

Impact of Fast Fashion on Sustainability & Environment

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ABSTRACT - Fast fashion garments, which are affordable and widely available, revolutionized the technique of how individuals bought and discarded fashion. By retailing huge quantities of items at low-slung rates, fast fashion has to turn out to be a key corporate model, resulting in increasing clothes consumption. All classes of consumers now have access to the latest trends as a result of fashion's "democratization." Each piece of clothing has its narrative. There are several environmental and social costs involved with the textile business, such as cotton growing that requires a lot of water, dyes that are dumped into local water sources without being cleansed, and low wages and poor working conditions for textile employees. According to our findings, fast fashion's unwelcome outwardness at every stage of the manufacturing chain has created a global environmental justice crisis that has to be addressed. Textile engineers and those who work in or live around them have many environmental problems. As a result of expanding consumption habits, masses of heaps of fabric leftover are currently being disposed of in landfills and unfettered sceneries. This is predominantly relevant in low-slung- and middle-income nations because ample of this excess winds up in second-hand clothing marketplaces (LMICs). In these countries, environmental and occupational health standards are frequently lax. This paper looks into the legal roles of commerce, governments, customers, and researchers in encouraging ethical consumption and sustainable production.

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KEYWORDS: Sustainability, Fast Fashion, Environment, Natural Resources

I. INTRODUCTION

"Fast fashion" refers to today's widely available, low-cost clothing. The term "rapid" refers to how quickly shops can bring new fashions from the runway to the shelves to keep up with demand. Supply chains have become progressively intercontinental as an outcome of globalization and the formation of a global budget, shifting fiber creation, textile manufacturing, and clothing construction to areas with lower labor costs. Low-cost clothing manufacture is aided by demand for low-cost clothing, which is subsequently outsourced to down- and middle-income nations to keep prices low (LMICs). Each year, the global style market spends \$1.2 trillion on 80 billion new articles of clothing. The United States munches more apparel and materials than any country on the earth [1].

More than 60% of global material exportations are at this time are completed in poor nations. Currently, Asia is the world's chief provider of apparel, accounting for more than 32% of global exports. [16] Nearly all fabrics for fast-fashion stores are produced in China, Bangladesh, Vietnam, Indonesia, and other

impoverished Asian nations. Textile production is dominated by these and other primarily non-white countries. It's no accident that fast fashion manufacturers choose this location to manufacture their goods. These countries' lax environmental rules allow merchants to mass-produce clothes without fear of legal repercussions. [17]

On an international scale, conservational impartiality and fast fashion Environmental justice, rendering to the Environmental Protection Agency (EPA), is defined as "the equitable conduct and evocative connection of all persons, nevertheless of

race, shade, or nationwide derivation" [5]. Superfund (hazardous waste) sites are disproportionately found inside or near communities of color in the United States, according to methodical study and practice. High-income countries shoulder the ecological and professional costs of mass production and disposal, but low-earning, low-wage workers and women in LMICs endure the brunt of the effects. To understand the extent of worldwide prejudice produced by affordable clothing consumption, it is necessary to



expand the ecological impartiality paradigm to include the askew impression practiced by persons who generate and marshal our clothing. Environmental justice advocates should focus on sustainable corporate practices, consumer behavior, as well as rapid fashion reduction in order to achieve Sustainable Development Goal 12 (SDG 12), which requires national and sectoral policies to promote sustainable consumption and production.

Sustainable brands have a long history. Wanted by a limited consumer base; part of the "hippy" image style. However, sustainable fashion has become conventional as well as among originators and customers alike with an increase in aesthetic appeal for a wider audience. Because of this, consumers have a need not just buy into the brand's ethics as well as purchasing a desirable, contemporary vehicle garment. While tackling all environmental and ethical questions while remaining commercially sustainable and future-oriented is a challenge for the fashion business. As a result, sustainable and ethical firms must reflect fairer salaries, improved working circumstances, more sustainably produced materials, and construction quality that is constructed for longevity, all of which eventually upsurge the cost of finished merchandise. Some of considerations contradict each other and can cause the buyer to emphasize the monetary cost while making a purchase. Many consumers who choose sustainability above fashion but can't afford the extra cost of sustainable clothes opt to buy second-hand instead of the newest designs. The rising trend of buying expensive vintage pieces proves that fashion and second-hand apparel do not have to be mutually incompatible. Dated clothing is in unswerving opposition to the concept of "quick style," and is prized as a means to show uniqueness while also rescuing something valuable from landfills. Whereas vintage used to be acquired at an exclusive auction, several internet outlets now sell vintage items.

II. PRODUCTION ENVIRONMENTAL HAZARDS

The first footstep in the creation of natural and synthetic fibers in the worldwide fabric stock shackle. Cotton and polyester, which have together been connected to major health risks as a result of their manufacturing and production procedures [6], account for 90% of clothes sold in the US. Polyester, unlike cotton, is an artificial material completed from oil. Textile dyeing wastewater is regularly unconfined into local aquatic systems untreated, releasing weighty metallic elements and other toxicants that can have major repercussions for the health of faunas and populaces in the region. In addition to depleting non-renewable resources, the clothing and textile industry generates

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significant amounts of orangery gases and requires massive extents of water, chemicals, and energy. As a petroleumbased material, polyester, nylon, and acrylic are often utilized by fast fashion producers, and they may take up to a thousand eons to biodegrade. To begin, there is an issue with the creation of natural and synthetic fibers. To produce Polyester, an oil-based synthetic fiber, a lot of water and chemicals must be used in the process of growing cotton. Dying textiles carries a danger on the other hand. 40 million people work in manufacturing, the subsequent footstep in the global textile supply chain. There are low- and middleincome nations that create 90 percent of the world's clothes (LMICs). Due to the deficiency of partisan infrastructure and organization administration in many low- and middleincome countries, this has happened. Deprivation in ventilation creates respiratory dangers from cotton dust and synthetic air particles. Repetitive motion duties can create musculoskeletal concerns. Accidents, overuse injuries, and mortality were recorded as health consequences in low- and middle-income nations, as well as poor reproductive and fatal outcomes (LMICs). When tragedy strikes around the world, like in 2013 when 1134 Bangladeshi textile workers were killed when Rana Plaza collapsed, it serves as a reminder of the dangers garment workers face daily. Even after the clothing is sold, environmental injustices linger, according to experts As a result of fast fashion, clients tend to view sartorial as one-use. Average Americans squander about 80 pounds of fashion and fabrics every year, which accounts for around 5% of landfill space. Most of the old garments that are shipped from the United States end up in LMICs, with over 500,000 tons of old clothes shipped every year from the United States. About \$700 million worth of second-hand clothes were disseminated from the United States in 2015.Low-wage employees in LMICs "grade" (process, categorize, and re-bale) used fashion that isn't sold in the US market and sells it in second-hand marketplaces. Not-for-sale clothing turns into solid waste, polluting rivers, greenways, and parks in LMICs without well-developed municipal waste systems, and causing additional environmental health problems.

III. PRODUCTION HAZARDS

Clothing assemblage, the subsequent point in the international weave supply chain, hires about 40 million people worldwide [7]. LMICs provide 90 percent of the ecosphere's apparel. Professional and security rules are seldom applied in these LMICs due to a lack of partisan substructure and administrative administration [8]. Several occupational risks are caused by poor aeration, cotton powder, and artificial air subdivisions. Repetitive motion tasks may also be detrimental to musculoskeletal health. In the early 1900s, textile workers in the US and the UK organized unions to defend themselves from the hazards of their occupations. Fast fashion is also damaging from a societal standpoint. More than 60 million individuals' labor in the garment sector to fuel fast fashion,



according to an Oxfam study from April 2016, with more than 15 million of them situated in Asia and more than 80% of them being women, typically fledgling and from impoverished rural origins. More than 90% of the clothes traded in Australia come from Asia.

IV. TEXTILE WASTE

The environmental impact of our garments is something most people don't think about. manufacturing needs large quantities of chemicals, water, energy, and other natural resources. One cotton shirt requires 2,700 liters of water, according to the World Resources Institute. And when people put garments in the trash, not only are they wasting money and resources, but the materials can take up to 200 years to disintegrate in a landfill. Textiles produce greenhouse gas methane and leak hazardous chemicals and colors into groundwater and our soil during the breakdown process. Textile waste isn't only solid trash with no negative consequences other than its physical existence. Harmful dyes and chemicals can seep into clothing. This is since many of the chemicals utilized are synthetic and hence difficult to degrade. This affects the quality of LMICs' water and soil, contaminating water bodies that they rely on for everyday necessities like drinking and washing. [20] Even though the fashion industry views the selling of finished clothing in high-income countries to be the end of its operations, conservational disparities persist after the garment has been purchased and exchanged. Buyers see clothing as a throwaway item as a consequence of the fast-fashion paradigm. Clothing and textiles take up roughly 5% of landfill area in the United States every year [3]. Clothing that does not end up in a landfill has a higher chance of being sold on the secondhand market. Every year, the United States. Exports around 500,000 tons of used clothing, the majority of which goes to LMICs [8]. By sending 1000pound bales of second-hand things that can't be sold in the United States, low-wage employees in low-income nations may "grade" (sort and categorize) the clothes and sell them in second-hand markets. Unsold clothes end up in landfills in low- and middle-income nations with insufficient municipal infrastructure, blocking rivers and greenways, and generating severe environmental health concerns.

Fabric waste cannot be prevented during manufacturing or use. Determining the purchase behaviors of customers and the product life cycle is also necessary. This knowledge could help reduce the vast volume of textile waste that is disposed of in landfills and burned. Spinning, weaving, dyeing, finishing, garment creation, and even at the end of the customer's expedition all generate textile waste. [21]

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V. SOCIAL JUSTICE, SOLUTIONS, AND INNOVATION

Models of production and sales in the fashion industry today are centered on expanding production and sales as well as quick manufacturing methods, low-quality products, and petite product life cycles, all of which result in unmaintainable ingesting and ecological damage. Production methods, as well as customer perceptions, must alter as a result of this. It will take a concerted effort from all stakeholders to achieve this: the textile sector must invest in clean technologies, fashion businesses must establish novel commercial replicas, customers must modify their buying designs, and administrations must reform lawmaking international commercial norms. Ensure sustainability at every stage of the complete supply chain is today a challenging challenge. Textile innovations, corporate sustainability, trade plans, and customer behavior will all be crucial in achieving worldwide conservational fairness.

Actions and policies that decrease environmental harm while also restricting human or natural resource exploitation to meet lifestyle demands are referred to as sustainability. Synthetic fibers are more ecologically friendly and endure longer in some conditions, even though all-natural cellulosic and protein yarns are healthier for the milieu and human healthiness.

For the garment sector to thrive, new law is required that only permits items into our Economic Blocks that meet the same labor, human rights, health and safety, and environmental requirements on the outside as they do on the inside. Outsourced items would be more expensive, making domestic production more competitive and sustainable. It leveled the playing field between outsourced and locally made items, because it costs more to pay and treat the people who manufacture your clothing fairly, as well as protect the environment. It will enhance the lives of all outsourced garment workers by providing higher pay, better and safer working conditions (a genuine living wage), and other benefits.

VI. SUSTAINABILITY IN THE WORKPLACE

The National Council of Textile Organizations and Fair Trade America, for sample, deliver resources for evaluating and auditing fair trade and construction values in the US. In addition to being accredited by one or more of these self-governing certifying organizations, some enterprises engage in "greenwashing." Companies promote their matters as "green" without following little guidelines [14]. To address these unsustainable performs, the industry should create internationally recognized certification requirements to promote ecologically responsive practices that improve wellbeing



and protection through the stock fetter. It is often believed that natural cellulosic and protein threads are healthier for the atmosphere and humanoid health. The elements used to make bamboo cellulose fibers such as lyocell are recycled in a closed-loop manufacturing process. To decrease the future environmental influence of textile production, the usage of sustainable fibers is essential. [22]

VII. IN THE CASE OF TRADE POLICY

Even though fair craft and eco-friendly manufacturers contest with fast-fashion shops, the market for reasonable occupation and eco-friendly fabric engineering is tiny, and verifying supply chains that meet ethical and environmental standards is difficult and expensive. In addition to trade strategies and guidelines, high-income nations may improve worker security and ecological health. Even though occupational and environmental protocols are frequently only enforced within a nation's boundaries, governments may lessen the worldwide ecological well-being problems associated with fast fashion in several ways. The industry should establish globally recognized certification norms to inspire ecological performs that improve well-being and security throughout the supply chain. High-income nations can boost worker safety and ecological healthiness through skill rule and regulation. Governments can take a variety of steps to decrease the environmental well-being risks related with fast fashion, even though work-related and ecological norms are often only enforced within a country's boundaries. Import levies on apparel and textiles, as well as weight and quantity constraints on commodities imported from LMICs, are only some examples. [22]

VIII. CONSUMER CONTRIBUTION

Environmental and ethical considerations must be balanced with a commercially viable and forward-thinking company model. All of these variables contribute to the expense of a sustainable and ethical brand, which in turn upsurges the cost of the final produce. As a buyer, you're usually faced with a range

of considerations, some of which are at odds with each other, prompting you to prioritize price. The implementation of employment norms and laws will be required to change the fast fashion business on a wide scale. Customers in high-income nations can benefit by supporting firms and legislation that restrict their detrimental impact on people and the environment. Customers, on the other hand, must be aware of greenwashing and wary of companies that make comprehensive, extensive entitlements about their ethical and environmental policies [14]. The fast-fashion industry feeds on the premise of getting more for less when it comes to environmental justice, but consumers must embrace the ancient proverb "less is more."

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Sustainable ingesting and manufacturing patterns are the United Nations' 12th Sustainable Development Goal. When purchasing durable clothing, shopping at secondhand stores, and repairing stuff they already own, high-income customers can contribute to universal conservational impartiality. They can also shop at retailers that have transparent supply chains. Then some go out of their way to buy eco-friendly and sustainable products. Pricing and quality, as well as usefulness, suitability, and the morals of the business from whom they are acquiring goods or amenities, are all essential to them. Of the 60 countries that have internet users, moreover half (55 percent) are prepared to reimburse more for goods and amenities that have a beneficial social and environmental impact. It's a prominent topic in the service industry to make clients happy. [24]

IX. CONCLUSION

Growing demand for huge numbers of inexpensive products has led to conservational and social squalor at each level of the supply chain in the areas since the fast fashion commercial prototypical turn out to be the standard for bigname fashion firms. In scientific, research, and environmental justice discourses, the ecological and humanoid vigor effects of rapid fashion have been largely ignored. Because of the breadth and extent of its societal and ecological breaches, fast fashion is a worldwide environmental justice problem.

They are vital to the advancement of science-based public health. In LMICs, like in the US, inadequate circulation of conservational acquaintances has a disproportional influence on people. Researchers are needed more than ever to look at the harmful health impacts of fast fashion at all levels of the production chain and after-sales process, especially in low- and middle-income nations (LMICs). It will become simpler to translate research findings into public health policy as this sector matures. There is yet hope, despite these dismal numbers. The fashion industry is being cleaned up by a growing number of fashion enterprises, many of them major, and organizations like Fashion Revolution [19]. The more we avoid it, the smaller the market for fast fashion will be. Even though these changes may seem tiny individually, collectively, they can have a big impact on the fashion business. By continuing to share resources and answers, we can reconstruct the economic paradigm into a circular and sharing economy.

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