



Sustainability Practices in The Fashion Industry

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Abstract

The fashion industry is one of the largest contributors to environmental degradation and social inequities. This article explores sustainability practices that aim to mitigate these impacts, emphasizing the urgent need for change. Key principles of sustainable fashion include ethical production, the use of eco-friendly materials, and embracing a circular economy. The adoption of sustainable materials such as organic cotton, recycled fabrics, and innovative alternatives like mushroom leather is crucial. Ethical production practices ensure fair wages and safe working conditions, promoting transparency in supply chains. Waste reduction strategies, including zero-waste pattern making and upcycling, help minimize the industry's environmental footprint. Circular fashion models, such as clothing rentals and second-hand shopping, offer sustainable alternatives to traditional consumption. Technological innovations like digital fashion and blockchain can further enhance sustainability efforts. However, challenges such as higher costs and consumer behavior remain significant barriers. By highlighting successful case studies, this article underscores the potential for a more sustainable future in fashion, calling for concerted efforts from brands, consumers, and policymakers.

Keywords- Sustainability, Degradation, Consumers, Policy makers, Fashion models.

Introduction

The fashion industry is alive with creativity, self-expression, and innovation, but there is a much less enticing story beneath the surface. Through figures and facts, a true story is told about a business that is both amazing and dangerous. The environmental cost of staying trendy is just too big to ignore. Unfortunately, we are still behind with regards to maintainable design fabricating, as patterns that have negative ecological effects and favour quick creation win.

A holistic approach to clothing design, production, and consumption that places environmental stewardship and social responsibility at the forefront is known as sustainable fashion. Sustainable fashion focuses on reducing waste and promoting responsible use by analysing and adjusting consumption patterns, encouraging consumers to choose quality over quantity. This development is firmly lined up with the rising worldwide accentuation on sustainable power, ecological maintainability, and moral creation. The use of sustainable materials, like natural fibres rather than synthetic textiles, in the production of clothing is one of its central tenets. The cultivation, processing, and production of these natural fibers are often governed by international standards, and they are biodegradable. Conversely, manufactured materials frequently include energy-escalated creation processes and can be negative to the climate, making them less positive with regards to feasible style.

The purpose of this article is to identify sustainability practices in fashion industry. Sustainable fashion aims to reduce negative effects on the environment by using eco-friendly materials like natural fibres, employing ethical labour practices, and encouraging recycling and reuse. Offering a path that aligns aesthetic appeal with a commitment to sustainability, quality, and integrity is a thoughtful response to traditional fashion consumption patterns. The industry's commitment to environmental sustainability is highlighted by the shift toward sustainable products and the use of renewable energy in production processes. It reflects a conscious shift in consumption patterns toward a more thoughtful and ethical approach, a



future in which fashion not only looks good but also does good.

Significance of Sustainable Fashion

Ecological Effect: The design business is a significant supporter of worldwide fossil fuel byproducts, water utilization, and waste creation. Maintainable design intends to limit these effects by utilizing inexhaustible materials, diminishing asset utilization, and carrying out eco-accommodating creation processes.

Squander Decrease: Conventional design frequently prompts tremendous measures of apparel winding up in landfills or being burned. Maintainable design advances circularity, where materials are reused, reused, or biodegraded, diminishing waste and moderating assets.

Wellbeing and Security: The utilization of unforgiving synthetic substances in traditional material creation can prompt medical problems for the two specialists and purchasers.

Maintainable design stays away from or limits the utilization of poisonous synthetic substances, advancing more secure and better items for all.

Purchaser Mindfulness: Maintainable design urges purchasers to think about the ecological and social effect of their apparel decisions. By bringing issues to light and advancing cognizant utilization, it engages people to settle on more educated and moral buying choices.

Environment and Social Impact of Fashion

With a global employment of over 75 million people and a value of more than 2.5 trillion dollars, the fashion industry contributes significantly to our economies. Over the past few decades, the industry has experienced phenomenal expansion, with production of clothing doubling between 2000 and 2014. According to McKinsey & Company (2016), despite the fact that clothing sales increased by 60% between 2000 and 2014, consumers only kept half as many items of clothing. Even though the fashion industry is doing well, more and more people are learning about the huge number of bad things it does to the environment. Fashion production pollutes rivers and streams, dries up water sources, and contributes 10% of humanity's carbon emissions. Additionally, washing certain kinds of clothing releases a significant amount of microplastics into the ocean, and 85% of all textiles are disposed of annually (UNECE, 2018).

Additionally, there is a human cost associated with fast fashion: textile workers, primarily women, in developing nations frequently receive pitiful wages and are compelled to work long hours in deplorable conditions (UNEP, 2018; WRI, 2019). Human Rights Watch says that these conditions lead to violations of human rights in many places. The use of chemicals in the production of clothing also raises serious health issues, both for consumers and workers in the industry. In addition, the pollution that was mentioned earlier has additional effects on health. We are forced to rethink fast fashion due to the costs it imposes on society and the environment, as well as the need for more sustainable business models and practices. The following resources provide additional information on fashion's effects on the environment and possible change paths.

Key Principles of Sustainable Fashion

Fashion's Circular Economy- The circular economy is more than just a new way to make sustainable clothes; it's a new way of thinking about how clothes are made and used throughout their lifecycle. The circular economy, in contrast to the traditional linear economy, in which resources are extracted, utilized, and then discarded, seeks to establish a sustainable loop that minimizes waste and maximizes value. The idea of designing for longevity lies at the heart of this concept. This means using long-lasting materials that are simple to repair or recycle to make clothes that are not only stylish but also durable. It's about moving away from fashion that can be thrown away and toward quality and handiwork. This change in operation can be very beneficial to those in the industry who want to become respected and ethical clothing manufacturers because they will be able to sell their products at a higher



price and ensure that their customers will recognize their products as something of value and durability.

Upcycling - Upcycling is all about creatively transforming an existing garment into something new that adds value and uniqueness. It is a method that transforms what could be considered waste into wearable art and celebrates individuality and craftsmanship. Upcycling gives old clothes a second life by reimagining them, making them more usable and reducing the need for new production. Upcycling is being used by fashion designers and artists as a way to express themselves and create one-of-a-kind pieces that tell a story. Upcycling initiatives have been launched by sustainable brands like Reformation and Eileen Fisher, which transform used fabrics into new collections. DIY upcycling projects are becoming a popular way to personalize and refresh wardrobes, and even consumers are getting involved.

Recycling: A Cycle for Sustainability - In contrast, recycling entails separating a garment into its component parts for use in new products or clothing. Separating fibres, removing dyes, and respinning yarn are all part of this more complex procedure, which calls for specialized equipment and facilities. Recycled materials turn old textiles into valuable raw materials, reducing waste and resource consumption. With investments in recycling programs and technologies made by Adidas and H&M, this practice is gaining traction.

Materials for Sustainable Textiles:

A Change-Making Fabric Fashion's use of sustainable materials is more than just a fashion fad; it is a significant step toward doing business in a way that is better for the environment. The fashion industry is creating a new narrative that brings together aesthetics and ethics by using materials that are better for the environment. A logical decision Organic cotton is produced without the use of synthetic fertilizers, genetically modified organisms, harmful pesticides, or toxic chemicals. Organic cotton farming puts soil health, biodiversity, and ecological balance first, in contrast to conventional cotton farming, which frequently pollutes water supplies and depletes soil resources. Organic cotton has advantages that go beyond the environment. It is typically more durable than conventional cotton and is hypoallergenic. Organic cotton has been praised by companies like Patagonia and Stella McCartney for its ability to produce high-quality, beautiful clothing without harming the environment. Taking this route is definitely something to think about for sustainable brands and clothing manufacturers who want to produce clothes of a higher quality and reduce their impact on the environment at the same time.

The Green Giant: Bamboo Another popular sustainable material in the textile industry is bamboo. It is a renewable resource that can be harvested without killing the plant and is a fast-growing plant that requires less water and pesticides. It is an appealing option for sustainable fashion manufacturing due to its inherent capacity to thrive without the use of harmful chemicals. Bamboo fabric is known for being breathable, wicking away moisture, and having a silky feel. It can be used to make anything from casual clothes to expensive ones. The growing interest in sustainable, practical, and comfortable materials is reflected in the rise of bamboo in fashion.

Polyester Recycled: Closing the Loop Polyester that has been recycled has revolutionized sustainable fashion. It converts waste into wearable fabric out of recycled plastic bottles, thereby reducing plastic pollution and conserving resources. Recycled polyester promotes a circular approach by challenging the conventional manufacturing process by making use of existing materials. Recycled polyester has been used in sportswear and footwear by brands like Adidas and Nike. It is a material that offers a viable alternative to virgin polyester without sacrificing quality and demonstrates that sustainability and performance can coexist. Therefore, picture a world in which sustainable clothing production is made possible by recycling plastic bottles. It suggests something from the future.



A Carefully Weaved Future - Not only are environmentally friendly textile materials like organic cotton, bamboo, and recycled polyester used by sustainable manufacturers to avoid having a negative impact on the environment, but they also contribute to the quality, comfort, and innovation of clothing. They signify a change in perspective in which fashion recognizes its role in shaping a more environmentally friendly future. These materials are part of a larger movement that believes that fashion can bring about positive change.

Respect for Morality and Sustainability

Enterprise resource planning (ERP) systems lead the way in environmentally friendly fashion. These systems keep an eye on things and make sure that eco-friendly practices are more than just buzzwords. Transparency is woven into the very fabric of the supply chain through ERP, enabling brands to authenticate ethical fashion practices like sourcing, reducing waste, and reducing their carbon footprint, as well as sustainable apparel manufacturing. ERP solutions serve as a compass for navigating the complex landscape of global regulations and outlined industry standards, in addition to environmental stewardship. ERP ensures that fashion brands not only talk the talk but also walk the walk by automating documentation and aligning operations with sustainability best practices, creating a future where style and responsibility are seamlessly integrated.

Enhancement of the User Experience

Fashion consumers of today expect personalized online and offline experiences. ERP systems facilitate customized marketing campaigns, loyalty programs, and individualized shopping experiences by collecting and analysing customer data. Brands can increase customer engagement, loyalty, and sales by comprehending customer preferences and purchasing patterns.

Challenges in Sustainable Fashion

Material Reusing is More Mind boggling: Material reusing is more mind boggling contrasted with reusing materials like glass or paper. By far most (93%) of reused materials come from plastic containers or PET jugs (polyethylene terephthalate), which are produced using non-renewable energy sources. Notwithstanding, not at all like plastic containers that can be reused on different occasions, a Shirt produced using reused polyester can't be reused once more. In Europe, most material waste is either unloaded or consumed, with just 22% being reused. Be that as it may, the reused material is frequently reused into protection, sleeping cushion stuffing, or cleaning fabrics, as opposed to being reused in clothing creation. Under 1% of texture utilized in apparel creation is reused into new attire.

Costly and Work Concentrated:

Garments containing multiple filaments are thought of as unrecyclable. Recyclable garments should go through variety arranging and evacuation of zips, buttons, studs, and different materials. This interaction is typically costly and work concentrated.

Decrease in Quality: At the point when materials are reused, particularly on account of materials like cotton, the quality frequently decreases.

This diminished quality can restrict the utilizations of the reused material and may require mixing with virgin materials, invalidating the point of reusing.

Defilement: Materials expected for reusing can become polluted with different substances, like food buildup in plastic compartments or colours in materials.

Defilement can corrupt the nature of the reused material and convolute the reusing system.

Innovative Restrictions: Reusing advancements are as yet growing, especially for specific materials like blended fibre materials or polluted plastics. Subsequently, the viability and effectiveness of reusing cycles might be restricted.

Carbon Impression: After Western purchasers store their unrecyclable polyester and blended textures into reusing receptacles, a critical piece of this waste finds its direction to



African recycled markets, especially in Ghana, or is unloaded into open landfills. Roughly 41% of the material waste gathered in Europe is transported to Asia, for the most part to assigned financial zones where it goes through arranging and handling.

Conclusion

In design, where imagination meets liability, the business is going through a significant change. From the disturbing measurements of quick design to the promising developments in maintainable practices, the style scene is being reshaped by cognizant decisions and mechanical progressions. The roundabout economy, upcycling, reusing, maintainable textures, and incorporating ERP frameworks are not simple patterns but rather fundamental parts of a dependable design future. These practices mirror an aggregate obligation to diminish squander, moderate assets, and make a development that will assist with designing become a more moral industry. The excursion towards a more dependable design world is loaded up with difficulties, however it's cleared with imagination, coordinated effort, and a dream for a future where style and maintainability coincide together as one. Furthermore, contemporary purchasers are progressively disposed to line up with maintainable assembling rehearses as the ecological consciousness of, for instance, the millennial age is fundamentally more articulated, mirroring a more extensive cultural shift towards dependable utilization. The design business isn't just about wearing the most recent patterns yet additionally about winding around values, morals, and ecological stewardship into the actual texture of our lives. It's a source of inspiration, a development towards a more gorgeous and dependable existence where pieces of clothing don't leave an adverse consequence on the climate.

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