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## 8 Investigating Social and Environmental Impacts of the Indian Clothing Sector

**Abstract:** The clothing sector is one of the oldest trades, having import and export practices from all corners of the world. Clothing is one of the most prominent economic activities in the globally competitive world. It has been innovating to satisfy the growing demands of customers. The buying preference in the clothing industry has been ever-changing, uneven and hyper-individual. Increasing demand in its consumption has exponentially increased production. Consumers demand affordable clothes and find quick disposal convenient, leading to increased harmful waste generation. The inferior composition of material processing leads to enhanced soil contaminations and excessive wastage of water, resulting in massive environmental and social degradation, which is often beyond repair. Natural fabrics are now increasing in demand to address the health and environmental concerns of many of the current consumers. Thus, sustainability is becoming the primary concern for some fashion brands, both in terms of projecting the right image and modifying the manufacturing processes to address these rising awareness and concerns. The present chapter explores the environmental and social impacts of the Indian clothing sector through a theoretical investigation from past research insights.

**Keywords:** clothing, sustainability, environmental, fashion

### Introduction

Go green is the new mantra that is finding space among the fashion cravers. Worldwide campaigns for the environment lead by young leaders like Greta Thunberg have attracted the attention of youngsters. The same demographic group experiments with fashion the most. Thus, new-look and the environment have become a natural mix. The consumer is now monitoring ecological issues in many purchase decisions. Today, individuals have begun searching for “Green Items” all over the place. For materialistic

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things, customers' choices are rooted in solace, style, stylish allure and so forth, yet presently more on eco-cordiality.

The clothing industry needs a definition that includes sustainability as its parameter. A cloth before reaching the end consumer runs through various processes. The stages often include: planning, gathering raw material, spinning, weaving, dyeing or printing, cutting, stitching and packing the final product (Esteve et al., 2017). The process employs hard labour and technology through factories. A design-centric fashion-prone product that eludes attire with short shelf-life has arisen as a strong environmental and social concern. Negative impacts are born through wastage and other contaminations from the manufacturing of textiles (Muthu, 2014).

## Scenario of the Indian Clothing Industry

The clothing industry in India is diverse, as is India (Dana, 2000). The product range and segmentation range from traditional handlooms of silk and handicraft products to ultra-fine machine knitted fabrics. The Indian clothing industry has a strong value chain, from yarn to apparel. The mix of labour-intensive and capital-intensive manufacturing was well-balanced. However, it is now leaning toward capital due to the technologically advanced and capital-intensive manufacturing process, which has increased spinning, weaving and processing. The domestic textile industry generates \$140 billion in revenue, of which \$40 billion comes from exports (Majumdar et al., 2020). This growth has been significantly aided by an increase in the middle-income group population and improved purchasing power of lower-middle-income group households. India produces a lot of raw materials. Irrigable crops such as cotton, jute, wool and silk are abundant. It is a significant competitive advantage for the Indian clothing industry.

Furthermore, India has a plentiful supply of labour, giving the Indian clothing industry a competitive advantage. The policy framework for India's clothing sector is to promote growth and development, such as 100% foreign direct investment in the Indian clothing sector. The benefits and advantages of the new textile policy of 2020 are increasing investment in the Indian clothing sector (Jain & Mishra, 2020).

## Environmental Impact of the Clothing Sector

Cotton, jute and man-made fibres are examples of natural fibres. Petrochemical fibres such as Lycra, elastic and polyester are examples of synthetic fibres. Synthetic fibres are simple to use, care for and withstand high demand (Laitala et al., 2018). The negative impact of synthetic fibres is also significant, as they are difficult to recycle and cause pollution during the manufacturing process. It can take decades for fibres to decompose.

Cotton production has a significant impact because it is a widely used raw material in the clothing industry. Cotton is a water-intensive crop that uses much water. According to recent reports, cotton production in India alone consumes 25% of the world's insecticides and 10% of the world's pesticides. It has risen in response to the increased demand for cotton clothing (Madhav et al., 2018). As a result, the demand for insecticides and pesticides is increasing, negatively impacting the environment. Water scarcity is increasing as a result of conventional cotton farming (Muthu, 2015).

The clothing and textile industries consume a lot of non-renewable resources. This is wreaking havoc on the environment. Petrochemicals such as rayon, polyester and nylon are harmful to the environment. Rayon, for example, is made from wood pulp. It is a lengthy chemical process that results in deforestation and air pollution. Furthermore, other fabrics, such as viscose, contain harmful chemicals that endanger factory workers (Hossain et al., 2018).

Harmful discharges from textile plants are polluting the air. According to environmental studies, air pollution from the clothing industry is the second-highest industrial air pollutant. The machinery used in the clothing industry includes boilers, thermopacs and oil generators, all of which contribute significantly to releasing hazardous gases into the atmosphere.

The amount of water used in the textile manufacturing process is enormous. It is a different use of water because cotton cropping absorbs it as well.

The clothing industry should, ideally, not require packages for transportation safety. For transporting products from factories to retail stores, batch packaging is essential. The unnecessary use of packaging can be avoided (Zamani, 2014).

## Temporary Employment

In today's globalised world, the clothing industry is like a jigsaw puzzle. Short-term employment is created as developed-country demand rises. It creates a small window of opportunity for developing countries to have an unlimited labour supply. The agony is that these workers face serious health consequences solely as a result of their employment. Increased temperatures and production accidents and an unorganised, unaware, unhealthy environment and long working hours add to labourers' toll. Child labour and worker exploitation have been reported in some countries as a result of prosperous clothing industries (Zamani, 2014).

## Women in the Labour Force

The number of female labourers in this area has increased from an average number to an enormous number. Female workers are subject to unequal treatment, including lower pay and limited opportunities for career growth, while male workers enjoy better benefits and higher positions (Resta & Dotti, 2015).

## Labourers' Rights

According to the Indian Factories Act of 1948 and also the Shops and Establishment Act, labourers should not work more than 48 hours per week. Given the importance of sticking to the conveyance plan, laborers discovered it to be seriously problematic for long periods throughout the season. When there is a high abroad fare order, labourers, including child laborers, will generally work for 36 hours at a stretch in fitting units (Freise & Seuring, 2015).

## Well-being and Safety

Workshops in developing countries often have fewer strict guidelines than those in developed countries. When working conditions are poor, workers' health suffers from health risks such as spinal pain, varicose veins, asthma, premature delivery, corrosiveness, and eye fatigue, as well as various wounds (Freise & Seuring, 2015).

## Relevant Studies

Choudhury (2014) used the life cycle assessment approach to investigate the environmental impacts of the textile industry. Bhar (2016) investigated the environmental impact of the Indian textile industry. Due to rising consumer demand, production is accelerating. This research aims to address and quantify the adverse effects of the Indian textile industry on the environment and consumer health. There has been a negative impact reported both inside and outside the workplace. Manufacturing industries have high levels of water contamination and noise pollution. The hazardous products emitted by the textile industry contribute to acid rain and global warming.

Kane (2001) investigated the dangers of the spinning industry. According to the study, cotton dust and noise pollution are hazardous to labourers. The industry is both physically and environmentally hazardous. Accidents, workplace fires, and other physical harm to employees working in the clothing industry are examples of physical haz-

ards. The study recommended some steps to reduce environmental and physical risks in the clothing industry. According to the findings of this study, producers must adhere to strict rules and guidelines when carrying out their manufacturing processes. Workers must be trained to avoid physical accidents on the job. Maintaining humidity and using respirators at work can help to reduce the risk of adverse effects.

Kant (2011) discussed the environmental effects of textile dyeing. Any surface would benefit from concealment. Regardless of how unique its constitution is, it will undoubtedly be a mistake as a business surface if it is inadmissibly concealed. The creation and application of designed tones for surface shading have thus become a massive industry today. The presence of sulphur, naphthol, tank tones, nitrates, acidic destructive, cleaning agents, proteins chromium blends and significant metals such as copper, arsenic, lead, cadmium, mercury, nickel and cobalt, as well as explicit aide manufactured mixtures, can be toxic. Other dangers are exacerbated by the cloth manufacturing process, which dissolves solutions in water such as formaldehyde-based shading fixing, chlorinated stain removers, carbon-based hydro conditioners, etc.

Kozlowski et al. (2012) discussed the ecological and social impacts of the design industry. The clothing industry has been placed in the spotlight as a significant ally of overall natural and social issues. A life-cycle assessment is a standard tool for investigating the characteristics of all stages of a product's life.

This chapter provides a framework for the planned business by combining life-cycle and accomplice examinations. The paper depicts how the identification of partners and their tendencies, obligations and obligations can cause the unexpected development and utilisation of appropriate courses of action and ventures to respond to natural and social concerns within the context of corporate responsibility to society. Objectives are: (i) to understand the scenario of the Indian textile industry; (ii) to explore the environmental impacts of the Indian clothing industry; (iii) to find out the social impacts of the Indian clothing industry; and (iv) to suggest recommendations for ethical clothing.

## Findings

Secondary data sourced from various authentic information centres exhibit the argument in this chapter. The environmental and social impacts of the clothing and textile industry are the mainframe explanations of the chapter. These impacts are studied based on previous research to gain insights. The objectives will be to examine the various hypotheses formulated. The result obtained will be discussed further based on previous research insights and theoretical evidence. This study will finally extend recommendations for ethical fashion.

India's clothing and textile industry uses petrochemicals and instant production cycles to meet the increasing demand for clothing and fashion (Eryuruk, 2012). Multiple studies claim that the clothing industry's manufacturing process wastes water,

causes air pollution, causes workplace conflicts and accidents and promotes volatile employment opportunities (Claudio, 2007). There is no other way to offset the negative environmental effects of the clothing industry than through ethical fashion and sustainability (Shishoo, 2012).

The clothing and textile industries hurt the social environment in a variety of ways. As previously stated, child labour is encouraged due to the rising demand for clothing and textiles. Workers claimed to have been exploited to increase production. It is worth noting that the number of female workers is growing, but with unstandardised rules and regulations. In India's clothing and textile industries, there is a significant wage disparity between men and women.

Furthermore, workplaces are more hazardous to one's health due to chemicals and high temperatures (Maia et al., 2013). Several industries reported workplace sexual harassment. As a result, the social environment in India is negatively related to the clothing and textile industry.

## Recommendations and Conclusion

This chapter concludes that the clothing and textile industry's conventional practices in India today adversely impact the ecology of the planet as well as Indian society. Adverse impacts include air pollution, water pollution, noise pollution, global warming triggering acid rain, worker's exploitation and child labour. It recommends control through a shift in the approach to sustainable practices in the clothing industry.

Sustainable fashion approaches include collaborative efforts to address the clothing industry's adverse impacts. The sustainable clothing industry satisfies consumer demand by considering the social and natural environment. Consumers are recommended to alter their demand patterns as per environment and health standards.

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