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## **ARTICLE A STUDY ON SIGNIFICANCE OF GREEN SUPPLY CHAIN MANAGEMENT IN MEDIUM SCALE INDUSTRIES**

**M.Vishnu<sup>1</sup>, M.John Paul<sup>2</sup>**

<sup>1</sup>*B.Tech., MBA., School Of Management Studies, Sathyabama Institute Of Science And Technology, Chennai, Tamilnadu, South India*

<sup>2</sup>*MBA ,MHRM ,M.PHIL ,TNSET,Ph.D.,Associate professor, School Of Management Studies Sathyabama Institute Of Science And Technology Chennai, Tamilnadu, South India*

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### **ABSTRACT**

Medium Enterprises in the Indian manufacturing industry have become one of the most prominent cogs in the global product supply chain and our country's social and economic progress. Green practices, on the other hand, are still in their early stages of application. The purpose of this report is to look at the main obstacles to green supply chain management in Indian medium manufacturing enterprises. This research intends to provide a suitable remedy to overcome those obstacles. I have used two spss tools namely Chi square and anova for analysis and also used percentage analysis.

*Keywords – Green Supply Chain Mechanism, Barriers In GSCM,MSI, Green Logistics, drivers of GSCM*

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### **1. INTRODUCTION**

In this modern era, impact of environmental contamination is the key complication which mankind faces every decade, the major emission of pollutants is caused from the growth of industrialization. Although the primary objective of any organization is to generate revenue, environmental concerns must also be in their Agenda. The growth of medium scale industries (MSI) in India has grown in recent decades.

These industries discover a larger employment opportunity when compared to other sectors of manufacturing The concept can be fully implemented when the government involvement is higher due to the knowledge and education on the concept can be provided to these industries can be assessed rapidly or some initiative by non-government bodies , according to earlier studies shows that the practice of the green supply chain management improves the brand image of the product among customers.

#### **OBJECTIVE OF THE STUDY:**

The study's main purpose is to identify the major challenges, barriers, and practical difficulties that medium-sized businesses and entrepreneurs encounter while implementing green supply chain management, as well as to suggest acceptable ways and approaches for removing those obstacles.

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### **2. REVIEW OF LITERATURE**

Chiou, T.Y. et al. 2011, the main aim of the study is to find the various influence of greening the suppliers and green innovation on environmental performance and competitive advantages in Taiwan, and it also deals with the green innovation in product, process and managerial perspectives

- Dr. Nagendra sohani, 2013, the study examines the various barriers and drivers of green supply chain management and It relates and summarizes the core knowledge In relation to green production, it corresponds with production and operations management.
- Haris aslam 2019, the study examines the Hierarchical Framework of Barriers to Green Supply Chain Management in the Construction Sector also the study says The internal practices do not influence corporate image directly or indirectly but the external practices had a significant impact on corporate image.
- Ghobadian, Holt.D 2010, The article deals with the fact that Environmental The progressive attitude (EA) is a significant predictor of GSCM activity, and innovative firms are also operationally very active. An empirical analysis of UK enterprises' green supply chain management methods.
- Ranjith, Karthick 2018, the study focuses on the implementation of green supply chain management and also deals with a comparative analysis between small scale industries in India and developed nations, the author also suggest various waste disposal methods to obtain the green supply chain management

### 3. RESEARCH METHODOLOGY

Based on my study I have used descriptive research. And also, I take 120 respondents for my study. I use questionnaires as Primary data and Secondary data from articles.

### 4. DATA ANALYSIS

a) Table shows the Designation of The Respondent in The Organization

Particulars	No. of Respondent	Percentage of Respondent
supply chain	36	30
Logistics	57	47.5
Packaging	27	22.5

TABLE-1

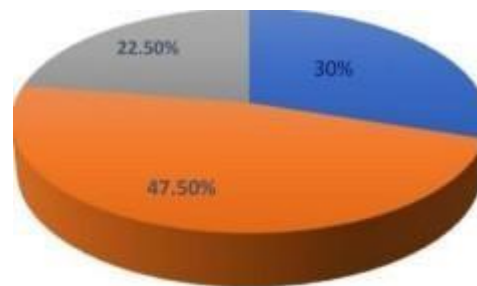


CHART-1

#### INFERENCE:

Majority of the respondents belong to the logistics designation category (47.5%) b)Table shows the waste disposals method currently practiced by the organization

Particulars	No. of Respondent	Percentage of Respondent
Segregation	14	11.7
Landfill	53	44.2
Composting	29	24.2
Recycling	24	20
Total	120	100

TABLE -2



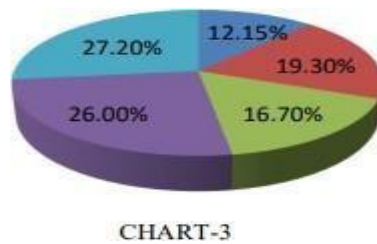
**INFERENCE:**

Majority of the respondents belong to the landfill category (44.20%)

c) Table shows the Barriers faced by the organization on implementation of green practices

Particulars	No. of Respondent	Percentage of Respondent
Lack of awareness	43	26
Lack of alternative technologies	45	27.2
Lack of government support	32	19.3
Slow rate of return	25	15.1
Fear of market competition	20	12.12
TOTAL	120	100

**TABLE-3**



**INFERENCE:**

Majority of the respondents believe that the main barrier faced is lack of alternate technologies (27.2%)

**CHI SQUARE:**

**Cross tabulation between number of employees and policies**

**INTERPRETATION:**

Since p value 0.115 is greater than 0.05 alternate hypothesis is rejected, null is accepted. Hence There is no significant association between number of employees with references to green practices in the organization

Number of employees * Policies Crosstabulation						Chi-Square Tests			
Count		Policies			Total	Value	df	Asymptotic Significance(2- sided)	
		we apply environmental criteria while purchasing decision made	we purchase Green (Non-toxic, Bio degradable, supplies, products and materials)	we specify electronics products using environmental assessment (EPEAT)					
Number of employee	Less than 200	22	22	12	56	7.430 <sup>a</sup>	4	.115	
	200-500	16	28	8	52				
	More than 500	5	2	5	12				
Total		43	52	25	120				

Pearson Chi-Square	7.430 <sup>a</sup>	4	.115
Likelihood Ratio	7.463	4	.113
Linear-by-Linear Association	.406	1	.524
N of Valid Cases	120		
a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 2.50.			

**INTERPRETATION**

The null hypothesis is accepted because the p value is greater than 0.05, while the alternate hypothesis is rejected. Hence There is no significance difference between policies in the supply chain management with regards to type of shipping materials used by the organization

**ANOVA:**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean
					Lower Bound
* Our packaging /shipping are reusable	50	1.86	.808	.114	1.63
our packaging / shipping are Bio-degradable	55	1.76	.666	.090	1.58
our packaging /shipping are recyclable	15	2.13	.743	.192	1.72
Total	120	1.85	.741	.068	1.72

ANOVA					
Policies	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.619	2	.810	1.488	.230
Within Groups	63.681	117	.544		
Total	65.300	119			

Policies		
Types of Sustainable/shipping material	N	Subset for alpha = 0.05
our packaging / shipping are Bio-degradable	55	1
Our packaging /shipping are reusable	50	1.86
our packaging /shipping are recyclable	15	2.13
Sig.		.075

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## 5. FINDINGS

- Majority of the respondents belong to the logistics designation category (47.5%)
- Majority of the respondents belong to the landfill category (44.20%)
- Majority of the respondents believe that the main barrier faced is lack of alternate technologies (27.2%)
- Majority of the respondents belong to the male (87.50%)
- Majority of the respondents belong to the age category of 26-53 (52.5%)

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## 6. SUGGESTIONS

Small-scale industries in India require long-term development, thus green product awareness and demand must be fostered. The study doesn't conclude on how this economical improvement can be accomplished, so further and more profound examination is suggested. Though some options have been explored, legislation, education, and government subsidiaries may be appropriate.

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## 7. CONCLUSION

Based on numerous literature reviews and data collecting, various hurdles and drivers of Green Supply Chain Management (GSCM) were identified in this study report. In most cases, these barriers and drives arise in the adoption of GSCM in any organization. As a result, these barriers and drivers must be addressed in order to overcome the challenges and ensure proper implementation of GSCM in the business. Another major reason preventing these companies from developing green supply chains is the expense. The cost factor can be eliminated by emphasizing the concept and demonstrating the advantages of implementing a green supply chain. The government should focus on encouraging and implementing the principle rather than making legislation more accountable.

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