

**ANALYSIS OF SCHEMES AND ELEMENTS OF SUPPLY CHAIN PROCESS IN
GARMENT EXPORT INDUSTRY INVOLVED IN MARINE TRADING**

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ABSTRACT

Recent times, the logistics and supply chain management industries in India have received more attention than they have in the past. The sector's growth has not kept pace with the expansion of the Indian economy as a whole, and this poses a danger to India's future competitiveness, despite its enormous potential. Keeping this in mind, this specific research was carried out in order to get a better understanding of the supply chain management system used by garment export facilities in the Tirupur area of Tamil Nadu. The study

intends to know about the schemes available for garment export through Marine trade, further, the study also identifies the important elements of supply chain competitiveness in garment industry.

Keywords: Supply Chain Process, Garment Export Industry, Schemes, Elements and marine trading.

INTRODUCTION

Over the last two decades, Supply chain management has proved enormously beneficial to businesses. Today's world of competitive environment and globalization requires to focus on increasing and demanding customers and all sectors have begun to see the supply chain as a strategic weapon for altering the current rules. Because of this, supply chain management and shareholder values are inextricably intertwined, and supply chain management will carry on playing an important role in the performance of industries in the future.

Supply chain management, in its most basic form, takes into account every facility that has an influence on the price and performs a role in making the product conform to customer requirements, from suppliers and production facilities to warehouses and distribution centers to retail outlets and shops. Every industry is focused on improving the efficiency of networks and enhancing capabilities to fulfill customer needs. The supply chain strategies help to a greater extent in enhancing the competitive advantages to businesses.

STATEMENT OF THE PROBLEM

1. Competitiveness of the company depends on cost being the major schemes, elements and supported by customer service, product innovation, product quality and delivery etc.
2. During the transportation of goods to the consumer it involves many problems like inadequate connectivity, labour problems and shipyard facilities.

SIGNIFICANCE OF THE STUDY

1. Supply chain management in the garment industry serves as a brand wheel that propels the textile sector forward
2. It is required that the outbound logistics and supply chain function in any garment export unit would guarantee that the correct product is directed to the correct client at the appropriate time, in the acceptable condition, and at the appropriate price.
3. Tirupur is one of India's most important garment export centres, and it employs a variety of supply chain management models.

OBJECTIVES OF THE STUDY

1. To study the schemes available for garment export through Marine trade.
2. To identify the important elements of supply chain competitiveness in garment industry.

RESEARCH METHODOLOGY

Source of data

The nature of the research is both analytical and descriptive in scope. The information in this study has been derived from primary sources. In the Tiruppur area, primary data will be collected utilising a mailed questionnaire approach from garment enterprises that have been selected for the study. For this study, secondary material has been gathered from books and websites, as well as a few magazines and newspapers as well as corporate reports.

Sample design

The population targeted for this study is the garment companies in the Tiruppur district in Tamilnadu. A total 661 companies out of 676 to whom the questionnaires were distributed is selected. A sum of 15 companies was found incomplete in their questionnaires. The sampling technique adopted for the study is simple random sampling.

TOOLS USED FOR THE STUDY

The statistical tools used for the study are:

1. Simple Percentage analysis
2. Mean score analysis
3. Chi square

LIMITATIONS OF THE STUDY

1. The study has been conducted in the Tiruppur district of Tamilnadu and hence the study is valid to this area.
2. The results are based on the response from the samples selected and that may be self-biased.
3. The study is made barely on the supply chain management of garment export industry involving marine trading and not on erstwhile modes of trading.

REVIEW OF LITERATURE

Swamynathan et. al., (2018), According to the report, the Indian textile sector provides employment for both unskilled and skilled workers throughout the country, directly employing more than 35 million people. The export of textiles and garments alone generates around 27 % of the country's foreign exchange profits. The Indian domestic textile and apparel sector is expected to reach a value of 141 billion US dollars by 2021, according to estimates. It is worth noting that there are nine Centres of Excellence for Technical Textiles

created around the country, demonstrating the significance the Indian government places on the textile industry. Three of these facilities are located in Mumbai, two are positioned in Coimbatore, and one is placed in each of the following cities: Ahmadabad, Kolhapur, Kolkata, and Ghaziabad. Supply Chain Collaboration in the textile sector has become more important for effective supply chain management, as well as for the textile units to maintain a competitive edge over their competitors, in recent years.

Suresh and Nixon Amirtharaj (2018), as previously said, the textile industry is comprised of a lengthy chain that includes raw - material production, supplement manufacture, apparel production and other similar events. All manufacturers are encouraged to use the SCM idea as a handy management tool as they attempt to enhance their product quality, lower their product and service costs, and shorten their product delivery and reaction times in a competitive industry. SCM, as it is commonly known, encompasses a wide range of activities, including but not limited to the following: inbound and outbound transportation management; warehousing; materials handling; order fulfilment; network design; inventory management; supply/demand planning; customer service; sourcing and procurement; packaging; and the management of IT support for a variety of functional areas. In the textile industry, India is quickly becoming a worldwide manufacturing base. For the Indian industry, particularly in the Tirupur district of Tamil Nadu, rising demand in both local and foreign markets is opening up a whole new universe of opportunity. Rawal et. al (2021), Poongodi M et. al(2022), Poongodi M et. al (2021), Dhiman P et.al (2022), Sahoo S.K et.al (2022), K.A et. al(2022) , Dhanraj R.K et. al (2020), Poongodi M et. al (2019), Poongodi M et. al (2020), M. M. Kamruzzaman et. al (2014), M. M. Kamruzzaman et. al (2021), Md Selim Hossain et. al (2019), Mingju Chen et. al (2019).

Dulababu et. al (2019) It was stated that the SCM in India is still at a fledgling level and is plagued by the following issues: a) the supply chain is quite expensive. b) A shortage of modern supply chain amenities, such as roads, trains, airways, and canals, to facilitate the movement of goods. The failure to make sufficient investments in information technology. Due to the absence of road and rail accessibility, agricultural output is being wasted. Perhaps the study concludes that India is the world's youngest country and that the country's development will continue for another two or three decades despite the fact that it has an insufficient skill set. According to Table 1, our country is ranked second, indicating that there is significant room for SCM growth through the implementation of the following strategies: a) Attract investments in information technology and information technology infrastructure in order to build SCM software for successful management. b) Leverage information technol-

ogy skills by drawing information technology engineers to the SCM domain. Through the use of MDPs and case studies, it is possible to align SCM strategy with business strategy, and policymakers in the business organisation will be able to merge the two strategies. Finally, a corporation can surpass its competitors in SCM if it possesses the characteristics listed below: agility and adaptability are two of the most important characteristics of an individual. c) Alignment of the axes Furthermore, it was discovered that the aforementioned goals may be achieved through effective cooperation, optimization, and connection.

ANALYSIS AND INTREPRETATIONS

Schemes Available For Garment Export Through
Marine Trade by the Government

Table 1 Descriptive Statistics

Schemes availed by the government	N	Mean	SD
TUFS	661	1.11	.316
CEPT	661	1.13	.340
SITP	661	1.09	.285
NTC	661	1.10	.298
Export promotions	661	1.11	.319
NIFT	661	1.09	.285
Welfare schemes	661	1.14	.346
Valid N (listwise)	661		

Source: Primary data

The companies agree towards usefulness of TUFS (1.11), CEPT (1.13), SITP (1.09), NTC (1.10), Export promotions schemes (1.11), NIFT (1.09) and Welfare schemes (1.14) provided by the government.

Comparison between membership of trading association of the companies and their acceptance on schemes available for garment export provided by the government

Ho1: There is no relationship between membership of trading association of the companies and their acceptance on schemes available for garment export provided by the government.

Table 2 Chi-Square

Schemes available for garment export	Membership of trading	N	Mean Rank	Chi-Square	Sig
TUFS	Yes	623	327.95	9.258	0.002
	No	38	380.97		
	Total	661			
CEPT	Yes	623	333.68	6.183	0.013
	No	38	287.00		
	Total	661			
SITP	Yes	623	332.80	3.945	0.047
	No	38	301.50		
	Total	661			
NTC	Yes	623	332.98	4.390	0.036
	No	38	298.50		
	Total	661			
EXPORT PROMOTIONS	Yes	623	324.83	37.062	0.000
	No	38	432.16		
	Total	661			
NIFT	Yes	623	330.15	0.887	0.346
	No	38	344.99		
	Total	661			
Welfare schemes	Yes	623	330.62	0.118	0.732
	No	38	337.18		
	Total	661			

Source: Primary data

There is relationship between membership of trading association of the companies and garment export schemes like TUFS (0.002), CEPT (0.013), SITP (0.047), NTC (0.036) and export promotions (0.000).

There is no relationship between membership of trading association of the companies and NIFT (0.346), Welfare schemes (0.732).

TUFS

The companies who don't have membership with trading association (380.97) have high level of acceptance towards TUFS scheme for garment export provided by the government.

CEPT

The companies who have membership of trading association (333.68) have higher level of acceptance towards CEPT scheme for garment export provided by the government.

SITP

The companies who have membership of trading association (332.80) have higher level of acceptance towards SITP scheme for garment export provided by the government.

NTC

The companies who have membership of trading association (332.98) have higher level of acceptance towards NTC scheme for garment export provided by the government.

Export promotions

The companies who don't have membership with trading association (432.16) have higher level of acceptance towards export promotions scheme for garment export provided by the government.

Important Elements of Supply Chain Competitiveness with Garment Industry

Table 3: Ranks given by the companies towards important elements of supply chain competitiveness with garment industry

Important elements	1									Rank
Cost	106	1	9	1	1	0	6	9	8	
Reliability	75	7	0	6	9	3	01	6	4	
Capacity	70	1	9	8	5	1	9	2	6	
Quality	59	8	5	7	9	6	6	0	1	
Delivery	48	11	1	4	5	1	6	6	9	
Product availability	66	9	4	00	7	9	0	1	5	

Important elements	1										ank
Innovative products	81	0	6	9	8	06	1	9	1		
Production planning	71	4	6	6	5	6	9	8	6		
Customer supplier relationship	85	0	1	0	2	9	3	00	1		

Source: Primary data

The above table shows about the ranking for important elements of supply chain competitiveness of garment industry and based on the ranks are plotted for calculation of garret ranking.

FINDINGS

- Schemes available for garment export through marine trade by the government

The companies agree towards usefulness of TUFS, CEPT, SITP, NTC, Export promotions schemes, NIFT and Welfare schemes provided by the government.

- Comparison between membership of trading association of the companies and their acceptance on schemes available for garment export provided by the government

The companies who don't have membership with trading association have high level of acceptance towards TUFS scheme and export promotion schemes for garment export provided by the government.

The companies who have membership of trading association have higher level of acceptance towards CEPT, SITP and NTC scheme for garment export provided by the government.

- Important elements of supply chain competitiveness with garment industry

Cost is considered to be important element of supply chain competitiveness with garment industry followed with customer supplier relationship, innovative products, reliability, production planning, capacity, product availability, quality and delivery.

SUGGESTIONS

- The ministry of commerce, should set up an SEZ in order to create the critical marketing and infrastructure to fill the gaps in the supply chain from garments export units to importers.

- The different Production systems must have different SCM systems, as the parameters hugely impact the performance and effectiveness of the Supply Chain.

- Industries must adopt Information Technology IT-based forecasting techniques. IT companies, various universities, and individuals and involved in developing newer algo-

rithms to improve SCM performance. The newer algorithms designed as per the customized needs of garment firms can give better forecasting results.

CONCLUSION

The garment industry in India has undergone radical changes due to technovation, globalization, and liberalization. Being one of the most important professions on the world, it is expected from the Indian garment industry to develop strategies on the supply chain without getting wooed by a short-run gap. Today's competition is SCM and logistics based.

The growth of any manufacturing is based on efficient logistics. Recent web-based technologies have had an impact on the design, manufacturing, logistics, and after-math service of products, specifically with reference to India.

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