025) established that procurement practices, inventory management, and supplier collaboration enhanced financial and operational performance through supply chain integration. Similarly, Wahdan and Emam (2017), Chileshe (2022), Al-Shboul*et al*. (2017), and Shetty (2019) reported that supplier relationships, customer management, and information sharing improved productivity, profitability, supply chain performance, and overall organizational performance. Despite these consistent findings, the studies were conducted in contexts such as Ethiopia, Egypt, Zambia, Jordan, and India, limiting their applicability to Uganda's agribusiness sector. Furthermore, most focused on overall organizational, financial, manufacturing, or supply chain performance rather than operational performance. In addition, several studies examined broader supply chain management dimensions such as logistics, procurement, supply chain integration, and total quality management, with limited attention to the specific effects of supplier relationship management, customer management, and information sharing. Consequently, empirical evidence on how these supply chain management practices influence the operational performance of registered agribusiness firms in Uganda remains limited.

3.0 METHODOLOGY

3.1 Research Design

The study used a correlational research design, which is a type of non-experimental approach that explores the strength and direction of relationships between variables without altering them (Sileyew,2019) This design is aimed at identifying whether and how different variables are connected, often through statistical methods like correlation and regression analysis (Myers, Well& Lorch Jr,2013). In this case, the correlational design was chosen to investigate

the connections between supply chain management practices, corporate governance mechanisms, and firm performance as naturally occurring elements within agribusiness companies (Dannels,2018).

3.2 Target Population

Population refers to the complete group of units that possess the characteristics of interest to the researcher (Willie, 2022).According to Willie,(2024), it is the entire collection of individuals or objects that share common features relevant to the study. Based on the Uganda Revenue Authority (2022) report, there were 38,528 agribusiness entities registered for tax purposes during the fiscal year 2021/22. Therefore, the study focused on these 38,528 registered agribusiness firms in Uganda. Since their contact details were available upon request, it was feasible to reach out to each respondent through phone calls and emails.

3.3 Sample and Sampling Technique

A sample is a part of the statistical population whose properties are studied so as to obtain information about a whole (Khothari, 2004). According to Hofmann and Patel (2014) an ideal sample should be large enough to serve as adequate representative of the population and small enough to be selected economically, that is in terms of subject availability.The study sample size was determined using Yamane's (1967) formula for finite populations. Given a target population of 38,528 registered agri-business firms and a precision level of 5%, the calculated sample size was 395.9, which was rounded up to 396 respondents worked out as shown below.

Using Yamane's (1967) formula for a finite population:

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

Where:

n= sample size

N= population size = 38,528

e= level of precision (sampling error), typically 5% = 0.05

Substituting the values:

$$n = \frac{38{,}528}{1 + 38{,}528(0.05)^2}$$

$$n = \frac{38{,}528}{1 + 38{,}528(0.0025)}$$

$$n = \frac{38{,}528}{1 + 96.32}$$

$$n = \frac{38{,}528}{97.32}$$

$$n = 395.9$$

$$n \approx 396$$

Therefore, the required sample size for a population of 38,528 registered agri-business firms in Uganda at a 95% confidence level and 5% margin of error is 396 firms.

After determining the total sample size, the population was divided into the four strata based on the firms' primary business activities. The number of firms selected from each stratum was then determined using proportionate allocation.The distribution of firms across the four agribusiness subsectors was as follows: Manufacturing (7,706), Trade (13,485), Services (5,779), and Agriculture (11,558).Stratification was necessary to ensure that each subsector was adequately represented in the study sample and to improve the precision of the estimates.proportionate allocation as proposed by Cochran (1977) was used to determine the number of firms to be selected from each stratum.

Table 3.1: Proportionate Allocation of Sample Size Across Agribusiness Subsectors.

Stratum	Population (Nh)	Percentage (%)	Sample Size (nh)
Manufacturing	7,706	20	79
Trade	13,485	35	139
Services	5,779	15	59
Agriculture	11,558	30	119
Total	**38,528**	**100**	**396**

Source: URA, (2026)

Thereafter, simple random sampling was used within each stratum to select the required number of firms. A complete sampling frame of registered agribusiness firms was obtained from the relevant registration authorities, and each firm was assigned a unique identification number. Using a random selection procedure, 79 firms were selected from Manufacturing, 139 from Trade, 59 from Services, and 119 from Agriculture, resulting in a final sample of 396 firms. This approach ensured that each firm had an equal chance of selection while maintaining proportional representation of all agribusiness subsectors in Uganda.

Contacts of the entities corresponding with the randomly selected TINs were obtained. The researcher then sent links of the data collection tools (designed in Kobo Collect) to these

contacts and followed up with calls, as well as physical visits by research assistants, to the contacts to ensure that the selected participants fully respond to the cause. In case the selected business could not be easily traceable via phone, email or WhatsApp, replacement was enforced. Simple random sampling would be suitable for this study because it gives every agribusiness firm an equal chance of being selected, thereby reducing selection bias and ensuring that the sample of top managers is representative of the 38,528 registered firms in Uganda.

4.0 RESULTS AND DISCUSSION

4.1 Response Return Rate

The study targeted a total of 396 respondents using Kobo Toolbox as the data collection platform. After the data collection process, responses were reviewed for completeness and validity. Out of the 396 administered questionnaires, 371 valid responses were received representing 93.7% response rate that was included in the analysis.

4.2 Demographic Characteristics of Respondents

The study first sought to capture the general demographic characteristics of the respondents and the firms they represent. This included the sector of operation, the age of the firm, the duration of employment of the respondents, and the size of the workforce in the firm. A total of 371 respondents participated in the study, providing a substantial sample for analyzing supply chain management practices, corporate governance, and performance of agribusiness firms in Uganda. The demographic information is presented in Table 4.2.

Table 4.1: Demographic Characteristics of Respondents.

Demographic Variable	Categories	Frequency	Percentage (%)
Sector of Operation	Crop farming	142	38.3
	Livestock farming	98	26.4
	Agribusiness processing	91	24.5
	Others	40	10.8
Firm Age (Years)	Less than 5	88	23.7
	5–10	136	36.7
	11–20	95	25.6
	Above 20	52	14
Respondent's Duration in Organization	Less than 2	76	20.5
	2–5	142	38.3
	6–10	98	26.4
	Above 10	55	14.8
Number of Employees	Less than 20	89	24
	20–50	154	41.5
	51–100	83	22.4
	Above 100	45	12.1

Source (Field Survey, 2026)

The results show that the largest proportion of respondents operate in crop farming (38.3%), followed by livestock farming (26.4%) and agribusiness processing (24.5%), with a smaller proportion in other sectors (10.8%). This reflects the composition of Uganda's agribusiness sector, which is dominated by crop production and livestock activities. Regarding firm age, most firms (36.7%) have been in operation for 5–10 years, indicating a mix of emerging and moderately established firms. In terms of tenure, the majority of respondents (38.3%) have been working in their firms for 2-5 years, showing moderate familiarity with organizational processes. Workforce size data reveals that most firms employ 20-50 employees (41.5%), which is consistent with the prevalence of Agribusiness firms in Uganda's agribusiness sector.

The demographic distribution confirms that the study's sample of 371 respondents is adequately representative of the agribusiness sector in Uganda. The diversity in sector, firm age, employee tenure, and workforce size ensures that findings on supply chain management practices, corporate governance, and firm performance are robust and generalizable across different types of firms. The mix of new, moderately established, and older firms captures the operational dynamics of Uganda's agribusiness sector, while the representation of Agribusiness firms and larger firms provides insights into how organizational size influences practices and performance.

4.3 Effect of Supply Chain Management Practices on Performance of Agribusiness Firms in Uganda

4.3.1 Correlation Analysis: Supply Chain Management Practices and Performance

A correlation analysis of the relationship between SCM and all the components on performance was conducted with the aim to determine both the strength and direction of the associations, providing insights into how integrated SCM practices influence operational and market performance. Correlation coefficients (r), significance levels (p), and sample size (N = 371) were calculated to assess the linear relationships between each construct and firm performance. The detailed results are presented in Table 4.1

Table 4.1: Relationship between Key SCMP Constructs and Performance.

Correlations					
		(1)	**(2)**	**(3)**	**(4)**
Performance of Agribusiness Firms	Pearson Correlation	1	.537**	.562**	.696**
	Sig. (2-tailed)		.000	.000	.000
	N	371	371	371	371
Supplier Relationship	Pearson Correlation	.537**	1	.703**	.714**
	Sig. (2-tailed)	.000		.000	.000
	N	371	371	371	371
Customer Management	Pearson Correlation	.562**	.703**	1	.746**
	Sig. (2-tailed)	.000	.000		.000
	N	371	371	371	371
Information Sharing	Pearson Correlation	.696**	.714**	.746**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	371	371	371	371
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Field Data,(2026)

The analysis showed a strong positive link between supplier relationship practices and firm performance ($r = 0.537$, $p < .05$). When the correlation is squared ($r^2 = 0.288$), it means that about 28.8% of the changes in performance can be explained by supplier relationship practices. This indicates that approaches like transactional, collaborative, and strategic supplier engagement significantly help in improving operational efficiency and the ability to respond to market changes. The strong connection shows that actively managing supplier relationships is important for ensuring reliable deliveries, cutting costs, and increasing product availability.

Customer management practices were also strongly and positively related to performance ($r = 0.562$, $p < .05$).When this correlation is squared ($r^2 = 0.316$), it means that around 31.6% of the performance variation is due to these customer-focused practices. This implies that concentrating on customer orientation, aligning the organization, and managing knowledge plays a major role in achieving better business outcomes. The slightly stronger correlation compared to supplier relationships suggests that managing interactions with customers and sharing information with them may have a greater direct impact on improving market responsiveness and operational success in the agribusiness sector.

Information sharing had the strongest link with performance ($r = 0.696$, $p < .05$), showing a very strong connection.When this value is squared ($r^2 = 0.484$), it means nearly 48.4% of the performance variation is explained by information sharing practices. This emphasizes the

importance of having structured systems for gathering, accessing, and sharing information within firms. Good information sharing helps in making quicker decisions, coordinating better across the supply chain, and responding more effectively to market needs. It is the most impactful supply chain management (SCM) practice among the three areas studied. Companies that do well in one area, such as supplier management, are likely to also perform well in managing customer relationships and sharing information.

Table 4.2: Regression Analysis ofEffect of Supply Chain Management Practices on Performance.

Model Summary									
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**				
					R Square Change	**F Change**	**df1**	**df2**	**Sig. F Change**
1	.719[a]	.516	.513	.54570	.516	130.678	3	367	.000
a. Predictors: (Constant), Information Sharing, Customer Management, Supplier Relationship									

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.756	.074		10.216	.000
	Supplier Relationship	.304	.033	.407	9.212	.000
	Customer Management	.132	.034	.175	3.882	.000
	Information Sharing	.234	.032	.306	7.313	.000
a. Dependent Variable: Performance						

Source: Survey Data, (2026)

The regression results show that the model was statistically significant (F = 130.678, p = 0.000), indicating that the supply chain management practices included in the model significantly explained the performance of agribusiness firms in Uganda. The correlation coefficient of 0.719 indicates a strong positive relationship between the independent variables and firm performance. The coefficient of determination (R Square = 0.516) shows that 51.6 percent of the variation in the performance of agribusiness firms was explained by supplier relationship, customer management, and information sharing, while the adjusted R Square of 0.513 suggests that the model provides a reliable estimate of this relationship.

The coefficient results indicate that all three supply chain management practices had a positive and statistically significant effect on the performance of agribusiness firms since their significance values were less than 0.05. Supplier relationship had the greatest influence

on performance (β = 0.407, B = 0.304, t = 9.212, p = 0.000), followed by information sharing (β = 0.306, B = 0.234, t = 7.313, p = 0.000), while customer management had the smallest but still significant effect (β = 0.175, B = 0.132, t = 3.882, p = 0.000). These findings indicate that increases in supplier relationship, information sharing, and customer management were associated with increases in the performance of agribusiness firms in Uganda.

The estimated regression equation is:

Performance = 0.756 + 0.304(Supplier Relationship) + 0.132(Customer Management) + 0.234(Information Sharing)

The findings of this study indicate that supplier relationship, information sharing, and customer management all have a positive and statistically significant effect on the performance of agribusiness firms in Uganda, with supplier relationship having the strongest influence. These findings are consistent with those of Aredda, Kero and Abegaz (2025), who found that supply chain management practices significantly improve the performance of agribusiness firms in Ethiopia. Both studies established that supplier relationship, customer management, and information sharing are important determinants of firm performance. However, while the Ethiopian study found information sharing to be the most influential factor, the present study found supplier relationship to have the greatest effect on performance. This difference may reflect variations in the operating environment and organizational priorities between agribusiness firms in Uganda and Ethiopia. The findings are also consistent with those of Chileshe (2022), who established that strategic supplier relationships, customer relationships, and information sharing positively influence the performance of agro dealers in Zambia.

Likewise, the results agree with Gandhi, Shaikh and Sheorey (2017), who found supplier relationship management and customer relationship management to be the strongest determinants of firm performance, and with Emon, Khan and Siam (2024), who reported that supplier collaboration and long term supplier relationships significantly improve organizational performance. Similarly, Gera *et al* (2022), through a systematic review, concluded that both internal and external supply chain management practices positively influence firm performance across different industries. Although these studies were conducted in different countries and sectors, they consistently demonstrate that effective management of supply chain relationships contributes significantly to improved organizational performance.

The positive and significant effect of information sharing found in this study also agrees with several previous studies. Aredda, Kero and Abegaz (2025), Gebisa and Ram (2023), Firmansyah and Siagian (2022), and Pintuma*et al*. (2020) all reported that information sharing significantly improves firm or operational performance. However, unlike the present study, Firmansyah and Siagian (2022) and Pintuma*et al*. (2020) found that information sharing also influences performance indirectly through other organizational capabilities, while the current study examined only its direct effect. The positive effect of customer management is consistent with the findings of Das and Hassan (2022), Gandhi, Shaikh and Sheorey (2017), Chileshe (2022), and Shetty (2019), all of whom concluded that customer relationship management contributes positively to organizational performance. Nevertheless, the current study found customer management to have the smallest standardized effect among the three supply chain management practices, whereas Aredda, Kero and Abegaz (2025) ranked it as the second most influential predictor of agribusiness performance.

The findings also compare well with those of Al Shboul*et al.* (2017), who found that supply chain management practices directly improve manufacturing firm performance, and with Wahdan and Emam (2017), who reported that supply chain management enhances financial performance by improving productivity and reducing costs. Furthermore, Banu and Ramya (2025) found that procurement practices, supplier collaboration, and inventory management significantly improve organizational performance through supply chain integration. Unlike their study, the present research did not examine the mediating role of supply chain integration, meaning that it provides evidence only of the direct effects of supply chain management practices on firm performance. This presents an opportunity for future studies to investigate whether supply chain integration explains part of the relationship between supply chain management practices and organizational performance in the Ugandan agribusiness sector.

The findings of this study extend Agency Theory by providing empirical evidence that supplier relationship, customer management, and information sharing function as effective governance mechanisms for reducing agency problems and enhancing the performance of agribusiness firms in Uganda. While Agency Theory emphasizes the need to minimize information asymmetry, conflicting interests, and opportunistic behaviour between principals and agents through appropriate monitoring and coordination mechanisms, this study demonstrates that effective supply chain management practices achieve these objectives by

fostering collaboration, transparency, and coordination among supply chain partners. The finding that supplier relationship had the strongest positive effect on firm performance suggests that building strong and collaborative relationships with suppliers is an effective means of aligning the interests of different supply chain actors and minimizing agency costs. Similarly, the significant effects of information sharing and customer management indicate that timely exchange of information and close engagement with customers improve coordination and decision making, thereby reducing inefficiencies associated with information asymmetry. Therefore, this study extends Agency Theory by confirming that supply chain management practices are not only governance mechanisms for controlling agency conflicts but also strategic capabilities that directly enhance organizational performance within the agribusiness sector. This broadens the application of the theory beyond its traditional focus on principal and agent relationships to demonstrate its relevance in explaining how collaborative supply chain governance contributes to improved organizational performance in developing economy contexts such as Uganda.

CONCLUSIONS

The study concludes that supply chain management practices have a significant and positive effect on the performance of agribusiness firms in Uganda. Specifically, supplier relationship, information sharing, and customer management were all found to contribute significantly to firm performance, indicating that improvements in these practices are associated with better organizational outcomes. The study further concludes that supply chain management practices collectively explain a substantial proportion of the variation in firm performance, highlighting their strategic importance in enhancing organizational success.

RECOMMENDATIONS

The findings of this study have important policy implications for improving the performance of agribusiness firms in Uganda. Policymakers, particularly the relevant government ministries and agencies responsible for agriculture, trade, and industry, should develop policies that promote effective supply chain management practices across the agribusiness sector. Such policies should encourage stronger collaboration between agribusiness firms and their suppliers through supportive regulatory frameworks, supplier development initiatives, and platforms that facilitate information exchange among supply chain partners. Government should also formulate policies that encourage investment in digital technologies and information systems that improve information sharing and coordination within supply chains.

For supply chain practice, managers of agribusiness firms in Uganda should prioritize strengthening relationships with suppliers because supplier relationship was found to have the greatest influence on firm performance. Firms should establish long term partnerships with suppliers based on trust, cooperation, and regular communication to improve coordination and operational efficiency. Agribusiness firms should also invest in systems that promote timely, accurate, and reliable information sharing among supply chain partners to support better decision making and improve organizational performance. Furthermore, managers should strengthen customer management practices by continuously engaging customers, responding to their needs, and improving service delivery. Further, agribusiness firms should adopt an integrated approach that simultaneously strengthens supplier relationships, information sharing, and customer management to achieve sustained improvements in organizational performance.Future research should examine additional supply chain management practices and investigate mediating and moderating variables that may further explain variations in agribusiness firm performance.

REFERENCES

1. African Development Bank. (2024). *African economic outlook 2024: Driving Africa's transformation through sustainable industrialization*. Abidjan, Côte d'Ivoire: African Development Bank.
2. Alawode, A. (2025). The role of agricultural value chains in enhancing food security and economic development. *International Research Journal of Modernization in Engineering Technology and Science*.
3. Al-Shboul, M. D. A. R., Barber, K. D., Garza-Reyes, J. A., Kumar, V., & Abdi, M. R. (2017). The effect of supply chain management practices on supply chain and manufacturing firms' performance. *Journal of manufacturing technology management*, *28*(5), 577-609.
4. Aredda, M. M., Kero, C. A., & Abegaz, M. B. (2025). Effects of Supply Chain Management Practices on Agribusiness Performance: Empirical Evidence from Oromia, Ethiopia. *Horn of African Journal of Business and Economics (HAJBE)*, *8*(1), 202-235.
5. Banu, M. S. S., & Ramya, A. (2025). Supply chain management practices and agribusiness firms' performance: mediating role of supply chain integration. *International Journal of Cultural Studies and Social Sciences*, *30*(1), 67-85.

6. Chileshe, M. J. (2022). *The impact of supply chain management practices on performance of small and medium enterprises. a case of agro-dealers in Lusaka* (Doctoral dissertation).
7. Chopra, S., & Meindl, P. (2019). Supply chain management. Strategy, planning & operation. In *Das Summa Summarum des Management: Die 25 wichtigsten Werke für Strategie, Führung und Veränderung* (pp. 265-275). Wiesbaden: Gabler.
8. Dannels, S. A. (2018). Research design. In *The reviewer's guide to quantitative methods in the social sciences* (pp. 402-416). Routledge.
9. Das, S., & Hassan, H. K. (2022). Impact of sustainable supply chain management and customer relationship management on organizational performance. *International Journal of Productivity and Performance Management*, *71*(6), 2140-2160.
10. Emon, M. M. H., Khan, T., & Siam, S. A. J. (2024). Quantifying the influence of supplier relationship management and supply chain performance: an investigation of Bangladesh's manufacturing and service sectors. *Brazilian Journal of Operations & Production Management*, *21*(2), 2015-2015.
11. Firmansyah, H. S., &Siagian, H. (2022). The impact of information sharing on supply chain performance through supplier quality management, supply chain agility, and supply chain innovation. *Petra International Journal of Business Studies*, *5*(2), 119-131.
12. Food and Agriculture Organization. (2023). *The state of food and agriculture 2023: Revealing the true cost of food to transform agrifood systems*. Rome, Italy: FAO.
13. Gandhi, A. V., Shaikh, A., &Sheorey, P. A. (2017). Impact of supply chain management practices on firm performance: Empirical evidence from a developing country. *International Journal of Retail & Distribution Management*, *45*(4), 366-384.
14. Gebisa, D. (2023). The impact of information sharing and inventory management practices on firms' performance in supply chain practices. *Gadjah Mada International Journal of Business*, *25*(2), 199-225.
15. Gera, R., Yadav, R., Khera, G. S., Saxena, A., Chadha, P., Dixit, S., & Sergeevna, L. Y. (2022). A systematic literature review of supply chain management practices and performance. *Materials Today: Proceedings*, *69*, 624-632.
16. Ivanov, D., &Dolgui, A. (2021). A digital supply chain twin for managing the disruption risks and resilience in the era of Industry 4.0. *Production Planning & Control*, *32*(9), 775-788.https://doi.org/10.1080/09537287.2020.1768450
17. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360

18. Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate governance* (pp. 77-132). Gower.
19. Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate governance* (pp. 77-132). Gower.
20. Kwamega, M., Li, D., &Abrokwah, E. (2018). Supply chain management practices and agribusiness firms' performance: Mediating role of supply chain integration. *South African Journal of Business Management*, *49*(1), 1-11.
21. Lee, I., &Mangalaraj, G. (2022). Big data analytics in supply chain management: A systematic literature review and research directions. *Big data and cognitive computing*, *6*(1), 17.
22. Maina, C., Njehia, B. K., & Eric, B. K. (2020). Enhancing organisational performance in the dairy industry: Supply chain management approach. *International Journal of Agriculture*, *5*(1), 25-38.
23. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2024). *Uganda agriculture sector performance report 2024*. Kampala, Uganda: Government of Uganda.
24. Myers, J. L., Well, A. D., & Lorch Jr, R. F. (2013). *Research design and statistical analysis*. Routledge.
25. Nazifi, B., Muhammad, A. A., Aliyu, A., & Musa, M. B. (2025). Agribusiness Enterprise Performance in Developing Countries: Review of Dimensions and Determinants. *African Journal of Management and Business Research*, *19*(1), 414-427.
26. Obonyo, E. A. (2025). *Information sharing, social capital and sustainable supply chain performance in the agri-food supply chain: An empirical study of the meat supply chain in Kenya*. Strathmore University.
27. Odongo, W., Dora, M. K., Molnar, A., Ongeng, D., &Gellynck, X. (2017). Role of power in supply chain performance: evidence from agribusiness SMEs in Uganda. *Journal of Agribusiness in Developing and Emerging Economies*, *7*(3), 339-354.
28. Ramayah, T., & Omar, R. (2010). Information exchange and supply chain performance. *International journal of information technology & decision making*, *9*(01), 35-52.
29. Reardon, T., Echeverria, R., Berdegué, J., Minten, B., Liverpool-Tasie, S., Tschirley, D., & Zilberman, D. (2019). Rapid transformation of food systems in developing regions: Highlighting the role of agricultural research & innovations. *Agricultural systems*, *172*, 47-59.https://doi.org/10.1111/agec.12517
30. Shetty, V. K. (2019). Impact of supply chain management practices on performance of companies. *Journal of Supply Chain Management Systems*, *8*(3), 48-57.

31. Sileyew, K. J. (2019). *Research design and methodology* (Vol. 7, pp. 1-12). London: Cyberspace.
32. Smith, H. K. (2024). Impact of Real-Time Data Sharing on Supply Chain Agility and Performance. *Journal of Business Logistics*, *45*(3), 210-225.
33. Uganda Bureau of Statistics (UBOS). (2025). *Statistical abstract 2025*. Kampala, Uganda: Uganda Bureau of Statistics.
34. Uganda Investment Authority. (2025). *Uganda agribusiness sector profile 2025*. Kampala, Uganda: Uganda Investment Authority.
35. Wahdan, M. A., & Emam, M. A. (2017). The impact of supply chain management on financial performance and responsibility accounting agribusiness case from Egypt. *Accounting and finance research*, *6*(2), 136.
36. Whipple, J. M., & Roh, J. (2010). Agency theory and quality fade in buyer-supplier relationships. *The International Journal of Logistics Management*, *21*(3), 338-352.
37. Willie, M. M. (2022). Differentiating between population and target population in research studies. *International journal of medical science and clinical research studies*, *2*(6), 521-523.
38. Willie, M. M. (2024). Population and target population in research methodology. *Golden Ratio of Social Science and Education*, *4*(1), 75-79.
39. World Bank. (2025). *Uganda economic update: Leveraging agribusiness for economic transformation*. Washington, DC: World Bank.