JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

From Fast to Fair: Making Fast Fashion More Sustainable

Aadya Chauhan
Student
The Shri Ram School Aravali

Abstract

Fast fashion is currently a high growth sector of the fashion industry. However it is socially and environmentally harmful, with the biggest burdens falling on low and middle income countries (LMICs). Fast fashion contributes to the generation of solid waste, water pollution, microplastic pollution and carbon emissions. In addition, the manufacture of fast fashion is often done by poorly paid workers, including children, working long hours in hazardous conditions. This paper examines these issues, and proposes a three-pronged method to combat these harms - robust certification of sustainably produced clothing, stringent regulation against environmental and socioeconomic exploitation, and widespread awareness campaigns to encourage ethical consumption behaviour.

Introduction

Fast fashion is the term for clothing businesses which create clothes at a quick rate and sell them at low prices, often following the latest microtrends in fashion (Smith). . Fast fashion involves replicating high - fashion designs by mass producing pieces at an extremely low cost and high rate of production. The clothes thus produced are relatively cheap, plentiful and not very durable. These characteristics encourage consumers to purchase and dispose of clothes at a much higher frequency, leading to massive amounts of waste and leaving a significant carbon footprint(Bajaj).

The high turnover of clothing associated with fast fashion has only grown in the past decade due to the emergence of microtrends that dominate social media platforms for relatively short spans of time. Social media platforms such as Instagram and TikTok play an important role, with influencers and celebrities continually promoting new trends, generating a cycle of demand that fast fashion businesses can quickly supply, but at significant social and environmental costs(Bajaj).

The growth of the fast fashion market has been exponential as well as detrimental. Globally, 80 billion pieces of new clothing are purchased every year, translating to $1.2 trillion annually for the global fashion industry. Approximately 85 % of the clothing that Americans consume, about 1.7 million tonnes annually, is sent to landfills as solid waste, amounting to nearly 40 kg per American per year in 2017 (Bick et al.) Additionally, there is a large amount of waste materials and effluents produced in the manufacturing of fast fashion clothing, and carbon emissions produced in the transportation of both raw materials and

finished goods. Last but not least, the low labour costs that make fast fashion possible are often accompanied by severe exploitation of workers, especially in low and middle income countries (LMICs) (Claudio).

Environmental issues associated with fast fashion

In recent years the fashion industry is being recognised as a significant contributor to environmental harm. According to UN estimates, the fashion industry generated 8% of all carbon emissions and 20% of all global wastewater in 2019, with an anticipated 50% increase in greenhouse gas emissions by 2030. The use of cheap, often toxic dyes and low-quality materials, coupled with excessive water consumption, leads to severe ecological degradation. This damage is typically concentrated in LMICs or rural areas of the Global South, where environmental regulations may be weak or poorly enforced (Bailey et al.).

Hazardous effluents: Approximately 90% of clothing marketed in the United States is made of cotton or polyester, both of which have major health implications due to manufacturing and production procedures. Polyester, a synthetic textile, is derived from oil, while cotton requires large amounts of water and pesticides to grow. Textile dyeing poses extra risks since untreated wastewater from dyes is frequently released into local water systems, releasing heavy metals and other toxicants that can harm the health of animals as well as neighboring inhabitants. (Bick et al.)

Microplastics: Pollution of water bodies by microplastics is another negative environmental impact of fast fashion. Microplastics are released into wastewater not only during the manufacturing of clothing but also throughout the garment's life due to wear and tear. In the production phase of fast fashion, over 8,000 synthetic chemicals are used to process clothing materials. The resulting wastewater, often discharged untreated into nearby waterways, carries a mix of harmful chemicals and microplastics into the ocean. Beyond production, consumers contribute to microplastic pollution when washing their garments. During laundry cycles, clothes shed plastic microfibers as they rub against each other in washing machines and dryers. These fibers enter household wastewater systems and make their way into rivers and oceans where marine animals often ingest them, mistaking them for food. This can lead to physical harm, chemical exposure, and disruption of feeding and reproductive systems, ultimately threatening the balance of marine ecosystems and the long-term survival of countless species (Narisu).

Carbon emissions: From the cultivation of cotton and synthetic fiber production to dyeing, manufacturing, and global transportation, each stage of the fast fashion supply chain releases large amounts of carbon dioxide. Polyester, a common fast fashion fabric, is made from fossil fuels and emits large amounts of Carbon Dioxide. The long-distance transportation of fast fashion goods, often by ships and planes, generates significant CO_2 emissions. This global movement adds heavily to the industry's carbon footprint, fueling climate change. A 2016 estimation declared the fashion industry to be responsible for approximately 4.0 gigatonnes of carbon dioxide equivalent emissions, representing about 8.1 percent of global emissions. Footwear alone accounted for 0.7 gigatonnes, nearly one-fifth of the total, while apparel contributed the remaining 3.3 gigatonnes (Niinimäki et al.) . These figures, however, exclude emissions from the use phase, such as transportation, laundering, and drying of garments. After incorporating these additional sources of carbon emissions, the European Environmental Agency estimated that the average EU citizen generated over 270kg of CO2 in 2020 through their clothing purchases and maintenance (European Parliament)

Solid textile waste: Perhaps the most visible impact that fast fashion has on the environment is the vast amount of textile waste produced as a consequence of rapidly shifting trends. As styles change, consumers are encouraged to discard clothing that is still wearable, leading to an overwhelming accumulation of textile waste in landfills(Beswick). Much of this discarded clothing is made from synthetic fibers that are non-biodegradable, contributing to long-term environmental pollution. The lack of effective recycling infrastructure also makes it difficult to sustainably manage this waste, exacerbating the industry's environmental footprint. Every year, around 500,000 tons of worn clothing are shipped from the United States, with the vast majority ending up in low-income countries. In 2015, the United States exported over $700 million in worn apparel. Second-hand clothing that is not sold in the US market is compressed into 1000-pound bales and transported overseas to be graded by low-wage workers in LMICs before being sold in second-hand marketplaces. Clothing that is not sold in markets ends up as solid garbage, blocking waterways, greenways, and parks and posing extra environmental health risks in LMICs without robust municipal waste systems. (Bick et al.). Fast fashion has significantly impacted the conditions of landfills as well. The combination of short garment lifespans and rising consumer demand resulted in a 40% increase in textile waste being landfilled in the United States between 1999 and 2009. Globally, textiles now make up as much as 22% of mixed solid waste. Of the total fibre produced in 2015, 73%, amounting to 39 gigatonnes, ended up in landfills (Niinimäki et al.)

Socioeconomic issues associated with fast fashion

The fast fashion industry, which thrives on the backs of cheap labour, serves as a significant driver of socioeconomic problems and systemic labour exploitation. These industries perpetuate poor working conditions, low wages, and lack of worker protections.

Hazardous working conditions: In major fast fashion production hubs like Bangladesh, China, and India, hazardous working conditions are unfortunately very common. Yet, these working environments are routinely ignored until a major failure causes the deaths of several workers. A stark illustration of this reality is the Rana Plaza building collapse in Bangladesh, which tragically exposed the severe neglect of worker safety within the industry (Gunawan et al.). While such tragic events force the hands of local and regional authorities to enact better workplace regulations and enforce them more stringently, the safety of garment workers is still a matter of chance.

Child labour: The exploitation of child labour have long been embedded in the fashion industry, especially in LMICs. Many children of garment workers are forced to drop out of school. The meager amounts of money they earn can only be used for food and is not sufficient to cover other basic necessities. Fast fashion, with its emphasis on high output at low cost, is either worsening this situation or rolling back hard won protections against the exploitation of children (Gunawan et al.).

Exploitation of women workers: Women, who make up a significant portion of the workforce, often endure severe labor exploitation and even human rights violations in the fast fashion industry. Garment workers in LMICs often complain that their bosses refuse to allow them to take time off to consult a doctor, and the workers cannot risk their jobs by leaving. Many people have reported passing out at work and being sent back to their sewing machines without receiving necessary medical assistance. This has even resulted in the deaths of workers (Chang). Bangladeshi garment workers are often denied fundamental rights,

including the right to maternity leave. According to studies, women working in the garment industry are often refused maternity leave entitlements, depriving them of the care they require before and after childbirth. This denial of rights not only harms workers' well-being but also contributes to the perpetuation of gender disparities in the workplace (Gunawan et al.)

Such exploitation of women working in the fast fashion industry is not limited to LMICs. In the UK, garment workers, who are often women of colour, have been found to receive wages far below minimum wage, working long hours without contracts in unsafe, exploitative conditions. The UK government's weak enforcement of the National Minimum Wage allows businesses to underpay workers, while loopholes in laws like the Modern Slavery Act and Companies Act let businesses avoid real accountability. Clearly, discrimination within the fast fashion industry hits an intersection of race and culture, gender, and economic status. It appears that the fast fashion industry upholds intersectional discrimination on a large scale, and UK retailers and consumers face no real accountability (Smith)

How the fast fashion industry can become more sustainable

The fast fashion industry can learn plenty from the sustainability efforts pioneered by other sectors such as coffee, mining, and chocolate. These industries, long criticized for exploitative labor practices and environmental harm, have taken meaningful steps toward ethical reform, many of which can be adapted to fashion.

Certification and labeling: Robust and reliable certification of finished products by third parties have helped not only enhance the quality and variety of coffees and cocoa products available in the market, but have also helped improve labour standards in LMICs that produce these goods and ensure that farmers receive a fair remuneration for their work (Ibnu et al.; Cadby and Araki).

Robust and transparent certification programs have emerged for coffee such as Fairtrade, Utz Certified, Rainforest Alliance, and the Common Code for the Coffee Community. Similarly, organizations such as the Fine Chocolate Industry Association (FCIA), the Fine Cacao and Chocolate Institute (FCCI), the Cocoa of Excellence (CoEx) program, and various industry members have collaboratively and individually taken steps in developing quality assessment standards for cacao.

Cadby and Araki identified pathways to understand how specialty cacao certifications have been developed and are aiding cacao producers in South America. These pathways can be adapted to fit the fashion industry

- *Quality:* This would be a metric of the degree to which clothing manufacturers prioritize durable materials and craftsmanship, thus reducing wasteful overproduction.
- *Genetics:* For specialty cacao, this means preserving and enhancing genetic diversity in cacao cultivars around the world. While promoting genetic diversity in natural fabrics is certainly desirable, this pathway can be expanded to identifying multiple fabrics to suit certain design needs. Clear descriptions of the sustainability of these fabrics would help consumers make more ethical choices.
- *Origin transparency:* Similar to cacao's emphasis on terroir, clothing certification can highlight where and how garments are made, promoting fair labour and regional craftsmanship.

Together, these pathways can help reshape the fast fashion industry into one that prioritizes sustainability, transparency, and human dignity across its supply chain.

Regulation

South African labour law, via the Labour Relations Act (LRA), recognises collective bargaining and organisational rights, aiming to stabilise workplace democracy in that country's massive mining sector. However, it also acknowledges the current system's shortcomings, such as employer manipulation, exclusion of minority unions, and lack of trust among parties (Karolia-Hussain and Fourie). Borrowing from the South African example, countries could mandate inclusive, compulsory collective bargaining frameworks. Brands should be legally obligated to engage in regular negotiations with all categories of worker representatives (including minority unions), especially in high-risk regions. This could mitigate many of the hazardous working conditions and exploitation that garment workers face, and improve worker-employer cooperation.

Enacting and enforcing stringent regulations related to environmental pollution and greenhouse gas emissions are also necessary to make the fashion industry more sustainable. As discussed earlier, an important reason that fast fashion is largely produced in LMICs is that in addition to low labour costs, these countries tend to have weak civic accountability and poor enforcement of environmental regulations. History shows that collective global regulation of pollutants is effective at improving environmental standards worldwide. Thanks to the 1987 Montreal Protocol on Substances That Deplete the Ozone Layer, and its subsequent revisions, the depth of the ozone layer in the Earth's atmosphere is expected to return to 1980 levels by 2040. (World Meteorological Organization).

Changing consumer behaviour

Fast fashion, by its very nature, is dependent both on responding to changes in consumers' tastes as well as influencing the development of new trends. With robust certification and an emphasis on sustainability, consumers may be able to identify which products and which brands cause the least amount of environmental and socioeconomic harm. Consumers may be able to vote with their wallets, rewarding companies with more sustainable products and punishing those with unsustainable products.

What sustainability can look like in countries where fast fashion clothing is made

Many LMICs see the fashion industry as a source of export revenue. Therefore they are likely to see any efforts to change business practices, especially in the fast fashion sector, as a threat to their economic development. When coupled with governments that appear less accountable to their citizens than those in many high income countries, this may make LMICs unwilling to participate in the certifications and regulations needed to make fast fashion less socially and environmentally exploitative.

Encouraging LMIC governments to support reforms to the fashion industry will require significant lobbying by NGOs, INGOs, and awareness campaigns targeting workers in these countries.

Certification and regulation can also bring new opportunities. Traditional, less environmentally destructive techniques of producing fabrics and clothing could be revived by regulating unsustainable fast fashion manufacture. Additionally, GI certificates could be issued for such traditionally produced clothing and help garment workers receive a fair compensation for their unique products.

Conclusion

While the emergence of fast fashion is the product of a particular moment in time - significant differences in labour costs, cheap shipping, rapid design and manufacture, and mass awareness of fashion trends - the world is becoming ever more aware of the social and environmental unsustainability of this business model. Through concerted efforts of governments and industry bodies in certification and regulation, as well as ethical consumption by customers, these harmful aspects of the fast fashion industry can be mitigated.

References

1. Bailey, Kerrice, et al. "The Environmental Impacts of Fast Fashion on Water Quality: A Systematic Review." *Water*, vol. 14, no. 7, 2022, https://doi.org/10.3390/w14071073.

2. Bajaj, Naman. "On Microtrends, Fast Fashion, and the Overconsumption Cycle." *Commons*, 9 Feb. 2024, https://www.thecommons.earth/blog/microtrends-ultra-fast-fashion-and-the-overconsumption-cycle.

3. Beswick, Constance. "Examining the Era of Micro Trends." *Global Fashion Agenda*, 17 Apr. 2024, https://globalfashionagenda.org/news-article/examining-the-era-of-micro-trends/.

4. Bick, Rachel, et al. "The Global Environmental Injustice of Fast Fashion." *Environmental Health*, vol. 17, 2018, pp. 1–4.

5. Brewer, Mark K. "Slow Fashion in a Fast Fashion World: Promoting Sustainability and Responsibility." *Laws*, vol. 8, no. 4, 2019, https://doi.org/10.3390/laws8040024.

6. Cadby, Jeana, and Tetsuya Araki. "Towards Ethical Chocolate: Multicriterial Identifiers, Pricing Structures, and the Role of the Specialty Cacao Industry in Sustainable Development." *SN Business & Economics*, vol. 1, no. 3, 2021, p. 44.

7. Chang, Andrea. "The Impact of Fast Fashion on Women." *Journal of Integrative Research & Reflection*, vol. 3, 2020, pp. 16–24.

8. Claudio, Luz. "Waste Couture: Environmental Impact of the Clothing Industry." *Environmental Health Perspectives*, vol. 115, no. 9, Sep. 2007. *DOI.org (Crossref)*, https://doi.org/10.1289/ehp.115-a449.

9. European Parliament. *The Impact of Textile Production and Waste on the Environment*. 29 Dec. 2020, https://www.europarl.europa.eu/topics/en/article/20201208STO93327/the-impact-of-textile-production-and-waste-on-the-environment-infographics.

10. Gunawan, Yordan, et al. "The Dark Side Of Fast Fashion: Examining The Exploitation Of Garment Workers In

Bangladesh." *Jurnal Hukum Dan Peradilan*, vol. 12, no. 3, Nov. 2023, pp. 441–68, https://doi.org/10.25216/jhp.12.3.2023.441-468.

11.Ibnu, Muhammad, et al. "Toward a More Sustainable Coffee Production: The Implementation Capacity of Indonesian Standard Coffee." *Pelita Perkebunan*, vol. 35, no. 3, 2019, pp. 212–29, https://doi.org/10.22302/iccri.jur.pelitaperkebunan.v35i3.361.

12.Karolia-Hussain, Faheemah, and Elmarie Fourie. "The Relevance and Impact of South African Labour Law in the Mining Sector: A Fourth Industrial Revolution Perspective." *Obiter*, vol. 42, no. 3, 2021, pp. 445–69.

13.Narisu, Helena. "The Impact of Fast Fashion on Marine Plastic Pollution." *Current World Environment*, vol. 18, no. 1, 2023, p. 102.

14.Niinimäki, Kirsi, et al. "The Environmental Price of Fast Fashion." *Nature Reviews Earth & Environment*, vol. 1, no. 4, Apr. 2020, pp. 189–200, https://doi.org/10.1038/s43017-020-0039-9.

15.Smith, Harriet Daisy. "Intersectional Discrimination and Exploitation Within the UK Fast Fashion Industry." *LJMU Student Law Journal*, vol. 2, 2022.

16.World Meteorological Organization. *Executive Summary - Scientific Assessment of Ozone Depletion: 2022*. GAW Report, 278, WMO, Oct. 2022, p. 56, https://ozone.unep.org/system/files/documents/Scientific-Assessment-of-Ozone-Depletion-2022-Executive-Summary.pdf.