

ISSUES INVOLVED IN LOGISTICS AND TRANSPORTATION IN TEXTILE INDUSTRY

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ABSTRACT

The textile segment consumes nearly 80% of the total dyes production, as the demand for the polyester and cotton in global market is high. The textile sector is one of the prime category of single product of exports for the exports the country. Supply chain management is the process of flow of materials from the supplier to the end customer. The paper focuses on the importance of transportation and logistics management in the new increasing competitive environment. The paper also discusses various constraints and limitations that the manufacturers have while entering the competitive market globally. The paper is based on secondary data. Reduction in total cycle time in manufacturing product, adopting new technologies can be beneficial for the manufacturers to enter in the global competitive market.

Keywords: Textile sector, supply chain technology, total cycle time, technologies, global market.

Introduction

In India, after agriculture the sector which provides massive employment is the textile industry. Textile industry provides employment for both capable or skillful workers as well as unskilled workers. The raw material may be man-made fibers, natural fibers, or synthetic fibers which are using the products of the chemical industry like dyes. The textile industry is the sector which generates second-largest employment in India. The textile industry offers employment to approximately 35 million over the country. Dyestuff industries are an important part of the chemical industries in India. The Indian dyestuff industries comprises of nearly 1000 small and 50 large scale units. The production of dyes from these units is nearly 1,30,000 tonnes, in which approximately 90% of the dyestuff production in India is from Maharashtra and Gujarat. This contribution is because of the availability of the raw materials. The largest consumers for dyes are paper, printing inks, textiles and foodstuffs. The textile

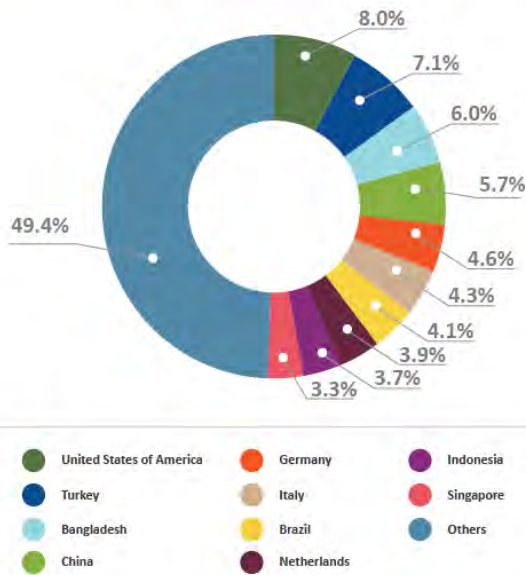
segment consumes nearly 80% of the total dyes production, as the demand for the polyester and cotton in global market is high.

Logistics can be termed as a movement of materials and flow of services from the origin point i.e supplier to the end point i.e customer. Supply chain management is widely used in buying of dyes & chemicals in textile industry. Supply chain management is the process of flow of materials from the supplier to the end customer. It is a process of planning, implementation and controlling the flow of materials which will result in cost effectiveness. E-business has generated an opportunity for organizations to improve the practices in SCM related to textile industry. It has been found through research that the companies those who have implemented supply chain effectively help them to achieve reduced cost. Many global companies set benchmark in cost in supply chain against the competitive organizations.

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TOP EXPORT DESTINATIONS FOR INDIAN DYES



Source: ITC (TradeMart; Value as of 2017; Value in %)

Supply Chain management is combination of flow of materials and information from the suppliers to manufacturers, to retailers, to final end consumers. Supply chain management also comprises of coordination & integration these flows both within and among the companies involved in the supply chain. The ultimate aim of any organization is to make the desired products available to the target customers at required time in proper quantity.

Supply chain comprises of suppliers, manufacturers, wholesalers, retailers, transporters and consumers. The manufacturer is responsible for all functions like receiving the customer request and fulfilling it by production, new product development, marketing, distribution of goods, finance involved in the entire process and sales after service provide to the customer. The supply chains can also be referred as the chain networks as mainly receives material and information as inputs from different suppliers and production unit products or manufactures the product that is required by the customers. In the textile industry the supply chain is i) customer places order, ii) purchasing of raw material, iii) manufacturing the product, iv) supply of the finished products at the retail outlets.

Literature Review

- I. J. Chen, et.al. (2004) revealed the growing importance of Supply Chain Management with the increasing globalization. The study focuses on the challenges that an organization faces while coordinating the entire supply chain, from upstream to downstream. The paper blended the three major approaches i) Supply management / strategic purchasing, ii) integration of logistics system and iii) supply network coordination. According to author, understanding the SCM is much more complex and implementing the idea of SCM into practice is not an easy task. The complex network involved in supply chain makes its implementation difficult, and along with the inter relation they also influence each other. As per the researchers, there is no proper theory for supply chain theory. The research proposed that the research in many literatures for SCM is restricted to certain aspect only and in future more research will be done on the complexities of supply chain activities.
- Bibekananda Basu (2010) emphasized the need of integration, proper planning, controlling and monitoring with the network. The author highlights that various departments like material management, distribution methods, inventory planning and control, production planning and control and transportation and storage and Quality services has to be taken care at the Textile industries. The author also focuses on the areas like customer service, setting higher targets with respect to business and profits, which can be a solution for cost reduction in supply chain management. The author concluded stating transparency in supply chain management could result in increased sales, higher customer satisfaction with reduced costs.
- Priyanshu Raparia (2017) in the research studied importance of supply chain management in textile industry and also the significance of the transparency/visibility in the supply chain which helps to transmit the data easily to the

stakeholders, customer. The researcher studied four different distribution channels. Inventory management is dependent on upriver and downriver activities. The author also studied various advantages that the textile industry would gain after the collaboration of different supply chain partners that are involved in the industry. The research paper concentrated on the major weak point at each stage of the supply chain like manufacturers, distributors, retail stores and finally the sales office.

- Dr. J. Rengamani (2017) in his research paper studied the increase in importance of logistics over the years. The author analyzed and studied the changes that organizations had towards the logistics. The paper states how the organization view of logistics of being just a movement of materials and storage has been changed and stated gaining importance, as logistics as a center point in the formulation of strategy and operational excellence in any organization for value addition. Many models have also been evolved over time to cope with the changing demands and needs of the market and also vary according to the services offered to the customer. The researcher concentrated on the internal factors of an organization for the study.
- Ruslan Beysenbaev, et.al. (2020) in the paper formulated some recommendations which will improve the Russian logistics system. Russia's logistics system was analyzed based on six indicators by using Logistics Performance Index (LPI). Two approaches were studied under LPI, in which first approach was about the implementation of timely delivery as per the LPI and second approach is after the successful implementation of first approach. The researcher has found that Russia logistics delivery time is on time and hence there is need to maintain the current level only. The researchers concluded that if the approaches are aligned with the recommendations given in the paper will result in positive changes in Russia's logistics system.

Importance of Logistics in Textile Industry

There is a significant increase in the importance of managing logistics and transportation for the export sector due to the competitive environment. It particularly requires:

- i. Managing the incoming goods flow from worldwide supplier proficiently,
- ii. Managing the production schedules quickly and reliably with the help of the subcontractors
- iii. Ensuring the buyer timely distribution of goods with the quality ensured.

Issues in Textile industry wrt logistics and transportation

Transport system and logistics of any sector directly impacts the finished product cost, as thus impacts the competitiveness of that particular sector. Thus analyzing the issue related to the transportation and logistics from various perspectives is important. Some of the issues affecting logistics and transport system can be as follows:

- 1) Performing activities those are necessary with respect to buyer's needs.
- 2) Cost that is involved in import and export shipments of materials.
- 3) Different participants (public and private) involved in the process of transportation and logistics.
- 4) Analyzing different supply chain models currently prevailing in the industry.

Textile sector is one of the most demanding and active sector in the world. The global networks demands textile industry to be most dynamic in terms of cost, quality provided reliability of the product and nearness to the market. From last few decades, textile industry has gained an important place in export market and thus a source of foreign investments. Though there is a need or growing importance in global market, textile industry faces many issues or challenges, that constraint them to enter into new competitive market globally. The constraints include limitations in modes of transport,

availability of infrastructure, custom procedures and policies, banking and financial policies related to trade and overall development of nation's transport and logistics system.

In addition to analyzing the logistics and transport service, it is important to consider following interactions:

- i) Interaction of different players in export sectors among themselves.
- ii) The logistics and transport system for import of materials.
- iii) The logistics and transport system for export of finished goods.

By focusing on the flaws between the above mentioned interactions and supply chain management, it is possible to intervene the success factors those impact competitiveness. By addressing the factors like movement of goods within the sector, the manufacturers can develop the tools which can help them to develop the tools that will help them to sustain competitively in the global market.

Opportunities that can improve performance in textile industry

The key opportunities that can improve performance in logistics and transportation in textile industry can be as follows:

- 1) Increasing the volume of output and the competence in export to handle larger amount of materials. Delays can increase the cost.
- 2) The custom procedures for the goods (for duty exempt) imported for the purpose of re-export should be simplified, at faster rate and made export friendly.
- 3) The exporters can reduce costs in vital areas such as freight and consignment by developing stronger relationship with their supply chain network partners so the operational challenges can be reduced and met easily.
- 4) Adopting technologies that can improve the operations can provide a significant opportunity to increase the reliability and efficiency and also build strong linkages between upstream and downstream partners.

- 5) Competent logistics and transportation can help manufacturers or exporters to create value for their buyers in the global competitive market by providing goods at comparative lower cost.

Innovations in Textile Industry

Innovation in textile industry process is acquiring importance to extent that the focus on technicalities in the textile industry has been handled by a separate department. The complex increasing demand of a customer, globally, has increased the importance of logistics and transport services in the textile industry. These increasing complexities are from i) cohesive manufacturing networks, ii) increasing usage of different transport modes like road, air, rail or maritime, iii) increasing JIT logistics concept.

As the complexity of demand is increasing, the processes required to complete the transactions trade involves number of steps, which include various players and also a legal transactions. As the process involves multiple stages and players, the cost at each step increases, which makes the manufacturer to compromise on the value of the final product in terms of quality, cost and efficiency of the product, ultimately, affecting the manufacturer's ability to compete globally.

Developing countries have limited capability to logistics and transport services which increases transaction costs to high end, thereby discouraging the competitiveness of goods. High transaction costs also restrict the ability of the manufacturers to take advantage of the opportunities in the international market.

CONCLUSION

The logistics and transportation in India is developing and it can be possible with the development of infrastructures and adoption of new technologies that will help the manufacturers to reduce the cost and provide materials at reasonable rate and effective services. At the firm level, the focus should be on reducing the total cycle time of manufacturing products so that the organizations can produce the goods at lower cost and gain competitive advantage over the competitors' even globally. Government policies play an important role in the

organizations effectively entering in the global market. It can be concluded that if the issues affecting logistics and transport in the textile industry can be handle and the organizations focus on the key parameters they can improve the performance in the global competitive market.

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