

# Synthesizing the Influences of Green Supply Chain Management towards Organisational Outcomes

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**Abstract:** Today sustainability is the biggest concern for the entire world, and it is one of the foremost objectives of the United Nations sustainability goals. In the context of businesses, supply chain management (SCM) is the most critical function which decides the company's performance. However, it is necessary to understand the influence of green supply chain management (GSCM) on organizations. This paper reviews the literature to explore the crucial dimensions of GSCM and analyses its influence on organizational outcomes. In order to apprehend the in-depth details, the authors have adopted a mixed research methodology to collect qualitative and quantitative data. The data from 74 companies were composed using the survey questionnaire and interview method using stratified sampling. The analysis is accomplished to recognize the influences of GSCM on organizational outcomes through the components of green supply chain drivers, green supply chain support activities, green supply chain practices, and organizational supply chain strategies. The findings and conclusion of the study highlight the relationship and positive influence of GSCM on the organizational outcomes in the form of financial and environmental performance.

**Keywords:** Green Supply Chain Management, Green Business Practices, Supply Chain Management, Sustainability in Businesses, SCM Strategies, Organisational Performance

## 1. INTRODUCTION

The environmentally sustainable activities have gained growing interest in improving their supply chain management (SCM) practices among organizations today. While environmental regulations require industry to adopt these considerations into account as the green issues evolve daily. To gain a full interpretation of the challenges, they need a continuous analysis and

monitoring in the field. Environmental concerns in the role of sustainable development have received significant priority. With rising awareness of environmental protection, enterprises are compelled to consider environmental practices in order to reinforce the green image of their own businesses together with the actual motivation to protect the environment [1]. In this regard, businesses must consider putting higher standards and liabilities on operations to protect environmental deterioration, which is a progressively significant aspect for corporations [2, 3, and 4].

The Green Supply Chain Management (GSCM) is seen as an approach to management theory incorporating all elements of the supply chain comprehended as a humanitarian and sustainable activity for companies, which is also offering economic advantages to them [5, 6]. The green supply chain management has developed into an industry-wide sustainability solution. Environmental responsibility has transformed as a key differentiator with progressively strict regulations and growing consumer expectations for more sustainable products, and many firms have started implementing sustainability practices in their businesses to create competitive advantages [7, 8]. Green supply chain management is all about delivering goods and services in the context of the environment from suppliers, manufacturers and retailers to the end customers through information, material and cash flows. Conventional supply chain management emphasises more on quality, cost and service, which has attributed to the environment

in smaller way [9]. Today's green supply chain management demands integrating the concept of the environment into the supply chains at each level of the product and service. Supply chain managers therefore plays a foremost role in implementing new sustainable solutions to tackle the sustainable issues faced by the industry and convey this to all stakeholders in the chain [10]. In addition, lean practices reduces waste at any point of the supply chain. It emphasizes on manufacturing quality goods that meet consumer needs that are economically and environmentally sustainable. This is the best method to implement, as it lowers inventories, reduces energy and resources [11, 12].

The management of the green supply chain is composed of integrating all "green" aspects of the supply chains. It is therefore described as the combination of green purchasing, green materials and manufacturing, green distribution and marketing, and green reverse logistics [13]. In addition, the management of the green supply chain can be described as incorporating environmental consciousness into the supply chain management, including product design, material purchase, manufacturing processes, product distribution and product management after its useful life. There has been a considerable rise in the need for companies to consider on green SCM in recent times, particularly as a result of enhanced agreement among the key stakeholders on the use of sustainable practices. Green SCM has therefore made its way into the whole continuum of supply chain activities [14].

The globalization has enhanced the opportunities and incentives for customers, with the rapid shift in the global manufacturing paradigm for making environmental and social problems more relevant to manage the businesses. Below is the green supply chain management framework.

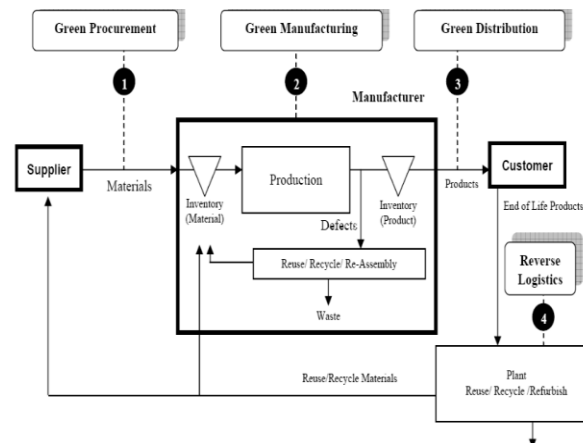


Figure 1: Framework of Green SCM

(Source: Adapted from Ninlawan et al., 2010 [14])

Firstly, green procurement was viewed as buying from the environment perspective, requiring practices that involve the reduction, reuse and recycling of products in the purchasing procedure. Individual firms, however, have the freedom to confirm that their manufacturers follow environmental regulations and expected to follow the supplier selection and conservation criteria [14, 15]. Secondly, green material and manufacturing are also attributed to as environmentally friendly manufacturing, which with technological advancements aims to reduce emissions during the entire process. Green manufacturing also result in low cost of raw materials, increased productivity, improved company image and reduced environmental effects [14, 15]. Thirdly, green marketing and distribution encompasses green packaging and green logistics. Green transport is designed to cleanse the transport environment by reducing carbon dioxide emissions throughout goods transport [14]. Fourthly, the green reverse logistics denoted to green recycling, which encompasses proper disposal of the used product from the customer [14, 16]. This dimension takes the sorting, inspection, re-processing, redistribution and disposal into account. The recycling mechanism plays an important role in the product life cycle as waste products may damage the environment, channels and the entire supply chain of firms [14, 17].

The growing resource scarcity, increasing consumer awareness, more environmentally conscious stringent laws, and the organisational impact on the environment pretense real challenges for today's firms [15]. Environmental management is implemented across the world by many firms [18]. It has gained increasing

attention among researchers and managers [19]. This activity deliberates on managing the green supply chain. In addition, the green supply chains consider the environmental impact of all supply chain operations, from raw material production to the last disposal of products. Through various stakeholders within the green supply chain to it focuses to motivate to go green and delivers the essential guidance and support. With this convergence, green supply chains will aspire to attain the reduction of waste and decreased environmental impact while ensuring higher customer satisfaction and better profits [20, 21]. In the Indian settings, companies are proceeding actions to become green and environment friendly [22]. Today's business organizations are facing the increasing pressure of balancing economic and environmental performance. With global competition for natural resources and tightening of environmental regulations, the debate of whether or not Green pays or costs has moved towards finding ways to be green and profitable [23, 24]. The combination of lean and green SCM can help firms increase environmental and economic performance, while they together help traverse a path towards sustainability [25]. Under the pressure of competition, regulations, and export markets, firms now work towards balancing environmental and economic performance [26, 27]. In response to this, the enactment of lean and green SCM practices can help managers walk towards organizational performance. Hence sustainability is the challenge to be resolved with the methodology followed in the research. In the economic context, India has faced many economic crisis which affected the businesses and consumers in India [28, 29]. Moreover, it has also undergone the Economic Calamity which especially affected many organisations from the earlier times [30].

The prime objective of this study is to assess the relationship of various elements of green supply chain management towards the organizational outcomes in terms of financial and environmental performance.

## 2. REVIEW OF LITERATURE

Presently, we are living in an era where environmental concerns have become an important issue for every business. The environmental pollution instigated by the companies and productions is the main threat that people and all other living creatures facing today. The traditional supply chain process followed by the

businesses in the 1990s concentrated mainly on the cost reduction part and continuous improvement in information flow inside the corporations but the factors of environment were mostly overlooked by them [15]. Thus, the industries have begun doing modifications in the processes of conventional supply chain management by adding environmental considerations in them. This has not only benefitted the industries by making them environmentally friendly but also helped them in becoming economically comprehensive. The gas emissions and menacing waste triggered by various supply chain activities came out as key factors responsible for serious environmental issues. Thus, GSCM has emerged out as a main topic of interest for scholars and practitioners of supply chain management. Thus, the GSCM is gaining prominence and momentum everywhere due to one main reason, that is, the continuous deterioration of the environment, which includes uneconomical use of natural resources, rise in waste dumping sites and intolerable rise in pollution. The green supply chain system covers purchasing, inbound logistics, production process, outbound logistics, and reverse logistics [31, 32]. Moreover, the assurance of a measurement model for the application of GSCM practices was combined with a metric scale for measuring various aspects of their GSCM practices. The results indicated that GSCM application of the first and second order models was accurate and correct [9]. It was further argued that GSCM opens unique opportunity to take competitive edge and better approaches of attaining value in the supply chains [33, 34].

It was described that there are three types of relationships for considering environmental aspects. These include information sharing and collaboration for improvements in processes or end products and finalizing environmental requirements [35]. While, the GSCM practices are classified differently, the first practice is 'Greening the Supply Process.' This can be implemented by incorporating various GSCM practices in traditional supply chain management. The second practice in Bowen's classification is product-based green supply which comprises variations done to implement green dimensions in the product provided, and third practice is 'Advanced Green Supply' that leads certain preemptive measures for consumer and supplier relationship [36]. On the other hand, there described four types of GSCM practices, which includes in-house GSCM practices, management of external environment,

eco-design and recovery of investment [37]. Moreover, two categories of GSCM practices were recognized, namely, process and product based approaches [15]. It has elaborated on the GSCM practices are based on the process as well as on the product which are listed according to the resources needed to implement them as per their level of complexity [38]. Subsequently, there are two main drivers of GSCM and identified as the most important ones, which are sustainability instigators and economic instigators. The sustainability instigators can be described as the improvements among the management practices that can create new environmental solutions and prevent some serious environmental impacts. The economic instigators supports by making a reduction in raw material and energy usage, increasing market share, and many other such strategies that could benefit the company's financial status [39, 40].

The GSCM Performance can be measured using two important factors, which are environmental and economic indicators. Concerning environmental performance, it was identified environment-friendly production techniques and innovative strategies for the design phase [35]. Moreover, the author suggested that environmental management and waste minimization are also very important factors to enhance environmental performance. About economic performance, there identified two categories as positive and negative economic performance. The positive economic performance includes factors like a reduction in cost due to less energy consumption, decreased cost of some raw materials, a decline in fines, and a diminution in the waste treatment costs [37]. On the other hand, negative economic performances include the increase in various operational costs, more investment in training or technology, an increase in cost caused by the acquisition of environmentally friendly raw materials [41].

The examination for the association between green supply chain performance and green practices by considering the supply chain system of the automotive industry is accessed. The researchers framed a conceptual model based on data analysis in several automotive industries, which provided reliable results. They found that among the list of green practices which one has positive behavior towards consumer satisfaction, quality and effectiveness, and adverse behavior on supply chain performance [42]. Moreover, it was

deliberated that green performance is achieved by 'Third Party Logistics (3PLs) service providers' by implementing certain explicit green practices. Moreover, the level of implementation of these practices may differ and take more time for fully functionalized, which affects the company performance in the long run [43]. It was determined that there is an influence of communication, coordination, and connection between the customers and suppliers of an organization. They supplementary discovered the effectiveness of the green supply chain management with customer environmental performance requirements [44]. Furthermore, it was reconnoitered the association between the supplier role in giving better green performance and green innovation. It is found that if the supplier follows green techniques and green innovation strategies, the company will get significant results, higher competitive advantage, and better environmental performance [45]. Similarly, it was observed and determined that there are linkages between green innovation and green image of different organizations and suggested new approaches and processes for green core competence for companies [46].

It was described that most of the enterprises, mainly in developed countries, are implementing green practices into their system by trying to counteract the negative environmental results instead of following a positive approach. It is to be attempted to minimize the sources of these negative effects, environmental waste, and emission of gases, which can give environmental solutions. Thus, there arises an immediate need for the companies to emphasize more on adopting and implementing the GSCM approaches [47]. Alternatively, the emphasis on the acceptance of GSCM is not much given in developing nations, mainly in the Asian region. The countries under the Southeast Asian region have few enterprises implementing it while some are just confined to limited levels as compared to the developed regions in the world [18]. However, it is deliberated that GSCM supports the minimization of cost and also helps in providing social progress by using advanced strategies and technologies [48]. Consequently, it has been considered that GSCM integration with SCM takes place by implementing environmental aspects at various stages and during different operations of the supply chain in any industry, which results in higher benefits to the organization.

The researcher has synthesized the literature and realized the course of methodology and analysis as per the objectives of the study.

### 3. RESEARCH METHODOLOGY

To realize keen details, the authors have adopted a mixed research methodology to collect quantitative as well as qualitative data. The research study has utilized primary and secondary data for quantitative and qualitative deliberations of the study. The primary data from 74 companies from the sectors of automobile, food, pharmaceutical, textile, and electrical in India was collected using the survey questionnaire and interview technique using a stratified sampling method. The analysis is made to recognize the influences of GSCM on organizational outcomes through the components of green supply chain drivers, green supply chain support activities, green supply chain practices, and organizational supply chain strategies. This study used a deductive approach and a hybrid of subjective selection for testing the various aspects of green SCM practices. The subjective sampling handpicks people and organizations as respondents that are likely to be crucial for the research to have more quality output. To meet the objectives of the research, organizations were filtered based on their exposure to green supply chain practices.

Centered on the research objectives, the researchers have formulated the following hypothesis for the study.

- *H1: There is a positive influence of green supply chain drivers on green support activities in the supply chain.*
- *H2: The green support activities in supply chain management positively contributes to green SCM practices.*
- *H3: The green supply chain management practices positively influence organizational supply chain management strategies.*
- *H4: There is a positive effect of green supply chain management practices on organizational outcomes.*

The researchers have used these hypothesis to further direct to the analysis and results of the study to deliberate the outcomes related to the influence of green supply chain management.

### 4. ANALYSIS AND RESULTS

The analysis and results of this research are deliberated with reliability and validity, descriptive analysis, variables effects analysis, and hypothesis testing for this study.

#### 4.1 Reliability and Validity:

The reliability of study is accessed using the method of Cronbach's Alpha, and validity is assured with the expert opinion.

Table 1: Reliability of Constructs of Study

No	Constructs	Cronbach's Alpha
1	Green Supply Chain Drivers	0.81
2	Green Support Activities	0.82
3	Green SCM Practices	0.87
4	Organisational SCM Strategies	0.88
5	Organisational Outcomes	0.88

The values of the coefficient of Cronbach's Alpha indicates the internal consistency of the items in the as representatives of the constructs being measured. Moreover, the validity of the data and instrument was realized by engendering the items from the theoretical background and through attaining opinions of experts on the objects of study.

#### 4.2 Descriptive Analysis:

The descriptive analysis states to the compilation of definite measures along with examining for patterns of relationships that exists among groups of data. It is a process to ascertain the level of implementation of these practices in manufacturing firms. This helps to find supporting or differing situations with unique or described ideas to indicate the conclusion. This section offers a descriptive analysis of the collected data from survey. It investigates the extent to which firms have implemented green SCM practices and their influence on the organisational outcome. The descriptive statistics of the variables are summarized using the mean score and standard deviation in the following table.

Table 2: Descriptive Analysis of Study

No	Parameter	Mean Value	Standard Deviation
1	<b>Green Supply Chain Drivers</b>	3.88	0.65
2	<b>Green SCM Support Activities</b>		
2.1	Organisational Assistance	3.74	0.75
2.2	Consumer Assistance	3.89	0.90
3	<b>Green SCM Practices</b>		
3.1	Green Inbound Implementation	3.48	0.71
3.2	Green operational Implementation	3.97	0.59
3.3	Green outbound Implementation	3.72	0.70
3.4	Reverse Logistics Process	3.18	0.85
4	<b>Organisational SCM Strategies</b>		
4.1	Total Demand Control	2.47	0.99
4.2	Value Additional Actions	2.47	1.06
4.3	Process Standardisation	2.98	0.99
4.4	Industry Standardisation	2.72	1.03
4.5	Organisational Culture	3.43	0.92
4.6	Organisational Alliances	2.48	1.14
5	<b>Organisational Outcomes</b>		
5.1	Environmental Performance	4.07	0.72
5.2	Financial Performance	3.79	0.61

In the context of primary and secondary data analysis and the interviews of the respondents, the following are the interpretations of the results of the descriptive analysis in the context of green supply chain management.

**Green Supply Chain Drivers:** It is realized that there is an underlying dimension across all the variables in GSCM. The mean score for green supply chain drivers is higher than three, which indicates that there is a positive force exercised by green drivers on the companies to adopt green practices. In this context, the government regulations and export market were strong influencers. Moreover, it clearly shows that the motivation for firms to go green is to abide by the government imposed rules and regulations to be a part of the global supply chains. The customer preference for green products and stakeholder pressure was found influential in implementing green SCM practices. At the

same time, the competitor's green strategies and industrial group activities have also contributed to the application of GSCM practices positively.

**Green Support Activities:** The companies have actively implemented Green SCM Support Activities for environmental management. They are identified as organisational assistance consumer assistance in the supply chain. Both these Green SCM Support Activities were found to be prominent among the organisations in the study. The organisational assistance and consumer assistance is vital to device green practices across the supply chain. It includes the total support for environmental regulations, total commitment from managers, and cross-functional collaboration for environmental improvements. However, this shows that organisations have implemented most of the internal management practices that can forge the application of GSCM exercises.

**Green SCM Practices:** The extensive literature review helped classify the primary Green SCM practices as green inbound implementation, green operational implementation, green outbound implementation, and reverse logistics process. Increasing high pressure from overseas consumers and associates, stringent national environmental regulations, support from internal management and the external customer provides a cohesive atmosphere for the application of green SCM practices. Furthermore, the analysis in the study shows the higher level of implementation of green operational implementation followed by green outbound implementation. The green operational implementation included the design of products with condensed use of energy and material with the ability to reuse, recycle or recover materials. The development of products with no usage of hazardous material or processes. It must be supportive to the environmental regulations, ongoing assessments on green SCM compliances, level of carbon emission, fuel efficiency, cleaner technology and internal recycling. Use of less or recyclable packaging materials reduced inventory and product handling, green warehousing systems, location hubs optimizations, and order consolidation are the dimensions that were relatively high than the other green outbound practices. There is larger awareness about the benefits of green SCM practices towards cost reduction to collaborative relationships but there seems to be a gap amongst the high internal application of green operational practices to the inclusion of other supply chain partners for green

inbound practices and reverse logistics. The green inbound practices were compounded by eight dimensions, profiling of raw materials from suppliers for containing no prohibited substances and electronic sharing of information with suppliers were the most highly implemented practice in the manufacturing firms. Localized sourcing and cooperation with suppliers for environmental objectives were also practiced moderately. Few practices that involved collaboration with supply chain partners like training to suppliers on environmental practices, environmental audit, ISO 14001 qualifications of supplier units, and ensuring environmental practices in second-tier suppliers were reported low. The implementation of reverse logistics in manufacturing firms to enable green supply chain management was indicated by four dimensions, recovery and reuse of used products, resell, return, remanufacture, refurbish or repack the returned goods. Almost all reverse logistics practices are found low. This could be since the reverse supply chain in India is at a nascent stage. The green SCM practices in manufacturing firms have developed systems and practices well within the firm, the external link of the supply chain including the inbound and outbound practices are moderately developed, and many manufacturing firms are still not exposed to product buyback or return.

**Organisational SCM Strategies:** Manufacturers today are leveraging Organisational SCM Strategies to eradicate waste, streamline processes, and constantly improving their organisational processes. It has proved to be the way to reduce cost, increase efficiency and enhance consumer satisfaction. The companies prominently adopt some SCM strategies like total demand control, value addition actions, process standardisation, industry standardisation, organisational culture, and organisational alliances. The culture is seen as a force to reckon a growing lean enterprise. The culture in organizations is indicated by the people practices and continuous improvement culture. The people practices are found to be in place with the managers tuned towards managing employee turnover and their development. The culture of continuous improvement is found transiting within the organization as it is at a stage of need identification and communication regarding the improvement to the workforce. The process standardization is based on the level at which planning, production, and process management are defined and standardized across the

supply chain. It also indicates the extent of product standards that can be used as shared components across various product lines. The analysis it is found that planning and production process standardization was established to the extent of complete documentation of processes. But sharing of process documents and standards across supply chain partners was not systemized among manufacturers. Some have also reported sharing their process documents with selected supply chain partners while product standards were more internalized and not extended to other product lines.

**Organisational Outcomes:** The organisational performance can be defined as the effects of an organisation as evaluated against its intended results. Two performance variables are used to measure organizational performance, which is environmental performance and financial performance. The environmental performance component includes a reduction in air emission, solid waste and wastewater, decreasing in ingestion of hazardous waste and lessening in the frequency of environmental accidents, enhancement in the firm's environmental condition and improvement in the firm's community relationship and corporate image. While, the financial performance component of organizational performance includes the market share growth, increase in sales volume, improvement in return, profit margins, and reduced inventories.

#### 4.3 Variables Effects Analysis:

The variable effect analysis shows the standardized total effects for all the variables and factors of the study.

The variables effects analysis shows that the total effect at green SCM support activities through green supply chain drivers is 1.00. The green SCM practices from green supply chain drivers through green supply chain management support activities and organisational supply chain management strategies is 0.910.

The organizational outcomes from multiple paths beginning from green supply chain drivers and organisational supply chain management strategies are 0.711, and the environmental performance from multiple paths beginning from green supply chain drivers and organisational supply chain management strategies is 0.401. These results of the study validate the outcomes

and shows that all the hypothesized pathways were accepted.

Table 3: Variables Effects Analysis for the Study

No	Variables	GSCM Drivers	GSCM Support	GSCM Practices	SCM Strategies	Organisational Outcomes	
						Environmental Performance	Financial Performance
1	Green Supply Chain Drivers	0.560	0.000	0.000	0.000	0.000	0.000
2	Green SCM Support Activities	1.000	0.000	0.000	0.000	0.000	0.000
2.1	Organisational Assistance	0.681	0.669	0.000	0.000	0.000	0.000
2.2	Consumer Assistance	0.710	0.711	0.000	0.000	0.000	0.000
3	Green SCM Practices	0.910	0.906	0.000	0.429	0.000	0.000
3.1	Green Inbound Implementation	0.619	0.619	0.691	0.295	0.000	0.000
3.2	Green operational Implementation	0.642	0.641	0.710	0.310	0.000	0.000
3.3	Green outbound Implementation	0.693	0.690	0.772	0.331	0.000	0.000
3.4	Reverse Logistics Process	0.269	0.268	0.310	0.132	0.000	0.000
4	Organisational SCM Strategies	0.810	0.807	0.000	0.329	0.000	0.000
4.1	Total Demand Control	0.000	0.000	0.000	0.818	0.000	0.000
4.2	Value Additional Actions	0.000	0.000	0.000	0.769	0.000	0.000
4.3	Process Standardisation	0.000	0.000	0.000	0.741	0.000	0.000
4.4	Industry Standardisation	0.000	0.000	0.000	0.897	0.000	0.000
4.5	Organisational Culture	0.000	0.000	0.000	0.868	0.000	0.000
4.6	Organisational Alliances	0.000	0.000	0.000	0.761	0.000	0.000
5	Organisational Outcomes	0.711	0.710	0.790	0.710	0.000	0.000
5.1	Environmental Performance	0.410	0.401	0.451	0.411	0.000	0.571
5.2	Financial Performance	0.379	0.380	0.432	0.382	0.222	0.543

The analysis concludes that green supply chain drivers significantly influence green SCM support activities, green SCM support activities influence green SCM practices, organisational SCM strategies influence green SCM practices, and green SCM practices influence organizational outcomes with financial and environmental performance.

#### 4.4 Hypothesis Testing:

The hypotheses were tested by examining the maximum likelihood estimates, their standard errors, and the associated critical ratio values. It is seen that all the hypotheses developed are supported. This indicates the value of the parameter estimated precisely for all relationships as hypothesized.

Table 4: Relationship Estimates of Hypothesis

No	Hypothesis	Relationships		Coefficient	Result	
1	H1	Green Supply Chain Drivers	→	Green Support Activities	1.000**	Accepted
2	H2	Green Support Activities	→	Green SCM Practices	0.898**	Accepted
3	H3	Green SCM Practices	→	Organisational SCM Strategies	0.441**	Accepted
4	H4	Green SCM Practices	→	Organisational Outcomes	0.378**	Accepted

\*\* Significant at the 0.01 level (2-tailed).

It is comprehended that green supply chain drivers predict green support activities perfectly with a  $\beta$  coefficient of 1.00. As per these values, the results are significant and hence the hypothesis H1, H2, H3 and H4 are accepted for this study. It is confirmed that there is a positive influence of green supply chain drivers on green support activities in the supply chain. Moreover, the green support activities in supply chain management positively contribute to green SCM practices. While the green supply chain management practices positively influence the organisational supply chain management strategies and there is a positive effect of green supply chain management practices on organisational outcomes.

## 6. FINDINGS AND DISCUSSION

The environmental apprehensions in supply chain management are critical for businesses. The green issues are considerably growing and the challenge for the industry to move towards sustainability [49, 50]. Moreover, it was mentioned that the green paradigm is related to the environmental and ecological efficiency of organizations. Such activities are related to the environment focused on green purchasing and incorporated into supplier-flowing product life cycle management through the manufacturer, customer, and reverse logistics completing the loop [51]. The consumer pressure is realized as a key factor for firms to enhance their image and practices towards the environment [52]. The green purchasing and consumer collaboration on green SCM activities have affected the companies to pursue product take-back and product reestablishment processes [53]. Hence, the customer requests for environment friendly products has transformed the attitude of the sellers and markets. Subsequently, the role of leadership is most crucial in the success of the business [54]. While, the involvement of the employees in management functioning provides better output for organisations [55]. The literature review indicates that there some critical drivers for green supply chain initiatives, which are anticipated business advantages, government regulations, community, consumer and supplier pressures, market demands and social responsibility. It is realised that there is a significant consequence of these drivers towards the green supply chain implementation [56]. Furthermore, the customer behavior, export market, environmental regulations, competitors and stakeholders, industrial group activities, and government



policies are underlying dimensions of green supply chain drivers relevant in the Indian business context.

This research deliberates on the causative relationship amongst organisational SCM strategies, green SCM practices, and organisational outcomes. The organisational SCM strategies can be ascertained by total demand control, value addition actions, process standardisation, industry standardisation, organisational culture, and organisational alliances. The green SCM practices can be configured by the green inbound implementation, green operational implementation, green outbound implementation, and reverse logistics process. Moreover, it also highlights that environmental performance has a direct and positive impact on financial performance which affects the organisational outcomes of the firm. It is realised that the organisational outcomes evolves directly from improved green SCM practices with the dual benefit of improved financial and environmental performance. Moreover, it ascertains that the green supply chain drivers influences the green SCM practices through green SCM support activities. The addition of organisational SCM strategies and its influence on green SCM practices is particularly important as it is an effort to incorporate cost reduction and waste elimination tools into the supply chain to achieve higher result of organisational performance.

## 7. CONCLUSION

The socio-economic dynamics and regulatory forces of today are compelling organisations to be green in their product sourcing, operational, distribution and logistics activities. Thus, companies increasingly need to go for green SCM in order to remain sustainable. The green supply chain management integrates environmental thinking into supply chain management which helps the industrial activity by different means and ways. It is realized that there is a positive influence on green supply chain drivers on green support activities in the supply chain. Moreover, the green support activities in supply chain management positively contribute to green SCM practices. While the green supply chain management practices positively influence the organisational supply chain management strategies and there is a positive effect of green supply chain management practices on organisational outcomes. Hence, firms need to develop a framework to implement Green SCM practices effectively and efficiently. The causal relationships established traverse the strengths and linkages among

the supply chain constructs. This research can help the SCM professionals to redesign the effective strategies for their organisations and it provides a new avenue in the body of knowledge on green SCM and offers direction for future researchers to work on multiple and integrated dimensions of green supply chain management.

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