

Explores the role of fast fashion in sustainability: stylish killer for the environment

Abstract

The fashion industry has never been bigger. It turns out more wasteful. With increasing incomes, fashion has also come on its own, evolving from being just clothes in large parts of the world to being a part of ones' identity. Fashion today's are the second largest biggest polluter in the world after the oil and gas industry. Impacts from the fashion industry include over 92 million tonnes of waste produced per year and 1.5 trillion litres of water consumed. On the basis of these environmental impacts, we outline the need for fundamental changes in the fashion business model, including a deceleration of manufacturing and the introduction of sustainable practices throughout the supply chain, as well as a shift in consumer behaviour namely, decreasing clothing purchases and increasing garment lifetimes. These changes stress the need for an urgent transition back to 'slow' fashion, minimizing and mitigating the detrimental environmental impacts, so as to improve the long-term sustainability of the fashion supply chain. This article will help to understanding of the factors affecting the Role of Fast Fashion in Sustainability and Stylish Killer for the Environment.

Keywords: Fast fashion; water quality; water degradation; sustainability; environmental impact; textile industry; consumer behaviour

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Introduction

In, today's era it is very much easy to buy clothes and textile accessories from anywhere through various digital platforms in affordable prices. So people buy garments and other textile accessories in mass quantities, without their much use. Earlier time people only have 5-6 pair of cloths for daily life but today's there is a new dress for each and every functions and occasions. People didn't like to repeat their dresses and textile accessories. So ultimately, they discard clothes in a very frequent manner and it directly correlate with the fashion pollution. Fast Fashion increase in very dramatic way. Earlier only rich people have lots of clothes but fast fashion is so affordable and reachable to middle class peoples also. There is heavy demand of fast fashion in the market so to meet this demand the fast fashion industry exports its production business from the developing countries like India, Bangladesh, Myanmar, Burma and Pakistan. The reason is simple to avoid high labour, cost, manufacturing cost and other expenses. To meet the huge demand, fast fashion industry increases its production and it also increases various destructive effects on the environment, labor working conditions, labour's mental and physical health.¹⁻⁴

Fast fashion or we can say new generation fashion has been changed the trends of textile industry. In current scenario, approximate 58 million tons of clothing sold every year, which reflect the huge demand of customer for this trend. To meet this demand textile companies push the working boundaries of workers and workers have no choice but to work in a catastrophic environment. The working conditions and working environment of workers are very dangerous and along with this they didn't get enough amount of money. There are some evidences that top fast fashion brands, resource workers from countries like Syria, turkey, Bangladesh etc. to meet their demands. The Fashion industry is currently engulfing the earth with garments with 100 billion items produced every year, that is more than ever before. International as well as national companies are antagonistic to each other and create a cutthroat competitive environment to create new styles and to hold larger market. In addition, this immense dilution of the fast fashion industry is set to continue, the sector is forecast to grow by 60 % by 2030.

Now, a day's fast fashion brands like Zara, promote etc. influence the young generation by creating an ambitions in their outlets. The second, thing is they used marketing strategies in a very efficient manner to attract the customer. Digital platforms like Instagram face book and others platforms helps to reach the customers easily. Today's most of the bloggers and influencers are from fashion industry. Top brands pay them to promote their clothing line. This is how market leaders in fast fashion influence their customers' buying behavior, backed by relevant neuro marketing specialists.

The main source of income of fast fashion is from e-commerce like mantra, amazon, flip kart and many others. Their heavy discount, easy accesses, easy return policies on the garment push the customer to buy new clothes from anywhere, any time. In addition, people buying the garments without the actual need of clothing. Some, brands tag their clothing with a ecofriendly tag but they didn't mention that how much chemicals were used to produced that particular eco-friendly fabric. This leads to serious health consequences not for those who were working in the manufacturing unit but also who were stay near by the manufacturing units.

As we know that fast fashion has a very short lifecycle so new trends has been changed in a very frequently and this will lead people to throw away their old clothes and purchase new trend fashionable garments. Every year approximate million tons of clothing ends up in a trash. Some fashion brands claim that their clothing line is sustainable to the environment but the reality is far away from their talks. Today if we see the market like sarojini nagar, in India then we concluded that how much garments are converted into a waste every year. The problem is not only restricted to the working environment of the workers but it is more beyond that. The amount of water wastage for washing, chemical processing of the garments is beyond out imagination. Washing some types of clothes sends significant amount of micro plastics into the ocean and rivers which pollute the water resources.⁵⁻⁸

To cut down the prices of the garment manufacturing, brands used cheap dyes and other chemical which directly affect the human life and causes some serious diseases like cancer, skin allergies and also affect the genitals of human being. As consumers worldwide buy

more clothes, the growing market for cheap items and new styles is taking a toll on the environment (Figure 1).



Figure 1 Sewing machine with fashionable garments.^{8,9}

Fashion industry in water consumption

Fashion industry required a massive amount of water at various stages of fabric manufacturing. According to a research, 80 billion cubic meters of water is used in a year by fashion industry and it is forecasted that this amount will be triple in coming years with increasing in demand of fast fashion garments. In various process of fabric manufacturing, garment manufacturing required lots of water. Most of fashion's global water usage is associated with cotton cultivation and the wet processes of textile manufacturing (bleaching, dyeing, printing and finishing). And it is well known fact that cotton crop need immense amount of water for their production.^{9,10} In India, in many states administration motivates the farmers to reduce the cultivation of high water needed crops to maintain the water level. In fast fashion textile manufacturing unit the chemical treated water dump in the fresh water resources, it pollutes the water resources and causes various diseases. Improperly treated waste water that enters local groundwater might degrade the entire ecosystem. In countries like Cambodia, the fashion industry is responsible for approximate 60% water pollution which creates a vicious problem in the region. Developing countries like India, china, Bangladesh, Pakistan already struggling to provide drinking water to their population, problem is strenuous.

Carbon footprint

In textile manufacturing, innumerable greenhouse gases generate per unit of material. Various reports claims that fashion industry is genesis 10 % of global greenhouse gas emissions. In developing countries, the main source of energy to run their industrial unit is still coal energy and use of coal energy in textile manufacturing results, larger carbon footprint. This issue is already discussed on various international as well as national plate forms by many world leaders. In the garment life cycle, energy use and CO₂ emission is highest during initial fibre extraction, especially for synthetic fibres, such as acrylics, as they originate from fossil fuel. Natural fibers have less carbon emission than manmade fibers, so it may be a solution for fast fashion industry to cut down the carbon emission.

Improved collection and recycling in garments sectors

Circular fashion

Like the circular economy in popular, round fashion seeks to reduce waste to a minimum and preserve the materials inside the consumption and manufacturing loop so long as feasible. While clothes are not used, they should be either sold as second hand clothes or recycled. For this to be possible, merchandise ought to be designed to have

multiple lifestyles cycles, with recyclable materials which might be tailored to the supposed use, 19 undying patterns and design suitable for disassembly (modular design). Researchers and businesses are checking out methods to cut fabric to produce less waste or require fewer seams to facilitate recycling.^{11,12}

Extended producer responsibility (EPR) and in-store collection

Producers and importers can be made legally answerable for making sure that used clothes are reused or recycled, with businesses both organizing their own Programmes or contributing financially to an approved together responsible enterprise. France is the handiest EU Member state to have an EPR regulation for garments, in area considering that 2006. Maximum businesses pay the Eco TLC, the simplest organization authorized via the public government, to prepare a collective series device. some other place, agencies including H&M run voluntary collection schemes and receive used clothes of any emblem, irrespective of whether or not they are nevertheless usable or not, in their stores in go back for a small reward. Concentrated on purchasers Efforts to make clothing greater sustainable require popularity with the aid of consumers, with opportunities for numerous publications of movement. Environmental effect of fabric and clothes industry.

Raising consumer awareness

Through campaigns or presenting facts on sustainability in shops or thru tags on garments it can be viable to teach consumers to buy best what they want and to pick more sustainable options. A study indicates that purchasers are typically in favors of environmentally accountable style, but that this isn't always contemplated in their real behaviour. As an example, gradual style has won much less traction than the sluggish food movement. quite a number of things pressure consumers far from sustainable fashion, together with better prices (although the range of environmentally conscious clients who are prepared to pay more for the sustainable alternative is on the upward push) and the notion that recycled clothes can be of a decrease first-rate and that they're produced in less polished styles, and many others.

Increased transparency and environmental labeling

Some companies already provide consumers with information on the environmental footprint of their products, such as CO₂ emissions or water use. Choosing a more sustainable option could be made easier through clear and standardized labeling of environmentally friendly products. The EU already has an EU Eco label for textiles and clothing (see below).

Better washing and drying instructions

As washing and drying make a massive contribution to the environmental effect of clothes, the industry should help through supplying customers with better facts on a way to reduce this impact, for instance, on care labels. Others provide step-by-step restore and care pointers on their web sites. EU policy the circular economy package, adopted in 2018, will for the first time require. Extending longevity of clothes Estimates show that if the number of times a garment is worn is doubled on average, the GHG emissions would be 44 % lower. Several concepts have been developed in this direction.¹³⁻¹⁶

Slow fashion

Unlike fast fashion, slow fashion is an attempt to convince consumers to buy fewer clothes of better quality and to keep them

for longer. The philosophy includes reliance on trusted supply chains, small-scale production, traditional crafting techniques, using local materials and trans-seasonal garments. It calls for a change in the economic model, towards selling fewer clothes. It is however not supposed to be EPRS European Parliamentary Research Service 6 simply a marketing stunt to sell even more clothes. As a result it could threaten the economic survival of clothes producers unless consumers are also willing to pay higher prices.

Fashion as a service

New business models may want to increase the number of wears of specific gadgets by means of the usage of the standards of the sharing financial system. A few brands already provide clothes as a provider leasing their garments instead of promoting them taking their instance from already properly-mounted services of renting wedding and unique occasion wear, shielding garments and newer services of renting maternity and infant clothes. Different corporations function garments subscription offerings, wherein purchasers pay a monthly charge to hire a set variety of clothes at a time, enabling them to alternate their cloth cabinet regularly without shopping for new garments (this already works properly with baggage and high-give up fashion, however an increasing number of additionally for everyday garments).

Improved collection for re-use, repair and up-cycling

Brands like Filippa K. are taking pioneering steps by selling their used clothes in their regular shops to make buying second-hand clothes easier. Others are offering long-term warranties that include offering free repair or replacement of a product, offering repair or instructions for repair, or offering up cycling or instructions for up cycling.¹⁷

Smart and instant fashion

The 2018 Pulse of the style industry record shows that the destiny should convey immediately and clever fashion that might reduce waste dramatically. Clever style ought to deliver garments of the future that may use clever technology to immediately modify to the needs of the patron, with the aid of converting colours as an instance, which might additionally reduce the want to produce multiple variations of the equal garment. On the spot style ought to allow on-demand production at point of sale, with the assist, for instance, of destiny and advanced three-D printing, which can additionally bring manufacturing back to the European. Consumers would be able to get what they want produced locally with no overproduction. Some smaller brands are already avoiding overproduction by producing only what consumers' order (Figures 2–4).^{12,18}

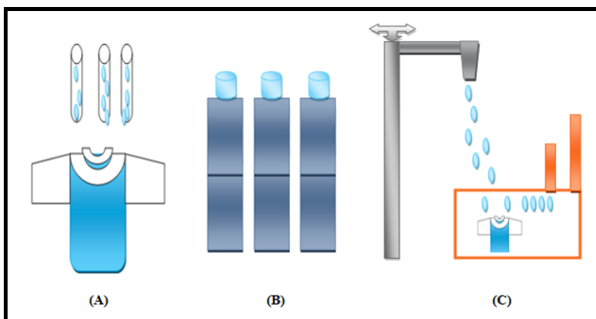


Figure 2 (A) The production of 1 kilogram cotton garments uses up to 3 kilograms chemicals, (B) The equivalent of more than 3 trillion plastic bottles is needed to produce plastic based cloths every year, (C) Textiles production (including cotton forming) uses almost 100 billion cubic metres of water annually representing 4% of global fresh water withdrawal.^{12,18}



Figure 3 Waste old garments to polluting the environment.^{16,17}



Figure 4 Fast fashion & Stylish garments.^{19,20}

The world's biggest fashion brands are lying about what their clothes are made from in a bid to be seen as more sustainable than they actually are, a major new report has found. The report by Changing Markets Foundation found that "green washing is rife" at both high street and luxury brands. According to the report, brands like ASOS have been deceiving consumers. "ASOS has been caught lying to its customers. A pair of ASOS trousers claim to be 'mono-material' and therefore 'designed to be remade' or recycled. Yet, the product is actually a blend of 54 per cent nylon and 46 per cent polyester a mixture impossible to recycle with current technology," it says. The results show that 60 per cent of claims by UK and European fashion companies, including Zara, H&M are unsubstantiated and misleading consumers.^{19,20}

Fashion garments and future perspectives

The cost pressure and level of competition in the fashion industry remain very high, making it difficult to change business practices. Yet, it is essential that the industry as a whole (from fibre production to retail) takes responsibility for its environmental impacts, including water, energy and chemical use, CO₂ emissions and waste production. Minimizing and mitigating these impacts, however, requires change, which businesses are often opposed to for a multitude of reasons, first and foremost being economic. For instance, investment in the latest pollution-control technology is an essential requirement for the short-term future of the textile industry, necessary to remove chemicals, heavy metals and other toxic substances from waste streams. Yet, using cleaner processes will increase production costs, a cost that is ultimately borne by the consumers, potentially ending cheap and fast fashion, leading economic declines within the fashion industry. However, streamlining industrial processes, including a reduction in the numbers of chemicals used, might also save costs in manufacture, providing economic incentives to implement more sustainable practices. Similarly, creative business models built on proactive design act to reduce waste, avoid surplus production and, thereby, creating a more stable business environment. Ultimately, the long-term stability of the fashion industry relies on the total abandonment of the fast-fashion model, linked to a decline in overproduction

and overconsumption, and a corresponding decrease in material throughput. Such transformations require international coordination and involve new mind-sets being adopted at both the business and the consumer levels.^{21–24}

One method to reducing fashion's environmental effect is to shift the device from linear (take, make and dispose) to round with the following three procedures: narrowing (efficiency), remaining (recycling) and slowing (reusing). Some other is to don't forget new business models which include renting, leasing, updating, repairing and reselling, all of which enable longer product lifetimes at the same time as concurrently presenting a brand new, slower lifestyle for consumers. Furthermore, these fashions can result in eco-performance (intensifying the use, as in renting) or maybe sufficiency (much less consumption). A hit modifications in patron behaviour, but, ought to be accompanied and supported with the aid of regulations addressing the social organization of intake on the social, cultural, monetary and cloth levels. Slow fashion is the future. But, we want a brand new system-wide knowledge of how to transition towards the sort of model, requiring creativity and collaboration among designers and producers, various stake-holders and end customers. We want new machine-level knowledge on how to make the transition closer to better sustainable balance within the fashion enterprise. Moreover, a functional system for textile recycling must be constructed. One of the most difficult challenges going forward will be to change consumer behaviour and the meaning of fashion. Consumers must understand fashion as more of a functional product rather than entertainment, and be ready to pay higher prices that account for the environmental impact of fashion (Figure 5).^{25–27}

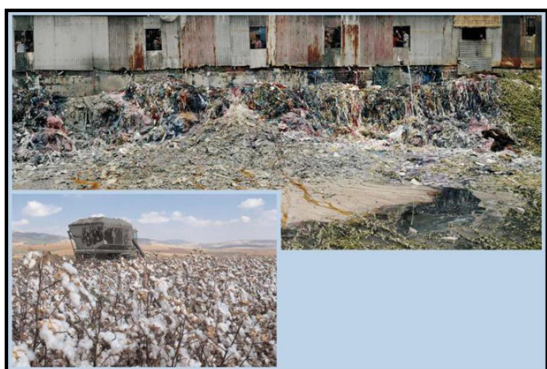


Figure 5 Polluted environment to waste apparels.^{24–26}

Conclusion

- The fashion enterprise is presently responsible for greater annual carbon emissions than all international flights and maritime shipping combined. If the enterprise continues its course, an increase of fifty percentages in greenhouse gasoline emissions is predicted inside a decade.
- By using analyzing the foundation causes of the hassle, the subsequent steps are less complicated to recognize as we are able to connect the dots and create solutions. Some viable answers have been indexed in the article, however some others include aware shopping of speedy style manufacturers and assisting reform.
- If you are not entirely certain of which manufacturers to assist, you aren't alone. Doing history research on brands before purchasing garments can help you grow to be a greater knowledgeable patron and steer your purchases in a manner that aligns with your environmental values.

- The style enterprise has brought about a vast amount of damage to our surroundings. However, if we begin to take proactive steps in the direction of advocating for a green-pleasant style enterprise and becoming an environmentally aware consumer, we can finally slow down weather change.

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Conflicts of interest

Authors declare that there is no conflict of interest.

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