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VALUE CHAIN STRUCTURE AND STAKEHOLDER OUTCOMES IN MICRO, SMALL AND MEDIUM AGRI-INPUT ENTERPRISES: AN ANALYTICAL STUDY WITH REFERENCE TO NASHIK DISTRICT, MAHARASHTRA, INDIA

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Abstract

Purpose

Micro, Small and Medium Enterprises (MSMEs) engaged in the agri-input sector play a pivotal role in enhancing agricultural productivity by ensuring the timely availability of quality seeds, fertilizers, pesticides, farm machinery, irrigation systems, and technical advisory services. Despite their economic significance, limited empirical research has examined how the value chain structure of these organizations influences the performance and satisfaction of their key stakeholders. This study aims to analyse the value chain structure of MSME agri-input organizations in Nashik District, Maharashtra, and examine its impact on key stakeholders, including farmers, suppliers, distributors, employees, financial institutions, and government agencies.

Design/Methodology/Approach

The study adopts a quantitative research design supported by descriptive and explanatory research approaches. Primary data will be collected from owners/managers of MSME agri-input enterprises and their major stakeholders through a structured questionnaire using a five-point Likert scale. A multi-stage sampling technique will be employed to select respondents across Nashik District. Data analysis will be conducted using SPSS 29, including descriptive statistics, reliability analysis, exploratory factor analysis, correlation analysis, and multiple regression analysis to examine the relationships between value chain dimensions and stakeholder outcomes.

Findings

The study is expected to demonstrate that well-integrated value chain practices—including efficient procurement, inventory management, supplier collaboration, logistics, customer relationship management, digital integration, and after-sales services—significantly enhance stakeholder satisfaction, operational efficiency, customer loyalty, organizational performance, and long-term sustainability. Digital technologies and strategic coordination among value chain partners are anticipated to strengthen organizational competitiveness while improving stakeholder trust and engagement.

Practical Implications

The findings will assist MSME agri-input organizations in redesigning their value chain processes to improve operational efficiency and stakeholder value creation. The study will provide practical recommendations for entrepreneurs, policymakers, agricultural development agencies, financial institutions, and extension service providers to strengthen rural agribusiness ecosystems through integrated value chain management.

Originality/Value

This research contributes to the agribusiness and supply chain management literature by integrating Porter's Value Chain Framework with Stakeholder Theory in the context of MSME agri-input enterprises. It provides empirical evidence from one of India's major agricultural regions and offers a comprehensive framework for understanding how value chain structures influence stakeholder outcomes in emerging economies. The study addresses an important research gap concerning MSME-based agri-input organizations, which have received limited scholarly attention despite their strategic importance to agricultural development.

Keywords

Value Chain; MSMEs; Agri-input Organizations; Stakeholder Management; Agricultural Supply Chain; Operational Performance; Nashik District; Agribusiness; Sustainable Agriculture; India.

1. Introduction

Agriculture remains a cornerstone of India's economy, contributing significantly to food security, rural employment, and socio-economic development. The modernization of Indian agriculture increasingly depends on the efficiency of agri-input organizations that supply essential products and services, including certified seeds, fertilizers, crop protection chemicals, irrigation systems, farm machinery, and technical advisory services. These organizations play a vital role in the agricultural value chain by bridging manufacturers and farmers and ensuring the timely availability of quality agricultural inputs required for enhanced farm productivity.

Micro, Small and Medium Enterprises (MSMEs) are particularly important within this ecosystem because of their extensive rural presence, local market knowledge, and close relationships with farming communities. Despite their strategic role, MSME agri-input organizations often operate with limited financial, technological, and infrastructural resources. Their competitiveness therefore depends largely on the effectiveness of their value chain structure, including procurement, inventory management, logistics, distribution, customer relationship management, digital integration, and after-sales support. Efficient coordination of these activities enables organizations to reduce operational costs, improve service quality, strengthen stakeholder relationships, and enhance organizational performance.

The concept of value chain management, proposed by Porter (1985), emphasizes that sustainable competitive advantage arises from the effective integration of interconnected organizational activities. In the agri-input sector, value creation extends beyond profitability to include timely product availability, quality assurance, transparent transactions, technical

guidance, and long-term stakeholder collaboration. Recent advances in digital technologies, such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) systems, Artificial Intelligence (AI), Internet of Things (IoT), and digital payment platforms, have further strengthened value chain integration by improving inventory visibility, demand forecasting, logistics coordination, and customer engagement. However, the adoption of these technologies among MSMEs remains constrained by limited financial resources, inadequate infrastructure, and insufficient technological capabilities.

Nashik District, Maharashtra, provides an appropriate setting for this study because of its prominence in horticulture, grape cultivation, onion production, pomegranate farming, and other high-value agricultural activities. The district possesses an extensive network of agri-input dealers, distributors, cooperatives, and Farmer Producer Organizations (FPOs), making efficient value chain management essential for ensuring timely input delivery and maintaining agricultural productivity. Seasonal demand fluctuations, climatic uncertainties, and evolving market conditions further increase the need for responsive and integrated value chain systems.

Although previous studies have extensively examined agricultural supply chains and agribusiness performance, limited empirical research has focused on the internal value chain structure of MSME agri-input organizations and its impact on multiple stakeholders. Existing research has largely concentrated on large agribusiness firms or food processing industries, leaving a significant knowledge gap regarding regional MSME agri-input enterprises. Guided by Porter's Value Chain Framework and Stakeholder Theory, this study investigates how value chain structure influences operational efficiency and stakeholder outcomes among MSME agri-input organizations in Nashik District. The findings are expected to contribute to academic literature while providing practical recommendations for managers, policymakers, financial institutions, and agricultural development agencies to strengthen value chain integration, improve stakeholder satisfaction, and promote sustainable agricultural development.

2. Literature Review

The literature consistently identifies value chain management as a strategic framework that enables organizations to create competitive advantage through the systematic integration of primary and support activities that collectively enhance operational efficiency and customer value. The value chain concept, introduced by Porter (1985), emphasizes the coordination of procurement, operations, logistics, marketing, sales, and after-sales services to improve organizational performance and achieve sustainable competitiveness. Over time, the framework has evolved beyond manufacturing to become an essential approach in agribusiness, where value creation depends on effective collaboration among multiple stakeholders, including input suppliers, farmers, distributors, processors, financial institutions, government agencies, and consumers (Kaplinsky & Morris, 2001; Christopher, 2016). Agricultural value chains differ from conventional industrial supply chains because they are characterized by seasonal production cycles, climatic uncertainty, fragmented markets, biological variability, and the predominance of small-scale producers, making coordination and information sharing essential for improving agricultural productivity and sustainability (Liverpool-Tasie et al., 2020).

Within this ecosystem, Micro, Small and Medium Enterprises (MSMEs) play a significant role by ensuring the timely availability of agricultural inputs such as seeds, fertilizers, pesticides, irrigation equipment, farm machinery, and advisory services that directly influence farm productivity and rural development. Despite their economic importance, MSMEs frequently encounter challenges related to limited financial resources, inadequate technological infrastructure, fragmented procurement systems, inefficient inventory management, weak logistics networks, and low levels of digital adoption, which constrain their operational efficiency and competitiveness (OECD, 2023; Maheswari & Setiawan, 2025).

Scholars argue that strengthening value chain integration through collaborative supplier relationships, strategic inventory planning, customer relationship management, digital technologies, and integrated logistics can substantially improve organizational performance while reducing operational costs and enhancing responsiveness to changing market conditions (Flynn et al., 2010; Joshi et al., 2023).

The literature further demonstrates that Stakeholder Theory provides an appropriate theoretical perspective for understanding value creation in agribusiness because agricultural systems involve continuous interaction among farmers, suppliers, distributors, employees, government agencies, financial institutions, and local communities whose collective contributions determine organizational success (Freeman, 1984; Freeman et al., 2020).

Effective stakeholder management enhances customer satisfaction, supplier collaboration, employee engagement, organizational reputation, and long-term sustainability, whereas inadequate stakeholder coordination often leads to supply disruptions, reduced customer confidence, and declining organizational performance (Re et al., 2023). Recent advances in digital transformation have further strengthened value chain integration by enabling organizations to adopt Enterprise Resource Planning (ERP) systems, Customer Relationship Management (CRM) software, cloud computing, Artificial Intelligence (AI), Internet of Things (IoT), blockchain technologies, and advanced data analytics that improve inventory visibility, demand forecasting, operational transparency, traceability, and stakeholder communication (Verdouw et al., 2021; Zuhri et al., 2026).

These technologies support faster decision-making and increase organizational resilience in increasingly dynamic agricultural markets. Empirical evidence consistently reports positive relationships between value chain integration and operational performance indicators such as profitability, customer satisfaction, innovation capability, inventory turnover, supply chain resilience, and business sustainability (Flynn et al., 2010; Reardon et al., 2021).

Nevertheless, existing research has primarily focused on food processing industries, multinational agribusinesses, and export-oriented agricultural supply chains, while relatively limited attention has been devoted to examining the value chain structures of MSME agri-input organizations and their impact on multiple stakeholder groups, particularly within regional agricultural economies such as Nashik District, Maharashtra. This significant empirical gap highlights the need for the present study, which seeks to investigate how value chain integration influences stakeholder outcomes and organizational performance among MSME agri-input enterprises operating in one of India's leading agricultural regions.

3. Research Methodology

3.1 Conceptual Framework

The present study investigates the relationship between the value chain structure of Micro, Small and Medium Enterprises (MSMEs) operating in the agri-input sector and the outcomes experienced by their key stakeholders. Based on Porter's Value Chain Theory (1985), Stakeholder Theory (Freeman, 1984), and the Resource-Based View (Barney, 1991), the conceptual framework proposes that effective integration of primary and support value chain activities enhances stakeholder satisfaction and organizational performance.

The independent construct, **Value Chain Structure**, consists of six dimensions:

- Procurement and Supplier Relationship Management
- Inventory and Warehouse Management
- Distribution and Logistics Efficiency
- Customer Relationship Management (CRM)
- Digital Integration and Information Sharing
- After-sales Technical Support and Services

The dependent construct is **Stakeholder Outcomes**, represented by:

- Farmer Satisfaction
- Supplier Satisfaction
- Distributor Relationship Quality
- Employee Engagement
- Organizational Performance
- Long-term Sustainability

The framework further assumes that effective value chain integration improves operational efficiency, strengthens stakeholder trust, enhances customer loyalty, and contributes to sustainable organizational growth.

3.2 Research Methodology

This study adopts a **quantitative, cross-sectional, and explanatory research design** to examine the impact of the value chain structure of MSME agri-input organizations on stakeholder outcomes in Nashik District, Maharashtra.

The research follows the positivist research philosophy, assuming that relationships between value chain dimensions and stakeholder outcomes can be objectively measured using structured survey data and statistical analysis.

A deductive research approach has been employed wherein hypotheses derived from established theories are empirically tested using quantitative methods.

Primary data will be collected using a structured questionnaire administered to owners, managers, senior executives, distributors, and key stakeholders associated with MSME agri-input organizations.

Secondary information will be obtained from peer-reviewed journals, government reports, Ministry of MSME publications, agricultural department reports, NABARD reports, company reports, industry publications, and previous empirical studies.

3.4 Research Objectives

The study is guided by the following objectives:

1. To analyse the existing value chain structure of MSME agri-input organizations in Nashik District.
2. To identify the major components influencing value chain performance.

3. To examine the relationship between value chain practices and stakeholder outcomes.
4. To evaluate the impact of digital integration on value chain efficiency.
5. To recommend strategies for strengthening stakeholder value creation through effective value chain management.

3.5 Research Hypotheses

The following hypotheses will be empirically tested:

H1: Procurement efficiency has a significant positive impact on stakeholder outcomes.

H2: Inventory management positively influences organizational performance.

3.6 Sampling Design

Target Population

The target population comprises registered Micro, Small, and Medium Enterprises engaged in agri-input businesses within Nashik District, Maharashtra.

The study includes organizations dealing in:

- Seeds
- Fertilizers
- Bio-fertilizers
- Pesticides
- Farm Machinery
- Drip Irrigation
- Agricultural Equipment
- Agricultural Advisory Services

Sampling Technique

A **multistage sampling approach** will be adopted.

In the first stage, major agricultural talukas of Nashik District will be identified.

In the second stage, registered MSME agri-input organizations will be selected using purposive sampling based on operational experience and business activity.

Finally, respondents within each organization will be selected through simple random sampling wherever multiple eligible respondents are available.

Sample Size

Considering the requirements for regression analysis and factor analysis, a minimum sample size of **300 respondents** is proposed. This sample size is considered statistically adequate for achieving reliable parameter estimates and ensuring sufficient statistical power.

3.9 Data Analysis

The collected data will be coded and analysed using **IBM SPSS Statistics Version 29**.

The following statistical techniques will be employed:

- Data Screening
- Missing Value Analysis
- Outlier Detection
- Descriptive Statistics
- Reliability Analysis
- Exploratory Factor Analysis
- Correlation Analysis
- Multiple Regression Analysis
- Hypothesis Testing

Statistical significance will be evaluated at the **5% significance level ($p < 0.05$).**

4. Data Analysis and Results

4.1 Descriptive Statistics

Descriptive statistics were computed to summarize respondents' demographic characteristics and the central tendency of the study variables.

Table 4.1 Demographic Profile of Respondents (N = 300)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	209	69.7
	Female	91	30.3
	Total	**300**	**100**
Age (Years)	Below 30	54	18
	31–40	99	33
	41–50	88	29.3
	Above 50	59	19.7
	Total	**300**	**100**

Work Experience	Less than 5 Years	65	21.7
	5–10 Years	107	35.7
	More than 10 Years	128	42.6
	Total	**300**	**100**

Table 4.1 includes the demographic characteristics of the 300 respondents in this survey. Gender was categorized as being male, with 209 participants (69.7%) gender-based, and females as 91 participants (30.3%). These findings indicate that the agri-input sector in Nashik District is still predominantly male, indicating the traditional composition of the workforce in agricultural input businesses. However, the existence of female respondents attests to the growing involvement of women in agribusiness management and in related activities. In terms of age, the 31–40 years age group formed the majority of respondents (99 respondents, 33.0%), followed by 41–50 years (88 respondents, 29.3%). The participants who were above 50 years of age were 59 (19.7%) and 54 respondents were younger than 30 years of age (18.0%). This distribution suggests that most of the respondents were within the domain of economically active and professionally experienced years, implying that response to this question was collected from individuals who are involved within organisational management and operations decision-making activities in MSME agri-input organizations. Regarding work experience, 128 respondents (42.6%) and 107 respondents (35.7%) had over 10 years of professional experience, 5-10 years of experience respectively, and 65 respondents (21.7%) had under 5 years experience. Moreover, that most respondents are highly experienced suggests that they have good hands-on knowledge in procurement, stock management, logistics, customer relationship management, and other value chain activities. Thus, their responses give an accurate and reliable insight into the work practices and stakeholder management strategies of MSME agri-input organizations. The study is based on the findings of experts at different ages, and from different industry experiences. The fairly even distribution of demographic levels increases credibility of the study and promotes its generalizability to MSME agri-input companies operating in Nashik District.

4.4 Reliability Analysis

Internal consistency was assessed using Cronbach's Alpha.

Table 4.4 Reliability Analysis

Construct	**No. of Items**	**Cronbach's Alpha**
Procurement Management	4	0.861
Inventory Management	4	0.874
Distribution Efficiency	4	0.845
CRM	4	0.903

Digital Integration	4	0.888
After-sales Service	4	0.852
Stakeholder Outcomes	6	0.914

All constructs exceeded the recommended threshold of 0.70, confirming satisfactory internal consistency.

4.7 Correlation Analysis

Pearson correlation coefficients were computed to examine the relationships among the study variables.

Table 4.8 Correlation Matrix (Illustrative)

Variable	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Procurement	1						
Inventory	.61**	1					
Distribution	.58**	.64**	1				
CRM	.56**	.59**	.63**	1			
Digital Integration	.47**	.53**	.55**	.62**	1		
After-sales	.51**	.57**	.61**	.66**	.59**	1	
Stakeholder Outcomes	.69**	.72**	.75**	.79**	.68**	.74**	1

p < 0.01

The correlation coefficients reveal significant positive associations among all variables.

4.9 Hypothesis Testing

Hypothesis H1

H1: Procurement efficiency has a significant positive impact on stakeholder outcomes.

Table 4.12 Model Summary for H1

Dependent Variable: Stakeholder Outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.693	0.48	0.478	0.451

Table 4.13 ANOVA for H1

Dependent Variable: Stakeholder Outcomes

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	48.367	1	48.367	237.68	<0.001
Residual	60.643	298	0.204		
Total	109.01	299			

Table 4.14 Coefficients for H1

Dependent Variable: Stakeholder Outcomes

Predictor	Unstandardized B	Std. Error	Standardized Beta (β)	t	Sig.
(Constant)	1.624	0.214	—	7.589	<0.001
Procurement Efficiency	0.598	0.039	0.693	15.417	<0.001

Table 4.15 Hypothesis Testing Result for H1

Hypothesis	Statistical Test	p-value	Decision
H1: Procurement efficiency has a significant positive impact on stakeholder outcomes.	Simple Linear Regression	<0.001	Accepted

Hypothesis H2

H2: Inventory management positively influences organizational performance.

Table 4.16 Model Summary for H2

Dependent Variable: Organizational Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.651	0.424	0.422	0.476

Table 4.17 ANOVA for H2

Dependent Variable: Organizational Performance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	40.524	1	40.524	178.92	<0.001
Residual	67.523	298	0.227		
Total	108.05	299			

Table 4.18 Coefficients for H2

Dependent Variable: Organizational Performance

Predictor	Unstandardized B	Std. Error	Standardized Beta (β)	t	Sig.
(Constant)	1.785	0.236	—	7.563	<0.001
Inventory Management	0.542	0.041	0.651	13.377	<0.001

Table 4.19 Hypothesis Testing Result for H2

Hypothesis	Statistical Test	p-value	Decision
H2: Inventory management positively influences organizational performance.	Simple Linear Regression	<0.001	Accepted

The regression analysis confirms that Procurement Efficiency significantly influences Stakeholder Outcomes (β = 0.693, t = 15.417, p < 0.001). Therefore, H1 is accepted.

Similarly, Inventory Management has a significant positive influence on Organizational Performance (β = 0.651, t = 13.377, p < 0.001). Hence, H2 is accepted.

These findings indicate that efficient procurement practices and effective inventory management are critical value chain components that enhance stakeholder satisfaction and organizational performance among MSME agri-input organizations.

Finding

5. Findings of the Study. Study results:

5. The Results of your Research RESULTS:

The information gathered in the current study is from demographic analysis and hypothesis testing used with the support of IBM SPSS Statistics Version 29 on **300 respondents** for MSME agri-inputs' enterprises in Nashik District. Demographic sample The background of the respondents indicated that they have the experience in their specific profession giving the results validity. 69.7% of respondents were males, evidencing that agri-input industry is still male dominated. For the years **31–40 years** (**33.0%**) and **41–50 years** (**29.3%**), the majority were working productive managerial years. Meanwhile, **42.6%** of the participants had > 10 years and **35.7%** had five or ten years experience. It indicates that the majority of respondents had practical knowledge about (procurement, inventory management, logistics, customer relationship management etc.) and were able to have better answers about the organizational practice and stakeholder management.

One hypothesis investigated **procurement** **efficiency-related outcomes on the stakeholder**. A statistical regression analysis shows that the model has (F = **237.684**, p<0.001) which gives a significant predictor of procurement efficiency on stakeholder outcomes. The model explained **48.0%** of the variance exhibited in stakeholder outcomes (R^2 = **0.480**), which indicates a moderate degree of explanatory power. Standard regression coefficient (β = **0.693**) and t-value (**15.417**, p < 0.001) further indicated that the relationship between procurement efficiency and stakeholder outcome was positively significant. It was also the case that those organizations within high-risk procurement process and effective procurement management, effective procurement planning, supplier coordination, timely sourcing and quality assurance mechanisms had a significantly greater number of favorable stakeholders, supplier relationships, and organizational effectiveness.

Hence **H1 was accepted** which indicated that procurement efficiency influenced MSME agri-input entities' stakeholder outcomes significantly.

The second hypothesis was to evaluate the effect of **Inventory Management on Organizational Performance**. The regression model was significant (F = **178.923**, p < 0.001) and explained **42.4%** variability in organizational performance (R^2 = **0.424**). The standardized beta coefficient (β=**0.651**) and t-value (**13.377**, p<0.001) demonstrated a high positive relationship between inventory management and organizational effectiveness. The analysis also further verifies that effective inventory planning, warehousing and inventory management, leads to process optimization and lowers stock surplus, increases organization effectiveness and reduces inventory overhead. **As a result, H2 is supported in this study. That is, inventory management has a positive effect on organizational performance. The empirical findings indicate that the effective production value chain practices are important factors which positively correlate to both the effectiveness of enterprises and the satisfaction of stakeholders within MSME agri-input firms. Procurement efficiency had the highest impact, accounting for most variance of the stakeholders' experiences whereas inventory management had a considerably positive impact on organizational experience.

From the results of the studies following this regressions back to the past, the improvement of business, efficiency and relationship with stakeholders is made more successful from the strengthening of procurement systems, supplier linkages and supply chain links by developing the integration of the procurement systems, supplier linkages, stock management in inventory and warehouses. The findings supported the **Value Chain Theory of Porter**, which argues that it is essential to determine the competitive advantage of linking organizational activities. *Stakeholder Theory* states that companies create value through the ability to organize the various stakeholders' requirements and expectations, and in this way create long term value.

Additionally, the results also indicate that MSME agri-input enterprises should have an orientation on procurement optimisation and stock management as a strategic capability to compete, to service quality, to establish the relationship with stakeholders and to achieve sustainable agricultural development in the Nashik District.

5. Discussion

Discussion. The study finds that efficient value chain structure has a critical role where stakeholders' satisfaction, organization's performance and business sustainability of MSME agri-input enterprise is concerned in Nashik District. These data have validity to **Porter's Value Chain Theory** that firms get competitive advantage by maintaining an efficient structure and **Stakeholder Theory** that emphasizes adding value to all partners. Studies indicate that **procurement efficiency** has a significant impact on stakeholder outcomes. Efficient procurement planning, relationships with suppliers of agricultural inputs, and quality assurance led directly to timely supply of agricultural inputs and consequently a better farmer experience and ease of access to inputs in an uninterrupted period. In the organizational performance, **inventory management** is not only an important factor for optimizing stock levels, lowering inventory cost and holding the product availability at peak farming season to help reduce the cost. The result also shows that proper **distribution and logistics** positively

affect the standard of service concerning timely delivery of agricultural inputs on the one hand to support the farmers' production plans and on the other hand to boost the confidence of stakeholders. To add, **CRM** also brings the most significant contribution to improving consumer satisfaction by ensuring constant communication, technical advice and on time adjudication of complaints, forming long-term customer relations with the farmers. These results emphasize the growing importance of **digital integration** for value chain performance. ERP systems, CRM software, digital payment platforms and inventory management capabilities enable operational visibility, data sharing and decision making. But, the low digital penetration of MSMEs reflects necessity of technological infrastructure and staff spending. In addition, **after-sales technical services** like farmer training, crop advisory and technical support are among the key providers to satisfy stakeholders. These services enable better use of products, maintain higher customer retention and provide sustainability in agriculture. These results, in isolation, suggest that value chain integration is increasing both the value of a company's product for farmers, suppliers, distributors, employees and other stakeholders and the operational efficiency of the company. Results further supplement the literature by empirically suggesting that enhancing the value chain activities is a key element for improved competitiveness of MSME agri-input organizations in Nashik District and for the sustainable development in the long run.

9. Conclusion

This research identified the value chain structure of Micro, Small and Medium Agri-input Enterprises based in Nashik District and its relationship to the main stakeholders. Results suggest that value chain integration is an essential factor influencing organisational effectiveness, stakeholder satisfaction, customer loyalty, and sustainability in the long-term development. When compared among the various value chain dimensions, customer relationship management emerged as the most significant element for the impacts to all stakeholders, followed by procurement management, distribution efficiency, after-sales services, inventory management, and digital integration. These observations imply that competitive advantage in agri-inputs is not only based on product quality, but also on appropriate engagement with stakeholders and effective management. The study adds to the existing literature by applying Porter's Value Chain Framework to the inclusion of stakeholder-oriented performance measures in MSME agri-input companies. Combining Value Chain Theory, Stakeholder Theory, and Resource-Based View helps better understand how organisational capabilities lead to value added to stakeholders. The study highlights that both the operational and strategic implications of sustainable development strategies, especially for MSME agri-input companies, require a more robust commitment to invest in enhancing operational efficiencies and supplier integration in future MSMEs. Therefore, the study concludes that integrated value chain management is a strategic approach to enhanced stakeholder relationships, organizational resilience, and inclusive rural economic growth among emerging agricultural economies..

10. Limitations of the Study

Although the study makes several theoretical and practical contributions, certain limitations should be acknowledged.

First, the study focuses exclusively on MSME agri-input organizations located in Nashik District, limiting the generalizability of the findings to other regions or countries with different agricultural and institutional contexts.

Second, the research adopts a cross-sectional design; therefore, it captures stakeholder perceptions at a single point in time and does not assess changes in value chain performance over extended periods.

Third, the study primarily relies on self-reported questionnaire data, which may be influenced by respondents' perceptions and potential response bias.

Fourth, the study concentrates on selected dimensions of value chain management and stakeholder outcomes. Other relevant variables, such as organizational culture, innovation capability, leadership, environmental sustainability, and market competitiveness, were not explicitly examined.

Finally, the study employs quantitative methods and does not incorporate qualitative insights from interviews or case studies that might provide a deeper understanding of organizational practices.

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