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RESEARCH PAPER

The mediating role of supplier relationship management in enhancing green supply chain performance: evidence from the agriculture and fisheries processing sector in emerging economies

Md Mehedi Hasan Emon[1], Mowdud Ahmed[2], Mohammad Shariful Islam[3]

[1]American International University-Bangladesh (AIUB), Bangladesh.
[2]Westcliff University (WU), Irvine, USA.
[3]University of Wollongong, Australia.

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ABSTRACT

Purpose: The aim of this study is to investigate how Environmental Regulatory Pressure (ERP), Market and Customer Green Pressure (MCP), Cost Pressure (CP), Top Management Environmental Commitment (TMEC), and Green Technological Readiness (GTR) influence Green Supply Chain Performance (GSCP) in Bangladesh's agriculture and fisheries processing sector, with Supplier Relationship Management (SRM) as a mediator.

Design / methodology / approach: A quantitative survey collected primary data from agriculture and fisheries processing firms in Bangladesh. Purposive sampling ensured respondents had relevant knowledge of sustainability and supply chain practices. A total of 417 valid responses were analyzed using SmartPLS 4 through structural equation modeling to test direct and indirect relationships among variables.

Findings: The findings demonstrate that the majority of sustainability drivers exhibit a positive influence on GSCP, with SRM playing an essential mediating role in transforming these drivers into effective operational green performance. ERP, MCP, CP, and GTR demonstrated significant direct and indirect effects, whereas TMEC necessitates coordination via SRM to influence GSCP effectively. These findings emphasize the necessity of incorporating external forces, internal capabilities, and relational mechanisms to attain sustainable supply chain results.

Practical implications: Firms should strengthen SRM practices, align green technologies with sustainability goals, and effectively respond to regulatory and market pressures to improve GSCP.

Social implications: The study promotes environmentally responsible supply chain practices that support resource efficiency and reduced ecological impact in emerging economies.

Originality / value: The study integrates Institutional Theory, Natural Resource-Based View, and Relational View Theory, providing empirical evidence on SRM's mediating role in enhancing green supply chain performance in a developing country context.

Keywords: Green Supply Chain Performance, Supplier Relationship Management, Sustainable supply chain, Institutional Theory, Natural Resource-Based View, Circular Supply Chain, Agro-Processing, Fisheries Supply Chain.

1 INTRODUCTION

Sustainability has emerged as a pivotal priority for enterprises globally, propelled by escalating environmental issues, regulatory demands, and customer anticipations (Adriant et al., 2023). Organizations are increasingly acknowledging that the integration of sustainable practices throughout their supply chains not only improves environmental performance but also bolsters

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long-term competitiveness (Anugrah et al., 2024). Implementing sustainability in intricate supply chains is difficult, especially in emerging economies where resource restrictions, infrastructural deficiencies, and fragmented supplier networks impede effective adoption (Nha Trang et al., 2022). Consequently, companies require systematic techniques to integrate sustainability objectives into operational processes, ensuring that performance enhancements are quantifiable, particularly in industries that depend significantly on primary production, such as agriculture and fisheries. The agriculture and fisheries processing business is intrinsically connected to natural resources, resulting in a substantial environmental footprint throughout its supply chain (Prodhan et al., 2023). In rising economies such as Bangladesh, this sector is essential for job creation, export revenue, and food security (Barua et al., 2021a). Despite its economic significance, supply chain management in these sectors frequently lacks formal sustainability integration, resulting in difficulties such as excessive resource consumption, waste generation, and inadequate supplier coordination (Das & Hassan, 2022; Sualia et al., 2025). Consequently, investigating methods that enhance sustainability performance while preserving operational efficiency has emerged as a priority for both scholars and practitioners. Supplier Relationship Management (SRM) serves as an effective tool, facilitating organizations in coordinating with suppliers, overseeing compliance, and jointly attaining sustainable supply chain goals (Khandelwal et al., 2021). By utilizing SRM, firms may synchronize supplier practices with sustainability objectives, thereby enhancing green supply chain performance (GSCP) (Shareef et al., 2020).

In developed countries, Supplier Relationship Management (SRM) has extended the scope of procurement functions and now is used as a strategic tool to achieve GSCM goals. Environmental audits, sustainability reporting systems, green procurement standards, supplier development programmes and digital monitoring platforms are all strategies used by companies in Germany, the Netherlands, Japan, and the United States to ensure compliance with environmental requirements and to boost the sustainability performance of their supply chains (Feng et al., 2024; Samad et al., 2021). These practices help businesses cut waste, maximize resource use, bring transparency to the environment and work towards sustainability. The use of similar supplier-centred sustainability practices is, however, limited in many developing economies including Bangladesh, where resources are limited, technology is not advanced, supplier chain is not integrated, and sustainability governance is weak. Therefore, it is important to gain insight into how SRM can contribute to the shift of sustainability pressures into better green supply chain performance, especially in the context of developing countries.

The agriculture and fisheries processing sector in Bangladesh is undergoing swift expansion driven by heightened internal demand and burgeoning export prospects, especially in international seafood and agro-based products (Uddin & Akhter, 2022). This expansion has attracted more scrutiny from regulatory bodies, multinational purchasers, and sustainability-oriented investors, who are progressively insisting on adherence to environmental regulations and sustainable sourcing methodologies (Rahman et al., 2020). Nonetheless, companies in this sector encounter significant obstacles in implementing sustainability owing to insufficient technological infrastructure, a lack of expertise in environmentally friendly practices, and inadequate collaboration among supply chain partners (Jose & Shanmugam, 2019). Consequently, enterprises are pursuing efficient frameworks and management instruments that facilitate the incorporation of sustainability activities into daily operations while preserving profitability and competitiveness (Sánchez-Flores et al., 2020). Supplier Relationship Management (SRM) has become a crucial strategic instrument, allowing companies to synchronize supplier competencies with sustainability mandates, guarantee prompt compliance, and promote collaboration for environmentally sustainable process improvements (Barua et al., 2021b; Gajdić et al., 2023). Supplier Relationship Management methods, including supplier training, performance assessment, collaborative problem-solving, and knowledge dissemination, are increasingly pertinent to attaining GSCP. The efficacy of SRM in mitigating the influence of sustainability drivers, including regulatory pressure, market expectations, and environmental activities, remains little examined, particularly within the agricultural and fisheries processing industry of Bangladesh (Alam et al., 2025). Consequently, comprehending the dynamics of SRM as a mediator offers insights into how companies might transform sustainability constraints into concrete green performance results. The present circumstances are marked by a growing emphasis on sustainable certifications, eco-labeling, and traceability systems, mirroring worldwide market demands and national regulatory measures (Tseng et al., 2022). Companies that actively include their suppliers in sustainability initiatives are more effectively positioned to minimize waste, improve resource efficiency, and comply with international requirements. However, in the absence of rigorous research and actual proof, the function of SRM in connecting sustainability drivers and GSCP remains predominantly theoretical. Consequently, analyzing this relationship within the Bangladeshi context offers essential insights for scholars, practitioners, and policymakers to formulate methods that foster environmental sustainability while facilitating sectoral development.

The increasing focus on sustainability around the globe is also witnessed in Sustainable Development Goal 12 (SDG 12), which advocates for efficient resource use, waste reduction, sustainable procurement and environmentally responsible business processes to drive responsible consumption and production. At the same time, advocating for more transparency and accountability in corporate sustainability performance, Environmental, Social, and Governance (ESG) frameworks have become more significant for investors, regulators, multinational buyers, and other stakeholders (Chauhan et al., 2022; Fu et al., 2023). In the agriculture and fisheries processing industry, SDG goals and ESG expectations are largely dependent on the success of the supply chain coordination, supplier compliance and environmental responsibility along the supply chain. Hence, the sustainability drivers ERP, MCP, CP, TMEC, and GTR can be considered as essential mechanisms on how companies can start to match their operations with SDG 12 target and other ESG requirements, while SRM is an enabling capability that can help companies achieve these sustainability goals in supplier networks.

Sustainability has become a crucial necessity for firms in resource-intensive sectors, especially in agricultural and fisheries processing, owing to the sector's direct influence on natural resources and environmental quality (Prastyabudi & Solvang, 2026). Research has consistently demonstrated that sustainability drivers, such as environmental regulatory pressure, market and customer demand for green practices, cost factors, top management's commitment to environmental issues, and readiness for green technology, significantly impact GSCP (Assis et al., 2023). Although these linkages have been theoretically proven, empirical evidence from emerging economies, particularly Bangladesh, is still few. Numerous research have concentrated on rich nations, where supply chain configurations, technology proficiencies, and regulatory systems vary significantly, hence constraining the applicability of their results to developing country situations (L. F. Rahman et al., 2021). Consequently, comprehending the impact of sustainability drivers on GSCP within the distinct context of Bangladesh's agriculture and fisheries processing sector is crucial for developing effective strategies.

Moreover, SRM is acknowledged as an essential tool for improving the efficacy of sustainability programs through the promotion of collaboration, oversight of supplier compliance, and encouragement of the implementation of environmentally friendly practices (Le, 2023). Although SRM is extensively addressed in the literature as a possible mediator between sustainability drivers and GSCP, there is a deficiency of thorough empirical studies investigating its mediating role across various sustainability drivers concurrently, including regulatory, market, cost, managerial, and technological factors (Sánchez-Flores et al., 2020). This disparity is especially evident in emerging economies, characterized by fragmented supplier networks, inconsistent technical readiness, and a lack of reliable translation of top management commitment into supplier-level execution (Wren, 2022). Consequently, without comprehending the mediating role of SRM, companies may adopt sustainability initiatives in isolation, resulting in subpar performance and overlooked chances for environmental and operational enhancements.

Furthermore, current research frequently neglects the interaction between positive and negative forces, including the financial burdens linked to environmental compliance, which may impede the adoption of green supply chains despite robust regulatory or management dedication (Barua et al., 2021b). The cumulative impact of many sustainability drivers on GSCP, mediated via supplier relationship management, is yet inadequately investigated. Exploring these links is essential as it enables organizations to prioritize actions, match supplier capabilities with environmental goals, and attain sustainable operational outcomes efficiently (Mukhsin & Suryanto, 2022). This study empirically examines the impact of environmental regulatory pressure, market and customer green pressure, cost pressure, top management environmental commitment, and green technological readiness on GSCP in Bangladesh, while evaluating the mediating role of Supplier Relationship Management to offer practical insights for sustainable supply chain strategies.

This study aims to investigate the impact of critical sustainability drivers Environmental Regulatory Pressure (ERP), Market and Customer Green Pressure (MCP), Cost Pressure (CP) associated with environmental compliance, Top Management Environmental Commitment (TMEC), and Green Technological Readiness (GTR) on GSCP within the agriculture and fisheries processing sector of Bangladesh. The study seeks to examine the mediating function of SRM in the connection between sustainability drivers and GSCP, offering empirical evidence on how SRM improves the efficacy of sustainability initiatives in attaining green supply chain results.

This study is important as it examines the mediating function of SRM in connecting essential sustainability factors to GSCP in the agriculture and fisheries processing sector of Bangladesh. Although other studies have investigated sustainability drivers and SRM independently, there is a paucity of empirical information about the simultaneous mediation of several drivers by SRM in emerging economies. Comprehending this relationship is essential for managers and policymakers aiming to improve environmental performance, supplier collaboration, and operational efficiency

in resource-intensive industries. This study provides innovative insights by amalgamating regulatory, market, cost, managerial, and technological elements with SRM, presenting a comprehensive framework for enhancing green supply chain results in scenarios where sustainability implementation encounters structural and operational obstacles. Moreover, the study extends the SDG 12 and ESG literature by investigating the potential of sustainability-oriented organizational and environmental factors to be translated into concrete green supply chain results by implementing good supplier relationship management. The study contributes information on how companies can build in their operations responsible production practices, better environmental governance, supplier sustainability compliance and sustainable development goals, and stay competitive.

2 THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

This study's theoretical foundation is based on various complementary theories to thoroughly elucidate the linkages among sustainability drivers, SRM, and GSCP. Institutional Theory has been extensively utilized to comprehend the impact of external constraints on organizational behavior, especially regarding the adoption of environmental policies (Nazir et al., 2024). ERP and MCP are intricately connected to Institutional Theory, as firms react to coercive, normative, and mimetic influences from regulators, customers, and industry counterparts to implement environmentally sustainable practices (Chen et al., 2025). However, just depending on Institutional Theory may inadequately elucidate internal organizational competencies or resource-based advantages that propel sustainable results (Wen et al., 2023). Consequently, whereas Institutional Theory elucidates the rationale behind corporations adopting green practices in response to external expectations, supplementary theories are necessary to address firm-level capacities and performance results.

The Natural Resource-Based View (NRBV) enhances this perspective by highlighting that companies can get competitive advantage via the strategic management of environmental resources and skills (Alkandi, 2025). Variables such as CP associated with environmental compliance, TMEC, and GTR are particularly pertinent to the NRBV. Cost pressures underscore the difficulties and restrictions related to investing in green technologies and compliance processes, indicating resource limitations that may hinder the firm's capacity to execute sustainability programs effectively (Buhaya & Metwally, 2024). Commitment from top management guarantees that strategic decisions emphasize environmental performance, connecting corporate resources with sustainability goals. Green technical readiness denotes a firm's ability to implement advanced environmentally sustainable technologies, hence improving operational efficiency and ecological performance (AL-Khatib, 2023; Junejo et al., 2025). However, NRBV alone fails to encompass the relational and collaborative dimensions of supply chains, which are essential for attaining green supply chain results in multi-tier supplier networks.

SRM is thus based on the Relational View Theory and the NRBV (Ibrahim et al., 2024; Tetteh et al., 2025). The Relational View Theory elucidates how inter-organizational linkages and resource-sharing mechanisms improve firm-level performance by utilizing complementary supplier skills. SRM enables companies to oversee environmental compliance, synchronize sustainable practices, and disseminate knowledge with suppliers, which is essential for converting sustainability imperatives into concrete green supply chain results. However, comprehending SRM in isolation fails to consider the impact of internal capabilities and strategic resources on overall performance. Consequently, incorporating NRBV guarantees that both relational and resource-based benefits are taken into account when assessing the influence of SRM on GSCP.

Although there is an increasing literature on sustainable supply chains, previous researches have yielded mixed results on the motivators of green supply chain performance. As an example, regulatory and market pressures have been found to enhance environmental performance in some studies, but produce only symbolic compliance with no significant operational changes, especially in developing economies where the enforcement of institutions remains relatively low (Mrugalska & Ahmed, 2021). On the same note, although technological preparedness and top management dedication are typically viewed as key drivers of sustainability, the empirical data of their effectiveness is inconsistent since organizational resources, supplier potential, and situational factors differ among industries and nations (Hyder et al., 2023; Sajjad et al., 2020). Moreover, the current literature has more or less analysed sustainability drivers on their own, which offers little insight into the combined effect of external pressure, internal capacity and relational processes on the green supply chain performance. The absence of such a theoretical merge leaves a significant research gap, especially in the context of the emerging economies where the presence of environmental problems, resources limitations, and disjointed supplier systems co-exist. Thus, a broader concept that incorporates Institutional Theory, NRBV, and Relational View Theory is required to describe the intricate processes in the interaction of sustainability drivers on GSCP.

GSCP is fundamentally based on the NRBV, as it signifies the result of proficiently managing environmental resources, technologies, and skills to attain a sustainable competitive advantage (AL-Khatib & Shuhaiber, 2022; Huma et al., 2023). This study integrates NRBV with Institutional and Relational View theories to establish a comprehensive theoretical framework, wherein external pressures drive sustainability adoption, internal resources and managerial commitment bolster implementation, and supplier relationships enable the successful achievement of green performance outcomes. However, in the absence of such integration, prior research has predominantly analyzed these dimensions independently, constraining the comprehension of their cumulative impacts in emerging economies such as Bangladesh. The multi-theoretical method utilized in this study is pertinent for delivering both practical and scholarly insights into attaining green supply chain excellence via coordinated sustainability initiatives, strategic resource management, and supplier engagement.

ERP, MCP, CP, TMEC and GTR were selected based on theoretical relevance as well as contextual relevance to the agriculture and fisheries processing industry. ERP and MCP are external institutional pressures that are posed by regulators, customers, and market stakeholders, which are the key factors in Institutional Theory. CP was added due to the fact that sustainability projects usually involve significant investments and compliance costs, and hence financial limitations is a major determinant of environmental performance especially in emerging economies with limited resources. TMEC and GTR have been chosen as strategic internal capabilities through NRBV, because the managerial commitment and readiness to technology help in defining the capability of a firm to utilize environmental resources successfully. Despite the fact that other variables including green innovation capability, environmental orientation and digital supply chain integration were investigated in earlier research, these variables are usually executed through organizational capabilities and technological resources that are conceptualized in TMEC and GTR. In addition, the current research is narrowed to the joined effect of the outside pressures, inside capabilities, and relational mechanisms that render the chosen constructs theoretically extensive and empirically applicable. SRM was added as the mediating factor since the sustainability goals can never be realized when only the internal activities of the organization are involved; instead, there should be effective cooperation with the suppliers to translate the drivers of sustainability into the actual results of the green supply chain. As such, the chosen variables offer a well-balanced and theoretically-based model to explain GSCP in the agriculture and fisheries processing sector of Bangladesh.

2.1 Hypotheses development

ERP denotes the external constraints enforced by governmental bodies, regulatory organizations, and industry-specific norms that necessitate enterprises to implement ecologically sustainable practices (Nazir et al., 2024). Institutional Theory posits that companies adhere to external constraints via coercive mechanisms, wherein conformity with laws and regulations secures legitimacy and sustains operational continuity within the industry (Choudhary & Sangwan, 2022). Companies in the agriculture and fisheries processing sector are acutely attuned to regulatory mandates, such as wastewater treatment standards, emissions control, and sustainable sourcing requirements, as noncompliance may lead to penalties, reputational harm, or limited market access (Buhaya & Metwally, 2024). Regulatory pressure may provide external motivation; however, the existence of legislation alone does not guarantee enhanced GSCP unless enterprises deliberately incorporate these mandates into their operational and supplier management procedures (Santoso et al., 2022). Consequently, companies must proactively establish monitoring, reporting, and process modification systems to guarantee that regulatory requirements result in significant enhancements in environmental performance and operational efficiency.

Moreover, regulatory demands frequently intersect with organizational competencies and supplier networks, underscoring the necessity for strategic alignment of resources and processes. In emerging economies such as Bangladesh, where institutional enforcement may be erratic, firms that proactively adhere to environmental regulations not only bolster compliance but also secure competitive advantages through enhanced resource efficiency, waste minimization, and increased customer satisfaction (Ali, 2023; Balon, 2020). However, empirical information regarding the efficacy of ERP in enhancing green supply chain outcomes in agriculture and fisheries processing is scarce, particularly in relation to its interplay with supplier cooperation and technology capabilities (Beniaich & Hmioui, 2025; Wu et al., 2025). Consequently, investigating the direct impact of ERP on GSCP yields critical insights into how regulatory frameworks influence organizational conduct and environmental results. Furthermore, Institutional Theory substantiates the premise that organizations react to external constraints to preserve legitimacy, reputation, and market positioning, hence validating the proposed positive impact of ERP on GSCP (Sayem et al., 2026).

Consequently, it is clear that firms under stringent environmental regulatory demands are more inclined to implement organized environmental practices, include sustainability measurements into supply chain activities, and attain quantifiable enhancements in green performance. Consequently, in light of the theoretical framework and practical ramifications outlined above, the subsequent hypothesis is proposed:

H1: ERP positively influences GSCP.

MCP denotes the expectations and demands from consumers, business partners, and the wider market for eco-friendly products, sustainable practices, and ethical operations (Geng et al., 2024). Institutional Theory posits that organizations are shaped by normative pressures from their environment, encompassing stakeholders like customers, industry associations, and business partners, which promote the adoption of sustainable practices to uphold legitimacy and competitive advantage (Tsikada et al., 2025). In the agriculture and fisheries processing sector, consumers are becoming more cognizant of environmental concerns, such as sustainable sourcing, diminished chemical application, and eco-friendly packaging, prompting companies to incorporate sustainable practices throughout their supply chains (Chakraborty et al., 2025). While customer demand can drive organizations, converting these pressures into quantifiable GSCP necessitates proactive organizational commitment, strategic supplier collaboration, and efficient operational modifications, rather than mere compliance or marketing hyperbole.

Furthermore, companies that adeptly address MCP can secure competitive advantages by improving brand recognition, augmenting consumer loyalty, and fulfilling international market standards, especially in export-driven industries (Nikseresht et al., 2024). Empirical research indicates that the proactive implementation of green practices in response to customer and market demands enhances environmental performance, minimizes waste, and optimizes resource use (Zeleke & Hailemariam, 2023). In emerging economies like Bangladesh, obstacles such as restricted technology capabilities, disjointed supplier networks, and the absence of organized environmental programs might hinder the conversion of market and customer pressures into sustainable supply chain results (Kabra et al., 2023; Long & Feng, 2025). Consequently, companies must deliberately synchronize their internal resources, executive commitment, and supplier collaboration to effectively address these external normative demands.

Institutional Theory offers a compelling justification for investigating the relationship between MCP and GSCP, as it underscores that firms adopt socially anticipated behaviors to uphold legitimacy, adhere to market norms, and fulfill the expectations of important stakeholders (Piprani et al., 2025; Wang et al., 2025). In the agriculture and fisheries processing sector, fulfilling customer and market sustainability requirements is increasingly vital for attaining sustainable operational results, accessing new markets, and preserving industry credibility. However, in the absence of empirical inquiry, the efficacy of MCP in promoting GSCP, especially in emerging nations, remains inadequately examined. Consequently, in light of the above debate and theoretical foundation, the subsequent hypothesis is proposed:

H2: MCP positively influences GSCP.

CP associated with environmental compliance denotes the financial strain that companies encounter when adopting sustainability initiatives, such as investing in green technologies, adhering to environmental regulations, and modifying operations for eco-friendly practices (Sharma et al., 2024). The NRBV posits that enterprises attain sustainable competitive advantage through the strategic management of their resources and capabilities, encompassing financial, technological, and human resources, to facilitate environmental activities (Domfeh et al., 2025). Simultaneously, Institutional Theory posits that organizations are shaped by coercive and normative pressures from external stakeholders, including regulators and market expectations, necessitating firms to incur supplementary costs to comply with sustainability standards (Wabanhu et al., 2025). However, elevated cost constraints can provide substantial problems for companies, especially in emerging economies, where restricted financial resources, insufficient access to sustainable technologies, and disjointed supply chains may hinder their capacity to adopt effective green practices.

Furthermore, in Bangladesh's agriculture and fisheries processing sector, companies frequently contend with slim profit margins and elevated operational risks, rendering the implementation of green initiatives financially burdensome and potentially constraining short-term profitability (Rahman et al., 2023). When cost pressures are deemed severe, companies may postpone, reduce, or selectively execute sustainability initiatives, adversely impacting GSCP (Rahman et al., 2021). Neglecting financial limitations in sustainability planning may lead to inadequate implementation of green practices, resulting in inefficient resource usage, ineffective waste management, and diminished environmental performance. Consequently, it is imperative to analyze the direct influence of cost pressures on GSCP, as comprehending this link aids managers in reconciling financial limitations with environmental obligations and strategic resource distribution.

The integration of NRBV and Institutional Theory offers a solid framework for examining the adverse impact of cost pressure on GSCP. NRBV emphasizes the necessity of effective resource management for optimal environmental performance, whereas Institutional Theory elucidates the external pressures firms encounter to engage in sustainability, notwithstanding the associated financial costs (Chaudhary et al., 2025). However, given the absence of empirical analysis, the degree to which cost pressures impede the adoption of green supply chains in emerging economies remains ambiguous. Consequently, in light of the preceding discourse and theoretical rationale, the subsequent hypothesis is proposed:

H3: CP negatively influences GSCP.

TMEC denotes the proactive engagement, strategic endorsement, and prioritization of environmental sustainability by an organization's senior executives, encompassing resource allocation, policy formulation, and leadership in ecological initiatives (Domfeh et al., 2025). The NRBV posits that firms attain competitive advantage and enhance performance by strategically utilizing their internal resources and capabilities, such as managerial commitment, organizational culture, and technological assets, to achieve environmental sustainability (Sharma et al., 2024). In the agriculture and fisheries processing sector, the dedication of senior management is essential, as sustainable supply chain practices frequently necessitate structural modifications, financial investments, supplier collaboration, and monitoring systems, all of which require executive endorsement for effective execution (Alkandi, 2025). In numerous firms, particularly in emerging economies such as Bangladesh, insufficient awareness, conflicting priorities, or a lack of strategic focus at the executive level can obstruct the effective implementation of sustainability objectives into operational actions, thereby diminishing the potential impact on GSCP (Olajide et al., 2023).

Furthermore, companies directed by environmentally dedicated leaders are more inclined to institutionalize eco-friendly practices, incorporate sustainability measures into performance assessments, and cultivate a culture of ongoing enhancement in environmental operations (Gazi et al., 2024). Top management commitment boosts supplier coordination, promotes investment in green technologies, and ensures alignment of sustainability programs with overarching corporate strategy, ultimately enhancing GSCP (Olajide et al., 2023). However, given the absence of empirical inquiry, the specific influence of TMEC on the efficacy of green supply chains remains inadequately examined, especially within emerging nations where resource restrictions and infrastructural deficiencies provide further obstacles. Consequently, analyzing the significance of top management commitment is essential for comprehending how leadership might affect environmental results and operational efficacy in a resource-intensive industry such as agriculture and fisheries processing.

The theoretical basis of NRBV substantiates this premise by highlighting that strategically managed internal resources, such as managerial commitment, are crucial for attaining sustainable competitive advantage and optimal environmental performance (Olajide et al., 2023). Consequently, it is clear that companies with robust top management commitment to environmental sustainability are more adept at executing green initiatives, collaborating with suppliers, and improving overall GSCP. Consequently, grounded in this theoretical justification and practical significance, the subsequent hypothesis is proposed:

H4: TMEC positively influences GSCP.

GTR denotes the degree to which a business has the technology skills, infrastructure, and expertise necessary to adopt, implement, and manage environmentally sustainable practices throughout its supply chain (Farrukh Shahzad et al., 2025). The NRBV posits that a firm's distinctive resources and capabilities, such as sophisticated technology and operational competencies, are essential for attaining competitive advantage and enhancing environmental performance (Domfeh et al., 2025). In the agriculture and fisheries processing sector, GTR is crucial as companies must incorporate environmentally sustainable processing technologies, eco-friendly packaging methods, and energy-efficient systems to reduce environmental impact and improve operational efficiency (Khayyam et al., 2025). Despite the acknowledged significance of technological readiness, numerous firms in emerging economies, such as Bangladesh, encounter obstacles including restricted access to green technologies, elevated implementation costs, and insufficient technical expertise, which can impede the conversion of sustainability initiatives into quantifiable green supply chain results (Ntoyanto-Tyatyantsi & Amadi-Echendu, 2025).

Furthermore, companies with elevated GTR are more adept at overseeing supplier adherence, enhancing resource utilization, and executing creative strategies for waste minimization and energy efficiency (Madhavan et al., 2024). Technological readiness empowers firms to proactively address environmental legislation, market expectations, and customer demands, thereby assuring the effective implementation of sustainability initiatives across the supply chain (Thi Binh et al., 2025). However, in the absence of adequate technological skills, companies may find it challenging to attain desired environmental performance, leading to subpar GSCP and diminished competitiveness in both global and domestic markets. Consequently, comprehending the

correlation between GTR and GSCP is essential for discerning how internal technological competencies might promote sustainability results in resource-intensive industries (Bag et al., 2025).

NRBV offers a robust theoretical framework for this theory, highlighting that strategic resources and firm-specific competencies, including technology readiness, are crucial for attaining superior performance and lasting competitive advantage (Hu et al., 2025). It is clear from the preceding discussion that enterprises exhibiting greater green technological preparedness are more inclined to adopt effective environmental practices, collaborate efficiently with suppliers, and enhance overall GSCP. Consequently, grounded in this theoretical justification and practical significance, the subsequent hypothesis is proposed:

H5: GTR positively influences GSCP.

SRM is the methodical methodology employed by businesses to oversee interactions, collaboration, and coordination with suppliers to fulfill operational and strategic objectives, including sustainability targets (Acquah, 2025). The integration of Relational View Theory and NRBV offers a robust framework for comprehending the role of SRM in enhancing GSCP. The Relational View Theory asserts that inter-organizational interactions, defined by trust, collaboration, and resource-sharing, generate distinctive relational rents that improve business performance (Kisinga et al., 2024). Within green supply chains, effective SRM allows enterprises to oversee suppliers' adherence to environmental standards, disseminate best practices, and collaboratively execute eco-friendly projects, thus enhancing environmental performance across the supply chain (Barbosa & Cansino, 2024).

Furthermore, the NRBV underscores that firm-specific competencies and resources, including technological proficiency, managerial dedication, and organizational expertise, are crucial for attaining sustained competitive advantage (Hart, 1995; Hossain et al., 2023). When SRM is efficiently executed, internal resources are augmented by supplier capabilities, allowing organizations to optimize processes, minimize waste, and improve resource efficiency, hence contributing to enhanced GSCP outcomes. In emerging economies such as Bangladesh, difficulties including fragmented supplier networks, absence of standardized practices, and restricted technological adoption may diminish the effectiveness of SRM on environmental performance unless intentional coordination and capacity-building initiatives are implemented (Giacomarra et al., 2021).

Moreover, SRM is essential in converting sustainability factors such as environmental regulatory demands, market and consumer green expectations, and green technical preparedness into quantifiable GSCP. Empirical research indicates that companies that actively involve suppliers in sustainability initiatives are more likely to attain compliance, promote environmental efficiency, and bolster competitiveness in both global and domestic markets (Borazon et al., 2022). However, in the absence of regular supplier participation, sustainability projects may stay fragmented inside individual companies, so constraining their overall efficacy and environmental impact.

According to the preceding theoretical discourse, the amalgamation of Relational View Theory and NRBV illustrates that SRM is an essential mechanism enabling enterprises to utilize supplier capabilities and internal resources to enhance green supply chain results. Consequently, in light of the aforementioned practical and theoretical significance, the subsequent hypothesis is proposed:

H6: Supplier Relationship Management positively influences GSCP.

2.1.1 Mediating role of SRM

ERP imposes external coercive demands on enterprises to implement environmentally responsible practices, encompassing adherence to laws, rules, and industry standards (Shukla et al., 2023). Institutional Theory posits that organizations react to pressures in order to uphold legitimacy, adhere to industry standards, and satisfy stakeholder expectations (Johnson-Hall & Hall, 2022). Although ERP encourages organizations to adopt green initiatives, it does not inherently ensure successful conversion into GSCP, especially in emerging economies characterized by compliance difficulties, fragmented supplier networks, and resource constraints (Nazir et al., 2024). However, when companies actively oversee their suppliers using SRM, ERP may be executed more efficiently, allowing enterprises to guarantee that suppliers comply with environmental standards, make process enhancements, and align with sustainability goals.

SRM, based on Relational View Theory and NRBV, asserts that inter-organizational collaboration, trust, and resource-sharing with suppliers improve business performance (Adetoyinbo et al., 2023). By incorporating SRM practices such as supplier assessment, collaborative problem-solving, and information sharing companies can transform regulatory demands into implementable green initiatives across the supply chain, thus enhancing GSCP. Without organized supplier interaction, companies may encounter compliance deficiencies, inconsistent application of sustainable

practices, and restricted environmental performance, hence diminishing the efficacy of ERP on overall supply chain sustainability (Borazon et al., 2022; Domfeh et al., 2025).

Furthermore, SRM enables companies to utilize supplier capabilities and resources in alignment with ERP, which is especially pertinent in Bangladesh's agriculture and fisheries processing industry, where suppliers are essential for the sustainable sourcing, processing, and distribution of products (Barbosa & Cansino, 2024). The theoretical frameworks of Institutional Theory and NRBV suggest that whereas external pressures serve as motivation, internal relational qualities like SRM are crucial for transforming these pressures into quantifiable environmental and operational performance. However, empirical research exploring this mediating mechanism in emerging economies is scarce, underscoring the necessity for targeted investigation.

Consequently, based on the preceding discourse and theoretical justification, it is clear that SRM enables the conversion of ERP into enhanced green supply chain results, resulting in the establishment of the following hypothesis:

H7a: SRM mediates the relationship between ERP and GSCP.

MCP denotes the anticipations from customers, business associates, and the wider market for companies to implement environmentally sustainable practices, including eco-friendly products, ethical sourcing, and operational transparency (Wabanhu et al., 2025). Institutional Theory posits that companies react to normative demands to uphold legitimacy, meet stakeholder expectations, and sustain competitiveness in the market (Agyapong et al., 2023). In the agriculture and fisheries processing sector, customers are progressively demanding sustainable sourcing and environmentally responsible operations, prompting enterprises to incorporate green practices into their supply chains (Nazir et al., 2024). Although MCP generates external impetus, companies frequently encounter difficulties in aligning consumer and market expectations with quantifiable enhancements in GSCP in the absence of organized coordination and monitoring systems.

SRM serves a pivotal function by facilitating collaboration, communication, and coordination between enterprises and suppliers to adopt sustainable practices throughout the supply chain (Haldorai et al., 2025). The theoretical underpinnings of Relational View Theory and NRBV emphasize that relational capabilities, including trust, knowledge-sharing, and collaborative problem-solving with suppliers, when integrated with firm-specific resources, improve performance outcomes (Johnson-Hall & Hall, 2022). When MCP incentivizes companies to take action, SRM guarantees that suppliers are actively involved in environmental compliance, process optimization, and sustainability efforts, thus transforming market expectations into concrete advancements in GSCP. In the absence of SRM, companies may have challenges related to inconsistent supplier compliance, disjointed sustainability activities, and less efficacy in attaining comprehensive environmental goals (Domfeh et al., 2025).

Furthermore, SRM enables companies to utilize supplier competencies in reaction to MCP, which is especially crucial in developing economies such as Bangladesh, where supplier networks tend to be diversified, resource-limited, and technologically heterogeneous (Barbosa & Cansino, 2024). The integration of MCP, SRM, and GSCP coincides with Institutional Theory by illustrating that external normative demands alone are inadequate; relational mechanisms are essential for the efficient operationalization of these pressures. However, empirical research investigating this mediating link is scarce, resulting in a significant vacuum in comprehending how customer-driven sustainability needs are converted into quantifiable supply chain outcomes.

Consequently, in light of the above discourse and theoretical justification, SRM is identified as a crucial intermediary connecting MCP to improved green supply chain results, thereby leading to the establishment of the following hypothesis:

H7b: SRM mediates the relationship between MCP and GSCP.

CP associated with environmental compliance denotes the financial limitations that companies encounter when executing sustainability measures, including investments in green technologies, process modifications, or ensuring supplier adherence to environmental standards (Shukla et al., 2023). The NRBV posits that enterprises can attain sustainable competitive advantage by adeptly managing their resources and capacities, including financial, technological, and relational assets, to enhance environmental performance (Wabanhu et al., 2025). Although cost restrictions frequently hinder the immediate implementation of sustainable practices, companies that adeptly manage their suppliers through SRM can alleviate the adverse effects of these financial constraints. In emerging economies such as Bangladesh, constrained financial resources and disjointed supplier networks sometimes impede enterprises' capacity to absorb these costs, leading to incomplete or uneven execution of green supply chain activities (Esposito et al., 2025).

SRM, based on Relational View Theory and NRBV, facilitates enterprises in collaborating with suppliers, sharing resources, and executing collaborative sustainability activities that mitigate the cost impact of green compliance (Yadav et al., 2022). By cultivating robust supplier relationships, companies can utilize supplier expertise, collaboratively invest in sustainable technology, and enhance resource allocation, thus mitigating the adverse impacts of cost pressures on GSCP (K.

(Emma) Feng & Lam, 2021). However, in the absence of organized Supplier Relationship Management, financial constraints may result in limited implementation of environmental practices, inefficiencies, and diminished sustainability performance throughout the supply chain.

Furthermore, SRM enables companies to transform cost-related limitations into strategic advantages by consolidating resources, collaboratively negotiating sustainable practices, and integrating supplier operations with environmental goals (Ooi et al., 2024). This strategy is especially vital in Bangladesh's agriculture and fisheries processing sector, where supplier collaboration is crucial for process standardization, adherence to environmental standards, and the attainment of sustainable operational results. However, empirical research investigating SRM as a mediator between CP and GSCP is few, particularly in the context of emerging economies.

Consequently, in light of the preceding discourse and theoretical justification, SRM is seen as a pivotal mechanism for mitigating the adverse effects of cost pressures and improving green supply chain results. Consequently, the subsequent hypothesis is articulated:

H7c: SRM mediates the relationship between CP and GSCP.

TMEC denotes the proactive endorsement, strategic emphasis, and leadership exhibited by an organization's senior executives to advance environmental sustainability throughout operations (Uddin & Akhter, 2022). The NRBV asserts that firm-specific resources, such as management competencies and strategic commitment, are crucial for attaining sustained competitive advantage and enhanced environmental performance (Haldorai et al., 2025). The efficacy of TMEC in enhancing GSCP is contingent upon the degree to which enterprises collaborate and coordinate with their suppliers to execute sustainability efforts. In underdeveloped economies such as Bangladesh, companies frequently encounter obstacles including fragmented supply chains, constrained supplier capacities, and inconsistent application of environmental practices, which may diminish the direct influence of TMEC on GSCP.

SRM serves as an essential tool for enterprises to collaborate with suppliers, exchange resources, and collectively adopt sustainable practices (Nirmal et al., 2025). Grounded in Relational View Theory and the NRBV, SRM enables the operationalization of top management commitment throughout the supply chain, converting strategic intent into actionable initiatives such as monitoring supplier compliance, adopting environmentally sustainable technologies, and optimizing resource utilization (Barbosa & Cansino, 2024). However, in the absence of structured SRM, the environmental commitment of top management may be merely symbolic or restricted to the organization, resulting in a lack of quantifiable enhancements in GSCP.

Furthermore, SRM enhances the impact of TMEC by synchronizing supplier activities with corporate sustainability goals, promoting collaboration, and guaranteeing the uniform implementation of environmental measures across the supply chain (Thi Binh et al., 2025). In the agriculture and fisheries processing sector, where suppliers are essential for the sustainable sourcing, processing, and distribution of products, efficient SRM guarantees that managerial commitment results in measurable environmental performance outcomes. However, empirical investigations examining SRM as a mediator between TMEC and GSCP in emerging nations are scarce, underscoring a significant research deficiency.

Consequently, based on the above discussion and theoretical justification, SRM is seen as a crucial method by which top management's environmental commitment enhances green supply chain outcomes. Consequently, the subsequent hypothesis is articulated:

H7d: SRM mediates the relationship between TMEC and GSCP.

GTR denotes an organization's ability to acquire, apply, and oversee advanced environmentally sustainable technologies and processes across the supply chain (Farrukh Shahzad et al., 2025). The NRBV posits that strategic, firm-specific resources and skills, such as technological preparedness, are crucial for attaining sustained competitive advantage and enhanced environmental performance (Domfeh et al., 2025; Ntoyanto-Tyatyantsi & Amadi-Echendu, 2025). Although GTR provides companies with the resources and skills to enhance GSCP, the efficacy of these technologies is contingent upon their integration with supplier operations and coordination throughout the supply chain. In emerging economies such as Bangladesh, mere technical adoption may not yield ideal environmental results due to fragmented supplier networks, disparate technological capabilities, and inconsistent process execution.

SRM, based on Relational View Theory and the NRBV, facilitates the implementation of technological preparedness through the promotion of collaboration, information exchange, and resource alignment with suppliers (Rajabian Tabesh et al., 2024). Through SRM, companies may guarantee that suppliers adopt appropriate green technologies, efficiently implement eco-friendly processes, and align with corporate sustainability goals (Thi Binh et al., 2025). However, without robust supplier engagement, the promise of GTR may remain underexploited, constraining advancements in resource efficiency, waste minimization, and overall environmental performance within the supply chain.

Furthermore, SRM allows companies to utilize supplier experience and technology proficiencies in addressing GTR, hence guaranteeing the continuous and sustainable implementation of green initiatives throughout all levels of the supply chain (Esposito et al., 2025). This is especially pertinent in the agriculture and fisheries processing industry, where numerous suppliers participate in production, processing, and distribution, necessitating coordinated technology adoption to get quantifiable GSCP outcomes. However, empirical investigations examining the mediating function of SRM between GTR and GSCP in emerging economies are few, underscoring a significant research void.

Consequently, based on the preceding discourse and theoretical justification, SRM is established as an essential mechanism that allows enterprises to convert technological preparedness into enhanced green supply chain results. Consequently, the subsequent hypothesis is articulated:

H7e: SRM mediates the relationship between GTR and GSCP.

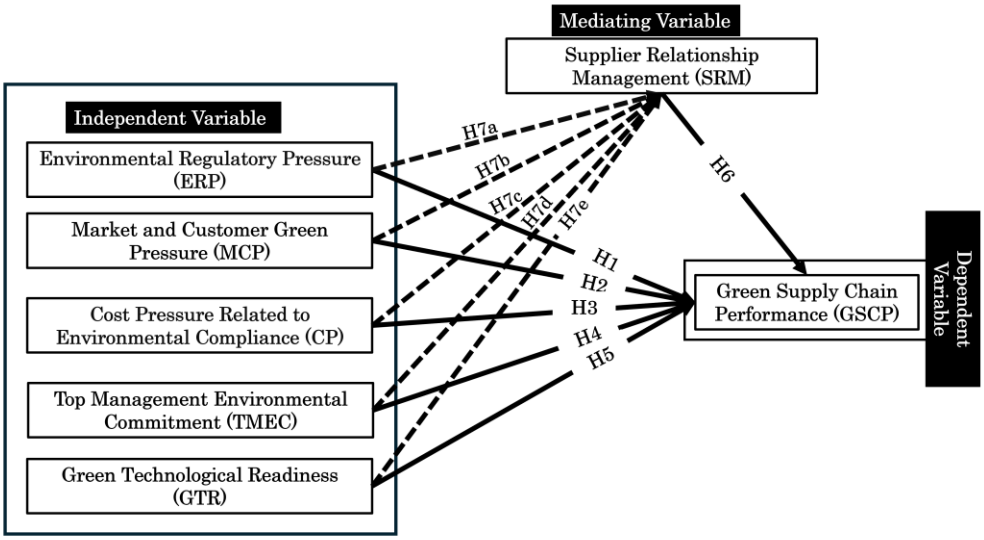

Figure 1 - Conceptual framework

3 MATERIALS AND METHOD

The study utilized a quantitative methodology to investigate the mediating function of SRM between sustainability drivers and GSCP within the agriculture and fisheries processing industry of Bangladesh. The study employed a cross-sectional research design, collecting data at a singular moment from respondents across various geographies. A survey-based approach was deemed suitable as it facilitated the systematic gathering of standardized responses from key decision-makers and operational personnel possessing direct knowledge of supply chain operations, supplier coordination, and sustainability practices. Due to the intricacy of factors such environmental regulatory pressure, technical readiness, and management commitment, primary data gathering using structured questionnaires was essential to obtain correct perceptions from knowledgeable respondents. Consequently, the research utilized a standardized survey instrument, distributed both online and in-person, to guarantee extensive representation across various geographic areas and types of firms.

The individual respondents served as the unit of analysis for this study. The research gathered primary data from managers and staff involved in supply chain management, environmental compliance, sustainability initiatives, and supplier coordination within medium to large agricultural and fisheries processing enterprises. The target population comprised supply chain managers, operations managers, quality assurance officers, environmental officers, and senior executives engaged in strategic decision-making for green initiatives, as these individuals possessed the most expertise regarding the processes, costs, and collaborative mechanisms influencing GSCP. Respondents from very small organizations or those lacking decision-making authority were eliminated to ensure the reliability and validity of the responses. Consequently, purposive sampling was employed to include only individuals possessing adequate knowledge and experience pertinent to green supply chain practices, a method that is extensively endorsed for SEM studies (Kumar et al., 2024).

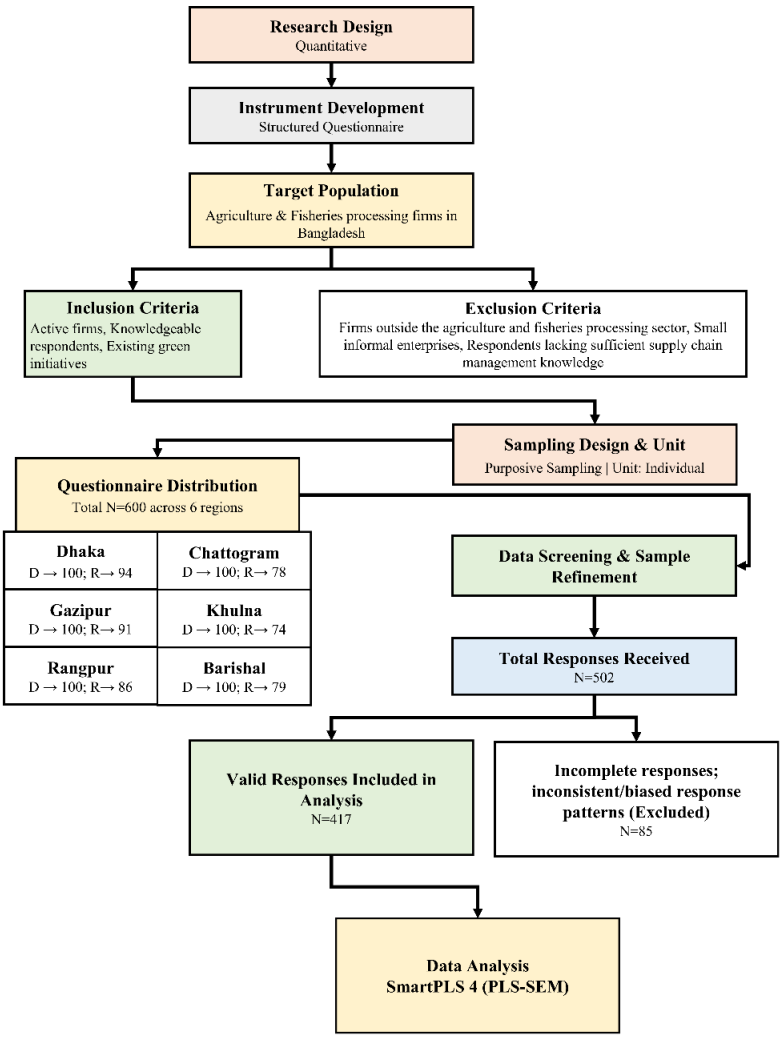

Figure 2 - Sequential methodological framework

The sampling frame comprised enterprises involved in agriculture or fishery processing throughout key regions of Bangladesh, including Chattogram, Khulna, Barishal, Gazipur, Dhaka, and Rangpur. The geographic decision was warranted due to the significant concentration of fisheries processing clusters in Chattogram, Khulna, and Barishal, alongside agro-processing centers in Gazipur, Dhaka, and Rangpur. However, outside these sectors, small informal enterprises, and respondents lacking sufficient supply chain management knowledge were removed to ensure data quality. A total of 600 questionnaires were distributed proportionally among areas, with 100 allocated to each region. A total of 502 replies were initially obtained. Following data screening, 85 replies were discarded due to incomplete questionnaires and inconsistent or biased response patterns. The conclusive usable dataset consisted of 417 valid responses.

The instrument was developed using established scales modified for the context of GSCP and sustainability factors. A five-point Likert scale, spanning from strongly disagree (1) to strongly agree (5), was employed to guarantee consistency and facilitate analysis. Fewer than seven points were used because a 5-point Likert scale was easier for respondents with varying educational and professional experiences in the agriculture and fisheries processing industry to understand and consistently respond to, resulting in less cognitive load and respondent fatigue. Furthermore, previous methodological studies indicated that using five-point scales is adequate in capturing the latent constructs and still considered reliable and valid for structural equation modeling, especially in an emerging economy environment where respondents' familiarity with highly granular scales might be limited (Alabi & Jelili, 2023). Prior to the final administration, the questionnaire was subjected to a pre-test by experts in supply chain and sustainability to enhance item clarity, relevance, and contextual appropriateness. The measuring scale's validity was confirmed via expert evaluation, pre-testing, and consistency with previous research (Robinson, 2023). Data were

gathered through both in-person and online surveys to properly contact respondents across various geographies. All responses were assigned numerical codes to enable quantitative analysis. However, the raw data necessitated cleansing to eliminate incomplete or inconsistent information, yielding 417 legitimate cases. The dataset was examined utilizing SmartPLS 4, which is suitable for SEM, managing intricate models with mediating variables, and supporting non-normal data distributions (Gironda, 2024; Hair et al., 2025). Descriptive statistics, assessment of the measurement model (internal consistency reliability, convergent validity, and discriminant validity), and evaluation of the structural model (path coefficients, coefficient of determination, effect size, predictive relevance, and mediating effects via bootstrapping) were performed to examine the proposed relationships. SmartPLS 4 was chosen due to its strong estimation capabilities for latent constructs and its prevalent application in significant studies focused on supply chain and sustainability constructs (Hair & Alamer, 2022).

Table 1 demonstrates that all constructs exhibit acceptable to exceeding internal consistency validity, with Cronbach's alpha values between 0.777 and 0.900, surpassing the recommended threshold of 0.70 (Hair Jr, Howard, & Nitzl, 2020). The measurement scales utilized in ERP, MCP, CP, TMEC, GTR, SRM, and GSCP are considered valid and suitable for further SEM analysis, as values exceeding 0.70 denote adequate internal consistency among items assessing the same latent construct (Hair et al., 2017).

Table 1 - Assessment of internal consistency across constructs

Constructs	No. of Items	Cronbach's Alpha
Environmental Regulatory Pressure (ERP)	4	0.836
Market & Customer Green Pressure (MCP)	4	0.832
Cost Pressure (CP)	4	0.900
Top Management Environmental Commitment (TMEC)	4	0.777
Green Technological Readiness (GTR)	4	0.854
Supplier Relationship Management (SRM)	4	0.867
Green Supply Chain Performance (GSCP)	5	0.838

4 RESULTS

Table 2 delineates the demographic characteristics of the respondents, offering a summary of gender, age, work experience, firm type, and regional distribution among the 417 participants. The gender distribution reveals that a predominant 62.4% of respondents were male, whereas female respondents constituted 37.6%, indicating a gender disparity frequently seen in managerial and operational sectors within the agriculture and fisheries processing industry. This distribution reflects the overall workforce structure in these businesses, where males frequently hold a greater share of decision-making roles, although female involvement is still considerable.

The predominant age group among respondents was 31–40 years (37.4%), succeeded by 41–50 years (25.9%) and 21–30 years (22.1%), although individuals aged 51 and above represented 14.6% of the sample. This suggests a primarily mid-career workforce, likely resulting in a blend of current knowledge regarding green supply chain methods and actual expertise in operational execution. The age profile is significant as expertise and decision-making authority typically augment with age, potentially affecting perceptions of environmental compliance, technology preparedness, and supplier management methods.

The job experience distribution indicates that 29.3% of respondents possessed 6–10 years of experience, 27.6% had over 16 years, 23% had 11–15 years, and 20.1% had 0–5 years. This varied experience spectrum suggests that the study encompasses viewpoints from both very novice employees who may contribute innovative ideas and seasoned employees with substantial practical knowledge. The inclusion of respondents with diverse experience levels promotes data dependability by reflecting various corporate viewpoints on sustainability and supply chain strategies.

A significant portion of respondents were from agro-processing enterprises (56.1%), while 43.9% were from fisheries processing firms. This distribution corresponds with the study's sectoral focus, reflecting a balanced representation of the two major categories of processing enterprises in Bangladesh. This depiction implies that the findings may address variations in operational procedures, technical implementation, and environmental compliance issues particular to each industry.

The regional distribution indicates that respondents were rather evenly distributed across key industrial centers: Dhaka (22.1%), Gazipur (20.1%), Chattogram (15.8%), Rangpur (15.6%), Barishal (13.9%), and Khulna (12.5%). This regional distribution offers a thorough examination of organizational practices across several geographic locations, accounting for differences in local rules, supplier networks, and environmental influences in the analysis. The demographic profile in Table 1 indicates that the sample is adequately diversified regarding gender, age, experience, company type, and regional representation, thereby enhancing the generalizability and robustness of the study's findings.

Table 2 - Demographic profile of respondents

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	260	62.4
	Female	157	37.6
Age	21–30 years	92	22.1
	31–40 years	156	37.4
	41–50 years	108	25.9
	51+ years	61	14.6
Years of work experience	0–5 years	84	20.1
	6–10 years	122	29.3
	11–15 years	96	23.0
	16+ years	115	27.6
Type of firm	Fisheries Processing	183	43.9
	Agro-processing	234	56.1
Region	Dhaka	92	22.1
	Chattogram	66	15.8
	Gazipur	84	20.1
	Khulna	52	12.5
	Rangpur	65	15.6
	Barishal	58	13.9
N		**417**	**100.0**

Table 3 presents the factor loadings, AVE, and CR for all constructs. All items demonstrate substantial loadings over 0.70, signifying that each item effectively represents the associated construct (Hair & Alamer, 2022). The AVE values range from 0.601 (TMEC) to 0.770 (CP), exceeding the recommended threshold of 0.50, hence affirming adequate convergent validity (Hair et al., 2019). The CR values range from 0.857 to 0.930, all exceeding 0.70, indicating significant internal consistency reliability of the latent variables. Consequently, ERP, MCP, CP, TMEC, GTR, SRM, and GSCP demonstrate both reliability and convergent validity, affirming their appropriateness for structural model analysis. The results validate that the measurement items reliably reflect the underlying theoretical notions and are suitable for SEM analysis (Hair & Alamer, 2022; Hair Jr et al., 2020). The robust loadings further suggest that the survey instrument adequately operationalizes the constructs within the context of agriculture and fisheries processing enterprises in Bangladesh.

Table 3 - Convergent validity and construct reliability of measurement items

Constructs	Items	Loading	AVE	CR
Environmental Regulatory Pressure (ERP)	ERP1	0.835	0.670	0.890
	ERP2	0.839		
	ERP3	0.804		
	ERP4	0.796		
Market & Customer	MCP1	0.813	0.663	0.887

Green Pressure (MCP)	MCP2	0.770		
	MCP3	0.830		
	MCP4	0.842		
Cost Pressure (CP)	CP1	0.899	0.770	0.930
	CP2	0.883		
	CP3	0.884		
	CP4	0.841		
Top Management Environmental Commitment (TMEC)	TMEC1	0.741	0.601	0.857
	TMEC2	0.712		
	TMEC3	0.843		
	TMEC4	0.799		
Green Technological Readiness (GTR)	GTR1	0.854	0.696	0.902
	GTR2	0.872		
	GTR3	0.821		
	GTR4	0.788		
Supplier Relationship Management (SRM)	SRM1	0.848	0.715	0.909
	SRM2	0.855		
	SRM3	0.807		
	SRM4	0.871		
Green Supply Chain Performance (GSCP)	GSCP1	0.799	0.609	0.886
	GSCP2	0.705		
	GSCP3	0.808		
	GSCP4	0.824		
	GSCP5	0.759		

Table 4 depicts the Heterotrait-Monotrait (HTMT) ratios for all constructs, indicating discriminant validity. All HTMT values are beneath the conservative threshold of 0.90, as recommended for reflective constructs (J. F. Hair et al., 2025), indicating that each concept is empirically different from the others. The HTMT between ERP and MCP is 0.873, which is below 0.90, indicating whereas connected, both constructs assess distinct facets of sustainability drivers. Additionally, SRM and GSCP exhibit a moderate HTMT value of 0.737, indicating that the mediator and dependent variable are separate while conceptually interconnected. Consequently, ERP, MCP, CP, TMEC, GTR, SRM, and GSCP fulfill the criteria for discriminant validity, ensuring no multicollinearity and that constructs represent distinct theoretical concepts. These results validate the estimation of the structural model and support the trustworthy interpretation of path coefficients in SEM analysis (Dirgiatmo, 2023).

Table 4 - Discriminant validity assessment using HTMT Ratios

Constructs	ERP	MCP	CP	TMEC	GTR	SRM	GSCP
ERP	-						
MCP	0.873	-					
CP	0.225	0.219	-				
TMEC	0.796	0.808	0.173	-			
GTR	0.802	0.773	0.237	0.858	-		
SRM	0.805	0.857	0.268	0.843	0.893	-	
GSCP	0.657	0.644	0.441	0.507	0.677	0.737	-

The VIF values used to test for common method bias and potential multicollinearity in the Structural model are shown in Table 4A. The values of VIF in all the models are in the acceptable range of 1.056 to 3.406, suggesting that multicollinearity is not a significant issue in the models. In particular, the results validate the stability and lack of critical common method bias issues of the

measurement and structural estimates, thus ensuring the validity of the results obtained with the PLS-SEM (Hair & Alamer, 2022).

Table 4A - Full Collinearity VIF (CMB test)

Path Relationship	VIF	Status
ERP → SRM	2.631	Acceptable
ERP → GSCP	2.656	Acceptable
MCP → SRM	2.615	Acceptable
MCP → GSCP	2.946	Acceptable
CP → SRM	1.056	Acceptable
CP → GSCP	1.068	Acceptable
TMEC → SRM	2.350	Acceptable
TMEC → GSCP	2.432	Acceptable
GTR → SRM	2.495	Acceptable
GTR → GSCP	2.995	Acceptable
SRM → GSCP	3.406	Acceptable

The model fit indices are presented in Table 4B which shows the SRMR of 0.067 is below the recommended value of 0.08, suggesting good fit for both the saturated and estimated model. The NFI value, however, is 0.721 which is a bit lower than the ideal NFI value of 0.90, indicating moderate model fit. The overall results of SRMR and NFI support the proposed structural model, as its fit can be considered to be acceptable to proceed with further interpretation of the SEM result (Hair Jr et al., 2020).

Table 4B - Model fit indices (SRMR and NFI)

Fit index	Saturated model	Estimated model	Recommended threshold	Interpretation
SRMR	0.067	0.067	< 0.08	Good fit
d_ULS	1.929	1.929	—	Acceptable
d_G	1.080	1.080	—	Acceptable
Chi-square	2443.568	2443.568	—	Descriptive
NFI	0.721	0.721	≥ 0.90 (ideal)	Moderate fit

Figure 3 illustrates the PLS-SEM findings that investigate the role of mediator of SRM between environmental stresses and GSCP. The measurement model indicates that all indicator loadings surpass the suggested threshold of 0.70, hence affirming satisfactory reliability and convergent validity (Hair et al., 2019). In the structural model, ERP (β = 0.086), MCP (β = 0.312), CP (β = 0.059), TMEC (β = 0.155), and GTR (β = 0.383) exert a positive influence on SRM, with GTR and MCP identified as the most significant predictors. The R^2 value of SRM is 0.706, signifying considerable explanatory capacity. Concerning GSCP, SRM exerts a significant positive influence (β = 0.353), affirming its strategic relevance in improving green performance. Furthermore, ERP (β = 0.165), MCP (β = 0.114), CP (β = 0.233), and GTR (β = 0.198) exert a favorable influence on GSCP, while TMEC demonstrates a negative direct effect (β = –0.187). The R^2 value of GSCP is 0.503, indicating moderate explanatory capacity.

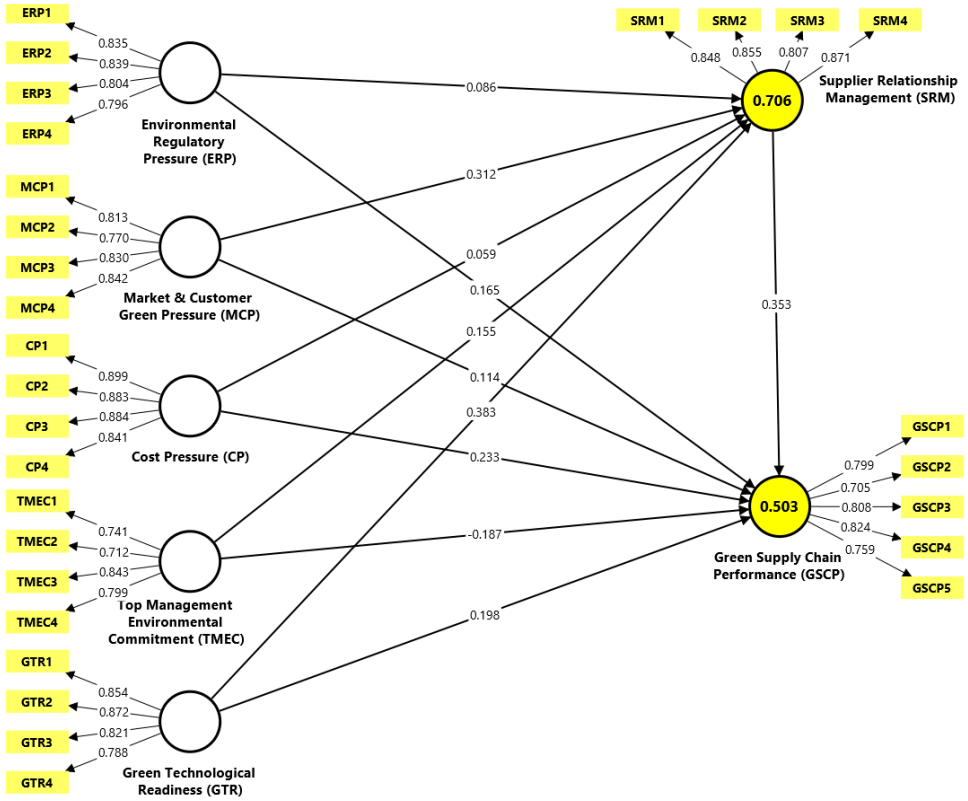

Figure 3 - Structural equation model showing the path coefficients (PLS-SEM Approach)

Table 5 illustrates the standardized path coefficients (β), standard errors (S/E), t-values, and p-values for the direct effects of sustainability drivers and SRM on GSCP. All hypotheses, with the exception of H4 (TMEC → GSCP), are substantiated, demonstrating substantial positive correlations for ERP (β = 0.165, p = 0.001), MCP (β = 0.114, p = 0.016), CP (β = 0.233, p < 0.001), GTR (β = 0.198, p < 0.001), and SRM (β = 0.353, p < 0.001). TMEC demonstrated a negative albeit statistically insignificant effect (β = -0.187, p = 0.096), indicating that top management commitment alone may not directly impact GSCP in this context. T-values exceeding 1.96 and p-values below 0.05 for supported paths imply statistical significance at the 5% level, affirming that sustainability drivers and SRM significantly enhance green supply chain performance (Hair & Alamer, 2022). The results confirm the theoretical significance of institutional and NRBV-based drivers, along with relational mechanisms via SRM, in enhancing environmental performance in agricultural and fisheries processing enterprises in Bangladesh.

Table 5 - Structural model results and hypotheses assessment for GSCP

Hypothesis	Path	β	S/E	t-value	p-value	Decision
H1	ERP → GSCP	0.165	0.047	3.479	0.001	Supported
H2	MCP → GSCP	0.114	0.047	2.403	0.016	Supported
H3	CP → GSCP	0.233	0.065	3.606	0.000	Supported
H4	TMEC → GSCP	-0.187	0.112	1.663	0.096	Not Supported
H5	GTR → GSCP	0.198	0.045	4.388	0.000	Supported
H6	SRM → GSCP	0.353	0.052	6.834	0.000	Supported

Table 6 explores the mediation outcomes, illustrating the indirect influences of ERP, MCP, CP, TMEC, and GTR on GSCP through SRM. All proposed mediation pathways (H8a–H8e) are validated, exhibiting significant β coefficients and p-values < 0.05, signifying that SRM partially or entirely mediates these associations. The sequence MCP → SRM → GSCP exhibits a significant positive indirect effect (β = 0.110, p < 0.001), indicating that supplier collaboration enhances the impact of market and consumer green pressure on green supply chain performance. Additionally, GTR → SRM → GSCP demonstrates a significant indirect effect (β = 0.135, p < 0.001), indicating that technical readiness enhances GSCP when supported by proficient supplier management. The t-

values surpassing 1.96 indicate statistical significance at the 5% threshold. These findings validate the theoretical amalgamation of the Relational View and NRBV, as SRM functions as a conduit for the transformation of sustainability drivers into practical green performance (Hair & Alamer, 2022; Hair Jr et al., 2020). The findings highlight the essential importance of supplier relationships in improving environmental performance within agricultural and fishery processing enterprises in Bangladesh.

Table 6 - Mediating effects via SRM

Hypothesis	Path	β	S/E	t-value	p-value	Decision
H8a	ERP → SRM → GSCP	0.030	0.084	2.110	0.035	Supported
H8b	MCP → SRM → GSCP	0.110	0.047	6.677	0.000	Supported
H8c	CP → SRM → GSCP	0.021	0.060	2.166	0.030	Supported
H8d	TMEC → SRM → GSCP	0.055	0.054	2.854	0.004	Supported
H8e	GTR → SRM → GSCP	0.135	0.054	7.102	0.000	Supported

Figure 4 illustrates the bootstrapping outcomes of the PLS-SEM model, evaluating the relevance of the structural pathways. The R^2 value for SRM is 0.706, signifying that ERP, MCP, CP, TMEC, and GTR collectively account for 70.6% of the variance in SRM, exhibiting considerable explanatory capacity (Hair & Alamer, 2022). GSCP has a R^2 of 0.503, indicating that SRM and the exogenous factors account for 50.3% of the variance in GSCP, which is deemed moderate (Hair et al., 2025). Bootstrapping results indicate that MCP → SRM (β = 0.312, t = 6.677), GTR → SRM (β = 0.383, t = 7.102), CP → SRM (β = 0.155, t = 2.854), and ERP → SRM (β = 0.086, t = 2.110) are positive and statistically significant (t > 1.96), demonstrating that both external and internal green pressures substantially augment SRM. Nonetheless, TMEC → GSCP (β = −0.187, t = 1.663) lacks statistical significance, as the t-value falls below the 1.96 threshold, indicating minimal direct impact. The relationship between SRM and GSCP (β = 0.353, t = 6.834) is robustly positive and statistically significant, indicating that successful SRM significantly enhances GSCP. Additionally, many direct effects on GSCP, including MCP (β = 0.165, t = 3.479), CP (β = 0.233, t = 3.606), and GTR (β = 0.198, t = 4.388), are statistically significant, suggesting partial mediation. Consequently, SRM serves a crucial mediating function between environmental demands and GSCP in the agriculture and fisheries processing industry, reinforcing the theoretical premise that collaborative supplier management enhances sustainable supply chain results (Hair Jr, Howard, & Nitzl, 2020).

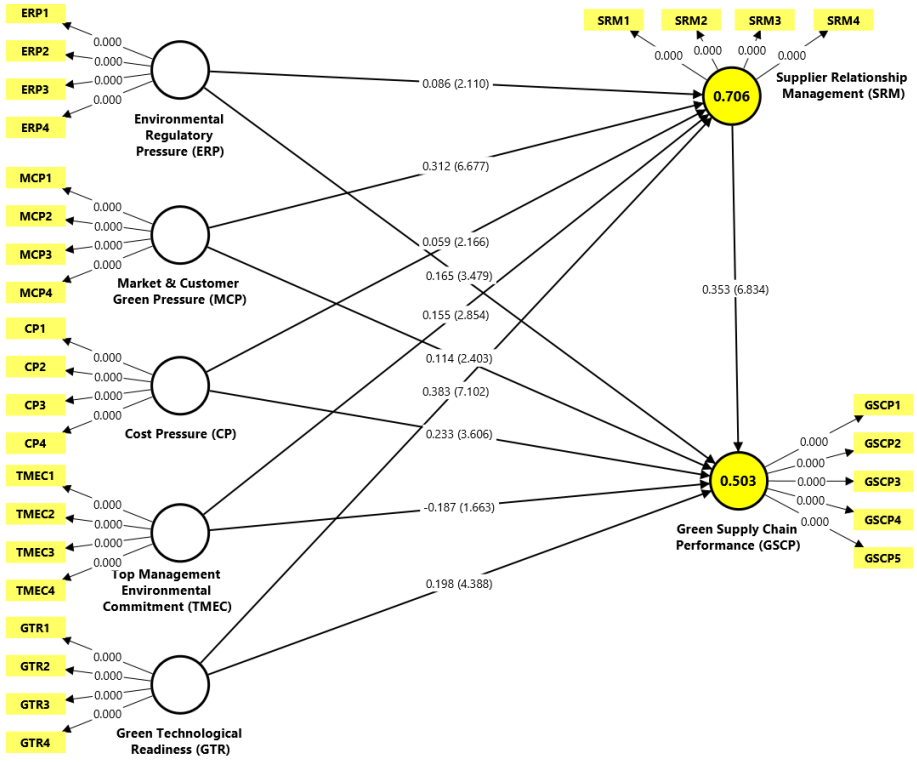

Figure 4 - Structural equation model results (Bootstrapping Approach)

Table 7 demonstrates the effect size (f^2) and prediction relevance (Q^2) for each structural model path. The overall f^2 for GSCP paths is 0.416, signifying a moderate accumulated effects of sustainability drivers and SRM on green supply chain performance, however the SRM mediator paths exhibit a substantial overall effect ($f^2 = 0.709$), underscoring the significant influence of drivers on SRM. Individual pathways have effect sizes from minimal to medium; for example, GTR → SRM shows a medium effect ($f^2 = 0.201$), indicating that green technological readiness significantly enhances supplier relationship management. Q^2 values beyond zero validate the model's predictive significance, indicating that the structural model can consistently forecast endogenous structures (GSCP and SRM) (Hair Jr et al., 2020). The results indicate that both direct and mediated interactions significantly contribute to GSCP, with SRM acting as a crucial mechanism that improves predictive performance in Bangladesh's agriculture and fisheries processing industry.

Table 7 - Effect size and predictive relevance metrics

Path	f^2	Effect size	Q^2	Predictive relevance
GSCP Paths				
ERP → GSCP	0.021	Small	0.416	Moderate
MCP → GSCP	0.009	Negligible		
CP → GSCP	0.102	Small		
TMEC → GSCP	0.029	Small		
GTR → GSCP	0.026	Small		
SRM → GSCP	0.074	Small		
SRM Paths (Mediators)				
ERP → SRM	0.009	Negligible	0.709	High
MCP → SRM	0.127	Small-Medium		
CP → SRM	0.011	Negligible		
TMEC → SRM	0.035	Small		
GTR → SRM	0.201	Medium		

Table 8 shows the R^2 and adjusted R^2 values for GSCP and SRM, reflecting the model's explanatory capacity. The R^2 for GSCP is 0.503 (adjusted $R^2 = 0.496$), indicating that roughly 50.3% of the variance in green supply chain performance is accounted for by sustainability drivers and SRM, demonstrating moderate predictive capability (Hair et al., 2019). Likewise, SRM exhibits a high R^2 of 0.706 (adjusted $R^2 = 0.703$), signifying that more than 70% of the variance in supplier relationship management is explained by the independent variables, hence exhibiting substantial explanatory power. The corrected R^2 values, marginally inferior to R^2, account for model complexity and sample size, hence affirming the resilience of the structural model. The results substantiate that the proposed model accurately delineates the interconnections among sustainability drivers, SRM, and GSCP within the agriculture and fisheries processing industry in Bangladesh, hence reinforcing the theoretical premises of institutional and NRBV frameworks.

Table 8 - Structural model explanatory power for GSCP and SRM

Constructs	R^2	R^2 adjusted
GSCP	0.503	0.496
SRM	0.706	0.703

5 DISCUSSION

This study examined the mediation role of SRM between sustainability drivers and GSCP in the agricultural and fishery processing sector in Bangladesh. It examined the impact of ERP, MCP, CP, TMEC, and GTR on green supply chain outcomes, emphasizing the essential significance of supplier relationships. The study extended beyond direct advantages to investigate the indirect pathways by which SRM enhances the translation of sustainability objectives into operational success. The research utilized Institutional Theory, the NRBV, and Relational View Theory to develop a comprehensive theoretical framework that encompasses external pressures, internal capacities,

and inter-organizational collaboration. The data indicate that although the majority of sustainability drivers substantially improve GSCP directly, SRM enhances their effect, underscoring the necessity of carefully managing supplier connections. However, certain factors, like TMEC, may not consistently exert direct influence on GSCP, indicating that managerial commitment necessitates effective supplier collaboration to yield concrete results.

5.1 Discussion of empirical findings

ERP have a very positive impact on GSCP. This finding is in line with Institutional Theory arguing that firms tend to engage in environmental adaptation to gain legitimacy and compliance by the coercive regulatory forces. ERP motivates companies in Bangladesh's agriculture and fisheries processing industry to adopt improved waste management and environmental responsibility practices. In addition, MCP also proves to be a positive influence on GSCP, indicating that firms are more likely to engage in sustainable supply chain practices, in response to normative pressures from customers and stakeholders. Export companies are particularly sensitive to the expectations expressed by the world for sustainability. CP shows a positive relationship with GSCP. This suggests that due to financial constraints associated with environmental compliance firms will improve their efficiency, reduce waste and optimize resources in line with the NRBV logic. GSCP is not significantly affected by TMEC. This challenges the previous literature and implies that it is not enough to have managerial commitment in the context of Bangladesh. The finding shows that TMEC needs to be well supported by SRM to positively affect environmental outcomes at an operational level. If not properly structured and coordinated by the suppliers, TMEC is only symbolic and not a performance. GTR is one of the most important enabling factors of GSCP, and green processes are easier to implement and environmental performance is more likely to be enhanced in firms that have technological capability. SRM has a strong positive effect on GSCP which validates the Relational View Theory. It emphasizes that working with suppliers as partners is critical to successful green supply chain results.

6 IMPLICATIONS OF THE STUDY

This study enhances theoretical understanding by synthesizing Institutional Theory, NRBV, and Relational View Theory, illustrating the collective impact of sustainability drivers, internal capabilities, and supplier relationships on GSCP (Alkandi, 2025; Nazir et al., 2024). It emphasizes that external factors like ERP and MCP catalyze green behaviors, while internal resources and technological preparedness determine the firm's capacity to execute these practices efficiently. However, SRM acts as a vital mediator, emphasizing that relational capabilities are crucial for transforming strategic intents into operational results. This research empirically substantiates the mediation effect of SRM, an aspect frequently addressed conceptually however frequently examined concurrently across many sustainability factors (Acquah, 2025; Khattak et al., 2024; Mmieh Kwakye et al., 2025).

The research offers methodological advancements by employing a rigorous SEM technique with SmartPLS 4 to identify both direct and indirect effects. The implementation of purposive sampling guarantees that respondents have adequate expertise in supply chain operations, sustainable practices, and supplier management. Integrating online and in-person data gathering across several geographies enhances the generalizability and reproducibility of the findings. This technique illustrates a pragmatic methodology for future researchers examining intricate interdependencies in supply chains of emerging economies, especially in industries characterized by varied operational methods and regulatory frameworks.

The results provide actionable insights for managers and policymakers in the agriculture and food processing industries. Firms are urged to proactively enhance SRM capabilities, as supplier collaboration enhances the advantages of sustainability initiatives on GSCP. However, managerial commitment alone may be inadequate; successful implementation necessitates aligning suppliers' capabilities with environmental goals and facilitating their development through technology and information transfer. Consequently, firms must prioritize training, supplier evaluations, and collaborative planning to improve environmental performance, while strategically utilizing external forces and internal resources.

The study's novelty is attributed to its integration of several theories, empirical analysis of various sustainability drivers, and emphasis on the mediating role of SRM within the context of an emerging economy. This study provides new insights into how businesses in Bangladesh's agriculture and fisheries processing sector can systematically utilize supplier relationships to enhance green supply chain performance, thus bridging the gap between theory and reality (Jensen & Whitfield, 2022; Prodhan et al., 2023).

7 CONCLUSION AND FUTURE RESEARCH DIRECTIONS

This study investigated the noteworthy issue of how sustainability drivers affect GSCP in Bangladesh's agriculture and fisheries processing sector, emphasizing the mediating effect of SRM. It addressed the deficiency of empirical evidence from emerging economies, where regulatory frameworks, technology capabilities, and supplier networks significantly diverge from those in developed countries. Despite the general acknowledgment of the significance of sustainability drivers such as ERP, MCP, CP, TMEC, and GTR, prior research has don't often investigated how these elements interact through supplier relationships to improve green supply chain results. Consequently, the study aimed to address this gap by synthesizing Institutional Theory, NRBV, and Relational View Theory to examine both direct and indirect mechanisms within a contextually pertinent framework.

The research indicated that the majority of sustainability drivers had an positive effect on GSCP, with SRM serving a vital mediating role in converting these drivers into effective green outcomes. Both ERP and MCP had substantial direct and indirect effects, suggesting that regulatory and market forces encourage enterprises to implement sustainable practices, with their efficacy being enhanced by strategic management of supplier relationships. However, certain drivers, like TMEC, may not directly enhance GSCP, indicating that managerial commitment necessitates operationalization via supplier coordination and technology preparedness. The findings highlighted the significance of economic pressures and GTR, indicating that financial limitations and technology capabilities can either obstruct or promote green supply chain adoption, contingent upon their management using SRM. Consequently, the results underscore the importance of incorporating external constraints, internal resources, and relational processes to attain long-term competitive advantage in supply chains within emerging economies.

Limitations of the study

The current study focuses on the agriculture and fisheries processing enterprises in Bangladesh that face distinct institutional, regulatory and economic conditions of moderate regulatory enforcement, disorganized supplier chain, and limited access to resources. The strength and direction of this relationship between sustainability drivers, SRM, and GSCP might have been affected by these contextual factors. Thus, the results should be considered in this particular emerging economy context. In addition, the lack of comparison between agriculture and fisheries processing sectors restricts the capacity to see differences in the adoption of sustainability and performance of the supply chains between the sectors.

Future research directions

Future studies could expand on this study by investigating longitudinal designs to analyze the evolution of SRM and GSCP over time, demonstrating how sustainability initiatives develop and influence business performance. Researchers could also examine additional moderating or mediating variables, such as corporate culture, digital supply chain integration, or government incentives, to enhance the understanding of contextual factors affecting green performance. Cross-sector comparisons among emerging countries would provide additional insights into sector-specific challenges and exemplary approaches. On the other hand, future studies are encouraged to perform separate comparison between agriculture and fisheries processing sectors to identify some possible difference on structural, operational and sustainability aspects that might affect the outcomes of the GSCP. In addition, future research could also enhance the transparency of measurement by making survey instruments (all items and original sources) available to facilitate replicability and methodological quality in sustainability/supply chain research. Consequently, expanding the research to encompass additional developing nations and varied industrial contexts can improve the generalizability of results, providing significant insights for both academics and practitioners aiming to boost sustainability and supplier collaboration within green supply chains

REFERENCES

Acquah, I. N. (2025). Supplier Relationship Management and Innovation Performance: Moderated-mediation Analysis of Supply Chain Visibility and Agility. *Journal of Operations and Strategic Planning*, *8*(2), 109–134. https://doi.org/10.1177/2516600X251385037

Adetoyinbo, A., Trienekens, J., & Otter, V. (2023). Contingent resource-based view of food netchain organization and firm performance: a comprehensive quantitative framework. *Supply Chain*

Management: An International Journal, *28*(6), 957–974. https://doi.org/10.1108/SCM-11-2022-0448

Adriant, I., Simatupang, T. M., & Handayati, Y. (2023). Collaboration in responsible agriculture supply chain management: a systematic literature review. *International Journal of Integrated Supply Management*, *16*(2), 148. https://doi.org/10.1504/IJISM.2023.130327

Agyapong, A., Aidoo, S. O., Acquaah, M., & Akomea, S. (2023). Environmental orientation and sustainability performance; the mediated moderation effects of green supply chain management practices and institutional pressure. *Journal of Cleaner Production*, *430*, 139592. https://doi.org/10.1016/j.jclepro.2023.139592

AL-Khatib, A. wael. (2023). The impact of big data analytics capabilities on green supply chain performance: is green supply chain innovation the missing link? *Business Process Management Journal*, *29*(1), 22–42. https://doi.org/10.1108/BPMJ-08-2022-0416

AL-Khatib, A. wael, & Shuhaiber, A. (2022). Green Intellectual Capital and Green Supply Chain Performance: Does Big Data Analytics Capabilities Matter? *Sustainability*, *14*(16), 10054. https://doi.org/10.3390/su141610054

Alabi, A. T., & Jelili, M. O. (2023). Clarifying likert scale misconceptions for improved application in urban studies. *Quality & Quantity*, *57*(2), 1337–1350. https://doi.org/10.1007/s11135-022-01415-8

Alam, M. N., Hasan, S. S., Masroor, I., Nabi, M. N. U., & Islam, M. R. (2025). Building Resilience Through Reputation Risk Management: A Study on Export-Oriented Shrimp Firms of Bangladesh. *Business Strategy & Development*, *8*(2). https://doi.org/10.1002/bsd2.70124

Ali, Z. (2023). Predicting SMEs performance through green supply chain practices: a mediation model link of business process performance. *Asia Pacific Journal of Marketing and Logistics*, *35*(2), 432–450. https://doi.org/10.1108/APJML-05-2021-0296

Alkandi, I. (2025). Green Supply Chain Management and Sustainable Performance: The Mediating Roles of Corporate Social Responsibility and Intellectual Capital in Saudi Arabia's Drilling Sector—A Resource-Based View and Stakeholder Theory Perspective. *Sustainability*, *17*(24), 11015. https://doi.org/10.3390/su172411015

Anugrah, R., Situmorang, M. L., & Suantika, G. (2024). Development of a green supply chain management strategy for the aquaculture industry: The case of the common carp (Cyprinus carpio L.) hatchery industry in Ciparay District, West Java, Indonesia. *Journal of Cleaner Production*, *453*, 142160. https://doi.org/10.1016/j.jclepro.2024.142160

Assis, M. T. Q. M., Lucas, M. R. D. P. V., & Rainho, M. M. (2023). The influence of trust for sustainable agri-food production: empirical evidence of a mariculturist supply chain in Southern Brazil. *British Food Journal*, *125*(12), 4268–4290. https://doi.org/10.1108/BFJ-08-2022-0734

Bag, S., Gupta, S., Galera-Zarco, C., & Laguir, I. (2025). Developing Green Hydrogen-Based Regenerative Supply Chain Strategies for a Sustainable Future: An Empirical Study. *Business Strategy and the Environment*, *34*(6), 6968–6990. https://doi.org/10.1002/bse.4334

Balon, V. (2020). Green supply chain management: Pressures, practices, and performance—An integrative literature review. *Business Strategy & Development*, *3*(2), 226–244. https://doi.org/10.1002/bsd2.91

Barbosa, M. W., & Cansino, J. M. (2024). The impacts of environmental collaboration on the environmental performance of agri-food supply chains: a mediation-moderation analysis of external pressures. *International Journal of Logistics Research and Applications*, *27*(12), 2712–2736. https://doi.org/10.1080/13675567.2024.2310024

Barua, P., Rahman, S. H., & Barua, M. (2021a). Sustainable management of agriculture products value chain in responses to climate change for South-Eastern coast of Bangladesh. *Modern Supply Chain Research and Applications*, *3*(2), 98–126. https://doi.org/10.1108/MSCRA-07-2020-0020

Barua, P., Rahman, S. H., & Barua, M. (2021b). Sustainable value chain approach for livestock-based livelihood strategies for communities of the southeastern coast of Bangladesh. *Modern Supply Chain Research and Applications*, *3*(3), 191–225. https://doi.org/10.1108/MSCRA-08-2020-0021

Beniaich, R., & Hmioui, A. (2025). Artificial Intelligence in Green Supply Chain Management: a Literature Review. *2025 International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA)*, 1–6. https://doi.org/10.1109/ACDSA65407.2025.11165940

Borazon, E. Q., Huang, Y.-C., & Liu, J.-M. (2022). Green market orientation and organizational performance in Taiwan's electric and electronic industry: the mediating role of green supply

chain management capability. *Journal of Business & Industrial Marketing*, *37*(7), 1475–1496. https://doi.org/10.1108/JBIM-07-2020-0321

Buhaya, M. I., & Metwally, A. B. M. (2024). Green intellectual capital and green supply chain performance: do external pressures matter? *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2349276

Chakraborty, D., Bresciani, S., & Troise, C. (2025). The role of institutional pressures in greenwashing: a two-phase study on company behavior. *International Journal of Bank Marketing*. https://doi.org/10.1108/IJBM-08-2024-0485

Chaudhary, S., Alshaghdali, N. O., Sasso, P., Caputo, F., & Papa, A. (2025). Leveraging digital capabilities for circularity in SMEs: a natural resource-based view to examine organizational resilience. *Review of Managerial Science*. https://doi.org/10.1007/s11846-025-00951-5

Chauhan, S., Singh, R., Gehlot, A., Akram, S. V., Twala, B., & Priyadarshi, N. (2022). Digitalization of Supply Chain Management with Industry 4.0 Enabling Technologies: A Sustainable Perspective. *Processes*, *11*(1), 96. https://doi.org/10.3390/pr11010096

Chen, L., Jiang, M., Jia, F., Wang, Y., & Yin, S. (2025). How Does Green Innovation Capability Affect Circular Supply Chain Management Adoption: An Institutional Theory Perspective. *British Journal of Management*. https://doi.org/10.1111/1467-8551.70020

Choudhary, K., & Sangwan, K. S. (2022). Green supply chain management pressures, practices and performance: a critical literature review. *Benchmarking: An International Journal*, *29*(5), 1393–1428. https://doi.org/10.1108/BIJ-05-2021-0242

Das, S., & Hassan, H. M. 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. https://doi.org/10.1108/IJPPM-08-2020-0441

Dirgiatmo, Y. (2023). Testing The Discriminant Validity and Heterotrait--Monotrait Ratio of Correlation (HTMT): A Case in Indonesian SMEs. In *Macroeconomic Risk and Growth in the Southeast Asian Countries: Insight from Indonesia* (pp. 157–170). Emerald Publishing Limited.

Domfeh, S. A., Govindan, K., & Xu, S. (2025). Drivers and outcomes of sustainable manufacturing practices: a technological, organisational, and environmental–natural resource-based view perspective. *Supply Chain Management: An International Journal*, *30*(6), 818–835. https://doi.org/10.1108/SCM-07-2025-0633

Esposito, B., Smaldone, F., Raimo, N., Sica, D., & Vitolla, F. (2025). Enhancing circular economy disclosure towards Net Zero: the role of circular economy capabilities. *International Journal of Productivity and Performance Management*, *74*(8), 2674–2700. https://doi.org/10.1108/IJPPM-07-2024-0455

Farrukh Shahzad, M., Liu, H., & Zahid, H. (2025). Industry 4.0 technologies and sustainable performance: do green supply chain collaboration, circular economy practices, technological readiness and environmental dynamism matter? *Journal of Manufacturing Technology Management*, *36*(1), 1–22. https://doi.org/10.1108/JMTM-05-2024-0236

Feng, K. (Emma), & Lam, C.-Y. (Anson). (2021). An Overview of Circular Economy in China: How the Current Challenges Shape the Plans for the Future. *The Chinese Economy*, *54*(5), 355–371. https://doi.org/10.1080/10971475.2021.1875156

Feng, T., Qamruzzaman, M., Sharmin, S. S., & Karim, S. (2024). Bridging Environmental Sustainability and Organizational Performance: The Role of Green Supply Chain Management in the Manufacturing Industry. *Sustainability*, *16*(14), 5918. https://doi.org/10.3390/su16145918

Fu, C., Lu, L., & Pirabi, M. (2023). Advancing green finance: a review of sustainable development. *Digital Economy and Sustainable Development*, *1*(1), 20. https://doi.org/10.1007/s44265-023-00020-3

Gajdić, D., Kotzab, H., & Petljak, K. (2023). Collaboration, trust and performance in agri-food supply chains: a bibliometric analysis. *British Food Journal*, *125*(2), 752–778. https://doi.org/10.1108/BFJ-07-2021-0723

Gazi, M. A. I., Hossain, M. M., Islam, S., Masud, A. Al, Amin, M. Bin, Senathirajah, A. R. bin S., & Abdullah, M. (2024). CSR and Sustainable Environmental Performance: An Exploration of Mediating and Moderating Factors. *Sustainability*, *16*(19), 8499. https://doi.org/10.3390/su16198499

Geng, R., Lin, S., & Dai, J. (2024). Examining customer pressure and green supply chain management in emerging market: An institutional logics perspective. *International Journal of Production Economics*, *278*, 109431. https://doi.org/10.1016/j.ijpe.2024.109431

Giacomarra, M., Crescimanno, M., Sakka, G., & Galati, A. (2021). The contribution of a supplier of the food and beverage industry to the sustainability of the overall supply chain. *Global Business and Economics Review*, *25*(3/4), 231. https://doi.org/10.1504/GBER.2021.118701

Gironda, J. T. (2024). Review of advanced issues in partial least squares structural equation modeling (second edition). *Journal of Marketing Analytics*, *12*(1), 108–109. https://doi.org/10.1057/s41270-023-00275-x

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, *1*(3), 100027. https://doi.org/10.1016/j.rmal.2022.100027

Hair, J. F., Babin, B. J., Ringle, C. M., Sarstedt, M., & Becker, J.-M. (2025). Covariance-based structural equation modeling (CB-SEM): a SmartPLS 4 software tutorial. *Journal of Marketing Analytics*, *13*(3), 709–724. https://doi.org/10.1057/s41270-025-00414-6

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24.

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, *117*(3), 442–458.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101–110.

Hair Jr, J. F., Howard, M. C., Nitzl, C., Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101–110. https://doi.org/10.1016/j.jbusres.2019.11.069

Haldorai, K., Kim, W. G., & Phetvaroon, K. (2025). Top management commitment, institutional pressures and green supply chain practices: pathways to sustainable performance. *Journal of Hospitality and Tourism Insights*, *8*(8), 2860–2879. https://doi.org/10.1108/JHTI-07-2024-0773

Hu, B., Na-Nan, K., & Kittichotsatsawat, Y. (2025). Toward sustainable farming: Assessing and validating green skills for agricultural professionals in China. *Environmental Challenges*, *18*, 101067. https://doi.org/10.1016/j.envc.2024.101067

Huma, S., Ahmed Siddiqui, D., & Ahmed, W. (2023). Understanding the impact of Green supply chain management practices on operational competitive capabilities. *The TQM Journal*, *35*(3), 796–815.

Hyder, A., Uddin, B., Siddiqui, H., Naeem, M., & Waheed, A. (2023). Mediation of Reverse Logistics in Sustainable Resources and Organizational Performance. *South Asian Journal of Operations and Logistics*, *2*(1), 11–27. https://doi.org/10.57044/SAJOL.2023.2.1.2302

Ibrahim, M., Mahmood, R., & Som, H. M. (2024). Green absorptive capacity and environmental performance: a perspective of SMEs' relational capability and green supply chain management practices. *Environment, Development and Sustainability*, *27*(6), 13947–13971. https://doi.org/10.1007/s10668-023-04420-5

Jensen, F., & Whitfield, L. (2022). Leveraging participation in apparel global supply chains through green industrialization strategies: Implications for low-income countries. *Ecological Economics*, *194*, 107331. https://doi.org/10.1016/j.ecolecon.2021.107331

Johnson-Hall, T. D., & Hall, D. C. (2022). Redefining Quality in Food Supply Chains via the Natural Resource Based View and Convention Theory. *Sustainability*, *14*(15), 9456. https://doi.org/10.3390/su14159456

Jose, A., & Shanmugam, P. (2019). Supply chain issues in SME food sector: a systematic review. *Journal of Advances in Management Research*, *17*(1), 19–65. https://doi.org/10.1108/JAMR-02-2019-0010

Junejo, I., Sohu, J. M., Qureshi, A. A., Shaikh, S., Ejaz, F., Jagirani, T. S., & Hossain, M. B. (2025). The green supply chain conundrum: exploring the interplay of practices, performance, and technology in shaping SME sustainability in developing country. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-025-06614-5

Kabra, G., Srivastava, S. K., & Ghosh, V. (2023). Mapping the field of sustainable procurement: a bibliometric analysis. *Benchmarking: An International Journal*, *30*(10), 4370–4396. https://doi.org/10.1108/BIJ-06-2022-0418

Khandelwal, C., Singhal, M., Gaurav, G., Dangayach, G. S., & Meena, M. L. (2021). Agriculture Supply Chain Management: A Review (2010–2020). *Materials Today: Proceedings*, *47*, 3144–3153. https://doi.org/10.1016/j.matpr.2021.06.193

Khattak, K.-N., Hassan, Z., Shehryar Ali Naqvi, S., Khan, M. A., Qayyum, F., & Ullah, I. (2024). A Conceptual Framework Based on PLS-SEM Approach for Sustainable Customer Relationship Management in Enterprise Software Development: Insights from Developers. *Sustainability*, *16*(6), 2507. https://doi.org/10.3390/su16062507

Khayyam, M., Yushi, J., Liu, Q., Idrees, H., Qin, S., & Nurlegul, A. (2025). Leveraging technological readiness and knowledge sources for green innovation: a resource orchestration perspective. *Business Process Management Journal*, *31*(3), 848–877. https://doi.org/10.1108/BPMJ-03-2024-0198

Kisinga, D. C., Mchopa, A. D., & Mwagike, L. R. (2024). Supplier relationship management and business performance of small-scale grapes processing firms in Dodoma, Tanzania: the moderating role of logistics capabilities. *IIMT Journal of Management*, *1*(1), 24–46. https://doi.org/10.1108/IIMTJM-11-2023-0051

Kumar, B., Singh, G., Dwivedi, Y. K., & Nanda, S. (2024). Using structural equation model (SEM) to analyse global student mobility programs in higher education in India. *International Journal of System Assurance Engineering and Management*. https://doi.org/10.1007/s13198-024-02541-2

Le, T. T. (2023). Linking big data, sustainable supply chain management and corporate performance: the moderating role of circular economy thinking. *The International Journal of Logistics Management*, *34*(3), 744–771. https://doi.org/10.1108/IJLM-01-2022-0011

Long, Y., & Feng, T. (2025). Uncovering the influence of commitment to low-carbon operations management on manufacturing carbon performance. *Journal of Manufacturing Technology Management*, *36*(4), 840–862. https://doi.org/10.1108/JMTM-05-2024-0231

Madhavan, M., Sharafuddin, M. A., & Wangtueai, S. (2024). Impact of Industry 5.0 Readiness on Sustainable Business Growth of Marine Food Processing SMEs in Thailand. *Administrative Sciences*, *14*(6), 110. https://doi.org/10.3390/admsci14060110

Mmieh Kwakye, R., Qu, L., & Wang, Y. (2025). Sustainability practices and complementor innovation capability: a PLS-SEM serial mediation model of market pressure and strategic alliances. *Business Process Management Journal*, 1–23. https://doi.org/10.1108/BPMJ-03-2025-0315

Mrugalska, B., & Ahmed, J. (2021). Organizational Agility in Industry 4.0: A Systematic Literature Review. *Sustainability*, *13*(15), 8272. https://doi.org/10.3390/su13158272

Mukhsin, M., & Suryanto, T. (2022). The Effect of Sustainable Supply Chain Management on Company Performance Mediated by Competitive Advantage. *Sustainability*, *14*(2), 818. https://doi.org/10.3390/su14020818

Nazir, S., Zhaolei, L., Mehmood, S., & Nazir, Z. (2024). Impact of Green Supply Chain Management Practices on the Environmental Performance of Manufacturing Firms Considering Institutional Pressure as a Moderator. *Sustainability*, *16*(6), 2278. https://doi.org/10.3390/su16062278

Nha Trang, N. T., Nguyen, T.-T., Pham, H. V., Anh Cao, T. T., Trinh Thi, T. H., & Shahreki, J. (2022). Impacts of Collaborative Partnership on the Performance of Cold Supply Chains of Agriculture and Foods: Literature Review. *Sustainability*, *14*(11), 6462. https://doi.org/10.3390/su14116462

Nikseresht, A., Golmohammadi, D., & Zandieh, M. (2024). Sustainable green logistics and remanufacturing: a bibliometric analysis and future research directions. *The International Journal of Logistics Management*, *35*(3), 755–803. https://doi.org/10.1108/IJLM-03-2023-0085

Nirmal, D. D., Kumari, M., & Gumte, K. (2025). Analyzing top management commitment, Industry 4.0 technologies and sustainable manufacturing practices through institutional theory and practice-based view. *Benchmarking: An International Journal*, *32*(9), 3492–3523. https://doi.org/10.1108/BIJ-12-2024-1120

Ntoyanto-Tyatyantsi, N., & Amadi-Echendu, A. (2025). *Circular Economy Technology Management Practices in Agri-Value Chains Using the Natural Resource-Based View* (pp. 1–11). https://doi.org/10.1007/978-3-031-72494-7_1

Olajide, O., Kamal, M. M., Kwak, D.-W., He, Q., & Lim, M. (2023). *The Impact of Strategic Environmental Management Capabilities on the Competitiveness of an Oil and Gas Industry's Supply Chain: An Empirical Evaluation of the Natural Resource-Based View of Firms* (pp. 245–255). https://doi.org/10.1007/978-3-031-30960-1_23

Ooi, S. K., Wong, S. L., & Adeneye, Y. B. (2024). Green pays off: the impact of corporate carbon strategies on corporate financial performance. *Asian Journal of Business Ethics*, *13*(1), 245–269. https://doi.org/10.1007/s13520-024-00196-7

Piprani, A. Z., Jaafar, N. I., Ellahi, R. M., Watabe, M., Islam, M. A., & Najmi, A. (2025). Supply Chain Mapping for High Risk Environment: Industry 4.0 and the Quest for Resilient and Sustainable

Supply Chains. *Sustainable Development*, *33*(5), 7441–7458. https://doi.org/10.1002/sd.3522

Prastyabudi, W. A., & Solvang, W. D. (2026). A Conceptual Framework Toward the Sustainable Management of the Aquaculture Supply Chain: Insights and Future Research Directions. *Logistics*, *10*(1), 21. https://doi.org/10.3390/logistics10010021

Prodhan, M. M. H., Khan, M. A., Palash, M. S., Hossain, M. I., & Kumar, G. (2023). Supply chain performance of fishing industry in Bangladesh: Emphasizing on information sharing and commitment. *Aquaculture Economics & Management*, *27*(4), 523–543. https://doi.org/10.1080/13657305.2022.2147249

Rahman, L. F., Alam, L., Marufuzzaman, M., & Sumaila, U. R. (2021). Traceability of Sustainability and Safety in Fishery Supply Chain Management Systems Using Radio Frequency Identification Technology. *Foods*, *10*(10), 2265. https://doi.org/10.3390/foods10102265

Rahman, M., Rodríguez-Serrano, M. Á., & Faroque, A. R. (2021). Corporate environmentalism and brand value: A natural resource-based perspective. *Journal of Marketing Theory and Practice*, *29*(4), 463–479. https://doi.org/10.1080/10696679.2021.1872387

Rahman, T., Ali, S. M., Moktadir, M. A., & Kusi-Sarpong, S. (2020). Evaluating barriers to implementing green supply chain management: An example from an emerging economy. *Production Planning & Control*, *31*(8), 673–698. https://doi.org/10.1080/09537287.2019.1674939

Rajabian Tabesh, A., Chowdhury, M. M. H., Quaddus, M. A., Ameri Sianaki, O., & Khan, E. (2024). The influence of agility on green purchasing practices: the role of supplier governance and supplier relationships. *Journal of Business & Industrial Marketing*, *39*(9), 1969–1983. https://doi.org/10.1108/JBIM-04-2023-0205

Robinson, J. (2023). Likert Scale. In *Encyclopedia of Quality of Life and Well-Being Research* (pp. 3917–3918). Springer International Publishing. https://doi.org/10.1007/978-3-031-17299-1_1654

Sajjad, A., Eweje, G., & Tappin, D. (2020). Managerial perspectives on drivers for and barriers to sustainable supply chain management implementation: Evidence from New Zealand. *Business Strategy and the Environment*, *29*(2), 592–604. https://doi.org/10.1002/bse.2389

Samad, S., Nilashi, M., Almulihi, A., Alrizq, M., Alghamdi, A., Mohd, S., Ahmadi, H., & Syed Azhar, S. N. F. (2021). Green Supply Chain Management practices and impact on firm performance: The moderating effect of collaborative capability. *Technology in Society*, *67*, 101766. https://doi.org/10.1016/j.techsoc.2021.101766

Sánchez-Flores, R. B., Cruz-Sotelo, S. E., Ojeda-Benitez, S., & Ramírez-Barreto, M. E. (2020). Sustainable Supply Chain Management—A Literature Review on Emerging Economies. *Sustainability*, *12*(17), 6972. https://doi.org/10.3390/su12176972

Santoso, R. W., Siagian, H., Tarigan, Z. J. H., & Jie, F. (2022). Assessing the Benefit of Adopting ERP Technology and Practicing Green Supply Chain Management toward Operational Performance: An Evidence from Indonesia. *Sustainability*, *14*(9), 4944. https://doi.org/10.3390/su14094944

Sayem, S. M., Alam, A., & Rahman, M. I. (2026). The role of green innovation and green supply chain practices in linking technological advancements to sustainability: evidence from the FMCG industry. *International Journal of System Assurance Engineering and Management*. https://doi.org/10.1007/s13198-025-03127-2

Shareef, M. A., Dwivedi, Y. K., Kumar, V., Mahmud, R., Hughes, D. L., Rana, N. P., & Kizgin, H. (2020). The inherent tensions within sustainable supply chains: a case study from Bangladesh. *Production Planning & Control*, *31*(11–12), 932–949. https://doi.org/10.1080/09537287.2019.1695917

Sharma, S., Singh, R. K., Mishra, R., & Subramanian, N. (Nachi). (2024). Developing climate neutrality among supply chain members in metal and mining industry: natural resource-based view perspective. *The International Journal of Logistics Management*, *35*(3), 804–832. https://doi.org/10.1108/IJLM-03-2023-0108

Shukla, S., Kapoor, R., Gupta, N., & Arunachalam, D. (2023). Knowledge transfer, buyer-supplier relationship and supplier performance in agricultural supply chain: an agency theory perspective. *Journal of Knowledge Management*, *27*(3), 738–761. https://doi.org/10.1108/JKM-07-2021-0514

Sualia, I., Cahyadi, E. R., & Halog, A. (2025). Greening the Seafood Supply Chain Through Circular Economy and Digital Transformation. In *Green Innovations in Supply Chain Management* (pp. 159–177). Wiley. https://doi.org/10.1002/9781394289035.ch8

Tetteh, F. K., Kwateng, K. O., Tukue, T., & Mensah, J. (2025). Green supply chain management practices: review, framework and future research directions. *Journal of Responsible Production*

and Consumption, *2*(1), 112–150. https://doi.org/10.1108/JRPC-08-2024-0039

Thi Binh, A. D., Nguyen, T. T. B., Huynh, T. L. D., Cong-Pham, H., Hoang, T. G., & Truong, H. Q. (2025). Multilevel drivers of social sustainability in developing food supply chains: the role of food safety management systems. *Journal of Enterprise Information Management*, 1–36. https://doi.org/10.1108/JEIM-10-2023-0529

Tseng, M.-L., Tran, T. P. T., Wu, K.-J., Tan, R. R., & Bui, T. D. (2022). Exploring sustainable seafood supply chain management based on linguistic preferences: collaboration in the supply chain and lean management drive economic benefits. *International Journal of Logistics Research and Applications*, *25*(4–5), 410–432. https://doi.org/10.1080/13675567.2020.1800608

Tsikada, C., Chasaya, W., & Ayandibu, A. O. (2025). The adoption of green supply chain management in entrepreneurship and its impact on business sustainability: lessons for South African SMEs. *Future Business Journal*, *11*(1), 198. https://doi.org/10.1186/s43093-025-00617-4

Uddin, M. B., & Akhter, B. (2022). Investigating the relationship between top management commitment, supply chain collaboration, and sustainable firm performance in the agro-processing supply chain. *Operations Management Research*, *15*(3–4), 1399–1417. https://doi.org/10.1007/s12063-022-00257-9

Wabanhu, E. A., Namwata, B. M., & Panga, F. P. (2025). Green supply chain management and sustainable performance of Tanzanian restaurants: the moderating role of competitor pressure. *Discover Sustainability*, *6*(1), 1099. https://doi.org/10.1007/s43621-025-01906-2

Wang, L., Chen, L., Shang, Y., & Li, C. (2025). Uniting stakeholders to promote green manufacturing: the push–pull–mooring model. *Management Decision*. https://doi.org/10.1108/MD-07-2024-1678

Wen, X., Cheah, J.-H., Lim, X.-J., & Ramachandran, S. (2023). Why does "green" matter in supply chain management? Exploring institutional pressures, green practices, green innovation, and economic performance in the Chinese chemical sector. *Journal of Cleaner Production*, *427*, 139182. https://doi.org/10.1016/j.jclepro.2023.139182

Wren, B. (2022). Sustainable supply chain management in the fast fashion Industry: A comparative study of current efforts and best practices to address the climate crisis. *Cleaner Logistics and Supply Chain*, *4*, 100032. https://doi.org/10.1016/j.clscn.2022.100032

Wu, Y., Mehmood, K., Mangla, S. K., & Jabeen, F. (2025). A Dynamic Capability View to Evaluate the Role of FinTech in Green Supply Chain Performance: Moderating Role of Data-Driven Lean and Green Practices. *Business Strategy and the Environment*. https://doi.org/10.1002/bse.70459

Yadav, S., Garg, D., & Luthra, S. (2022). Ranking of performance indicators in an Internet of Things (IoT)-based traceability system for the agriculture supply chain (ASC). *International Journal of Quality & Reliability Management*, *39*(3), 777–803. https://doi.org/10.1108/IJQRM-03-2021-0085

Zeleke, R. E., & Hailemariam, S. S. (2023). Drivers for Sustainable Supply Chain Management and the Practices in Ethiopian Apparel Industries. *Journal of Engineering*, *2023*, 1–15. https://doi.org/10.1155/2023/2625998

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