



A Study on Problems and Benefits in Implementation of Green Supply Chain Management Practices in TVS Supply Chain Solutions Ltd, Chennai

Mr. Balaji K, Mr. Abhishek Narayan J,
DEPARTMENT OF MANAGEMENT STUDIES,
KARPAGAM COLLEGE OF ENGINEERING, COIMBATORE-641032

Date of Submission: 11-04-2023

Date of Acceptance: 26-04-2023

Abstract

Green Supply Chain Management is the process of incorporating environmental concerns into supply chain management including product design, material sourcing and selection, manufacturing, delivery of final products, and the management of product's end-of-life. GSCM has emerged in the last few years and covers all phases of product's life cycle from design, production and distribution phases to the use of products by the end users and its disposal at the end of product's life cycle. Awareness level of customers of Green practices opted by organizations has got raised in entire industry. So organizations need to focus on the utilization of energy and resources for making environmentally sound supply chain. But there are problems in adopting and implementing Green Supply Chain Management practices in the companies. Hence the study focuses on problems and benefits in Green Supply Chain Management Practices in the company TVS Supply Chain Solutions Ltd, Chennai. The sample of this study is 150. Descriptive research design and random sampling method is used. Questionnaire is used as a primary data. Percentage analysis, chi-square analysis, correlation analysis statistical tools are used. This study concluded that the current system of operations in the organization TVS SCS, not only in India but around the world, is damaging the environment and soon a day will come when the damages done to our earth will become irreversible. There is a huge pressure on the organization TVS SCS to supply products that are environmentally friendly in their sourcing, production, delivery, usage and disposal. From the myriad of parameters affecting implementation of GSCM, cost of technology and complexity of processes are perceived to be as the major obstacle to implementing Green SCM, which therefore draws attention towards the need for cost effective and easy to implement solutions. A framework needs to be established to create awareness and spread the

knowledge regarding GSCM practices showcasing the cost and efficiency benefit for the companies.

Keywords: Green supply chain management, supply chain management, automobiles.

I. INTRODUCTION

Introduction to Supply Chain Management

Supply Chain Management can be defined as the management of flow of products and services, which begins from the origin of products and ends at the product's consumption. It also comprises movement and storage of raw materials that are involved in work in progress, inventory and fully furnished goods.

Oliver and Webber (1982). "Supply chain management (SCM) is the process of planning, implementing, and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible.

Introduction to Green supply chain management

The term 'Green supply chain management' (GSCM) refers to the concept of integrating sustainable environmental processes into the traditional supply chain. This can include processes such as product design, material sourcing and selection, manufacturing and production, operation and end-of-life management.

GSCM is the process of incorporating environmental concerns into supply chain management including product design, material sourcing and selection, manufacturing, delivery of final products, and the management of product's end-of-life"

According to Handfield et al, Green Supply Chain Management is as, "Application of environmental management principles to the entire set of activities across the whole customer order cycle, including design, procurement, manufacturing and assembly, packaging, logistics, and distribution".



Lin et al. (2001) defines green supply chain management, "It is also connected to Environmentally Conscious Manufacturing (ECM) of which they viewed it as involving developing and putting into operation manufacturing processes that curtailing and getting rid of all forms of waste, improve material utilization efficiency and improving operational safety as well as reducing energy consumption across the supply chain".

ELEMENTS OF GSCM

A. Green Procurement

Green procurement is defined as an environmental purchasing consisting of involvement in activities that include the reduction, reuse and recycling of materials in the process of purchasing. Besides green procurement is a solution for environmentally concerned and economically conservative business, and a concept of acquiring a selection of products and services that minimizes environmental impact in a multinational investigation identified key factors for green purchasing including providing design specification to suppliers that include environmental requirements for purchased items, cooperation with suppliers for environmental objectives, environmental audits for supplier's internal management, and suppliers' ISO14001 certification.

B. Green Design

Green design has been used extensively in the literature to denote designing products with certain environmental considerations. It is the systematic consideration of design issues associated with environmental safety and health over the full product life cycle during new production and process development. Its scope encompasses many disciplines, including environmental risk management, product safety, occupational health and safety, pollution prevention, resource conservation and waste management. A common approach is to replace a potentially hazardous material or process by one that appears less problematic. This seemingly reasonable action can sometimes be undesirable if it results in the rapid depletion of a potentially scarce resource or increased extraction of other environmentally problematic materials.

C. Green Operations and Reverse Logistics

Green operations relate to all aspects related to product manufacture/remanufacture, usage, handling, logistics and waste management once the design has been finalized. Some of the key challenges of GSCM such as integrating

remanufacturing with internal operations, understanding the effects of competition among remanufacturers, integrating product design, product take-back and supply chain incentives, integrating remanufacturing and reverse logistics with supply chain design in this define reverse logistics as „the process of planning, implementing, and controlling the efficient, cost-effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal. Reverse logistics activities differ from those of traditional logistics. Reverse logistics networks have some generic characteristics related to the coordination requirement of two markets, supply uncertainty, returns disposition decisions, postponement and speculation. Green distribution consists of green packaging and green logistics. Packaging characteristics such as size, shape, and materials have an impact on distribution because of their effect on the transport characteristics of the product. Better packaging, along with rearranged loading patterns, can reduce materials usage, increase space utilization in the warehouse and in the trailer, and reduce the amount of handling required.

D. Green Manufacturing and Remanufacturing

Green manufacturing is defined as production processes which use inputs with relatively low environmental impacts, which are highly efficient, and which generate little or no waste or pollution. Green manufacturing can lead to lower raw material costs, production efficiency gains, reduced environmental and occupational safety expenses, and improved corporate image. Green manufacturing aims to reduce the ecological burden by using appropriate material and technologies, while remanufacturing refers to an industrial process in which worn-out products are restored to like-new condition. Remanufacturing is defined as recycling integrated manufacturing. Industries that apply remanufacturing typically include automobiles, electronics and tyres. Product recovery refers to the broad set of activities designed to reclaim value from a product at the end of its useful life.

E. Waste Management

Waste management can be said as the reduction of perilous waste which is generated as a by-product of the production process and operations and subsequently treated, arranged or disposed off. Waste reduction can be done at source or prevention of pollution at every step of the organization's



procedures. Waste management helps to prevent the formation of waste rather than managing it after it is generated. Effective waste management needs to focus on preventing pollution at the source in products as well as manufacturing processes rather than removing it after it has been created. Firms can control waste through efficient usage of water instead of having to wait until the waste has accumulated. In addition, disposal cost, especially for equipment has always been a compelling problem and has led to green consciousness. Firms need to ensure that they utilise whole life costing when procuring equipment, by taking disposal measure and costs into account.

F. Green Product Development

Consumer marketers are trying to stand out in a growing and diverse eco-committed marketplace. Given the long-term impact of climate change and global warming, the call for the production and consumption of green products becomes even more urgent and necessary. Green product (GP) development has become a key strategic consideration for many worldwide organisations, mainly due to environmental regulations and public awareness of environmentally conscious practices.

Benefits from GSCM adoption

1. Sustainability of Resource- GSCM helps in proper and effective utilization of available productive resources of organizations. Organizations will purchase "green" input resources for environmental friendly production process to produce desired outputs.
2. Lowered Costs / Increased efficiency- Effective management of suppliers can reduce transaction and promotes recycling and reuse of raw materials. Also, the production of waste and hazardous substances can be cut, preventing corporations from being fined as a result of violating environmental regulations. Consequently, the relevant handling and operational cost involved can be further reduced and, in the mean time, the efficiency of using resources can be enhanced.
3. Product differentiation and competitive advantages - It helps the organization in positioning its product differently in customer's mind. Besides attracting new profitable customers for organization, it gives competitive edge over competitors in market place. It will strengthen the brand image and reputation in market place.
4. Adopting to Regulation and reducing Risk- Organizations adopting GSCM practices can reduce

the chances of being prosecuted for anti-environmental and unethical practices.

5. Improved quality and products- organization will produce products which are technologically advanced and environment friendly. This will enhance the brand image and brand reputation in customer's mind.

Challenges of Green Supply Chain Management Mismanaged Implementation

Changing a supply chain management system takes financial investment, time, and human resources. If not implemented properly, there will be wasted labor, service redundancy, and missed deadlines that result in significant costs.

Complicated

Process of supply chain management involves numerous complexities as it involves several departments within the organization. It may lead to create confusion and hamper the normal functioning of business. Employees may feel hesitant and demotivated to accept this concept as it is new to them thereby giving rise to several other difficulties.

Lack of Reliability

Supply chain management lacks of reliability as it is completely dependent upon the mode of information exchange among several departments. If there is any instance of inaccurate information sharing by any of the department, then it will have adverse effects on performance of whole supply chain.

STATEMENT TO THE PROBLEM

Along with the rapid change in global manufacturing scenario, environmental and social issues are becoming more important in managing any business. Green supply Chain Management (GSCM) is an approach to improve performance of the process and products according to the requirements of the environmental regulations. GSCM has emerged in the last few years and covers all phases of product's life cycle from design, production and distribution phases to the use of products by the end users and its disposal at the end of product's life cycle. GSCM is integrating environmental thinking into Supply Chain Management (SCM). Awareness level of customers of Green practices opted by organizations has got raised in entire industry. So organizations need to focus on the utilization of energy and resources for making environmentally sound supply chain. But there are problems in adopting and implementing



Green Supply Chain Management practices in the companies. There is benefits if the organization successfully implements the Green Supply Chain Management beyond its problems. Hence the study focuses on problems and benefits in Green Supply Chain Management Practices in the company TVS Supply Chain Solutions Ltd, Chennai.

OBJECTIVES OF THE STUDY

Primary objective

- A study on problems and benefits in implementation of green supply chain management in TVS Supply Chain Solutions Ltd, Chennai.

Secondary objectives

- To study the level of awareness in green supply chain management practices
- To understand the problems in implementing green supply chain management practices
- To analyse the benefits in adopting green supply chain management practices

SCOPE OF THE STUDY

- The present study is conducted in TVS Supply Chain Solutions Ltd, Chennai.
- The sample of this study is 150.
- The study is confined to problems and benefits in green supply chain management practices in the company.
- The study is conducted with employees of the company.
- It helps to understand the problems in adopting and implementing the green supply chain management practices in the company.
- It throws light on the benefits of implementing in Green Supply Chain Management practices.

COMPANY PROFILE

TVS Supply Chain Solutions Ltd

TVS SCS is a global organisation that provides end to end supply chain management services, including global forwarding and last mile solutions.

History

TVS SCS commenced operations as 'TVS Logistics', a division of TVS & Sons in 1995 before

being incorporated as a separate company in 2004. We were promoted by the erstwhile TVS Group, which has over 100 years of operating history. The core values of 'TVS' stands for trust, value and customer service. Our culture and philosophy of doing business is defined by building trust and putting customers first and continuously improving our offerings. Our business is focused on helping customers achieve their cost and revenue goals by aiming to deliver high levels of productivity, ensure customer experience with efficiency and provide digital-ready platform and innovation driven solutions.

TVS was formed in 1911, thanks to the ambitious dreams of our founder, TV Sundaram Iyengar. He wanted to build a business that would create a family of like-minded individuals pursuing only the best in quality and standards. The success of the TVS group is deeply rooted in our founder's personal belief of commitment to the values of trust and customer service. Although the company is named after the founder, the letters TVS have always stood for Trust, Value, and Service within the company. This remains the guiding and overarching philosophy by which the group functions. It was only natural that success and market leadership followed. Today, TVS is one of India's leading automotive groups, with over 90 Companies under its umbrella with a revenue of around \$8.5 Billion. The first four companies in India to have won the coveted Deming Prize are from the TVS Group.

Founder of TVS group

T V Sundaram Iyengar

Services

TVS SCS addresses supply chain challenges for international organisations, government departments, large and medium-sized businesses, and trade on our ability to reduce our clients' operating costs and improve their performance through efficient solutions. We are able to exceed our client's expectations by increasing the visibility of the supply chain through our continually evolving technological capabilities suited as per the requirements.

Being a one-stop solution for end to end logistics services and supply chain management companies, TVS SCS works with multiple industries, including Automotive, Defence,



Engineering, FMCG, Rail, FMCG, Utilities, E-commerce and Healthcare.

With a strict focus on quality and business excellence, TVS SCS operations are backed by robust technology for transportation, last mile, warehousing, accounts and billing and workforce management. TVS SCS seamlessly connects with customers' ERP to provide them with real-time visibility and transparency in operations.

1. INTEGRATED SUPPLY CHAIN SOLUTIONS

TVS SCS are specialists in transforming supply chain and logistics through efficiency and visibility to deliver improved performance and a reduction in operating costs.

TVS SCS offers end to end supply chain services from Sourcing and procurement, integrated transportation, Logistics Operation Centre and In Plant Logistics, – Finished Goods and After Market Fulfilment, Consultancy and Professional Services, Product Management Solutions. All supported by our Information Systems. TVS SCS address supply chain challenges for international organisations, government departments, large and medium-sized businesses and trade on an ability to reduce our client's operating costs and improve their performance through efficient solutions.

- Consultancy & Professional Services
- Product Management Solutions
- Manufacturing Support
- Warehousing, Storage & Distribution
- Transportation & Integrated Logistics
- Integrated Packaging Solutions
- Information Systems
- Sourcing and Procurement

TVS SCS provide the following benefits:

- Reduced operating costs

- Improved performance through efficiencies
- End-to-end visibility
- A collaborative approach to doing business
- Efficient and seamless solutions
- Deliver first-class service
- Growth and innovation

2. NETWORK SOLUTIONS

Global Forwarding Solutions (GFS)

- Airfreight
- Ocean Freight
- Land Freight Transport
- Project Forwarding Solutions
- Digital Customer Solutions

Time Critical Final Mile Solutions

- Courier Services
- Same Day Courier
- Next Day Courier
- International Courier
- Spare Parts Logistics
- Technology Services

Global Integrated Technology Systems

TVS SCS vision technology is used in areas of human capital management, warehouse operations management, automation of label reading, eliminating manual validation solutions using cognitive intelligence and advanced neural network models. Advanced concepts such as facial recognition, label reading, personal protection equipment (“PPE”) recognition and drone technology are incorporated to enable innovative supply chains. Facial recognition provides a



sophisticated surveillance technique with a combination of a video camera, a high-end processor with goods storage and an algorithm, which is custom-built for facial analytics. In the case of label reading, a computer vision algorithm is executed on classified image sets with continuous learning.

The PPE object recognition can be used in any factory for the safety and security of employees, contractors and visitors. It ensures compliance of restricted area access, and the camera even recognises various PPE objects. We aim to make the inventory-checking process more efficient with the use of drone technology. We believe drones can complete the reconciliation process in a faster, accurate, on-demand and fully automated manner.

Customers

TVS SCS addresses supply chain challenges for international organisations, government departments, large and medium-sized businesses and trades on an ability to reduce our clients operating costs and improve their performance through digital-led efficient solutions. With significant experience across various industry sectors, TVS SCS has established its position as a leading integrated supply chain solutions organisation across the globe, collaborating and building strong relationships with our customers.

Certifications

- Ecovadis
- Investors in People
- ISO9001 (Quality)
- ISO14001 (Environmental)
- ISO27001 (Information Security)
- ISO45001 (Occupational Health & Safety)
- ISO22301 (Business Continuity)
- Cyber Essentials PLUS

Strategy

Growth in our existing core sectors. We have been able to grow in our existing core sectors, such as automotive, industrial and consumer sectors, by

offering our capabilities to existing customers in new geographies as well as by offering capabilities to new customers engaged in such industries.

Scout for adjacent sectors. We have the ability to take a common set of processes, capability and technology, and customize them for a new set of customers to solve complexity of their business. We have leveraged this and developed capabilities to address adjacent segments, such as the electric vehicle sector as an adjacency to the automotive sector and smart metering as an adjacency to the utilities sectors.

Pivot to new age and fast emerging sectors. We further develop our existing capabilities and technology infrastructure and leverage them to pivot into new sectors such as electric vehicles, health tech, clean energy and utilities. For example, we leveraged our ability of inventory purchase, technology services and time critical services for the healthcare sector. Further, in the United Kingdom, we won a contract where we deployed our NS capabilities for managing reverse logistics of COVID-19 test samples.

II. REVIEW OF LITERATURE

KannanGovindan, Mathiyazhagan Kaliyana, Devika Kannan, A.N.Haq (2020), Manufacturing industries started adopting the green concept in their supply chain management recently to focus on environmental issues. But, industries still struggle to identify barriers hindering green supply chain management implementation. This work focuses on identifying barriers to the implementation of a green supply chain management (Green SCM) based on procurement effectiveness. A total of 47 barriers were identified, both through detailed literature and discussion with industrial experts and through a questionnaire-based survey from various industrial sectors. Essential barriers/priorities are identified through recourse to analytic hierarchy process. Finally, a sensitivity analysis investigates priority ranking stability.

KannanGovindan, Mathiyazhagan Kaliyana, Devika Kannan, A.N.Haq (2020) "Barriers analysis for green supply chain management implementation in Indian industries using analytic hierarchy process" International Journal of Production Economics Volume 147, Part B, Pages 555-568.



K.Mathiyazhagan, Kannan Govindan, A. Noorul Haq, Yong Geng (2020), As customers are becoming more environmental conscious and governments are making stricter environmental regulations, the industries need to reduce the environmental impact of their supply chain. Indian auto component manufacturing industries especially SMEs (Small and Medium Enterprises) are focused to cleaner production by implementing Green Supply Chain Management (GSCM) in their industries. But they are struggling to implement GSCM concept. The present research analyzes the barriers for the implementation of GSCM concept which has been divided into two phases such as identification of barriers and qualitative analysis. The study has used three different research phases: identification of barriers from the literature, interviews with various department managers and a survey of auto component manufacturing industries. The identification phase led to the selection of twenty-six barriers based on literature and in consultation with industrial experts and academicians. The Interpretive Structural Modeling (ISM) qualitative analysis was used to understand the mutual influences amongst the twenty-six barriers by survey. However, in their GSCM implementation, especially for maintaining the environmental awareness, the supplier barrier is the dominant one. Finally the approach has been applied to ten auto components manufacturing industries in Tamilnadu, South India.

K.Mathiyazhagan, Kannan Govindan, A. Noorul Haq, Yong Geng (2020) "An ISM approach for the barrier analysis in implementing green supply chain management" Journal of Cleaner Production Volume 47, Pages 283-297.

Rakesh K. Mudgal, Ravi Shankar, Parvaiz Talib and Tilak Raj (2020), Owing to ever-increasing scarcity of natural resources and mounting concern in the market for 'green' products and processes, environmental issues are fast emerging as one of the most important subject of management's decisions in manufacturing organisations. Green business practices are not easy to adopt and implement, due to the presence of many barriers. The purpose of this paper is to identify and analyse these barriers. A questionnaire based survey was conducted to rank these barriers. The results of this survey and Interpretive Structural Modelling (ISM) approach have been used to model and analyse key barriers and drive managerial insights.

Rakesh K. Mudgal, Ravi Shankar, Parvaiz Talib and Tilak Raj (2020) "Modelling the barriers of green supply chain practices: an Indian perspective" International Journal of Logistics Systems and Management Vol. 7, No. 1, pp 81-107.

III. RESEARCH METHODOLOGY

Research is important both in scientific and nonscientific fields. In our life new problems, events, phenomena and processes occur every day. Practically, implementable solutions and suggestions are required for tackling new problems that arise. Scientists have to undertake research on them and find their causes, solutions, explanations and applications. Precisely, research assists us to understand nature and natural phenomena.

Research design

The researches use descriptive research design in this study. It involves survey and fact findings enquire of different kinds. The major purposes of descriptive research are the state of affairs as it exists at present.

Sample design

A sample design is a definite than for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample i.e. the size of the sample. Same design is determined before data are collected. There are many sample designs from which a researcher can choose.

Topic of the study - "A study on problem and benefits in Green Supply Chain Management Practices in TVS Supply Chain Solutions Ltd, Chennai"

Sampling Technique - Random sampling

Sample size - 150

Sampling Unit - Chennai

Questionnaire used

Open ended question, closed ended questions and likert scaling techniques has been used to measure the concept.



Data collection Methods

Data refers to information or facts. It includes numerical figures, qualitative and quantitative information. There are two types of data collection method. They are primary and secondary data.

Primary data

A primary data is a data which is collected for the first time for a particular interest to collect more information. In this study the primary data was collected through questionnaire.

DATA ANALYSIS AND INTERPRETATION

Chi-square test

The Chi-square test is an important test amongst the several tests of significance developed by statisticians. Chi-square is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance. As a non-parametric test, it can be used to determine if categorical data shows dependency or the two classifications are independent.

χ^2 is calculated as follows:

$$\chi^2 = \sum(O-E)^2/E$$

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	58.841 ^a	12	.000
Likelihood Ratio	69.995	12	.000
Linear-by-Linear Association	9.152	1	.002
N of Valid Cases	152		

a. 9 cells (45.0%) have expected count less than 5. The minimum expected count is .80.

INTERPRETATION:

As per the above table, it is inferred that the P value is 0.000; it is significant to 5% (0.05) significant level. The minimum expected count is .80. Thus

Degrees of freedom = (C-1) (R-1)

C - number of columns

R- number of rows

O - Observed frequency

E - Expected frequency

RELATIONSHIP BETWEEN NO.OF YEARS OF EXPERIENCE AND LACK OF KNOWLEDGE, EXPERIENCE TRAINING TO PERSONNEL

HYPOTHESIS TESTING

Null hypothesis (Ho):

There is no significant relationship between the no. of years of experience and lack of knowledge, experience training to personnel.

Alternative hypothesis (H1):

There is some significant relationship between the no. of years of experience and lack of knowledge, experience training to personnel.

alternative hypothesis is accepted and it is finding that there is significant difference between the no. of years of experience and lack of knowledge, experience training to personnel.



Correlation

Correlation analysis deals with the association between two or more variables. It does not tell anything about cause and effect relationship. Correlation is described or classified in several different ways. Three of the most important ways of classifying correlation are:

1. Positive and Negative
2. Simple, Multiple and Partial
3. Linear and Non-Linear

Karl Pearson’s method is popularly known as Pearson’s coefficient of correlation. It is denoted by the symbol ‘r’.

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{(n \sum x^2 - (\sum x)^2)(n \sum y^2 - (\sum y)^2)}}$$

The value of the coefficient of correlation as obtained by the above formula shall always lie between +1 and -1. When r = 1, it means there is perfect positive correlation between variables. When r = -1, it means there is perfect negative correlation between variables. When r = 0, it means no relationship between variables.

CORRELATION ANALYSIS RELATIONSHIP BETWEEN PRODUCT QUALITY HAS SHOWN IMPROVEMENT AND CUSTOMER SATISFACTION HAS INCREASED

Correlations

		PRODUCT QUALITY HAS SHOWN IMPROVEMENT	CUSTOMER SATISFACTION HAS INCREASED
PRODUCT QUALITY HAS SHOWN IMPROVEMENT	Pearson Correlation	1	-.033
	Sig. (2-tailed)		.687
	N	152	152
CUSTOMER SATISFACTION HAS INCREASED	Pearson Correlation	-.033	1
	Sig. (2-tailed)	.687	
	N	152	152

**** Correlation is significant at the 0.01 level (2-tailed).**

INTERPRETATION:

The Above table indicates that out of 152 respondents, co-efficient of correlation between product quality has shown improvement and customer satisfaction has increased is -0.033. It is below 1. So there is negative relationship between product quality has shown improvement and customer satisfaction has increased.

IV. FINDINGS

- 51.3% of the respondents are in the age group of between 30-40 years.
- 47.3% of the respondents salary is between Rs.15, 000-Rs.20, 000.
- 48.7% of the respondents have experience of 5-10 years.
- 52.7% of the respondents have highly aware on green supply chain management practices adopted in your company.

- 54.0% of the respondents have partly aware on green supply chain have the direct impact on environmental concern.
- There is significant difference between the no. of years of experience and lack of knowledge, experience training to personnel.
- There is positive relationship between income per month of the respondents and product quality has shown improvement.

V. SUGGESTION

- There should be awareness in adopting and implementing the green supply chain management practices for customers of the company and employees.
- There must be appropriate technology to implement green supply chain management practices in the company.
- The company must provide knowledge, experience and training to the personnel to



successfully implement the green supply chain management practices in the company.

- There should be top level management commitment in implementing green supply chain management in the company.
- The company must monitor its cost of implementation in order to prevent shortages in profit.
- There should be government support to adopt environmental friendly policies in the company. It must utilize the government support.
- The government must frame flexible rules to adopt green supply chain management and they lead the organization to attain green concept in the society.
- The adoption of green supply chain practices must ensure to improvement in product quality to the concern.

VI. CONCLUSION

Greening the supply chain is an industry issue that will only gain importance over the years to come. Continuous time and effort is required to

implement and enhance the green capabilities. The current system of operations in the organization TVS SCS, not only in India but around the world, is damaging the environment and soon a day will come when the damages done to our earth will become irreversible. There is a huge pressure on the organization TVS SCS to supply products that are environmentally friendly in their sourcing, production, delivery, usage and disposal. From the myriad of parameters affecting implementation of GSCM, cost of technology and complexity of processes are perceived to be as the major obstacle to implementing Green SCM, which therefore draws attention towards the need for cost effective and easy to implement solutions. A framework needs to be established to create awareness and spread the knowledge regarding GSCM practices showcasing the cost and efficiency benefit for the companies. While the challenges might change but the fundamentals of doing good business will remain the same. The leaders should see the green supply chain management as a core part of the business that can result in cost competitiveness and value creation in longer duration.