



# Review Of Textile Trade Between India, It's Neighbours And The ASEAN Countries.

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## ABSTRACT

India has a significant presence in the textile and apparel industry. In spite of excellent value chain, availability of raw materials, availability of labour, low cost of manufacturing, policy & legislative support the textile industry is facing many challenges. The internal concerns are many, such as: quality issues, fragmented nature of the textile industry, dominance of unorganized MSMEs, irregular production cluster development, longer supply chain etc. The external concerns have been restricted to three distinct areas for this study, i.e. the ASEAN- India FTA, Competition with Bangladesh and Competition with Vietnam. The Indian textile industry has not been able to have favourable outcomes from the ASEAN-India FTA (AIFTA). This is evident from the fact that there has been sharp increase in India's imports from ASEAN as compared to its exports to ASEAN. Post AIFTA India's trade deficit with ASEAN has increased. The market access given by India and FDI from ASEAN also haven't been able to create the desired impact on the trade relationships between the two signatories. The other challenge is the competition with immediate neighbours of India. Bangladesh and Pakistan have been competing with India in the global textile trade. Vietnam is the third challenge faced by the Indian textile industry. The competition intensifies as India, Bangladesh and Vietnam have interests in the similar markets for their growth. India has been on the backfoot at various levels as compared to Bangladesh and Vietnam while dealing with markets like EU, Canada etc. The review paper is an effort to understand to analyze the trends and structure in India-ASEAN textile industry and trade. The paper carries out an intensive SWOT and PESTEL Analysis of the Indian textile industry and textile trade to understand various dimensions to the textile industry and trade. The paper also analyses various remedies India can employ to face the competition posed by the neighbours (Bangladesh) and the ASEAN countries (Vietnam) in the textile industry. India can use 4 R's as remedies for the betterment of the Indian Textile Industry: Reform, Rejuvenate, Revisit and Realign.

## KEY WORDS

ASEAN, PESTLE Analysis, Textile Industry, Trade, SWOT Analysis

## INTRODUCTION

**The Indian Textile Industry:** Agriculture plays an important role in the Indian economy (Kekane Arjun, 2013) which has been helping and aiding various industries and one being the textile industry. India has been part of the 'silk road' (Encyclopaedia Britannica, 2020) and has been able to consolidate the textile industry to its advantage. The Indian textile industry contributes 2% share in the country's GDP. The largest share of cotton (23%) and jute (62%) production in the global market the country stands at an advantage. Silk, polyester and fibre production make India rank as the second largest producer in the world. The country also ranks as the second largest global manufacturer of textiles and clothing. With a 5% of global trade India is also the second-largest exporter of apparel and textiles in the world. Textile was the third largest exported product in 2019 after Chemicals and Engineering Goods. It amounts to almost 15% share of the total global exports.

**The Asian Textile Industry:** Globally, the Asian region continues to remain the textile manufacturing hub. Abundant availability of raw materials, lower cost manufacturing base along with cheap labour are some of the reasons for the region's textile industrial growth. China leads the Asian block followed by India, Bangladesh, Vietnam, Pakistan, Sri Lanka and Indonesia. There is domestic consumption of textile, depending on the consumer buying behaviour and it varies from country to country. However a large portion of textile both in the form of yarn and finished products (apparels or garments) is exported. The major exports markets for the region are the United States, European Countries, United Kingdom and Japan. Both India and China have been competing in the global markets and have been trying to reach out to new markets in countries like Mexico and Russia and consolidate in the existing US & European markets.

**The ASEAN Textile Industry:** The ASEAN countries are not far behind. Valued at 16% of its GDP the textile industry in Vietnam had second largest export turnover in the country in 2019, with exports to the US, EU, Japan & South Korea. Indonesia is another country in the block which has shown great potential. Apart from the internal consumption of the textile industry produce, it exports to mainly the United States, Middle East, EU, and China. The domestic consumption in Thailand is low and it has been exporting textiles and garments to US, Japan, and the United Kingdom. It has started focusing on the Russian market for its exports. To consolidate this presence and give a push to the Textile Industry, the ASEAN Federation of Textile Industries (AFTEX) was established in the year 1978. The member states of ASEAN came together to form this regional body that comprises of National Textile and Garment Industry Associations.

**India- ASEAN Trade:** Implementation of the India-ASEAN Free Trade Agreement (AIFTA) was initiated from January 2010. The objective of India was to expand its economic and political relationship with its South Asian neighbours. India's 'Look East Policy' (1991), the 'Comprehensive Economic Cooperation between ASEAN and India' (2003) and the AIFTA of trade in goods (TIG) (2009) formed the basis of the engagement between India and ASEAN Countries. In 2010, Indian and ASEAN signed the Comprehensive Economic Cooperation Agreement with Vietnam, Indonesia and Malaysia.

#### Matters of Concern:

- 1) **ASEAN-India Free Trade Policy (AIFTA):** The trade between India and ASEAN has witnessed a shift in the pre and post AIFTA. There is a sharp increase in India's imports from ASEAN as compared to exports to ASEAN countries. There is a distinct pattern seen if the data of merchandise import and export is divided into two distinct time periods, pre-AIFTA and post-AIFTA.

**Merchandise Exports:** The pre-AIFTA exports in 2001 were USD 3 billion which increased to USD 18 billion in 2009 with a CAGR of 22%. The post-AIFTA exports in 2010 were USD 23 billion and grew to USD 36 billion in 2019 with a CAGR of 5%.

**Merchandise Imports:** The pre-AIFTA imports in 2001 were USD 4 billion and increased to USD 24 billion in 2006 with a CAGR of 22%. The post-AIFTA imports in 2010 were USD 30 billion and grew to USD 57 billion in 2018 with a CAGR of 8%.

**Trade Deficit:** Some reports also suggest that India has been on the receiving end of the ASEAN CEC Agreement. India's total trade deficit with ASEAN has increased from USD 8 billion in 2009-10 to USD 22 billion in 2018-19. ASEAN accounts for 9% of India's global trade, while India accounts for 2.8% of ASEAN's global trade. India's trade and economic interaction with ASEAN Countries has seen a 23% rate of increase.

**Market Access:** The data shows that under the AIFTA, India enabled greater market access to its partner countries and had less access in return. ASEAN countries eliminated tariffs on 50.1% and 69.7% lines while India eliminated tariffs on 74.4% lines.

**Other Issues:** ASEAN accounts for nearly 10% of FDI in India. ASEAN countries had a considerable share of Indian imports (10.6%) and exports (10.4%) in 2016-17. Key markets for India for textile and apparel exports are; USA (18%), China (14%), UAE (17%), UK (6%) and Bangladesh (5%).

- 2) **India and its Neighbours, particularly Bangladesh:** India is not only competing with China, which is an established competitor in the global textile market but has considerable competition from its neighbouring countries like Bangladesh and Pakistan. Under the World Trade Agreement, the EU has given preferred access (duty free) to Bangladesh in its textile and apparel market as the country falls under the Lowest Developed Countries (LDC). Indian garment exports attract 9-10% duty when exported to EU. The US, Canada and Japan have given access to their market to Bangladesh under their respective GSP schemes. In 2018, Bangladesh had a 6% share in global clothing market with garments exports worth USD 32.92 billion. India on the other hand has just 4.1% share with USD 16.14 billion worth of garments exports. Bangladesh the cost of labour is the lowest in South Asia (USD 101 per month), however the productivity of its workers is more than his

counterparts in the region, including India (USD 257). The country also has a low power cost of USD 0.09-0.12 / kWh. Bangladesh has attracted USD 2.15 billion FDI while India attracted USD 3.2 billion between the period of April 2000 to March 2018. World Bank data shows that India's exports to Bangladesh is worth USD 2.25 billion while its imports are USD 336 million for textile and clothing. Key markets for Bangladesh for textile and apparel exports are; USA (18%), Germany (16%), UK (10%), France (7%) and Spain (6%).

- 3) **India and ASEAN, particularly Vietnam:** India (along with China) is facing tough competition from the ASEAN Countries. Countries like Myanmar, Indonesia, Philippines, Thailand and Vietnam have strong textile market. The EU has given preferred access to Vietnam in its textile and apparel market due to its LDC status and also by meeting the EUs sustainable development expectations. More than 50 countries, including Australia, Canada, China, France, Germany, India, Italy, Japan, Republic of Korea, South Korea, the UK, etc have a double tax avoidance agreement with Vietnam. Today the US receives more garments from Vietnam (and Bangladesh) than from India. The monthly wage of Vietnam is USD 216. In the last 10 years (till 2019) the total merchandise exports of Vietnam grew at an annual average of 18% while India's merchandise exports grew only at 5%. In 2010 Vietnam had a trade deficit of USD13 billion which became a surplus of USD 47 billion in 2019. India on the other had increased trade deficit, from USD 130 billion in 2010 to USD 156 billion in 2019. India's exports to EU have increased 1.6 times as compared to Vietnam's 4.4 times between 2009 and 2018. Key markets for Vietnam's textile and apparel exports are USA (42%), Japan (12%), South Korea (10%), China & HK (6%) and Germany (3%).

The **objectives** of this review paper are;

1. To analyze the trends and structure in India-ASEAN textile trade.
2. To carry out SWOT and PESTEL Analysis of Indian Textile Industry and Textile Trade.
3. To analyze various remedies India can employ to face the competition posed by the neighbours (Bangladesh) and the ASEAN countries (Vietnam) in the textile industry.

## ANALYSIS

This review paper on textile trade between India, its neighbours and the ASEAN Countries focuses on understanding the Indian textile industry, various macro factors in trade and textile trade between India and ASEAN. Trade forum sentiments and collation of various opinions shared on the subject were used to do a SWOT and PESTLE Analysis.

## SWOT Analysis of Indian Textile Industry and Trade

### Strengths:

1. **Raw Material:** India produces 23% of the world's Cotton and 62% of world's Jute. It holds the second position in the production of Silk (11%) in the world. It also is the second largest producer of polyester and fibre in the world.
2. **Weaving Looms:** India has the largest number (64%) of the global looms.
3. **Employment:** As the second largest employer (after agriculture) the Indian textile industry provides direct employment to roughly 4.5 crore people. Estimates suggest that another 6 crores are provided employment in the sectors allied with the textile industry.
4. **Global Exports:** With 5% of global trade share of exports, India ranks as the second largest exporter of textiles and apparel.
5. **Labour:** India has been historically and culturally a textile manufacturing and user country. Skilled labours and crafts men are available and at a very cheap rate.
6. **Manufacturing:** The low manufacturing costs (as compared to many developed and developing nations) is a great boon to the textile industry in India.
7. **Domestic Demand:** The domestic textile and apparel market in India was USD 100 billion in 2018-19 which grew at a CAGR of 10% since 2005-06. The market is expected to grow at a CAGR of 12% and expected to reach to USD 220 billion.
8. **Cost Competitiveness:** India, according to a report by International Textile Manufacturers Federation (ITMF), is ranked as one of the most cost-efficient textile manufacturing countries in the world. The country has been ranked as the third most competitive country in terms of ring yarn manufacturing. The report also ranks India as second in terms of knitted and woven ring yarn fabric manufacturing.
9. **Retail and E-Commerce:** India is the 5<sup>th</sup> largest global destination in the world for retail. Similarly, the e-commerce business in India is expected to grow from USD 38.5 billion in 2017 to USD 200 billion by 2026.

10. **Contribution to Industrial Production:** The Indian textile industry contributes nearly 14% of the total industrial production of the country.

#### Weakness:

1. **Quality:** The contamination levels in India are very high. This impacts the quality of fibre both in terms of the fineness and its length. There is a need to make good designs of international standards to stay relevant in the global market. Reports suggest that only 5% of fabric is produced in the organized mills that have quality control in place. More than 60% of the fabric is produced in the looms which has poor quality control measures in place. The remaining, i.e. 20% from handloom sector and 15% kitting sector have some quality control in place.
2. **Unorganized Weaving Sector:** Around 95% of the Indian weaving sector is unorganized.
3. **Fragmented Nature of Industry:** The organized sector contributes to only 5% of the fabric production in the country. The predominance of unorganized sector does not allow room for uniformity and growth momentum. India does not have large fabric manufacturers as compared to China and the United States. The decentralized structure of the garment industry leads to high fabrication and overheads costs. Typically, the cost structure of garments would have 55% as material cost, 22% as fabrication cost, 15% as overheads cost and 9% as finishing cost.
4. **Predominance of MSMEs:** The Indian textile industry is dominated by the MSMEs. Inadequate know-how, low on research and innovation, low technology upgradation causes low productivity and automation levels.
5. **Irregular Development (Production Clusters):** India has around 6400 textile, handloom and handicraft clusters. However only 50 clusters are responsible for majority of the fabric produced in India.
6. **Labour Laws:** The sector is largely unorganized; the labour laws and the implementation of the laws is another hurdle in the industry's growth story.
7. **Technology & Machinery:** The industry is fragmented and lacks modern manufacturing machinery and technology like their counterparts in the global scenario. This leads to a lower manufacturing and productivity levels.
8. **India- ASEAN FTA:** The FTA that came into force in 2010. There is a sharp increase in India's imports from ASEAN as compared to exports to ASEAN countries. The provisions of the FTA on rules of origin, non-tariff barriers and the degree of market access, better customs procedures are some road blocks and concerns that have been raised by the Govt. of India in 2020. The rising trade deficit of India is also a huge concern for the country.
9. **Supply Chain:** The Indian textile and clothing industry has the most complex and longest supply chains in the world. There are nearly 15 intermediators between the farmer and the consumer. This contributes to the lengthening of the lead time and also increase in the cost. Also, the supply chain in India is highly fragmented.

#### Opportunities:

1. **Value Chain:** India has an advantage of the entire value chain in the textile industry, which is currently uncompetitive.
2. **Manufacturing Excellence:** India must target to produce more consistently and reliably than its competitors (ASEAN, China, Pakistan and Bangladesh). It needs to work on the trends in the global manufacturing, aim at the growing fashion industry, develop flexible supply chain, emphasize on sustainability and realign the roles of buyers and suppliers.
3. **Diversification:** There is scope for diversification with new product development and innovation, focused towards both the domestic and global markets.
4. **Technology:** There is tremendous scope for the upgrading technology that will help the manufacturing process and the overall output in the industry. India needs to focus on effective cost saving measures such as introduction of newer technologies and maintenance of existing machinery.
5. **Foreign Direct Investment (FDI):** Post liberalisation, India is a promising destination for FDI in the textile sector. The Govt. of India has allowed 100% FDI in the textile sector under the automatic route. During the period of April 2000-June 2019, India received FDI of USD 3.2 billion for textile sectors.
6. **Scheme of Integrated Textile Park (SITP) & Mega Integrated Textile Region and Apparel (MITRA) Parks:** The Indian Govt. has already sanctioned 59 textile parks under the PPP model. In the federal budget of 2021 the Govt. proposed to develop 7 Textile Region and Apparel (MITRA) parks aimed at doubling the industry size to USD 300 billion by 2025-26.



7. **Newer Markets & Consolidation of Old Markets:** There is potential in newer markets such as Russia, South America, Japan etc. There is need to develop a competitive edge to deliver quality product of international standards and consolidate the existing US and EU markets.

#### Threats:

1. **Rising Neighbours:** Last decade has seen the rise of India's neighbours, especially Bangladesh in the global textile landscape. The country ranks 3<sup>rd</sup> after China and India in the Asian textile manufacturing hub. The country is also resource rich as far as raw materials like jute is concerned. Bangladesh apparel exports (USD 33 billion) have surpassed Indian exports (USD 17 billion) in FY 2019. Pakistan is another country in the Asian block which has a competitive edge to India. These countries have been able to have a greater inroad in the Middle Eastern market too.
2. **Vietnam:** The country is also the part of the ASEAN Countries. A late entrant in textile it has been able to establish itself as a cheap manufacturing destination and has been able to export apparels to various markets globally. Today after China, Vietnam is the fourth largest exporter for clothing, garments and textiles worldwide. The country earned USD 39 billion in 2019 and has a year-on-year increase of 8%.
3. **China:** The leader in textile trade in Asia, the country dominates the export market. The textile exports from China amount to nearly 37% of the global textile export. The textile industry contributes around 7% of the country's GDP.
4. **Pandemics (COVID 19 like):** The COVID 19 pandemic one of the most damaging natural calamity has shaken up humanity and impacted the global and local economy.

#### PESTLE Analysis of Indian Textile Trade

##### Political:

1. **Focus on 'Ease of Doing Business':** With the push for reduction of red-tape in the necessary permissions and paperwork for businesses. According to the World Bank Report- Doing Business 2020, India ranks 63<sup>rd</sup> amongst the 190 selected countries in 'Ease of Doing Business'. It has jumped 79 positions from 142<sup>nd</sup> rank in 2014 to 63<sup>rd</sup> rank in 2019.
2. **Policy Framework:** Govt. of India initiatives such as 'Make in India', 'Skill India', 'Start-up India' and 'Stand-up India' have been able to generate positive sentiments in the industry and the markets.
3. **Atmanirbhar 3.0:** The budget for FY 2020-21 saw a huge allocation of funds (in tune of Rs. 1.45 lakh crores) for the manufacturing sector (including the textiles). National Technical Textile Mission was proposed with a budget of Rs 1480 crores to be utilized till 2024. A total of Rs. 27300 crores allocation was done for the promotion and development of industry and commerce (including textiles).
4. **Scheme of Integrated Textile Park (SITP) & Mega Integrated Textile Region and Apparel (MITRA) Parks:** The Indian Govt. has already sanctioned 59 textile parks under the PPP model. The model allows upto 40% participation from the private sector. In the federal budget of 2021 the Govt. proposed to develop 7 Textile Region and Apparel (MITRA) parks aimed at doubling the industry size to USD 300 billion by 2025-26.
5. **Others;**
  - a) **Atmanirbhar Bharat Rozgar Yojna:** Under this scheme the Govt. of India will continue to pay 24% EPF to relieve financial burden on the manufacturers.
  - b) **Skilled Man Power:** In order to ensure a steady supply of man power the Union Cabinet, GoI approved Rs. 1300 crore budget for skilling and up-skilling more than 10 lakh people in the labour-intensive textile sector.
  - c) **Cargo Clearance:** The 24x7 cargo clearance facility was proposed for extension. This will be applicable across 14 sea ports and 13 airports to ensure faster clearance of import and export cargo.
  - d) **The Emergency Credit Line Guarantee Scheme:** The scheme includes the textile sector (amongst other sectors) and aims at clearing financial challenges faced by the existing players and provide a platform for new players to establish in the textile industry.
  - e) **Production Linked Incentive (PLI):** The PLI is focused at increasing manufacture and export of Indian technical textiles. The scheme is aimed to fuel the V-shaped recovery plans of the economy.

**Economic:**

1. **Fastest Growing Economy:** India is considered as a fastest growing economy with 10% growth in FY 2020 as recently predicted by Standard & Poor's Ratings.
2. **Liberalized FDI Regime:** The Indian Govt. has allowed 100% FDI in the textile sector under the automatic route. FDI under automatic route do not require a prior approval either by the Government of India or Reserve Bank of India (RBI).
3. **Bilateral Agreements:** India has signed some major agreements which have boosted the textile and apparel exports. The bilateral agreements with developed nations who are the major importers of textile is lesser than those with the developing nations.
  - a) **Free Trade Agreements or FTA:** South Asia Free Trade Area (SAFTA), Bhutan and Sri Lanka.
  - b) **Preferential Trade Area or PTA:** Asia Pacific Trade Agreement (APTA), Afghanistan and Chile.
  - c) **Comprehensive Economic Cooperation Agreement or CECA:** Association Of Southeast Asian Nations (ASEAN), Malaysia and Singapore.
  - d) **Comprehensive Economic Partnership Agreement or CEPA:** Japan and South Korea.
  - e) **Generalized System of Preferences or GSP:** European Union.
4. **Goods and Services Tax (GST):** Under the newly implemented GST, the rate structure for the cotton fibre is at 5% and for man-made synthetic fibre at 18%. Silk and jute are totally exempted from the GST purview.
5. **COVID 19:** The pandemic affected India like any other country in the world. Like every industry impacted, the textile industry too was hit by the pandemic and subsequent lockdown. The pandemic impacted production (unavailability of raw materials), labour (migration), cancellation/differing of orders led to inventory build up, cashflow constrains, supply chain disruption etc. However, on the other side the textile and garment sector did make some remarkable humanitarian efforts. The mass production of masks and PPE kits. India became the second-largest manufacturer of the PPE Kits in the world.

**Social:**

1. **Per Capita Income:** The Indian per capita income in 2019 was recorded as 6920 PPP dollars as compared to 1210 PPP dollars in 1991. This has led to higher disposable income and increased the buying capacity of the Indian consumer.
2. **Young Demography:** With more than 50% of its population below the age of 25 and more than 65% below the age of 35 the median age of Indians is 29 years. This huge human resource is the fuel for any growing economy. According to the World Bank data the Indian workforce is over 472 million strong in 2020, which constitutes 34 % of the total population of the country. The unemployment rate in December with 9.1% was the highest in 2020.
3. **Consumer Behaviour:** India has been known for its textile, handloom and handicrafts. The consumption within the Indian market is amply evident with the high domestic demand and consumption. Consumption of textile products and goods has evolved drastically. In the past the fabric of one's clothing was often related to the class or led to the socio-economic profiling and segmentation. The textile was largely hand-spun or hand-woven and had a cost. The consumption was modest. The post industrialization and mass production of machine spun and woven materials made textile products more accessible and affordable. The advent of synthetic materials and mixed or blended variety of fibres has changed the demand further and affordability has increased tremendously. The demand for non-woven fabrics has seen an increase in the down-stream industries such as automotive, construction sectors, personal care, packaging etc. There is a growing demand for home textile with the increasing middle class and the growing disposable income. Lifestyle changes and the need for grooming have changed the consumer perception and consumer buying behaviour.
4. **Conscious Consumerism:** The textile and apparel consumers are become aware and are conscious of the fact that their brands and manufacturers follow environmental and ethical considerations while producing their products and goods.

**Technological:**

1. **Modernization and Automation:** The industry is largely unorganized and dominated by the smaller players. Automation of process and manufacturing intelligence are two crucial factors for growth in the international economy. Automation and intelligent manufacturing will boost production and quality; however, modernization and automation have a cost. There is an increase in demand for automated machinery that use robotics, however there is an apprehension that machines will cause unemployment. The change has begun, a survey Willis Towers Watson revealed that the Indian textile factories will double their automation efforts by

the next three years. According to some sources there are 1.9 million power looms out of the 5 million looms in the country. The rapid phase of automation has its own problems; cost of machines is greater than cost of labour, breakeven will take years, the Govt.'s job guarantee scheme is skewed and doesn't help the scenario.

2. **A-TUFS under Start-up India:** The Government of India introduced the Amended Technology Up-gradation Fund Scheme (A-TUFS). This credit linked capital investment subsidy is aimed towards 'Make in India' and 'Zero Defect and Zero Effect' in manufacturing. This scheme not only facilitates supplementing of investment, aids productivity, improves quality, generates employment but also helps exports and import substitution in textile industry. Indirect promotion of investment in textile machinery manufacturing is also part of the scheme. This scheme is aimed to create employment for 35 lakh people and enable investments worth Rs 95,000 crore by 2022.
3. **E-commerce and Retail:** The advent of e-commerce has given a boost to the Indian textile and apparel industry. The Indian retail market is dominated by food and grocery (67%) followed by apparel and accessories (8%). Retail industry accounts for over 10% of India's GDP and provides 8% of the country's employment. The online retail market is estimated to be 25% of the total retail market in India. This is estimated to increase to 37% by 2030. A joint study by ASSOCHAM and Resurgent India showed that about 85% of the amount spent on e-commerce was for apparels.
4. **Internet and Smart Phone:** India has young demography and it has seen a drastic increase in the internet and smart phone penetration. Each month the country adds approximately 10 million internet users. The number of smart phone users have increased from 5.4 out of 100 in 2014 to 26.2 out of 100 in 2018. It is estimated that one in every three Indian's uses a smart phone for shopping.

#### Legal:

1. **Industrial Relations and Security:** There are various labour laws that are govern the industries. Some estimates suggest there are around 200 odd state laws and 50 odd central laws. In 2019, the Ministry of Labour and Employment, Govt. of India had introduced four Bills on labour codes to consolidate 29 central laws. These Codes regulate: (i) Wages, (ii) Industrial Relations, (iii) Social Security, and (iv) Occupational Safety, Health and Working Conditions. The implementation of the laws has always been a bottle neck and a concern. Some studies have found that more than a fifth of workers in the textile industry do not receive minimum wages. This causes a lot of attrition of labour and they move from factor to factory.
2. **Legalisations and Rules:** India has various legalisations in relation to the industry and environment. There are 06 legalisations that cover water pollution, 02 legalisations that cover air pollution, 02 under environment protection and 06 under the hazardous substances and waste related legalisations. There are some rules that are also applicable, such as Noise Pollution (Regulation and Control) Rules, 2000, Ozone Depletion Substances (Regulation) Rules, 2000. Apart from these the textile industry is governed by various indirect legalisations related to agri-business, import and exports, taxations etc. Various Govt. Departments both at the federal level and the state level are responsible to ensure the compliance and monitoring of these legalisations and rules.
3. **Consumer Guidance and Protection (Eco-labelling):** In order to increase customer awareness in 1991 the Govt. of India launched the eco-labelling scheme for products known as 'ECOMARK'. The mark helps the customer to easily identify environment-friendly products. Textiles have also been included under the said mark provided by the Govt. of India.

#### Environmental:

1. **Fertilizers and Pesticides:** Studies have shown that the second-most damaging agricultural crop in the world is Cotton. Around 25% of all pesticides used globally are put on cotton crops. Also, the crop is irrigated with a combination of fertilizers and pesticides and this causes the chemicals to percolate in the ground and contaminate the ground water table.
2. **Decomposition:** The production process of artificial fibres like polyester and lycra creates pollution but these materials are hard to recycle. It takes 30-40 years to decompose. Each year more than 90 million pieces of clothes end up in landfills.
3. **Manufacturing Process:** Manufacturing process in textile industry comprises of spinning and weaving, this undermines air quality. The process of dyeing and printing of textile consumes massive quantity of water and chemicals. These are released in the environment and cause contamination. The wet-treatment such as de-sizing, pre-washing, bleaching, dyeing and printing of the fabrics is another hazardous process in manufacturing. Volatile Organic Compounds (VOCs) released in the process can harm the environment. The

inks and dyes used for colouring of textiles is made of chemicals. These chemicals are harmful as they are released in the environment or are absorbed in the body.

4. **Energy & Water Consumption:** The processes require large quantity of energy (electricity) and water. Studies have shown that spinning consumes around 34% of energy, while weaving consumes 23% of energy, chemical wet processing consumes 38% energy and other processes consume 5% energy. Around 200 litres of water is consumed to produce 1 kg of fabric.
5. **Air Pollution:** Studies have shown that 10% of global carbon emissions are on account of the apparel industry. The industry is also second largest industrial polluter. Other air pollutants such as Aniline Vapours, Chlorine and Chlorine Dioxide, Hydrogen Sulphide, Nitrous Oxides, Sulphur Dioxide and Volatile Organic Components are produced in various stages of the textile production.

**Remedies:** Based on the SWOT Analysis and PESTLE Analysis, the following remedies can be adopted by India to face the competition posed by the neighbours (Bangladesh) and the ASEAN countries (Vietnam) in the textile industry. We propose the **4 R's** for the Indian Textile Industry: **Reform, Rejuvenate, Revisit and Realign.**

### 1. Reform:

- a) The fundamentals of the Indian textile industry are strong. But in order to make it competitive both for our internal consumption and for the global consumption there is need for process automation and intelligent manufacturing. Quality improvement from the source (raw material) to the finished product is essential. Focus needs to be on a 'convergence' based approach. Efforts to incorporate quality improvement measures need to begin with sectors such as agriculture (Cotton and Jute), sericulture (Silk) and animal husbandry (Wool).
- b) The sector is highly unorganized and dominated by MSMEs. Efforts need to be made to bring the MSMEs into the organized sector. The Govt. need to think of incentivization and relaxations to facilitate these businesses to upgrade and become organized.
- c) Uniform development and opportunities for the various handloom, handicraft and textile production clusters. Greater emphasis needs to be given to the Govt. of India initiative such as the Special Purpose Vehicles (SPVs).
- d) The Indian textile industry needs to adopt Supply Chain Management (SCM). This includes not just the use of technology but to also look at information sharing, planning, resource synchronization and global performance measurements. This will help to lower the inventories, increase productivity, lower the manufacturing cost, shorten the lead time, give higher profits and result in greater customer loyalty.

### 2. Rejuvenate:

- a) The textile industry is labour intense. It is important to understand this and ensure the mechanisms to enhance productivity and quality are in place. There is need for better labour laws and implementation of these laws. The new codes introduced by the Govt. of India to regulate wages, industrial relations, social security, and occupational safety, health and working conditions needs to be implemented in letter and spirit.
- b) Upgrading has been classified into four types. These are functional, process chain and product. (Humphrey & Schmitz, 2002) The functional element includes upgrading the skills of labours. Many of the exiting labours in textile industry have been working since generations, mostly an informal training setup adopted. There is need to upgrade the skills of the labour in order to bring quality and efficiency. Process upgradation can be achieved through technology. Automation and intelligent manufacturing are the need of the hour. The use of modern machines that use Nano-technology and robotics need to be promoted.

3. **Revisit:** Many experts suggest that India should enter FTAs only when the agriculture and manufacturing sectors have been prepared adequately (Biswajit Dhar, 2019). The FTA success also lies on various players. Cooperation of the private sector, competitiveness in the economies of both the nations, transportation and communication links are vital in boosting trade links with one another (Gaur, 2003). The focus in regional engagement should shift from politics to economics. The governance structures and outlooks of the countries plays an important role in bilateral trade and the implementation of such trade agreements. The provisions of the FTA on rules of origin, non-tariff barriers and the degree of market access, better customs procedures are some road blocks and concerns and they need to be addressed. India needs to relook at much larger market



access given to some of the countries under its FTA. There needs to be similar access to their market, which is currently a concern. India needs to understand that ASEAN is a regional alliance of countries and it primarily aims at economic and political stability of its member countries. The import-exports, trade deficit, market access and may more issues need to be brought back to the drawing table and discussed.

4. **Realign:** India needs to look at newer partnerships and agreements. India needs to push for the long-pending agreements with European Union (EU) and Eurasian Economic Union (EAEU). India should also consider joining the Regional Comprehensive Economic Partnership Agreement with the 16 countries (including ASEAN countries). The Indian industry and the Government should come together and explore other markets such as Hong Kong, Israel, Japan and South Africa.

## CONCLUSION

India is a vibrant and growing economy. The textile and apparel industry is an integral part of the country's economic growth story. Agility is the key to sustainable development. With the fast changing trends and the competition around, it's important for the textile industry to rise up to the occasion. It is essential to move ahead with quality improvement, upgradation, technology adoption, defragmentation, uniform development and supply chain management. Labour is the backbone of this labour intense industry. Efforts to create a conducive work environment with better wages is the need of the hour. Trade in today's globalized world is a necessary for the country's economy. It is important to take measures to ensure that the trade between India and ASEAN goes in the desired directions and in the interest of both the partners. Course correction and steps to improve various aspects of the bilateral trade agreement are needed now more than ever. Newer partnerships and trade agreements to explore new markets and to consolidate the existing textile trade markets is an opportunity that's knocking at India's doors.

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