

# A Literature Study on the Evolutions of Sustainable Supply Chain Management in Developing Economies.

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# Abstract

The objective of this literature review was to evaluate the current body of research on sustainable supply chain management (SSCM) in developing countries, taking into account a global perspective. This paper provides a comprehensive analysis of the rapid growth of the subject from an evolutionary standpoint. Its objective was to understand the development of sustainability concerns by studying patterns in various industries and economies, and utilising different methodologies. Scientifically, it has come to light through this review that, supply chain sustainability is in upsurge. Also, supply chain sustainability is increasing innovations and inventions. Develop a framework for analyzing the impact of specific government policies or regulations on SSCM evolution in developing economies. Propose a model that considers the interplay between cultural factors and the adoption of sustainable practices within developing economies' supply chains.

Key Words: Sustainability, Supply Chain, Evolutions, Emerging Economies.

## Introduction

In contemporary times, it is anticipated that firms would exhibit the adoption of sustainable development techniques within their operational frameworks. Multiple scholars (Gualandris et al., 2015; Luthra et al., 2014; Zailani et al., 2012; and Roy et al., 2020) have highlighted that the driving forces behind this requirement include

customers, the government, the media, shareholders, and consumers. Mani et al. (2016) state that businesses must adapt their processes to meet criteria and attain sustainability. This phenomenon can be attributed to the diminished efficacy of standard operational procedures. Marshall et al. (2015)

acknowledge that enterprises can serve as a catalyst for promoting the adoption of ecologically sustainable practices. According to the study conducted by Ali et al. (2020), the inclusion of satisfying stakeholder interests and attaining a competitive edge within the sector is also encompassed within this course of action.

The topic of sustainability has been examined by various terminologies and methodologies in both the commercial sector and the sphere of literature. The evaluation of three basic factors, namely the economic, environmental, and social, is emphasised by several academics and professional organisations in the definitions they supply. The adoption of sustainable supply chain management is a crucial area of academic focus, as it plays a vital role in promoting sustainability inside institutions. The significance of sustainability is progressively growing in the realm of supply chain management, prompting firms to include it into their strategic decision-making processes for both immediate and long-term objectives. Esteemed scholars, including Carter and Rogers (2008), Seuring and Muller (2008), and Ahi and Searcy (2013), have formulated the concept of supply chain management (SSCM) and emphasised the importance of integrating sustainable development initiatives into SCM to enhance businesses in the immediate and extended periods. Gopal and Thakkar (2016) state that many businesses have adopted sustainable practices in their supply chains due to shifting consumer purchasing patterns, heightened consumer complaints, and demands from various stakeholders and governments. Kashmanian (2015) asserts that there is a growing significance in comprehending the manner in which a corporation might engage with crucial stakeholders within its supply chain, with the aim of prioritising sustainability. The global prevalence of literature reviews on Sustainable Supply Chain Management (SSCM) and its related issues has been observed to be on the rise, as evidenced by the studies undertaken by Tseng, Islam, et al. (2019) and Engert et al. (2016). Carter and Washispack (2018) conducted a comprehensive examination of prior systematic literature reviews pertaining to sustainable supply chain management as part of their research. The audience was made aware of the growing corpus of literature dedicated to enhancing comprehension and progress in this particular topic.

Researchers and corporations are increasingly focusing on emerging economies. This is due to their increasing significance in supply chains due to the globalisation of markets and the expansion of foreign industry. Jia et al. (2018) conducted a comprehensive examination of sustainable supply chain management (SSCM) practices in economically disadvantaged nations. They determined that it is crucial to examine the patterns and measures for ensuring the sustainability of emerging countries. Geng et al. (2017) conducted a comprehensive review of the existing literature to identify scholarly articles that examined the role of green supply chains in manufacturing enterprises located in Asian countries. Ultimately, they contended that despite ongoing research in this field, empirical evidence is still required to thoroughly examine the impact of SSCM techniques on firm success. Businesses must also establish a global strategic supply chain (SSC) that considers the unique characteristics of each country. This entails identifying the precise factors that influence work performance and identifying potential avenues for enhancing the value of the supply chain. In addition, they must collaborate with other emerging regions globally (Campos et al., 2017). Therefore, given the increasing concern around the attainment of a sustainable future in developing countries, it is crucial to do study on sustainability matters and identify the main challenges faced by these nations. According to

Luthra and Mangla (2018), the use of this approach will facilitate the improvement of operational efficiency and effectiveness in sustainable supply chains, encompassing the economic, environmental, and social dimensions of sustainability.

The purpose of this literature review is to offer current concepts and popular topics on Sustainable Supply Chain Management (SSCM) in developing countries. The choice to carry out a thorough literature review was made due to its clear and replicable characteristics, as well as its capacity to pinpoint deficiencies in studies and opportunities for further exploration (Koberg and Longoni, 2019). This review provides a critical analysis of the current body of literature, considering both descriptive and content perspectives. It aims to assess the advancements made in the field and identify the key areas that necessitate further investigation. This study aims to investigate the progression of research on Sustainable Supply Chain Management (SSCM) in developing economies.

# **Literature Review**

# The Significance of Sustainability in Promoting Economic Well-being

In 2013, the Council for Supply Chain Management Professionals (CSCMP) revised its definitions to incorporate the concept of sustainability. Sustainability pertains to the dedication of a firm to adhering to the principles of sustainable development, encompassing the consideration of stakeholders' requirements and the realisation of corporate social responsibility (CSCMP, 2020). According to Carter and Rogers (2008), sustainable performance can be described as the evaluation of outcomes that encompass the convergence of three aspects. Bateh, et al. (2013) assert that academic publications cover numerous definitions of sustainability, illustrating its enduring nature and the need for a holistic objective. While various definitions can be found in literature, the most wellknown and cohesive theory focuses on the integration of three dimensions and the promotion of impending development (Seuring & Müller, 2008). Nevertheless, academic authors primarily conform to the definition of sustainability proposed by the Brundtland Commission of the United Nations in 2020. These definitions facilitate the understanding of the concept, highlighting its inclusion of not just environmental factors but also economic and social components.

According to Carter and Rogers (2008), there is a contention that the terms "sustainability" and the concept of the "triple bottom line" (TBL), which integrates the economic, environmental, and social aspects of a corporation, can be used interchangeably. The inception of this concept occurred when it became evident that corporations were primarily focused on economic considerations, neglecting their social and environmental obligations. In order to achieve Triple Bottom Line (TBL) sustainability, firms and their suppliers are required to implement efficient processes and procedures, actively seek consumer feedback, and meet market requirements (Thong & Wong, 2018). Ilyas and Wiwattanakornwong (2020) assert that sustainable development is widely recognised as a significant global goal due to its substantial influence on the economic, environmental, and societal aspects at the individual level. Thong and Wong (2018) argue that in order to improve the effectiveness of their supply chains and enhance their competitiveness in the face of growing external demands, firms must adopt sustainable practices.

#### **Global Sustainable Supply Chain Management.**

From its inception, the central focus of Supply Chain Management (SCM) revolved around the efficient and reliable transfer of both raw materials and finished goods to end consumers. Maintaining a consistent and uninterrupted movement of goods and data across the whole supply chain was a persistent challenge. Companies primarily focused on waste reduction for commercial purposes rather than for social or environmental considerations. In conventional supply chain literature, suppliers were commonly perceived as lacking strategic significance, as the primary focus of the company's strategy was around leveraging its purchasing power. Supply Chain Management (SCM), as defined by Rebeca et al. (2020), involves the activities associated with the movement and conversion of goods and services within a supply chain, as well as the exchange of information from suppliers to consumers. Currently, supply chain management (SCM) holds significant importance in global enterprises, necessitating a comprehensive evaluation that highlights the interconnectedness of its various elements. Consequently, enterprises who have proficiently overseen their supply chain operations have formulated tactics to address and overcome significant global threats. Following this, supply chain management (SCM) has undergone a transformation to encompass increasingly intricate situations, aiming to achieve both financial advantages and the integration of sustainable development principles into its operational framework (Closs & Speier, 2011). As a result, there has been an increasing interest in Sustainable Supply Chain Management (SSCM) among researchers, academics, and managers. Moreover, the use of Sustainable Supply Chain Management (SSCM) approaches is becoming more widespread as a corporate strategy aimed at fostering sustainable development in the industrial sector. The establishment of sustainable supply networks has been a result of businesses' efforts to achieve sustainability and enhance supply chain performance.

The sustainable supply chains encompass actions that consider economic, social, and environmental factors from a threedimensional perspective (Köksal et al., 2017). Kim and Chai (2017) provided a definition of the SSC as a supply chain that not only achieves profitability and maximises its potential, but also exhibits accountability towards its consumers, suppliers, societies, and environments by employing innovative strategic, tactical, and management technologies. Incorporating sustainable development concepts, this supply chain model operates within the framework of the three pillars of sustainability. Supply Chain management has been integrated into the framework of Supply Chain Management (SSCM) by scholars for more than ten years (Kim et al., 2014). The aforementioned measure was implemented with the aim of attaining sustainable development goals and addressing challenges by incorporating a variety of tools and tactics. The primary emphasis of the original programmes was on addressing environmental concerns and associated topics, such as sustainable design, ecologically friendly products, and green supply chains. Various definitions of supply chain management (SSCM) were revealed through literature reviews. The primary emphasis of the definitions was on the three pillars of sustainability, highlighting the importance of coordination, collaboration, and cooperation across the whole supply chain. The authors who have been emphasised are Carter and Rogers (2008), Seuring and Muller (2008), Ahi and Searcy (2013), Wolf (2011), Wittstruck and Teuteberg (2012), and Pagell and Shevchenko (2014). Carter and Rogers (2008) examined non-economic factors and included sustainability concerns into supply chain management. A theoretical framework was given for this objective. This development gave rise to a novel field of research, wherein Sustainable Supply Chain Management (SSCM) was characterised as the intentional and observable amalgamation and achievement of a company's social, environmental, and economic goals through the synchronised management of significant inter-organizational activities. According to Rebeca et al. (2020), the objective is to improve the enduring financial well-being of both the particular company and its supplier networks. According to Seuring and Müller (2008), the concept of SSCM encompasses the effective management of material, information, and capital flows, as well as the fostering of collaboration among firms within the supply chain.

Within the context of achieving sustainable development by following environmental, social, and economic criteria, the definitions emphasise the crucial importance of the supply chain. The field of Sustainable Supply Chain Management (SSCM) has shown consistent improvement and has become a vital managerial method for improving the sustainability of enterprises. The study conducted by Rebecca et al. (2020) unveiled that firms have not fully adopted the integration of sustainability principles into their supply chain operations. This is apparent from the minimal progress that has been made in this field. The implementation of a sustainable supply chain management plan involves the comprehensive supervision of all activities within the supply chain, with the aim of achieving a balanced cohabitation between economic sustainability, social accountability, and environmental conservation.

# Dimensions of sustainable supply chain management in emerging economies.

The proliferation of global markets has led to a growing focus on the implementation of sustainable supply chain strategies in developing nations. The terms "emerging economy" and "developing nations" are sometimes used interchangeably by scholars, despite the absence of a precise definition for an emerging economy. These entities can be differentiated based on their average income per person, limited engagement in commercial or manufacturing endeavours, and inadequate infrastructure. However, it is worth noting that emerging nations often exhibit comparable or even superior levels of economic growth when compared to industrialised countries (Roztocki and Weistroffer, 2011). The primary distinction is in their respective levels of economic expansion. In this research, the terms "emerging" and "developing" economies will be employed interchangeably owing to their comparable attributes. The objective of this study is to analyse the existing body of literature pertaining to sustainable supply chain management (SSCM) within respective economies. It is crucial to emphasise that in various forms of research, it is imperative to differentiate them in order to analyse their disparities.

According to De Abreu et al. (2012), countries that have a significant impact on global supply chains and sustainable development are characterised by their involvement in various activities, including extraction, production, installation, and manufacturing, within their respective regions. Emerging markets, sometimes referred to as developing nations, are characterised by their continuous growth in comparison to developed ones. Choi and Luo (2019) have emphasised the significant advancements made by these nations in their endeavours to foster sustainability and implement sustainable practices. In comparison to affluent

nations, there is a dearth of research on sustainable supply chain management (SSCM) in developing countries. This contrast has been emphasised in several research in the SSCM literature (Rajeev et al., 2017; Silvestre, 2015; Khalid et al., 2015). Mani et al. (2016) have previously recognised the association between societal conflicts and business enterprises in regard to social sustainability. According to Tang (2018), a correlation exists between the operational elements of supply chains in developing nations and the notion of corporate social responsibility. Tong et al. (2018) conducted a study on the integration of socially responsible practices with suppliers in the supply chain. The study specifically concentrated on emerging countries. Abreu (2012) conducted a study examining the impact of company region, business size, and position in the value chain on the implementation of corporate social responsibility activities within the textile industry in Brazil and China. Jayaram and Avittathur (2015) assert that previous scholarly investigations have examined the importance of emerging economies in the supply chain operations of diverse enterprises engaged in global trade.

## **Methodology**

## Analysis and Findings of the Literature

During this phase, a comprehensive examination was conducted on all 56 articles that were chosen. Following this, the aforementioned periodicals were classified into separate categories according to their unique characteristics and contents. The initial investigation encompassed a substantial quantity of descriptive data. A comprehensive thematic analysis was undertaken on a sample of 56 papers produced from 2011 to 2023, with a particular focus on highlighting the expansion and importance of the knowledge repository. The dataset comprised the publication year, industry sector, country of application, and research methodology employed. In the process of doing a methodological analysis for this study, a systematic classification was applied to the instruments and methodologies utilised in order to tackle the problem referenced in each article. During the content analysis, the issues and factors related to sustainability were categorised. The results of the content and descriptive surveys play a fundamental role in guiding the subsequent stages of the research endeavor.

The concluding phase of the methodology entails presenting a comprehensive analysis of the research outcomes, pinpointing any deficiencies and constraints, and offering suggestions for future investigations. Subsequently, the conclusion ensues. The graphic presented below depicts the systematic approach employed in this study methodology. Henceforth, the forthcoming sections will delineate the outcomes, analysis, and concluding remarks of this scholarly investigation.



Figure 1. Illustration of the approaches employed in conducting this literature review. Source: Sánchez-Flores et al., (2020)

# **Results and discussion**

The findings encompass both a descriptive analysis and a content analysis of each of the 56 articles. Descriptive analysis refers to the systematic procedure of identifying and categorising scholarly articles based on their specific publication year, industry sector, and country of research. The content analysis assesses the research methodology and sustainability attributes employed in the examined articles.

## Analysis of Descriptive Data

This paragraph offers a comprehensive analysis of the 56 papers encompassed within the present study. The analysis includes both numerical data and insightful observations.

The data is evaluated according to the publication year of the journal, the industry sector it belongs to, the location of the study, and the methodology used.

## Analysis of articles categorised by industry sector.

The industry sector classification is structured into five distinct sectors, namely numerous sectors, manufacturing, agricultural and mining, service sector, and no specific sector, in order to facilitate manageability. An effort was made to include the papers that belong to these categories but have not been considered.

The distribution of the publications analysed for each industry category is depicted in Figure 2. Among the 56 publications that were examined, it was found that 21 articles (38%) span over many industry sectors, whilst 17 articles (31%) specifically concentrate on the manufacturing sector. There are 9 articles (16%) that represent the agriculture and mining industry, 5 articles (9%) represent the service sector, and one article (2%) does not name a specific sector. The industry of manufacturing, which is the second most extensively researched sector, is anticipated to receive substantial focus from corporate leaders due to the increasing importance of the triple bottom line in corporate governance (Brandenburg, Hahn, & Rebs, 2018). Multiple industry sectors were thoroughly explored in several empirical investigations (38). The predominant focus of research endeavours has been directed towards investigating the manufacturing sector. Nevertheless, the existing research has not thoroughly investigated the impact of adopting sustainable supply chain management (SSCM) on the operational outcomes of manufacturing firms in developing countries. Esfabbodi, Zhang, and Watson (2016) emphasise this constraint. The Appendix provides a detailed classification of these publications based on their respective industrial sectors. The healthcare supply chain in Brazil was examined by Scavarda et al. (2019), with a specific emphasis on sustainability. A management paradigm is proposed with the objective of providing strategic operational advantages to organisations.



Examining supply network chains in developing markets poses significant challenges, especially in supply chains that involve complex commodities. Identifying all parties involved in the supply chain process is particularly difficult, as highlighted by Schoggl et al. (2016) in their research. The table presents the study approaches employed for the analysis of SSC in developing countries. Empirical research constitutes the predominant approach, including 62.5% of the overall publications. Case studies, on the other hand, account for 21.4% of the total papers. In order to underscore the significance of interviews and surveys as conventional approaches for gathering information, it is imperative to highlight their widespread recognition



Fig. 3. Distribution of research methodology.

This study investigated the implementation of Sustainable Supply Chain Management (SSCM) in developing countries through the utilisation of diverse approaches and tactics. The investigation was carried out with empirical models and comprehensive analysis. The study conducted by Akhtar et al. (2016) aimed to investigate the impact of leadership practices on sustainability. The researchers analysed data collected from top executives in the agri-food industry within emerging economies, specifically focusing on global supply chains. The research employed structural equation models (SEMs) to investigate the potential effectiveness of datadriven and flexible leadership approaches in promoting sustainable projects among executives in global supply chains. The findings of the study have enhanced our understanding of this particular topic. The data obtained by Ilyas, Hu, and Wiwattanakornwong (2020) through a structured survey sent to the industrial sector in Pakistan was analysed using Structural Equation Modelling (SEM). The findings of the study suggest that the support of high-ranking executives has a substantial influence on the adoption of environmentally friendly supply chain practices and the achievement of sustainable development goals through effective implementation. The findings indicate that government assistance is crucial in assisting high-ranking executives in effectively establishing and maintaining an environmentally friendly supply chain. In Malaysia, a study was done by Thong and Wong (2018) to examine the influence of environmental and social performance on economic performance, as well as the associated benefits. The analysis of survey data from various industrial sectors, including food and beverage, electrical and electronics, among others, was conducted using structural equation modelling (SEM) and partial least squares (PLS).

In their study, Bag et al. (2020) utilised Structural Equation Modelling (SEM) and Partial Least Squares (PLS) techniques to ascertain strategies aimed at improving the sustainable supply chain performance within the mining industry of South Africa. The techniques were employed to improve the efficiency of the supply chain. A survey was undertaken to examine the research inquiries pertaining to big data analytics

The study demonstrated that a high level of expertise in big data analytics has a substantial impact on the development of ecofriendly new products and the long-term viability of a supply chain. A number of additional authors utilised primary data to perform qualitative research, through which they directly collected information from diverse companies across several industries. The researchers Turker and Altuntas (2014), Liu et al (2012), Fleury and Davies (2012), and Morali and Searcy (2013) employed a datagathering methodology that involved conducting a series of interviews. Ahmad et al. (2017) employed the best-worst method (BWM) to analyse survey data from two national oil and gas companies in order to evaluate the role of external factors on sustainability. Padhi et al. (2018) administered a semi-structured questionnaire to various industry sectors in India. The study incorporated six fuzzy multi-criteria decision-making procedures in order to enhance researchers' comprehension of prospective sustainable alternatives. The objective was to ascertain the most appropriate methodologies that industrial enterprises should adopt. Significantly, specific articles utilised a blend of methodologies to carry out their investigation. Furthermore, the majority of the authors undertook a thorough analysis of the available literature, which formed the basis for their research. There exist various methodologies that can be employed to examine sustainable supply networks within emerging nations. The absence of emphasis on emerging economies or specific challenges pertaining to sustainable supply chain management (SSCM) often renders direct comparisons with previous systematic literature studies impractical. Certain articles comprehensively cover various aspects of innovation within the context of Sustainable Supply Chains (SSC). These aspects include different types of innovation, Green Supply Chain Management (GSCM), sustainability in global supply chains, sustainability metrics, and Sustainable Supply Chain Management (SSCM). There is a lack of special focus on emerging economies in these studies. Other instances, such as those in emerging nations, are confined to a single country.

Moreno-Camacho, Montoya-Torres, Jaegler, and Gondran (2019) conducted a literature study that specifically examined sustainable measures. Their analysis encompassed studies published throughout the timeframe of 2015 to 2018. The results of their study indicated that 96.5% of the papers analysed in their evaluation focused on environmental concerns, whereas the present review only presents a percentage of 82.1%. Furthermore, they observed that 45.2% of the analysed publications pertained to social matters, while their assessment concentrated on 80.4% of them. The observed differences can be attributed to the differences in historical periods and, more particularly, to the primary focus of this study on emerging economies. In order to achieve the objective of the review, the subsequent sections will undertake a comprehensive examination of each sustainable dimension, together with their interconnections and the importance they possess within the framework of the sustainable supply chain in developing countries.



Fig. 4. Distribution of articles per sustainable dimension.

#### The Environmental Aspect

A significant majority of the articles, specifically 80%, focused on environmental challenges either in isolation or in conjunction with social and/or economic factors. Furthermore, a significant majority of the research, particularly 92%, focused on environmental concerns and employed empirical or case-study approaches to produce and authenticate data. In their study, Moreno-Camacho et al. (2019) observed an increasing inclination towards sustainable practices across developing nations, with a specific focus on Asia. They highlighted the heightened emphasis on environmental studies, while acknowledging the insufficient investigation of social elements. The papers exclusively focused on environmental issues, specifically the management of solid waste in metropolitan areas, assessment of carbon efficiency, elimination of pollution, reduction of waste and carbon footprint, and utilisation of resources and healing. The authors referenced in this study are Ali et al. (2020), Marzuki et al. (2017), Jakhar et al. (2018), Ding et al. (2018), Azevedo et al. (2019), and Krishnan (2020). The study conducted by Roy et al. (20202) examined the factors contributing to environmental sustainability through the improvement of supply network performance. The environmental sustainability of proposed solutions is investigated in the research conducted by Roy et al. (2020), Suhi et al. (2019), and Krishnan et al. (2020). The importance of monitoring sustainable performance in supply chains from an environmental perspective has been substantiated by empirical evidence and case studies. These studies have also emphasised the importance of active stakeholders participating in the promotion, progress, and support of integrating environmental measures across the supply chain in emerging economies. Furthermore, scholars and executives are progressively acknowledging the importance of environmental sustainability and ecological considerations due to recent regulations, client demands, and the necessity for eco-friendly products (Moktadir et al., 2018).

## The Economic Aspect

The economic performance has a significant impact on the efficiency of a supply chain. The total cost of supply chain management is often seen as a critical statistic. Previous studies conducted by Zhang et al. (2014), Esfabbodi et al. (2016), and Ding et al. (2015). Out of the investigated publications, 56% focused on economic difficulties and frequently included social and/or economic factors in their analysis. Empirical research or case studies were undertaken in 72% of the articles pertaining to emerging economies. Several publications place significant emphasis on economic objectives related to resource efficiency,

market share, and sales. Nevertheless, they also recognise the importance of finance throughout the entirety of the process. Zailani et al. (2012), Ding et al. (2016), and Ding, Zhao et al. (2016) conducted notable studies. Kumar et al. (2020) did a study which revealed that monetary factors significantly influence the implementation of social responsibility within the textile industry supply chain of emerging economies. In their study, Esfahbodi, Zhang, and Watson (2016) investigated the intersection of economic factors and environmental considerations. They stressed the importance of complying with environmental standards and regulations while also considering economic performance as the main priority.

## The social dimension

The predominant focus of the publications is on the social dimension, either independently or in combination with the economic and/or environmental dimensions. This constitutes 78% of the overall sum. Out of the 56 research that were examined, 10 of them specifically focused on social issues, while the remaining 6 studies incorporated both social and environmental aspects. There was only one piece of work that combined the social aspect with economic concerns. In addition, a total of 30 papers were analysed using a triple-bottom-line approach. Koberg and Longoni (2019) found in their literature study on global Sustainable Supply Chain Management (SSCM) that scholarly articles often prioritise the social element of sustainability over its economic and environmental dimensions. In their study, Morais and Silvestre (2018) conducted an extensive investigation in Brazil, utilising a multi-case study approach to analyse the strategies employed by supply chain-oriented organisations in achieving social sustainability. The success of social activities was determined to be contingent upon many important variables, namely motivation, cooperation, and the flow of information.

# Conclusion

There's a growing interest in sustainable supply chains (SSC) within developing economies. However, many companies in these countries seem unaware of SSCM practices, despite their significant role in global markets (Nayak et al., 2019). This suggests research on SSCM in developing countries is lagging behind the global trend. While SSCM research has been around for a while, pressure from customers, governments, and NGOs is making sustainable practices a must-have for businesses today (Govindan and Cheng, 2015).

Some studies looked at existing research and found that surveys are a popular way to study sustainable supply chains and innovation. However, other research suggests more in-depth studies, like case studies or theoretical models, are also valuable in the field of SSCM. This highlights a need for a wider range of research methods, including both hands-on surveys and more detailed qualitative approaches.

Researchers have developed various ways to measure how sustainable supply chains are. These measurements help businesses make informed choices about their supply networks. Studies have identified specific social sustainability measures that are important in India, including fair treatment of workers, charitable giving, and safe working conditions. These studies also show that strong social sustainability practices by suppliers lead to better overall supply chain performance. Even though assessing sustainability can be complex, it's important for businesses in developing economies to evaluate their supply chain social sustainability practices.

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Developing economies are increasingly focused on making their supply chains more environmentally friendly. This is because these economies often rely heavily on natural resources, use a lot of manual labor, and require significant transportation to move goods (Jakhar et al., 2018). Researchers have even developed methods to measure environmental sustainability in manufacturing sectors of countries like Bangladesh (Suhi et al., 2019). A key challenge is figuring out how much resources are used throughout the supply chain and how to cut back on that consumption, since research on this topic is limited in developing economies. There's also a growing interest in the social side of sustainability in these countries, although this area is still quite new.

Consequences on the economy, environment, consumption of resources, and society are all considered in the pursuit of sustainable development. The objective of this literature review is not only to provide recommendations for future research but also to provide an overview of the current state of research concerning sustainability in developing countries. When under- taking supply chain management, it is critical to duly acknowledge and account for the unique circumstances that exist in developing nations. It is critical to emphasize the social implications of operations and investigate the interconnections among the three constituent elements comprising a supply chain. The objective is to accomplish this by establishing a perpetual equilibrium in developing economies. To increase sustainable performance fully, a comprehensive strategy should be implemented throughout the supply chain, according to the findings of this literature review.

# **Further research focus**

Research on sustainable supply chain management (SSCM) has often focused on developed economies. There may be a lack of studies specifically focused on developing economies, making it difficult to understand the unique challenges and opportunities they face.

Data collection in developing economies can be challenging due to infrastructure limitations, confidentiality concerns, and a lack of standardized reporting practices. This can lead to a bias towards large, well-established companies with better data collection capabilities.

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