A Study of Opportunities and Challenges of Indian Textile Industry

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Abstract

This study examined the opportunities and difficulties facing the Indian textile industry. The textile sector is the second largest employer in India. The machinery can be upgraded to increase productivity, and new methods of processing and better management of working capital are also crucial factors in propelling the industry forward. The availability of skilled labor and the enforcement of labor rules are critical in the pursuit of global excellence. International borders present several obstacles for global standards to rise to the top of the trade that requires home productivity. Improved "Make in India," "Startup India," and "ease of doing business" can attract more money from outside.Indian textile firms are making a concerted effort to modernize their equipment remain competitive in the international market. The textile industry is undergoing a dramatic shift in focus toward technical textiles, or uses of textiles other than garments.The results of this study show the sectoral segmentation of corporate insolvency resolution processes, as well as investment and expansion in the textile industry.

Keywords: industry, textile, global, textile industry, productivity.

1. INTRODUCTION

India's textile industry employs more people in rural and semi-urban areas than any other sector of the economy, although contributing only 2% to the country's GDP. In India, there has been an ever-increasing call for the cultivation of organic cotton. It is incumbent upon producers and merchants to uphold standards and alleviate the condition of cotton farmers. There is a 91% decrease in water usage and a 62% decrease in energy consumption for organic cotton in regions without chemical pesticides (Ward and Mishra, 2019). Growers of cotton crops typically damage the environment using conventional methods by wasting water, polluting the air and water, and eliminating biodiversity through the use of pesticides. Some of the socioeconomic issues that have an impact on rural areas in India where cotton is grown include farm indebtedness, child labor, and gender discrimination. Cotton-growing rural areas in India are impacted by gender and other factors. According to Panigrahi and Rao (2018), Indian textile businesses' awareness of environmental issues allows them to take proactive measures to protect the planet through the adoption of sustainable business methods that also give them a market edge. For textile companies to get a competitive edge, they need money from both state and federal governments to adapt the technology for making eco-friendly textile products for their customers. The transition of Indian textile and apparel companies from the unorganized to the organized economy was aided by the Goods and Services Tax (GST). Future taxation by the Indian government could help the country improve its infrastructure and compete on a global scale (Khan and Soni, 2018). To strengthen state trade enforcement capacities, the Indian government has assisted a small number of private professionals, most notably transnational Indian lawyers, in obtaining specialized knowledge in trade law and policy (Shaffer et al., 2015). This change allows India to more easily hire private lawyers with competence in WTO law and cooperate with other parties under the protection of the states. India's central government handles any disputes that occur as a result of the country's efforts to comply with international trade law. The textile sector has yet to attain sustainability and a circular economy that benefits the environment, the economy, and society as a whole (Balanay&Halog, 2019). According to the World Bank, India ranks 77 out of 190 countries in 2023. This points to the potential for growth in India's textile industry as a result of the country's relaxed regulations for investment, technology transfers in production, trade, and improvement, and general friendliness toward business.As of July 31, 2018, only 2% of the world's cotton was used in cotton mills. By the end of 2018, that number was expected to rise to 4% (25.49 million metric tons). Cotton cultivation inside the country rose from 2016-2017's 108.26 lakh hectares to 124.44 lakh hectares, but the disappointing drop in

yield to 505 kg/ha from 542 kg/ha was cause for concern. The main reason for the decrease in yield was an infestation of pink boll worms in the central and southern regions. In 2016-2017, the figure rises to 370 million bales, up from 345 million in 2015-2016. Cotton imports of 15 lakh bales were factored into the expected total supply of 428.76 for the period of October 2018 through September 2018.

1.1 INDIAN TEXTILE INDUSTRY OPPORTUNITIES

India's textile business is strong because it has a wide range of fibers and yarns. Natural fibers include cotton, jute, silk, and wool, while manufactured fibers include polyester, viscose, nylon, and acrylic. In producer-driven value chains, it is the large, multinational companies that play a key part in coordinating the production networks. The textile industry is in dire need of capital investment and new ideas, just like the aerospace, computer, semiconductor, and manufacturing industries. Several exporting countries, the most majority of which are developing countries, rely on the participation of large retailers, marketers, and branded manufacturers to construct decentralized manufacturing networks. Industries that rely heavily on human labor, such as clothing, footwear, toys, handicrafts, and consumer electronics, are increasingly following this trend of trade-led industrialization. The manufacturing node in producer-driven value networks is often dominated by large manufacturers, while the design and retail nodes in buyer-driven value chains are mostly influenced by marketers and merchandisers. The apparel sector is a great case study for analyzing value chain dynamics in response to consumer demand. Due to the low barriers to entry into the clothing industry and the widespread practice of protectionism in this field by rich countries, the developing world is home to an unprecedented variety of garment exporters. The apparel sector is a great case study for analyzing value chain dynamics in response to consumer demand. By 2023, the estimated size of the global apparel market is $2.6 trillion, up from $2 trillion in 2018. The rising economies, particularly India, will be the primary growth drivers of the global apparel market. By 2023, Indiawill have the largest clothing market, growing by more than US$ 378 bn., and India will have the second largest, growing by over US$ 121 bn. The domestic demand in these two countries is enormous and rising, and their populations' purchasing power is rising, so together they will add around US$ 500 bn. to the global apparel market size by 2023. By 2023, the combined garment markets of India are projected to be larger than those of the European Union and the United States, at US$ 795 billion. India's gross domestic product grew by 7.2% in the fourth quarter of 2017–18, making it one of the world's fastest-growing economies. Increased disposable income and increased consumer demand both contribute to this expansion. India accounts for about 5% of the world's total textile and garment exports.The expansion of Indian e-commerce businesses opens up the potential for the country's textile industry in both the domestic and global markets. The leading companies in the Indian e-commerce market include Amazon, Flipkart, Jabong, and Myntra. India's textile industry is one of the oldest in the world and has existed for a while. Even today, the textile industry still makes up one of the major export contributors for India, accounting for over 13% of all exports. One of the main employers and one with a high labor intensity is the textile sector. Two significant segments make up the textile industry. First, the unorganized sector includes handicrafts, sericulture, and handloom, all of which are conducted on a modest scale using conventional equipment and techniques. The second is the organized sector, which includes the spinning, clothing, and apparel segments and uses contemporary equipment and methods including economies of scale. About 45 million people are employed directly and another 20 million indirectly by the textile sector. India exported $40 billion worth of textiles in total in FY 2015–16. The hand-spun and hand-woven textiles sector represents one extreme end of the textile industry's great diversity, while the sophisticated, capital-intensive mill sector represents the other. The majority of the textiles industry is made up of decentralized power looms, hosiery, and knitting. India's textile industry is one of a kind because of the country's long history with textiles and its dependence on agriculture for the production of raw materials like cotton. Products from India's textile sector can be found in a variety of domestic and international markets Kumar, R. S. (2018).

1.2 INDIAN TEXTILE INDUSTRY CHALLENGES

The unorganized sector and SMEs dominate India's textile industry, which is otherwise extremely dispersed. The textile industry is facing significant problems due to the shifting government regulations at the state and federal levels. Clothing is costly due to the Goods and Services Tax (GST) system. Raising interest rates and worker pay and salaries is another significant threat. The clothing business has a greater rate of turnover than others. The textile industry is receiving investment despite the federal government's efforts to attract foreign companies. Bangalore, Mumbai, New Delhi, and Tirupur are major centers of India's textile and garment industry. These factories can crank out woven and knitwear in every style and color imaginable, and they do it quickly and affordably. The convoluted, capital-intensive mill sector contrasts with the other extreme of the textile industry's tremendous diversity: hand-spun and hand-woven textiles. Hosiery, knitting, and dispersed power looms make up the bulk of the textiles sector. Bangladesh, and Sri Lanka all compete aggressively for the low-priced clothing market. The Indian textile industry faces serious difficulties in the international market because of tariff and non-tariff obstacles and quotas. The textile sector in India faces several concerns, including environmental and social ones.

2. REVIEW OF LITERATURE

Devraj, et al (2023) conducted a study onthe The post-colonial structure in the Indian clothing industry and how it contributes to the precarity of women employees. Decentralization of economic activity in emerging countries and neoliberal policies from the late 20th century have been blamed for increasing unemployment in India. This study analyzes the production, employment patterns, and women's work influenced by policies implemented in the Indian textile industry. Social preconceptions based on gender have contributed to the economic and social marginalization of women in the labor. The industry's growing focus on exports helped advance neoliberal policies that have since worsened already unstable working conditions.

Klassen, et al (2023) explained the study ofFashion Industry and Voluntary Sustainability Standards: Opportunities and Challenges for Creating a Circular Textile Economy.The promise to produce positive social, environmental, and economic sustainability results has contributed to the Circular Economy's (CE) rapid rise in popularity as a sustainability solution across the industry. Circular economy initiatives have begun to make use of voluntary sustainability standards (VSS), which are already widely employed in a wide range of industries for a variety of development goals. By drawing from a wide range of works and conducting expert interviews, this study provides a contribution to the field on CE in the fashion industry by providing an in-depth analysis of the compatibility between VSS and CE. The findings of this study are intended to provide a basis for future studies on textile sustainability and to be used as a resource by businesses, governments, and other organizations working to advance a circular textile economy.

Murugan, et al (2023) discussed the study onEmploying a Variety of Ergonomic Assessment Tools, Human Factor Analysis of Textile Industry Workers. Common causes of disability in the textile industry include musculoskeletal illnesses, cumulative trauma disorders, repetitive strain injuries, and repetitive motion injuries, underscoring the importance of ergonomics in preventing work-related sickness. The goal of this study is to assess the ergonomic risks associated with MMH operations in the textile industry, including those brought on by repetition, bending, awkward posture, heat stress, and contact stress. To do this, a variety of instruments will be used, including the NIOSH lifting equation (LI), the Rapid Upper Limb Assessment, and the Occupational Stress Inventory (OSH). Results from the NIOSH and RULA surveys were very similar, however those from the SI and Rodgers studies showed more severe muscle weariness.

Varshney, et al (2023) conducted a study ofClassification of Traditional Indian Textile Patterns Using Transfer Learning. Indian textiles have a long and storied history, and their designs are as varied as the regions in which they are most popular. Learning the craft takes time and effort, as does coming up with fresh ideas that fit in with current market tendencies.

In this study, we aim to categorize woven, painted, printed, and stitched fabric pattern designs of traditional Indian textiles using a database we've built and transfer learning with convolutional neural networks. This is the first effort of its kind, and it paves the door for future research and development in this area to create content-based image retrieval tools and automatic new designs.

Saccani, et al (2023) explained the studyAn empirical study in the textile and apparel industries explores the use of circular supply chain orchestration to address Circular Economy problems. The textile and apparel industries, which have a significant negative influence on the environment, are particularly in need of making the switch to a Circular Economy. As a result, this study offers a method for orchestrating circular supply chains to assist the apparel and textile industries in overcoming obstacles to the Circular Economy. This study combines the streams of supply chain orchestration, resource orchestration, and circular economy to better understand circular supply chain orchestration. This study will assist managers of the textile supply chain in developing challenge-response orchestration systems as part of the transition to a Circular Economy.

Harsanto, et al (2023) discussed the study of Sustainability Innovation in the Textile Industry: A Systematic Review. The purpose of the study is to gain an awareness of the way that sustainable innovation is currently being used in the textile sector. For this study, the authors conducted a systematic review to gather data on sustainable innovations in the textile industry. Thematic analysis was used to conduct qualitative analysis of 41 publications that were found through the systematic search and met the criteria for inclusion. Researchers focus on sustainability-related innovations has grown, as evidenced by the study's findings. Based on the results of this study, it appears that ecological innovation is more prominent than social innovation when it comes to sustainability discussions in the textile business.

Hiremath, et al (2014) conducted a study ofAspects of textile workers' health and safety from the textile industries in Solapur, India. The textile industry in India is vital to the country's economy and supports millions of people both in the countryside and the cities. The health and safety of textile workers in Maharashtra, India, specifically the city of Solapur (one of the important textile clusters) is the focus of this study. The overall health, muscle strength, lung capacity, and visual acuity of 180 workers from the designated textile companies of Solapur city were evaluated using various methods. Study showed that many employees have experienced breathing issues, increased muscular tone, vision impairment, and musculoskeletal disorders.

Gurusamy, et al (2012) explained the study of Women entrepreneur development in Indian textile industry. The growth of female business owners in India's textile sector is the focus of this study. The promotion of entrepreneurship is an essential element of long-term economic and social progress. Subsidies for female business owners and special rules for schedule caste and schedule tribal entrepreneurs, and women are provided by the Indian government, and are used by women business owners to learn about the possibilities and advantages of the textile industry. This study also details the many programs in India aimed at empowering women business owners.

Study	Focus	Methods	Key Findings
Devraj, et al (2023)	Indian textile industry's post-colonial structure and its effects on women workers	Analysis of production, employment patterns, and policies	Social preconceptions based on gender contribute to economic and social marginalization of women in the labor force, and neoliberal policies have worsened unstable working conditions
Klassen, et al (2023)	The potential of voluntary sustainability standards (VSS) or the fashion sector to create a circular textile economy	Literature review and expert interviews	VSS and the circular economy are compatible and can advance sustainability in the fashion industry, providing opportunities for businesses, governments, and other organizations
Murugan, et al (2023)	Workers in the textile sector face ergonomic dangers	Ergonomic assessment tools	Musculoskeletal and other work-related disorders are common in the textile industry, and ergonomic assessments can help identify risks and prevent

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			illness
Varshney, et al (2023)	Indian traditional textile designs are categorized	Transfer learning with convolutional neural networks	Categorization of woven, painted, printed, and stitched fabric pattern designs using transfer learning with convolutional neural networks can pave the way for future research and development of image retrieval tools and automatic new designs
Saccani, et al (2023)	Managing circular supply chains in the clothing and textile sectors	Resource and supply chain orchestration	In the textile and apparel industries, circular supply chain orchestration can help overcome obstacles to the adoption of a circular economy, aiding supply chain managers in developing challenge-response orchestration systems
Harsanto, et al (2023)	Sustainable development in the textile sector	Systematic review and thematic analysis	Ecological innovation is more prominent than social innovation in discussions of sustainable innovation in the textile industry
Hiremath, et al (2014)	Solapur, India's textile workers' health and safety	Various health assessments	Textile workers in Solapur face health risks, including breathing issues, increased muscular tone, vision impairment, and musculoskeletal disorders
Gurusamy, et al (2012)	The textile business in India is dominated by women entrepreneurs	Literature review and case studies	Government subsidies and programs have helped promote women entrepreneurship in the Indian textile industry, leading to greater economic and social progress for women

3. METHODS

The difficulties and potentials of the Indian textile industry in the new India have been conceptualized. **Table 1**explains the credit requirements for growth and investment in the textile sector.**Table 2** shows the corporate insolvency resolution procedure (CIRPS) distribution by sector as of 2022.

3.1Scale

A total of 385.50 million bales of cotton were anticipated to be consumed by mills, small businesses, and non-textile companies, with a carry forward of 43.26 million bales due to anticipated exports of 70 million bales.

4. RESULT

According to **Table 1**, the High-Powered Steering Group recommended spending a total of Rs. 98,550 crores on input factors like new machinery and technology in 2022 to help the textile industry grow and meet international quality and productivity standards.This illustrates the procedure for dealing with a company's insolvency. As of December 31, 2018, the textile, leather, and clothing industry had 60 active resolutions out of a total of 99 resolutions. **Table 2** shows the breakdown of insolvency resolutions by industry; of the 99 total, 39 have been finalized, allowing the affected businesses to attract healthy levels of both domestic and international investment and credit.

Table 1: Credit requirement for investment and growth in textile industry

Segment	Investment (in crores)
Ginning and processing	1,800
Spinning	10,600
Weaving	22,950
Knitting	3,150
Woven processing	25,800
Knit processing	8,550
Clothing	24,000
Jute	500
Silk, wool	1,200
Total	98,550

Investment (in crores)
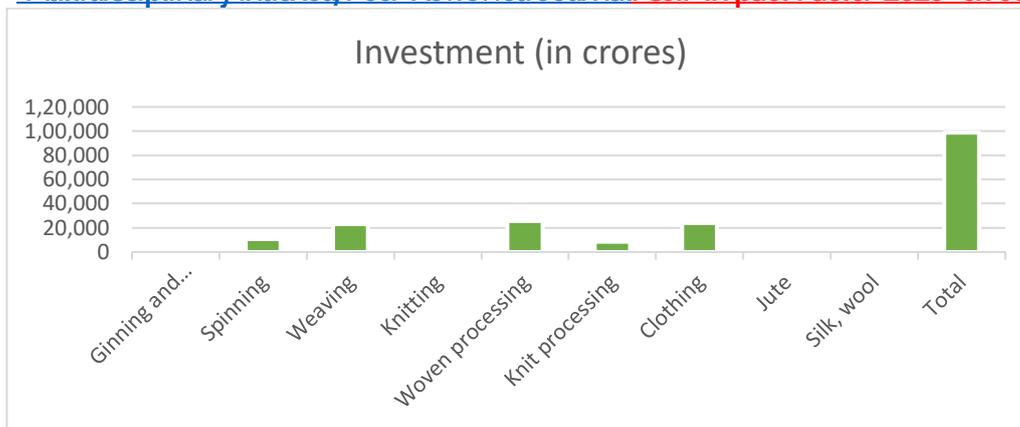
Table 2: Sector wise distribution of corporate insolvency resolution process (CIRPS) as on 2022

	Closed	*Ongoing*	*Total*
Manufacturing	**259**	**353**	**612**
Food,beveragesandtobaccoproducts	24	50	74
Chemicalsandchemicalproducts	26	35	61
Electricalmachineryandapparatus	20	36	56
Fabricatedmetalproducts	16	26	42
Machineryandequipment	34	36	70
Textiles,leatherandapparelproducts	39	60	99
Wood,rubber,plasticandpaperproducts	30	37	67
Basicmetals	55	61	116
Others	15	12	27
Realestate,rentingandbusinessactivities	87	148	235
Construction	47	106	153
Wholesaleandretailtrade	69	82	151
Hotelsandrestaurants	17	24	41
Electricityandothers	12	26	38
Transport,storageandcommunications	18	21	39
Others	77	138	215
Total	**586**	**898**	**1,484**
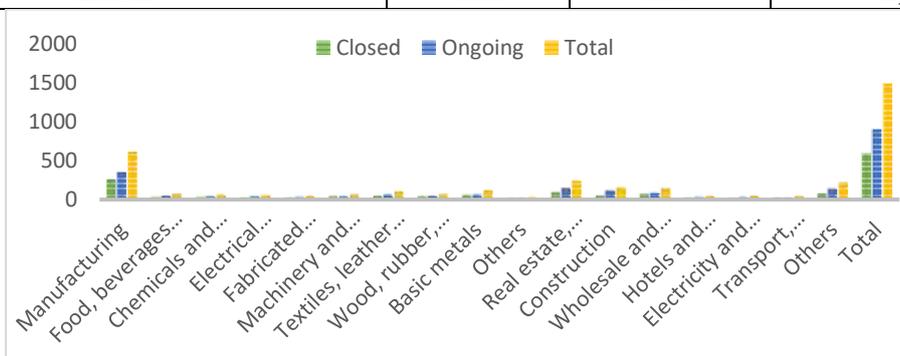
Conclusion

India's textile industry is second only to China's. New India's aspirations to break into worldwide markets are reflected in the study focus on the difficulties and opportunities facing the Indian textile sector. The textile industry is dramatically shifting its focus to technical fabrics, which are used for purposes other than apparel. India sends a diverse selection of textiles to over a hundred different countries. The textile and garment business in India employs 45 million people, making it the country's second-largest sector of the economy. There is a significant role played by the textile industry in India's economy.

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