

Role of Green Procurement and Ethical Sourcing in Enhancing Sustainable Supply Chain Performance in Emerging Markets

Uday Narayan Jha¹ and Dr. Rahul Kushwah²

¹Research Scholar, Department of Business Administration

²Professor, Department of Business Administration

Vikrant University, Gwalior, M.P, India

Abstract: *Green procurement and ethical sourcing have become important components of sustainable supply chain management, particularly in emerging markets where firms face increasing environmental, social, economic, and regulatory pressures. Green procurement refers to the integration of environmental criteria into purchasing and supplier-selection decisions, while ethical sourcing emphasizes responsible labour practices, human rights, fair working conditions, transparency, and responsible supplier relationships. This research examines the role of green procurement and ethical sourcing in enhancing sustainable supply chain performance in emerging markets through a qualitative and descriptive review of literature published between 2010 and 2022. The study focuses on the environmental, social, operational, and economic dimensions of supply chain performance.*

Keywords: Green Procurement, Ethical Sourcing, Sustainable Supply Chain, Sustainable Procurement

I. INTRODUCTION

Supply chains have increasingly become central to discussions of corporate sustainability because environmental and social impacts are generated not only within individual firms but also throughout networks of suppliers, manufacturers, distributors, logistics providers, and customers. In emerging markets, the importance of sustainable supply chain management is particularly significant because rapid industrialization, expanding international trade, increasing resource consumption, and growing integration into global value chains have created both economic opportunities and sustainability challenges. Green procurement provides organizations with a mechanism for incorporating environmental considerations into purchasing decisions, including supplier selection, environmentally preferable materials, energy-efficient products, recyclable packaging, waste reduction, and life-cycle considerations.

Ethical sourcing complements these activities by addressing social and ethical issues such as labour rights, occupational safety, fair wages, human rights, non-discrimination, and responsible business conduct. Research on sustainable supply chains in emerging economies demonstrates that sustainability practices can improve environmental performance, although economic outcomes may vary depending on implementation costs and organizational capabilities (Esfahbodi et al., 2016). A meta-analysis of empirical research from Asian emerging economies found that green supply chain management practices were positively associated with economic, environmental, operational, and social performance (Geng et al., 2017).

The purchasing function is particularly important because organizations can influence supplier behaviour through procurement standards, contractual requirements, supplier evaluation, audits, collaboration, and long-term supplier-development programmes. Sustainable procurement research indicates that sustainability performance can differ across supply chain tiers, highlighting the importance of extending sustainability requirements beyond immediate suppliers (Ghadge & Bhattacharjee, 2018).

In emerging markets, this challenge is more complex because firms may operate through extensive supplier networks characterized by different levels of technological capability, regulatory compliance, financial resources, and awareness of sustainability requirements. Ethical sourcing therefore requires more than establishing supplier codes of conduct; it requires monitoring, communication, supplier development, and mechanisms for enforcing responsible practices. Research on emerging-economy sourcing found that purchasing teams can play an important role in enforcing supplier social practices and that stronger enforcement is associated with improved firm performance (Shafiq et al., 2019).

BACKGROUND OF GREEN PROCUREMENT

Green procurement is the process through which organizations incorporate environmental considerations into purchasing decisions. It extends traditional procurement criteria such as price, quality, delivery, and reliability by considering environmental characteristics of products, services, suppliers, and production processes. Green procurement may include purchasing products with lower environmental impacts, selecting suppliers with environmental management systems, reducing packaging, increasing the use of recycled materials, reducing hazardous substances, and evaluating suppliers according to environmental performance. Within sustainable supply chains, green procurement acts as an important link between purchasing decisions and broader environmental objectives.

Research has established that green supply chain management can contribute to improved environmental outcomes. Geng et al. (2017), using evidence from Asian emerging economies, reported positive relationships between green supply chain practices and economic, environmental, operational, and social performance. Similarly, a 2022 meta-analysis covering 65 independent samples and 14,196 observations found a moderate positive relationship between green supply chain management and enterprise environmental performance, with the effects varying according to market environment, culture, region, and industry type.

Green procurement can influence supply chain performance through several mechanisms. First, environmental supplier criteria encourage suppliers to reduce emissions, waste, water consumption, and energy use. Second, environmentally responsible purchasing can encourage innovation in products and production processes. Third, collaboration with suppliers can help firms identify opportunities for material substitution, recycling, reuse, and resource efficiency. Fourth, green procurement can reduce exposure to environmental risks and regulatory pressures. Consequently, procurement can shift from being a purely transactional function to becoming a strategic sustainability mechanism.

SUSTAINABLE SUPPLY CHAIN PERFORMANCE

Sustainable supply chain performance is multidimensional because it includes environmental, social, economic, and operational outcomes. Traditional supply chain performance has generally emphasized cost, quality, flexibility, delivery, and productivity. Sustainable supply chain management expands these criteria by incorporating environmental protection and social responsibility. Consequently, a sustainable supply chain attempts to achieve operational and economic efficiency while simultaneously reducing environmental impacts and promoting responsible social practices.

Esfahbodi et al. (2016), based on 128 manufacturing firms in China and Iran, reported that sustainable supply chain management practices were associated with improved environmental performance, while improvements in cost performance were not necessarily immediate. This finding is important for emerging markets because sustainability investments can require additional resources in the short term, even when they produce environmental and strategic benefits over time.

A sustainable performance framework can therefore be represented through four major dimensions: environmental performance, social performance, economic performance, and operational performance.

Table 1. Dimensions of Sustainable Supply Chain Performance

Dimension	Major Indicators	Expected Contribution of Green Procurement and Ethical Sourcing
Environmental	Emissions, waste, energy, water, resource use	Reduction of environmental impacts

Social	Labour rights, safety, wages, human rights	Improvement in supplier social responsibility
Economic	Cost, profitability, revenue, risk	Long-term efficiency and risk reduction
Operational	Quality, delivery, flexibility, reliability	Better supplier and process performance
Reputational	Trust, transparency, corporate image	Improved stakeholder confidence

ROLE OF GREEN PROCUREMENT IN SUSTAINABLE SUPPLY CHAIN PERFORMANCE

Green procurement influences sustainable supply chain performance by incorporating environmental considerations into supplier and purchasing decisions. Instead of selecting suppliers exclusively on the basis of price and delivery, firms can evaluate environmental certification, energy consumption, emissions, waste management, material efficiency, packaging practices, and environmental innovation. Such criteria encourage suppliers to improve their environmental practices and create a cascading effect across the supply network.

One of the major benefits of green procurement is resource efficiency. Suppliers encouraged to reduce energy, water, raw materials, and packaging can lower environmental impacts while potentially improving operational efficiency. However, environmental improvements do not automatically translate into immediate financial gains. Evidence from emerging economies indicates that sustainable supply chain adoption can improve environmental performance without necessarily generating short-term cost advantages (Esfahbodi et al., 2016).

Green procurement also encourages supplier innovation. Organizations can work with suppliers to develop recyclable materials, low-energy products, environmentally friendly packaging, and more efficient production technologies. Such collaboration is particularly important in developing economies where individual suppliers may lack the resources to independently implement advanced sustainability initiatives. Literature on developing countries emphasizes collaboration between corporations, governments, and domestic firms as an important mechanism for adopting green supply chain practices (Asif et al., 2020).

Table 2. Comparison of Green Procurement and Ethical Sourcing

Aspect	Green Procurement	Ethical Sourcing
Primary focus	Environmental sustainability	Social and ethical responsibility
Supplier criteria	Energy, emissions, waste, materials	Labour rights, safety, human rights
Main objective	Reduce environmental impact	Promote responsible labour practices
Key tools	Green supplier assessment, eco-labels, environmental audits	Codes of conduct, social audits, worker standards
Performance outcome	Environmental and operational improvement	Social and reputational improvement
Major challenge	Cost and technological capability	Monitoring and enforcement
Long-term effect	Resource efficiency and environmental resilience	Social legitimacy and stakeholder trust

An integrated approach allows firms to move from narrow green purchasing towards broader sustainable procurement. Ghadge and Bhattacharjee (2018) demonstrate that sustainable procurement performance can vary across supply chain tiers, highlighting the need to consider sustainability beyond direct suppliers.

GREEN PROCUREMENT AND ETHICAL SOURCING IN EMERGING MARKETS

Emerging markets have distinctive characteristics that affect sustainable procurement. These include rapid economic growth, increasing international investment, developing regulatory systems, large supplier populations, cost sensitivity, infrastructure constraints, and differences in technological capabilities. These conditions can create challenges for implementing environmental and social procurement standards.

At the same time, emerging markets provide significant opportunities for sustainability improvements. Firms can use procurement requirements to encourage suppliers to adopt cleaner technologies, improve labour conditions, reduce

waste, and enhance transparency. A systematic review of sustainable supply chain research concerning emerging-economy suppliers found that such suppliers have an important role in global sustainable supply chains and that cultural and institutional dimensions influence sustainability implementation (2022 review).

The evidence from India also demonstrates the relevance of sustainable supply chain practices. Katiyar et al. (2018), using data from 226 Indian automobile firms, developed a framework examining the relationship between sustainability and supply chain performance. The study illustrates the growing importance of sustainability practices in an emerging economy and highlights the relevance of integrating sustainability into supply chain performance assessment.

RESEARCH METHODOLOGY

The present research follows a qualitative, descriptive and exploratory research design. The study is based primarily on secondary information obtained from academic research articles, peer-reviewed literature, conceptual studies, empirical investigations, and research on sustainable supply chain management. The literature period was restricted mainly to 2010–2022, in accordance with the scope of the study. The analysis focuses on the relationship between green procurement, ethical sourcing, and sustainable supply chain performance, with particular attention to emerging-market contexts. The reviewed literature was organized according to four performance dimensions: environmental, social, economic, and operational performance. The study does not claim to generate new primary survey data; rather, it synthesizes existing research to identify major relationships, implementation challenges, and potential mechanisms through which responsible procurement can influence sustainable supply chain outcomes.

IMPACT ON ENVIRONMENTAL PERFORMANCE

Green procurement can directly influence environmental performance because purchasing decisions determine the materials, products, technologies, and suppliers incorporated into organizational operations. Organizations that establish environmental requirements for suppliers can encourage reductions in emissions, waste, energy consumption, water use, and environmentally harmful materials. Evidence from emerging markets supports this relationship. For example, research involving manufacturing firms in Pakistan found significant relationships among green supply chain management practices, institutional pressures, environmental performance, and financial performance (Ma et al., 2022). Research from Bangladesh similarly reported a beneficial relationship between green supply chain management practices and environmental performance (Alauddin & Arif, 2022).

The broader evidence is also supported by the 2022 meta-analysis of green supply chain management, which found that GSCM has a moderate positive effect on enterprise environmental performance. The study also emphasized that market environment, regional culture, sampling area, and industry type can influence the strength of this relationship.

Table 5. Major Challenges and Possible Solutions

Challenge	Effect on Sustainable Procurement	Possible Solution
High initial cost	Limits adoption of green technologies	Long-term cost-benefit analysis
Limited supplier capabilities	Makes compliance difficult	Supplier training and development
Weak monitoring systems	Creates sustainability gaps	Digital monitoring and regular assessment
Regulatory differences	Creates inconsistent standards	Harmonized supplier standards
Lack of transparency	Makes ethical violations difficult to identify	Traceability and disclosure
Small supplier resources	Limits investment in sustainability	Collaboration and technical support
Price-oriented purchasing	Encourages short-term decisions	Multi-criteria supplier evaluation
Complex multi-tier supply chains	Reduces visibility beyond first-tier suppliers	Tier-based sustainability monitoring

Emerging-market organizations therefore need to balance environmental and social objectives with cost, quality, flexibility, and supplier capability. Literature emphasizes that collaboration can help developing-country firms overcome some of the barriers associated with green supply chain adoption (Asif et al., 2020).

II. CONCLUSION

Green procurement and ethical sourcing represent two important mechanisms through which organizations can improve sustainable supply chain performance in emerging markets. Green procurement integrates environmental considerations into supplier selection and purchasing decisions, thereby encouraging resource efficiency, waste reduction, cleaner production, environmentally preferable materials, and improved environmental performance. Ethical sourcing complements these practices by addressing labour rights, human rights, workplace safety, fair treatment, and responsible supplier behaviour. The literature reviewed between 2010 and 2022 generally indicates positive relationships between sustainable supply chain practices and environmental, social, operational, and economic outcomes, although financial benefits may not occur immediately.

Evidence from emerging economies demonstrates that environmental improvements can be achieved through sustainable supply chain practices even when short-term cost improvements are uncertain. Therefore, organizations operating in emerging markets should integrate green procurement and ethical sourcing into supplier selection, supplier development, monitoring, collaboration, risk management, and performance measurement systems. A long-term and integrated approach can help firms move beyond compliance-oriented procurement toward sustainable supply chains that generate environmental, social, operational, and economic value.

REFERENCES

1. Alauddin, M., & Arif, M. I. (2022). The effect of green supply chain management on environmental performance: Evidence from Bangladesh. *International Journal of Social Sciences and Humanities Invention*, 9(10), 7292–7302.
2. Asif, M. S., Lau, H., Nakandala, D., Fan, Y., & Hurriyet, H. (2020). Adoption of green supply chain management practices through collaboration approach in developing countries: From literature review to conceptual framework. *Journal of Cleaner Production*, 276, 124191.
3. Boruchowitch, F., & Fritz, M. M. C. (2022). Who in the firm can create sustainable value and for whom? A single case-study on sustainable procurement and supply chain stakeholders. *Journal of Cleaner Production*, 363, 132619.
4. Esfahbodi, A., Zhang, Y., & Watson, G. (2016). Sustainable supply chain management in emerging economies: Trade-offs between environmental and cost performance. *International Journal of Production Economics*.
5. Geng, R., Mansouri, S. A., & Aktas, E. (2017). The relationship between green supply chain management and performance: A meta-analysis of empirical evidences in Asian emerging economies. *International Journal of Production Economics*, 183, 245–258.
6. Ghadge, A., & Bhattacharjee, A. (2018). Sustainable procurement performance of large enterprises across supply chain tiers and geographic regions. *International Journal of Production Research*, 57(3), 764–778.
7. Katiyar, R., Meena, P. L., Barua, M. K., Tibrewala, R., & Kumar, G. (2018). Impact of sustainability and manufacturing practices on supply chain performance: Findings from an emerging economy. *International Journal of Production Economics*, 197, 303–316.
8. Khan, M. A., Ahmad, S., & Khaled, A. S. D. (2022). An empirical study of green supply chain management practices and environmental performance of Indian manufacturing organisations. *International Journal of Services and Operations Management*, 42(4), 480–499.

9. Ma, X., Akhtar, R., Akhtar, A., Hashim, R. A., & Sibt-e-Ali, M. (2022). Mediation effect of environmental performance in the relationship between green supply chain management practices, institutional pressures, and financial performance. *Frontiers in Environmental Science*, 10.
10. Shafiq, A., Johnson, P. F., & Awaysheh, A. (2019). Emerging economy sourcing: Implications of supplier social practices for firm performance. *International Journal of Production Economics*, 218, 148–158.
11. Zeng, H., Li, R. Y. M., & Zeng, L. (2022). Evaluating green supply chain performance based on ESG and financial indicators. *Frontiers in Environmental Science*, 10.