



Sustainability in Fashion Industry

Akula Amruta Rao¹, Dr. G.S Vijaya²

¹PG Student, USN: 22MBAR0651, ²Guide, Professor and program Coordinator – LSCM and SOM
CMS Business School

ABSTRACT

The fashion industry has long been a significant contributor to global environmental pollution, with overproduction and underutilization of clothes resulting in the release of toxic gases and excessive dumping. Despite the growing awareness of the industry's environmental impact and the emergence of sustainable practices, there is still a lack of comprehensive understanding of the factors influencing consumer behavior and the industry's response to sustainability challenges, particularly in developing countries like India. This study aims to investigate consumer attitudes, perceptions, and behaviors towards sustainable fashion consumption in Bangalore, India, and to analyze the factors influencing the adoption of sustainable practices by fashion brands and retailers.

INTRODUCTION

The fashion industry has long been a major contributor to global economic growth, with its ever-evolving trends and styles captivating consumers worldwide. However, beneath the glamorous façade lies a darker reality – the industry's significant negative impact on the environment. From the cultivation of raw materials to the disposal of unwanted garments, every stage of the fashion supply chain leaves a substantial ecological footprint

The rise of fast fashion, characterized by cheap, trendy clothing produced rapidly to meet consumer demand, has exacerbated the industry's environmental toll. Mass production using polluting materials, coupled with the insatiable appetite for new styles, has led to an alarming increase in textile waste. The fashion industry is now the second-largest polluter globally, emitting vast amounts of greenhouse gases and contributing to water scarcity, soil degradation, and microplastic pollution. Recognizing the urgent need for change, sustainability has emerged as a crucial focus within the fashion industry. Brands are exploring eco-friendly materials, minimizing waste through innovative design techniques, and adopting circular economy principles to extend the life cycle of garments. Digital transformation, such as 3D design tools and smart manufacturing processes, also offers promising solutions to reduce the industry's environmental impact.

Sustainable fashion has emerged as a crucial concept in the fashion industry, aiming to address the significant environmental and social issues associated with the production and consumption of clothing. The fashion industry has long been a major contributor to global economic growth, but its negative impact on the environment and society has become increasingly apparent.

The rise of fast fashion, characterized by cheap, trendy clothing produced rapidly to meet consumer demand, has exacerbated the industry's environmental toll. Mass production using polluting materials, coupled with the insatiable appetite for new styles, has led to an alarming increase in textile waste. The fashion industry is now the second-largest polluter globally, emitting vast amounts of greenhouse gases and contributing to water scarcity, soil degradation, and microplastic pollution. Sustainable fashion seeks to mitigate these negative impacts by promoting environmentally friendly practices throughout the fashion supply chain. This includes the use of eco-friendly materials, minimizing waste through innovative design techniques, and adopting circular economy principles to extend the life cycle of garments. Sustainable fashion also emphasizes the importance of social responsibility, ensuring fair labor practices and supporting local communities.

SUSTAINABLE FASHION PRACTICES AND INITIATIVES

The fashion industry is increasingly adopting sustainable practices and initiatives to address its environmental and social impact. These efforts span across various stages of the fashion supply chain, from design and production to consumption and disposal.

Sustainable Design and Production

Practice	Description	Examples
Zero-waste design	Creating garments with minimal fabric waste through innovative patternmaking techniques	Tessellation, jigsaw, embedded jigsaw, multiple cloth approach, minimal cut

Circular design	Designing products for longevity, repairability, and recyclability	Modular design, design for disassembly, use of mono-materials
Sustainable materials	Using eco-friendly and biodegradable materials with lower environmental impact	Organic cotton, recycled polyester, Tencel, hemp, linen
Innovative technologies	Adopting advanced manufacturing techniques that reduce waste and energy consumption	3D printing, digital sampling, waterless dyeing

Sustainable Consumption and Disposal

Practice	Description	Examples
Slow fashion	Encouraging mindful consumption and investing in high-quality, timeless pieces	Capsule wardrobes, made-to-order production, repair and alteration services ⁴
Collaborative consumption	Promoting sharing economy models that extend the life cycle of garments	Clothing rental, subscription-based services, second-hand marketplaces
Take-back programs	Collecting used garments for recycling or repurposing to reduce textile waste	In-store collection points, online recycling initiatives
Upcycling and remanufacturing	Transforming pre-consumer and post-consumer waste into new products	Patchwork, embellishments, fabric reconstruction

Industry Collaborations and Certifications

Sustainable fashion initiatives also involve collaborations among industry stakeholders and the adoption of certifications and standards to ensure responsible practices. Examples include:

- Multi-stakeholder initiatives like the Sustainable Apparel Coalition and the Fashion Pact
- Certifications such as Global Organic Textile Standard (GOTS), Bluesign, and Cradle to Cradle
- Transparency and traceability tools like the Higg Index and blockchain technology

Despite these efforts, challenges remain in implementing sustainable practices across the complex and fragmented fashion supply chain. Overcoming these challenges requires a holistic approach that involves all stakeholders, from designers and manufacturers to retailers and consumers

THE INDIAN CONTEXT: SUSTAINABLE FASHION IN DEVELOPING COUNTRIES

In the context of developing countries, particularly India, sustainable fashion faces unique challenges and opportunities shaped by socio-economic factors, cultural norms, consumer preferences, and infrastructure limitations. The Indian market, with its rich heritage of textiles and craftsmanship, holds significant potential for sustainable fashion practices. However, the adoption of these practices is influenced by a complex interplay of factors.

Challenges

- **Economic Constraints:** Many consumers in developing countries, including India, are price-sensitive, making affordability a critical factor in their purchasing decisions. Sustainable fashion, often perceived as more expensive, may not be accessible to the broader population.
- **Awareness and Education:** There is a need for increased awareness and education about the benefits of sustainable fashion among consumers. While there is a growing consciousness, the depth of understanding regarding the environmental and social impacts of fashion choices remains limited.
- **Infrastructure and Supply Chain:** Developing countries often face challenges in terms of infrastructure and supply chain logistics, which can hinder the production and distribution of sustainable fashion products. Issues such as inadequate recycling facilities and lack of access to sustainable materials can pose significant barriers.

Opportunities

- **Cultural Heritage and Craftsmanship:** India's rich cultural heritage and traditional craftsmanship offer a unique opportunity to promote sustainable fashion. By leveraging traditional techniques and local artisans, the fashion industry can create eco-friendly and culturally rich products.
- **Growing Consumer Interest:** There is a growing interest among Indian consumers, especially the younger generation, in sustainable and ethical fashion. This shift in consumer preferences presents an opportunity for brands to innovate and cater to this emerging market.

- **Government and Policy Support:** The Indian government's focus on sustainability and environmental conservation can provide a supportive framework for the growth of sustainable fashion. Initiatives such as promoting organic farming and supporting small-scale artisans can contribute to a more sustainable fashion ecosystem.



Figure 1.2 – Sustainable Fashion Infographic

Source: <https://medium.com/@divisha.pandey1233/embracing-sustainable-fashion-a-path-towards-a-greener-wardrobe-32392dd06dd1>

INNOVATIVE APPROACHES TO SUSTAINABLE FASHION

Innovative approaches to sustainable fashion are crucial for addressing the environmental and social challenges posed by the fashion industry. These approaches not only aim to minimize the negative impacts but also seek to create positive value through sustainable practices.

Circular Economy and Zero-Waste Design

The circular economy model offers a framework for sustainable fashion by promoting the reuse, recycling, and regeneration of products and materials. Zero-waste design techniques further contribute to this model by minimizing fabric waste during the production process⁴.

Use of Sustainable Materials

Innovations in sustainable materials, such as the development of eco-friendly fabrics and the use of recycled materials, are key to reducing the environmental footprint of fashion products. These materials offer alternatives to conventional textiles, which are often resource-intensive and polluting.

Digital and Technological Innovations

Digital technologies, such as 3D printing and virtual sampling, can revolutionize the fashion industry by reducing waste and improving efficiency. These technologies enable more precise production processes and reduce the need for physical samples, thereby minimizing waste.

Consumer Engagement and Education

Engaging consumers through education and awareness campaigns is essential for promoting sustainable fashion. By informing consumers about the impacts of their fashion choices and the benefits of sustainable practices, brands can encourage more responsible consumption behaviours.

Collaborative Efforts

Collaboration among stakeholders, including designers, manufacturers, retailers, and consumers, is crucial for advancing sustainable fashion. By working together, the industry can address systemic challenges and drive collective action towards sustainability⁴. In conclusion, the Indian context presents both challenges and opportunities for sustainable fashion in developing countries.

CONCLUSION

The study on sustainability in the fashion industry in Bangalore, India, has provided valuable insights into consumer attitudes, perceptions, and behaviours towards sustainable fashion, as well as the challenges and opportunities faced by the industry in adopting sustainable practices. The findings highlight the growing awareness and concern among consumers regarding the environmental impact of the fashion industry, with a majority expressing their willingness to support sustainable fashion initiatives.

However, the study also reveals significant barriers to the widespread adoption of sustainable fashion, such as affordability, accessibility, and lack of information. Price and style remain the primary factors influencing clothing purchase decisions, posing a challenge for promoting sustainable alternatives that may be perceived as more expensive or less fashionable.

SCOPE FOR FUTURE RESEARCH

The study on sustainability in the fashion industry in Bangalore, India, has opened up several avenues for future research. While the current study provides valuable insights, there is scope for further exploration and analysis in this field.

- Expand the geographical scope of the study to include other cities and regions in India, as well as other developing countries. This would provide a more comprehensive understanding of sustainable fashion consumption and industry practices across different socio-economic and cultural contexts.
- Delve deeper into specific aspects of sustainable fashion, such as the adoption of circular economy principles, the impact of digital technologies, or the role of policy interventions in promoting sustainability. Focused research on these topics would contribute to a more nuanced understanding of the challenges and opportunities in each area.
- Conduct longitudinal studies that examine the evolution of consumer attitudes and behaviours towards sustainable fashion over time. Such research could provide insights into the effectiveness of various initiatives and campaigns in driving long-term change.
- Explore the potential for cross-sector collaborations and partnerships in promoting sustainable fashion. Investigating the synergies between the fashion industry and other sectors, such as agriculture, technology, or waste management, could lead to innovative solutions for sustainability challenges.
- Focus more research on the social and economic dimensions of sustainable fashion, particularly in the context of developing countries. Examining the impact of sustainable fashion initiatives on livelihoods, gender equality, and community development could provide valuable insights for policymakers and industry stakeholders.