



Drivers of Implementing Sustainable Procurement in Small and Medium Enterprises in Bauchi State, Nigeria

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ABSTRACT

Sustainable procurement has emerged as a strategic imperative for organizations seeking to align economic performance with environmental and social responsibility. Despite its growing relevance, the adoption of sustainable procurement practices among Small and Medium-sized Enterprises (SMEs) in developing economies remains limited due to various internal and external challenges. This study investigates the internal and external drivers influencing the adoption of sustainable procurement practices among SMEs in Bauchi State, Nigeria. Adopting a descriptive survey research design, the study targets active SMEs registered with the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) and operating within Bauchi Metropolis for over three years. A structured questionnaire was administered to a sample of 70 SME owners and procurement personnel selected through stratified and simple random sampling techniques. The findings reveal that internal factors such as leadership commitment, employee awareness, and financial capacity significantly influence adoption, while external drivers like government regulations, stakeholder pressure, and customer expectations also play critical roles. The study further identifies key barriers, including limited access to information, lack of regulatory incentives, and resistance to change, which hinder broader implementation of sustainability practices. This research contributes to the growing body of knowledge on sustainability in procurement by providing empirical insights from a developing economy perspective. It offers practical recommendations for policymakers, business practitioners, and stakeholders to create enabling environments for SMEs through targeted policies, training, and support mechanisms. By addressing both internal and external drivers, the study emphasizes the need for a holistic approach to promoting sustainable procurement adoption that supports inclusive economic growth and environmental stewardship.

ARTICLE INFO

Article History

Received: September, 2025

Received in revised form: October, 2025

Accepted: January, 2026

Published online: January, 2026

KEYWORDS

Internal, External, Drivers, Sustainable, Procurement and Adoption

INTRODUCTION

In recent years, sustainability has emerged as a critical concern in the global corporate landscape, influencing how organizations operate and how stakeholders assess performance. The adoption of sustainable practices, especially in procurement, is increasingly seen as a strategic imperative for firms striving to balance profitability with social

responsibility and environmental stewardship. Sustainability, often rooted in ecological and environmental considerations, emphasizes the capacity of firms to adapt and thrive in changing environments while ensuring that present actions do not compromise the ability of future generations to meet their needs (Bodhanwala & Bodhanwala, 2021). Within this framework, sustainable procurement is the integration of

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environmental, social, and economic considerations into purchasing decisions—has gained significant traction, particularly as stakeholders demand greater accountability and resilience from businesses.

Small and Medium-sized Enterprises (SMEs), which represent a large portion of Nigeria's economy, play a vital role in employment generation and economic growth. Despite their importance, SMEs often face difficulties in adopting sustainable procurement practices due to limited resources, low awareness, and lack of regulatory support (Malesios et al., 2020). In developing economies such as Nigeria, these barriers are further compounded by infrastructural deficiencies, capital constraints, and resistance to change within organizational cultures. Yet, evidence suggests that integrating sustainability into procurement strategies can enhance SMEs' competitive edge, reduce operational costs, improve environmental outcomes, and promote long-term resilience (Samuel, 2023).

While extensive studies have explored sustainable procurement in large firms and developed economies, there remains a notable gap in understanding the internal and external drivers influencing its adoption by SMEs in developing regions, particularly in Northern Nigeria. Internal drivers such as leadership commitment, organizational culture, and

employee awareness, alongside external factors like regulatory frameworks, market demand, and stakeholder pressures, significantly shape the adoption process. However, empirical research exploring how these factors interplay to either support or hinder sustainable procurement adoption in Bauchi State remains scarce.

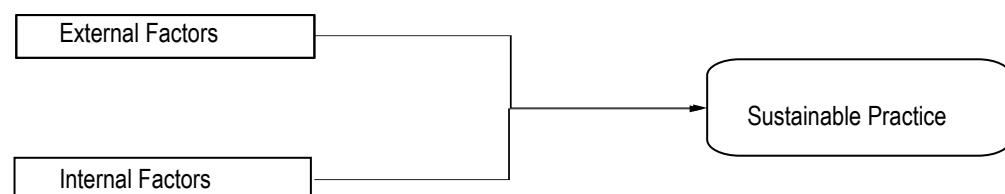
This study, therefore, aims to investigate the influence of both internal and external factors on the adoption of sustainable procurement practices by SMEs in Bauchi State, Nigeria. By doing so, it addresses a critical knowledge gap, providing valuable insights for policymakers, practitioners, and scholars. Understanding these drivers is essential not only for promoting sustainability in procurement but also for fostering inclusive, environmentally responsible growth among SMEs in a rapidly evolving global economy.

LITERATURE REVIEW

The research framework is a structure that supports the theory that explains why the research problem under study exists. It explains relationship between the variables under investigation as well as how the independent variable influences the dependent variables. It includes the concepts, definition, existing theories and other literature in the study.

Independent Variable

Factors Influencing Sustainability



Source: Author's Compilation, 2025.

The adoption of sustainable procurement practices by Small and Medium-sized Enterprises (SMEs) has become a critical area of focus given their significant collective

impact on the economy and the environment. This literature review delves into the conceptual and theoretical foundations of sustainable procurement, examines the various dimensions of

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sustainability, and explores the internal and external drivers that influence its adoption by SMEs, particularly within the context of Bauchi State.

The Concept of Sustainable Practices and Procurement

Sustainability, at its core, involves making decisions that strike a balance between environmental, social, and economic considerations to ensure long-term success (Govindan et al., 2020, 2021a). This concept has evolved into a strategic imperative for organizations globally, driven by the urgency of the United Nations (UN) Sustainable Development Goals (SDGs) 2030 (Van Wassenhove, 2019; Fatimah et al., 2020). For businesses, achieving these goals extends beyond internal efforts, necessitating active engagement across the entire supply chain (Cai and Choi, 2020).

Corporate sustainability has emerged as a valuable tool for businesses to reduce costs, manage risks, innovate new products, and foster internal cultural and structural changes (Amna, S., 2022). Sustainable practices encompass a wide array of activities, including energy-efficient technologies, prudent resource management, waste minimization, and socially conscious corporate behaviors (Liou, 2020). While some argue that strict environmental regulations might impede economic expansion, particularly in resource-dependent sectors (Kumar, 2022), it is crucial to recognize the importance of balancing ecological, economic, and social issues (Chen, 2019) within a comprehensive sustainability theory (Sahu, 2023).

In developing economies, there's a growing demand for environmental and social responsibility, spurred by increasing stakeholder and customer awareness of environmental degradation (Jakhar et al., 2018; Luthra and Mangla, 2018; Schroeder et al., 2018; Delmonico et al., 2018). Human activities, such as population growth, increased resource consumption, and lack of environmental accounting, are primary drivers of climate change and pollution. Businesses are increasingly expected to address these concerns through transparent non-financial reporting, also

known as sustainability reports (Luthra and Mangla, 2018).

Sustainability Dimensions and Assessment

Business sustainability entails incorporating social equity, economic efficiency, and environmental performance into operational practices (Tamayo-Torres et al, 2019). It's defined as "adopting business strategies and activities that meet the needs of the enterprise and its stakeholders today, while protecting, sustaining, and enhancing the human and natural resources that will be needed in the future" (Rajesh, 2019b). While traditional frameworks highlight economic, environmental, and social dimensions, the United Nations has introduced a fourth: the institutional dimension.

Economic Sustainability

According to the Global Reporting Initiatives (GRI, 2020), economic sustainability pertains to an organization's impact on the economic circumstances of its stakeholders and on economic systems at local, national, and global levels. Key measures include financial health, economic performance, potential financial benefits, and trading opportunities. Maintaining economic health is crucial for long-term survival, with financial stability and value creation for stakeholders being paramount.

Environmental Sustainability

Environmental sustainability focuses on reducing a firm's or its supply chain's overall carbon footprint. This involves monitoring impacts on air, water, land, and mineral/energy resources (GRI, 2020). Practices such as reducing carbon emissions, implementing renewable energy, and adopting eco-friendly production methods are increasingly seen as indicators of a company's commitment to responsible business (Clark et al., 2019). Environmentally proactive firms are perceived as less exposed to regulatory risks and reputational damage, often achieving cost savings and operational efficiency, which positively impact financial performance (Ahmad et al., 2023; Gebhardt et al., 2023).

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Social Sustainability

The social dimension of sustainability addresses issues related to both internal human resources and external populations (Shaikh, 2022). Internal factors include employment stability, fair employment practices, health and safety, and capacity development. External considerations encompass human, productive, and community capital, focusing on factors like human rights, equity of labor, and community well-being (López-Toro et al., 2021). Firms actively engaging in social sustainability practices can bolster their brand reputation, cultivate customer loyalty, and foster stakeholder trust, leading to higher valuation from investors (Peng & Isa, 2020; Shaikh, 2022). Despite its importance, social sustainability has often been overlooked due to concerns about its potential negative impact on business (Huang, 2021).

Theoretical Framework: Natural Resource Based View Theory (NRBV)

This study is underpinned by the Natural Resource Based View Theory (NRBV), an extension of the Resource Based View (RBV) that incorporates environmental concerns to enhance firm competitiveness (Hart, 1995). NRBV posits that firms can gain a competitive advantage by leveraging eco-oriented resources and integrating eco-friendly practices into their strategies. This approach drives firms toward better sustainable capability and performance by promoting quality of life among stakeholders and addressing ecological issues (Samuel, 2023).

The NRBV theory is highly relevant to understanding the complex relationship between sustainable procurement practices and SME performance and value. Sustainable procurement practices can be seen as valuable, rare, and non-substitutable resources that contribute to an SME's competitive advantage (Samuel, 2023). By investing in sustainable procurement, SMEs can develop unique capabilities in stakeholder engagement, environmental stewardship, and ethical governance, differentiating themselves and creating long-term value. This theoretical lens allows for an examination of how SMEs can strategically leverage sustainable procurement to

mitigate risks and enhance their long-term value creation.

Factors Influencing Adoption of Sustainable Procurement Practices by SMEs

The adoption of sustainable procurement practices by SMEs is influenced by both external and internal drivers.

External Drivers

External drivers primarily stem from various stakeholders and the nature of the business sector.

1. **Government:** Government regulations, legislation, economic incentives (loans, grants, tax concessions), and knowledge dissemination significantly influence SMEs' sustainable practices (Jakhari et al., 2018). High fines for non-compliance often compel SMEs to adopt sustainable practices.
2. **Customers:** Customer demand for sustainable products, processes, and services, along with buyer organization dynamics, drive SMEs towards environmental practices. Proactive customer demand can lead to improved energy and resource management (Jakhari et al., 2018).
3. **Networks and Alliances:** SMEs benefit from positive attitudes towards local business and environmental agencies, which foster cooperative relationships and facilitate knowledge sharing on environmental practices and their cost-benefit advantages.
4. **Suppliers:** Supplier readiness and the inclusion of environmental criteria in procurement policies by SMEs significantly impact sustainable adoption within the supply chain.
5. **Community Surrounding:** Local communities, environmental pressure groups, civil society agencies, and NGOs exert considerable pressure on SMEs to adopt sustainable practices and improve their environmental



performance. Public demand for sustainability is a major motivator.

6. **Competitors:** Competitor behavior often drives SMEs to adopt environmental management practices, especially when they lack internal capabilities to interpret market dynamics. SMEs may modify their products to match new trends in recyclability and environmental performance observed in competitors.

7. **Tangibility Aspect of the Business Sector:** The nature of products and services offered by SMEs (their tangibility) also influences sustainable practice adoption. Sectors with greater tangibility are more likely to implement sustainable practices.

5. **Environmental Management Capability (EMC):** The internal capabilities of SMEs, including assets, skills, and technologies, enable them to respond decisively to environmental demands. Greater environmental experience and robust resource bases contribute to proactive sustainability practices.

6. **Size of Firm:** Medium-sized firms, in terms of employees and turnover, tend to be more engaged in greener practices. Larger organizational size often correlates with the implementation of sustainability management tools.

Internal Drivers

Internal drivers are rooted within the SME itself, including its employees, organizational culture, and strategic considerations.

1. **Employees:** Employee demand for improved working conditions is a crucial factor motivating SMEs to invest in ecological measures.
2. **Organizational Culture:** The personal values and ethics of owners and managers, their moral and social responsibility, management support, and knowledge management are vital. Top management commitment and a pro-environmental attitude significantly drive sustainable practices within SMEs.
3. **Brand Image and Reputation:** Improving corporate image, demonstrating environmental stewardship, and enhancing brand reputation are key motivators for SMEs to engage in environmental activities. This can lead to economic gains, increased sales, and attracting environmentally conscious customers.
4. **Competitive Advantage and Strategic Intent:** SMEs can achieve competitive advantage through cost reduction,

Sustainability Practice and SMEs

SMEs, despite their classification as "small and medium," collectively make a significant contribution to global economic growth and employment, accounting for over 90% of companies globally and more than half of all employment (International Finance Corporation). However, despite their crucial role, many SMEs have historically shown limited interest in ecological matters and often lack the tools and means for integrating environmental work into their operations. They frequently possess less information about environmental management and struggle to see the link between environmental management systems and their benefits. This oversight is significant, as the collective environmental impact of SMEs is substantial, estimated to account for 60-70% of total pollution. This highlights a critical gap between the potential for positive impact and the current level of sustainable practice adoption by SMEs.

This literature review provides a comprehensive overview of the key concepts, theories, and drivers related to sustainable procurement adoption by SMEs. Understanding these factors is crucial for developing effective

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strategies to encourage and support SMEs in Bauchi State in embracing sustainable practices.

METHODOLOGY

This study adopts a descriptive survey research design to investigate the internal and external drivers influencing the adoption of sustainable procurement practices by small and medium-sized enterprises (SMEs) in Bauchi State, Nigeria. This design is deemed appropriate as it enables the researcher to observe and describe the existing conditions of sustainable procurement adoption without manipulating any variables. It allows for the systematic collection of data directly from a representative sample of the target population, thereby providing insights into existing patterns, perceptions, and behaviors regarding sustainability in procurement among SMEs.

The population of the study comprises owners and managers of SMEs registered with the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) and operating within Bauchi Metropolis for at least three years. Bauchi Metropolis was selected due to its commercial vibrancy and the concentration of active SMEs. From the total 2,212 SMEs registered in the area, only 85 are currently active and operational beyond three years, thus forming the study population.

To ensure fair representation, a stratified random sampling technique was adopted to categorize the SMEs based on business sectors. This was followed by simple random sampling to give every SME an equal chance of being selected, reducing sampling bias. The sample size of 70 was determined using the Krejcie and Morgan (1970) sample size determination table. The selected sample was drawn from ten SMEs, with a proportional number

of questionnaires distributed based on business size and availability.

Primary data was collected using a structured questionnaire designed around a five-point Likert scale ranging from Strongly Agree to Strongly Disagree. The questionnaire was divided into three sections: demographic profile, organizational characteristics, and questions addressing the core research objectives. To ensure content validity, the questionnaire was reviewed by academic and industry experts. Reliability was tested through a pilot study using Cronbach's Alpha, with items scoring below 0.70 removed to maintain internal consistency.

Data collection employed a self-administered method, allowing respondents to independently complete the questionnaires. The data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) through the SEMinR package. This technique is suitable for exploratory modeling and theory testing, enabling the researcher to assess relationships among latent variables. Ethically, participation was voluntary, with informed consent obtained from all respondents. Anonymity and confidentiality were maintained, and data was used strictly for academic purposes in line with established ethical standards.

RESULTS

Data Analysis, Presentation, and Interpretation

This study explored the internal and external drivers influencing the adoption of sustainable procurement practices by SMEs in Bauchi State. The analysis of data collected from 65 SME respondents revealed diverse levels of adoption of sustainability practices across different sectors.

Table 1: Summary of Key Internal and External Drivers

Category	Driving Factors	Mean Score
Internal Drivers	Social responsibility	3.69
	Competitive advantage	3.66
	Cost savings potential	3.55
	Top management support	3.46

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Category	Driving Factors	Mean Score
Internal Drivers	Organizational culture	3.45
	Enhancement of brand image and reputation	3.35
	Employee demand	3.46
External Drivers	Customer pressure	3.85
	Government regulations	3.62
	Competitor behavior	3.62
	Economic incentives from government	3.54
	Supplier readiness	3.29
	Local community pressure	3.06
	Stakeholder collaboration	3.11

Source: Author's Fieldwork, 2025

Results show that external drivers such as pressure from customers (3.85), government regulation (3.62), and competitor behavior (3.62) significantly influenced sustainable procurement adoption. Internally, social responsibility (3.69) and competitive advantage (3.66) were rated highly. The analysis of procurement practice implementation revealed that seven out of sixteen sustainability indicators were actively embraced, particularly those related to environmental concerns (e.g., lifecycle analysis: 3.99), supplier engagement (e.g., waste reduction commitment: 3.84), and community involvement (e.g., philanthropy: 3.80).

DISCUSSION OF FINDINGS

The findings of this study highlight the multifaceted and context-driven nature of sustainable procurement adoption among SMEs in Bauchi State. The observed levels of adoption are shaped by a combination of internal organizational dynamics and external environmental pressures, aligning with the Natural Resource-Based View (NRBV) theory, which emphasizes the strategic value of environmental capabilities in achieving competitive advantage (Hart, 1995; Samuel, 2023).

Internally, SMEs in Bauchi exhibited a strong orientation towards social responsibility (mean = 3.69), competitive advantage (mean = 3.66), and cost savings (mean = 3.55) as motivating factors for sustainable procurement.

This supports the argument made by Rajesh (2019b) and Amna (2022) that sustainable procurement contributes to operational efficiency, brand equity, and long-term viability. Moreover, the enhancement of brand image and organizational culture also featured prominently in SMEs' internal motivations—consistent with findings from Peng and Isa (2020) and Tamayo-Torres et al. (2019), who observed that socially responsible firms often benefit from increased stakeholder trust and improved firm valuation.

Top management support (mean = 3.46) was another critical internal enabler. This confirms previous studies (Chen, 2019; Luthra & Mangla, 2018) that emphasize the role of leadership in fostering a corporate culture that prioritizes ethical and sustainable practices. The NRBV theory also suggests that firms that invest in environmental and socially responsible capabilities tend to develop rare and inimitable competencies, which enhance their resilience and differentiation in the market (Hart, 1995).

Externally, customer pressure emerged as the most influential factor (mean = 3.85), corroborating the work of Jakhar et al. (2018), who identified customers as key catalysts in driving environmental practices among SMEs. Regulatory pressure from the government (mean = 3.62) and competitor behavior (mean = 3.62) were also found to significantly impact adoption rates. This supports the assertion by Govindan et al. (2021a) and Bodhanwala & Bodhanwala (2021) that businesses in emerging markets often

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respond to formal and informal institutional pressures in their sustainability journey.

The role of government, through regulations and incentives, cannot be overstated. In this study, economic benefits and incentives offered by the government (mean = 3.54) were identified as vital motivators for SMEs to adopt sustainability. This echoes the findings of Kumar (2022) and Global Reporting Initiative (GRI, 2020), who argue that policy tools such as tax incentives, grants, and penalties are essential in shaping sustainable business behavior, especially in resource-constrained contexts like Nigeria.

Interestingly, the agriculture and manufacturing sectors showed a higher level of sustainable procurement implementation, particularly in areas such as lifecycle analysis and reduced packaging. This supports the observation by Gebhardt et al. (2023) and Clark et al. (2019) that firms in environmentally sensitive sectors tend to lead in the adoption of eco-friendly practices due to higher exposure to environmental risks, regulatory scrutiny, and societal expectations.

Additionally, the emphasis on community engagement and philanthropic activities, such as volunteering and donations, reflects a growing sense of social sustainability among SMEs. According to Shaikh (2022) and López-Toro et al. (2021), such practices not only enhance corporate image but also foster deeper integration between businesses and their local communities, which is particularly relevant for SMEs that are often embedded in the social fabric of their environments.

Nonetheless, aspects of sustainable procurement such as ethical sourcing, supplier audits for labor conditions, and living wages remained under-implemented, as shown by the lower mean values across these items. This finding aligns with the concerns raised by Huang (2021) and Schroeder et al. (2018), who noted that social sustainability is often underprioritized due to perceived costs and lack of immediate financial returns.

The findings reinforce the position that sustainable procurement among SMEs is a function of both intrinsic business strategy and extrinsic societal and regulatory stimuli. As Luthra

and Mangla (2018) and Van Wassenhove (2019) suggest, achieving the United Nations' Sustainable Development Goals (SDGs) in developing economies will require coordinated efforts across institutional, market, and organizational levels to overcome the barriers and fully harness the enablers of sustainability. The role of education, stakeholder collaboration, and policy support must be amplified to ensure that sustainable procurement becomes a mainstream practice among Nigeria's SMEs.

CONCLUSION AND RECOMMENDATIONS

This study concludes that the adoption of sustainable procurement by SMEs in Bauchi State is driven by a combination of internal motivations—such as corporate social responsibility, cost savings, and competitiveness—and external pressures, notably from customers and regulatory bodies. Despite varying levels of implementation, most SMEs recognize the strategic importance of sustainability, particularly in enhancing brand reputation and ensuring regulatory compliance. However, the study also reveals that many sustainability practices, especially those relating to ethical labor, supplier audits, and local sourcing, are still at a nascent stage and require further institutional support and awareness.

Based on the findings, the following recommendations are proposed:

1. Government agencies should provide targeted incentives, training, and regulatory support to encourage SMEs in all sectors to adopt holistic sustainable procurement frameworks.
2. SMEs should integrate sustainability into their core strategic planning by developing internal sustainability teams and policies.
3. Sector-specific guidelines should be introduced to cater to the unique sustainability challenges faced by industries such as agriculture, construction, and manufacturing.
4. Stakeholder collaboration, especially with local NGOs, academia, and supply chain actors, should be encouraged to



foster mutual learning and resource sharing.

5. Awareness and capacity-building programs should be organized to inform SMEs about the long-term financial and environmental benefits of sustainable procurement.

By addressing both internal and external drivers, SMEs in Bauchi State can better position themselves as proactive agents of sustainable development, contributing meaningfully to Nigeria's broader environmental and economic goals.

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