

---

# TRANSFORMING FAST FASHION: ADVANCING SDG 12 THROUGH SUSTAINABLE CONSUMPTION AND CIRCULAR ECONOMY

---

Deepika Dhemla, Research Scholar, Department of Law, Central University of Punjab,  
Bathinda<sup>1</sup>

## ABSTRACT

The swift proliferation of the fast fashion sector has emerged as a significant catalyst for environmental degradation and social imbalance, undermining the attainment of SDG 12: Responsible Consumption and Production. This article critically examines how the fast-fashion business model exacerbates adverse consequences on environmental justice in relation to SDG 12, through resource exploitation, pollution, and waste generation. Adopting a doctrinal research methodology, the study synthesizes existing legal frameworks, industry practices and policy documents to assess where gaps remain in regulatory interventions and systematic inefficiencies within the fashion supply chain. Key environmental ramifications explored include water pollution from cotton cultivation, toxic chemical discharges in textile processing, carbon-intensive manufacturing emissions, and the proliferation of pre-and post-consumer textile waste. The latter, comprising production offcuts and discarded garments, exacerbates landfill saturation, positioning the fashion industry as a leading contributor to global waste crises. The study takes a two-lens approach to research by focusing on both supplier practices such as unsustainable sourcing and labour exploitation and consumer behaviours that prioritize quantity over quality. The paper, therefore, suggests systemic changes towards slow fashion principles that include minimalist consumption, adoption of sustainable fibres, and corporate accountability. This is also complemented by a circular economy framework for extending the lifecycles of garments through reuse, repair, and recycling and policy interventions that will incentivize ethical production. Through the combination of doctrinal analysis of regulatory mechanisms with case studies on sustainable alternatives, this study highlights the urgency of aligning fashion industry practices with the targets of SDG 12. The results indicate that shifting to sustainability-oriented models is crucial not only for reducing ecological damage but also necessary for ensuring balanced economic growth and long-term health of the planet. In this regard, the study is relevant to the debate on environmental justice by specifying steps toward the realization of the potential for fashion industry growth without compromising ecological and social responsibility.

---

<sup>1</sup> Deepika Dhemla, Research Scholar, Department of Law, Central University of Punjab, Bathinda.

**Keywords:** circular economy; environment; fast fashion; sustainable; waste; sustainable development; SDG12.

## Introduction

The model followed by the fast fashion industry encourages the consumers to deal clothing as disposable. It is a major contributor to the environmental crisis. Slow fashion is a branch of sustainable fashion, which emphasizes economic, social, and environmental sustainability throughout a garment's lifecycle. Sustainable fashion, which emphasises economic, social, and environmental sustainability throughout a garment's lifecycle, includes slow fashion. Following the same tenets as sustainable fashion, slow fashion stresses how the market's demand side—rather than its supply side—can spur a reduction in the ecological footprint of the sector. The choice for durable and lasting wardrobes, driven by a dedication to social justice, environmental stewardship, and ethical and sustainable methods, distinguishes consumers who choose the "slow fashion" model. The way that the fast-fashion business model worsens negative effects on environmental justice in regard to SDG 12 through resource exploitation, pollution, and waste generation is one of the most significant gaps in the literature on slow fashion, despite the fact that it is continuously expanding. The present paper seeks to contribute to closing this gap by creating a conceptual framework of fashion consumption with a focus on slow fashion model. The activity of promoting goods, services, or behaviours that put an emphasis on resource conservation and environmental preservation is known as sustainability advertising. It can effectively promote a sustainable culture by acting as a bridge between consumer knowledge and practical environmental responsibility. Sustainable advertising may effectively convey the values of sustainability and ethical consumption, as demonstrated by the successful campaigns and techniques used by slow fashion firms. For example, Patagonia's iconic 'Don't Buy This Jacket' campaign persuade the consumers to reconsider needless purchases by highlighting the environmental cost of production. Brands also promote initiatives like recycling programs and resale platforms to encourage circularity; Levi's 'Buy Better, Wear Longer' campaign, for instance, emphasizes garment durability and resale options to inspire consumers to extend the life of their clothing and reduce waste.<sup>2</sup>

---

<sup>2</sup> Shyama V. Ramani, Noemi Lanzolla, Suraksha Gupta & Arnab Banerjee, 'Sustainable Consumption with Slow Fashion' (2025) *International Journal of Advertising*, <https://doi.org/10.1080/02650487.2025.2509460> (last visited on March 16, 2025).

## The concept of fast fashion

The phrase "fast fashion" refers to inexpensive, low-quality apparel that is manufactured quickly and cycled around the market to accommodate emerging trends. The "New York Times" first used the word in the early 1990s when Spanish apparel giant Zara came to New York City. The goal of the business was to bring a piece of clothing from design to shop shelves in only 15 days.<sup>3</sup> When businesses started producing less expensive versions of luxury brands in the late 20th century, this trend really took off. This was done in an effort to keep up with the rapidly changing fashion industry. This concept was heavily promoted by companies like Zara and H&M. They were the ones who started making new clothes collections at a rapid pace. Customers are drawn to this since it is updated with the newest trends and is reasonably priced. Customers can purchase the newest styles for less money. This traps them in a cycle of constantly buying and discarding clothing.<sup>4</sup> Also, Fast fashion allows low-income individuals to wear styles that are similar to those of the wealthy, which lessens the class prejudice that clothing causes. Therefore, the fashion and textile sector is a major contributor to both economic and social development. However, Fast fashion frequently comes at the expense of both the environment and human health. The fashion business is the second biggest polluter in the world, according to the United Nations. It is responsible for 8% of carbon emissions and 20% of wastewater. It releases more carbon into the air than all of the world's foreign flights and shipping put together, and it uses almost 93 billion cubic meters of water per year.<sup>5</sup>

## Legal framework

Legislative support is fundamental to achieve sustainability in textile and fashion industries. Sustainable practices within the fashion sector have, until recently, received limited attention from regulatory frameworks. India does not have a single, unified law targeting fast fashion. Instead, fragmented regulatory framework influences the sector which includes *Environment (Protection) Act, 1986*, *Water (Prevention and Control of Pollution) Act*, *Air (Prevention and Control of Pollution) Act*, *Plastic Waste Management Rules 2016*, *Solid Waste Management Rules*, etc. Integrated laws specifically for fashion waste are still lacking. The world's first

---

<sup>3</sup> Explainer: What Is Fast Fashion?, available at: <https://earth.org/what-is-fast-fashion/> (last visited on February 8, 2025).

<sup>4</sup> "Fast Fashion and Its Environmental Impact in 2025", available at: <https://carbontrail.net/blog/fast-fashion-and-its-environmental-impact-in-2025/> (last visited on February 8, 2025).

<sup>5</sup>K. Bailey, A. Basu & S. Sharma, 'The Environmental Impacts of Fast Fashion on Water Quality: A Systematic Review' (2022) *Water*, <https://doi.org/10.3390/w14071073>.

nation to take action against fast fashion and its persistent waste problem is Europe. In Europe, After housing, food, and transportation, textile consumption has the fourth-highest effect on the environment and climate change. Additionally, the textile and apparel sector is a significant source of local jobs and business opportunities, employing roughly 1.5 million people throughout Europe. It is the third-largest industry for using water and land, and the fifth-largest for using basic raw resources and releasing greenhouse gases.<sup>6</sup> Due to these reasons, the EU Strategy for Sustainable and Circular Textiles development was presented on March 31st, 2022. Furthermore, in order to promote more sustainable products in the market and more sustainable post-consumer textile management, the EU Strategy considers the “Extended Producer Responsibility” (EPR) as an essential tool. The EPR imposes legal obligations on importers and producers to guarantee the recycling or reuse of discarded apparel. By 2030, textile products sold in the EU are expected to be durable, recyclable, made primarily of recycled fibres, free of hazardous chemicals, and produced in accordance with social and environmental standards, according to the EU Strategy. Recently on June 10, 2025, France has come up with the Anti-Fast Fashion Law, setting new sustainability benchmarks for the textile industry. With the focus on decreasing environmental and social impacts, the law places strict regulations on brands entering the French market. French law penalizes brands that produce short-lived textiles, encouraging products designed for longevity and easy repair and also imposes strict guidelines for communicating product information.<sup>7</sup>

### **Viewing Fast Fashion Through the Sustainable Development Goal-12:**

The fast fashion industry has grown exponentially over the past few decades, making it easier and cheaper for consumers to access trendy clothing. The concept of fast fashion is indirectly proportionate to sustainable development Goal 12. While SDG 12 strives for "ensuring sustainable consumption and production patterns," the fast fashion industry operates on fundamentally opposing principles that prioritize rapid production, low costs, and frequent consumption cycles. This convenience comes at a high social and environmental cost, creating formidable challenges in achieving the “United Nations Sustainable Development Goals”

---

<sup>6</sup> "Textiles Strategy - European Commission", available at: [https://environment.ec.europa.eu/strategy/textiles-strategy\\_en](https://environment.ec.europa.eu/strategy/textiles-strategy_en) (last visited on March 16, 2025).

<sup>7</sup> "France Takes on Fast Fashion: A Game-Changing Law for the Industry coming soon", available at: <https://www.trimco-group.com/newsroom/france-takes-on-fast-fashion-a-game-changing-law-for-the-industry-coming-soon> (last visited on August 6, 2025).

(SDGs).<sup>8</sup> In 2015, all member states of the United Nations united to establish a "global call to action aimed at eradicating poverty, safeguarding the planet, and guaranteeing peace and prosperity for everyone by 2030." There are "17 Sustainable Development Goals (SDGs) in the 2030 Agenda for Sustainable Development", which collectively serve as a comprehensive framework for realizing the UN's objectives. Unquestionably, the fashion business has an impact on SDGs 12 (Responsible Consumption and Production) and 13 (Climate Action), as it is one of the most polluting industries in the world. In fact, the fast fashion business is one of the main causes of climate change, accounting for around 10% of global carbon emissions. This massive carbon footprint is projected to increase by 50% by 2030 if current production patterns continue, moving the industry further from the sustainable production targets outlined in SDG 12.<sup>9</sup> The global waste crisis and climate change are made worse by the fast fashion model's cycle of overproduction and overconsumption. Achieving efficient use and sustainable management of natural resources is the main objective of Sustainable Development Goal 12. Despite this, it still remains the second highest consumer of water.<sup>10</sup> Annually, the fashion industry consumes 93 billion cubic meters of water which is equivalent to meeting the demands of five million people for an entire year. Approximately 2,700 litres of water is required by cotton production alone to produce a single t-shirt, enough for one person's drinking needs for 900 days. This excessive water consumption occurs against a backdrop of global water scarcity, highlighting the industry's failure to achieve the resource efficiency mandated by SDG 12.<sup>11</sup> The industry being heavy reliant on synthetic fibres also accounts for microplastic pollution crisis. The throwaway culture of fast fashion undermines the SDG 12's vision of circular production approach. Therefore, a shift towards circular fashion—where products are designed to be reused, recycled, or biodegradable—is crucial for achieving responsible consumption and production. Brands should prioritise reduce overproduction, use sustainable materials and encourage consumers to buy less but higher-quality clothing. Companies like Patagonia through various programs like Worn Wear, which encourages the repair, reuse, and recycling of clothes, are trying to have less impact on the environment. Adidas shows how a big company can make a difference by using its three-loop method. The first loop is about recycling plastic

---

<sup>8</sup> "Fast Fashion and the Sustainable Development Goals", available at: <https://impactentrepreneur.com/fast-fashion-and-the-sustainable-development-goals/> (last visited on August 1, 2025).

<sup>9</sup> "10 Concerning Fast Fashion Waste Statistics", available at: <https://earth.org/statistics-about-fast-fashion-waste/> (last visited on August 7, 2025).

<sup>10</sup> "SDG 12: Ensure Sustainable Consumption and Production Patterns", available at: <https://www.threadingchange.org/blog/sdg-8-brnc2> (last visited on July 21, 2025).

<sup>11</sup> "Fast Fashion Statistics 2025", available at: <https://www.uniformmarket.com/statistics/fast-fashion-statistics> (last visited on August 7, 2025).

trash, the second is about making shoes that can be recreated, and the third is about regeneration, where Adidas wants to employ biodegradable materials that will break down naturally in the environment.<sup>12</sup> Fashion rental services, resale platforms, and upcycling initiatives offer promising alternatives to the fast fashion model.<sup>13</sup>

### **Environmental footprint of fast fashion industry**

Fast fashion's quick and high-volume manufacture has had a major adverse repercussion on the environment. This rapidly expanding fashion sector, now valued at \$150.82 billion globally in 2025 and projected to touch \$291.1 billion by 2032, has fundamentally transformed clothing production and consumption patterns while simultaneously creating an unprecedented environmental crisis.<sup>14</sup> To satisfy customer demands, the fast fashion industry mostly depends on mass production. As a result, natural resources like electricity and water are overused. Additionally, in each and every stage of the global supply chain starting from the raw material, yarn and textile manufacturing to retailers and consumer stage, the fast fashion exerts environmental impacts. The global supply chain is the complex web of producers, distributors, retailers, and suppliers who work together to produce and deliver goods and services to consumers around the world. It involves various processes, including sourcing raw materials, manufacturing products, warehousing, transportation, and final delivery to customers.

**Pollution from Water use-** The textile industry being largely dependent on mass production led to overuse of natural resources like water and energy. The apparel business produces enormous volumes of effluent and uses a lot of water.<sup>15</sup> As the main material used to make clothing is cotton which is highly sought in the fashion industry. Cotton is the most popular fabric and one of the most water dependent crops which is used in over 75% of all garments. The fact that a cotton garment uses 2,700 litres of water makes this clear. It is equivalent to the amount of alcohol ingested during a two-and-a-half-year span. Additionally, it makes about 4% of total freshwater extraction worldwide. The cultivation of one kilogramme of cotton

---

<sup>12</sup> "Top 10: Brands Embracing the Circular Economy", available at: <https://sustainabilitymag.com/top10/top-10-brands-embracing-the-circular-economy-in-2023> (last visited on August 7, 2025).

<sup>13</sup> "The Fabric of Change: How the Fashion Industry Can Support the UN's Sustainable Development Goals", available at: <https://www.stylisa.com/post/the-fabric-of-change-how-the-fashion-industry-can-support-the-un-sustainable-development-goals> (last visited on June 16, 2025).

<sup>14</sup> "Fast Fashion Statistics 2025", available at: <https://www.uniformmarket.com/statistics/fast-fashion-statistics> (last visited on August 7, 2025).

<sup>15</sup> K. Bailey, A. Basu & S. Sharma, 'The Environmental Impacts of Fast Fashion on Water Quality: A Systematic Review' (2022) *Water*, <https://doi.org/10.3390/w14071073>.

required to make one pair of denim pants requires 10,000 gallons of water, it should be noted. On the other hand, 10,000 litres of water would take a human ten years to consume.<sup>16</sup> It's also important to think about the chemicals used in cotton growing. Cotton uses 10% of the world's pesticides and 25% of the world's insecticides. Also, polyester fibres, which are the most popular type of cloth, add to pollution in the ocean. These fibres break down into tiny microfibers that go into the ocean through wastewater. Treatment plants typically can't filter them out because they are too small. When it is ingested by the marine organisms, it causes irreversible harm to their health.

**Pollution from Chemical use:** Synthetic fibres, such as polyester, are a major component of fast fashion and have a considerable negative effect on the environment. Polyester is the most widely produced material because of its cost-effectiveness and performance qualities. Polyester requires twice as much energy to produce as cotton. When washed, it also releases microplastics into the environment. Approximately 35% of the primary microplastic pollution in the oceans is made up of these microplastics. The production of polyester fibre uses about 70 million barrels of oil annually. Additionally, the fibre takes more than 200 years to decompose. The ecology is seriously harmed by the use of chemicals and dyes in clothing industry. Toxic dyes are frequently used in fast fashion. At this point, textile dyeing is the world's second-largest source of clean water pollution, after agriculture.<sup>17</sup>

**Textile waste and landfills:** Fast fashion adds a lot to the problem of waste. Every year, 92 million tonnes of textile waste are produced by consumers worldwide. This textile waste eventually ends up in landfills.<sup>18</sup> Fast fashion encourages more frequent shopping, which results in excessive consumption. Because fashion trends change so quickly, buyers throw away clothing quickly, creating a waste loop. Many garments are thrown away after being worn less than ten times. The issue of textile waste is a result of this overconsumption. Just 12 percent of the materials used to make clothing are recycled. The remaining ones are all disposed of in landfills, which adds to the pollution. Landfills are the main disposal option for waste in modern times. Generation Y, the largest consumer group of fast-fashion items, is expected to make the problem worse as they are reluctant to dispose of their clothes in a sustainable manner. In fact,

---

<sup>16</sup> "UN Helps Fashion Industry Shift to Low Carbon", available at: <https://unfccc.int/news/un-helps-fashion-industry-shift-to-low-carbon> (last visited on April 19, 2025).

<sup>17</sup> "Fast Fashion and Its Environmental Impact in 2025", available at: <https://carbontrail.net/blog/fast-fashion-and-its-environmental-impact-in-2025/> (last visited on February 8, 2025).

<sup>18</sup> "Fast Fashion and Its Environmental Impact in 2025", available at: <https://carbontrail.net/blog/fast-fashion-and-its-environmental-impact-in-2025/> (last visited on February 8, 2025).

even while Generation Y consumers are thought to be conscious of the various environmental problems that society faces, their intentions and attitudes do not always translate into action, particularly in the fashion industry. The fast fashion industry dominates both the stages i.e. pre-consumer textile waste and post-consumer textile waste.

- **Pre-consumer textile waste-** Pre-consumer waste in fashion, also referred to as production waste, is produced during the manufacturing of textiles and garments, and includes fibre, yarn and fabric waste. According to one study, 15% of the fabric needed to make clothing is wasted; other studies have found that this percentage is around 10% for trousers and pants and above 10% for shirts, jackets and undergarments. Numerous factors influence this waste percentage, including fabric breadth, fabric-surface design, and garment type and design (for example, one-directional designs are linked to higher waste). The quantity of pre-production waste can be reduced by lowering manufacturing rates and improving design-manufacturing communication to increase production accuracy. New, unworn clothing that is unsold (or returned, particularly after being purchased online) and "designated as waste" is known as deadstock, and it has received a lot of attention in recent years.
- **Post- consumer textile waste:** Post-production waste includes clothing that customers throw away. The short garment lifetimes, alongside increased consumption, has led globally, textiles account for up to 22% of mixed waste worldwide. Despite the high waste, textile-recycling rates remain low.

**Carbon footprint:** The Intergovernmental Panel on Climate Change claims that the textile industry causes 10% of global greenhouse gas emissions due to its long supply chains and energy intensive production.<sup>19</sup> The fashion industry is responsible for 8-10% of global emissions<sup>20</sup>. The industry is also responsible for too much pollution. It contributes to 10% of global carbon emissions, which is more than international flights and maritime shipping combined.<sup>21</sup>The fashion industry's carbon footprint remains staggering in 2024. It is responsible for 1.2 billion tons of greenhouse gases annually. This figure is predicted to increase by 50% by the year 2030. The fashion industry's high carbon footprint comes from

---

<sup>19</sup> "UN Helps Fashion Industry Shift to Low Carbon", available at: <https://unfccc.int/news/un-helps-fashion-industry-shift-to-low-carbon> (last visited on July 2, 2025).

<sup>20</sup> "Climate change: Why fashion is a major polluter", BBC News, March 11, 2022, available at: <https://www.bbc.com/news/science-environment-60382624> (last visited on July 8, 2025).

<sup>21</sup> "Fast Fashion and Its Environmental Impact in 2025", available at: <https://carbontrail.net/blog/fast-fashion-and-its-environmental-impact-in-2025/> (last visited on April 15, 2025).

high energy use and is influenced by the source of the energy used. According to a 2020 McKinsey report, the fashion industry will need to reduce its total CO<sub>2</sub> output to below 1.1 billion metric tons by 2030, a 48% decrease from current levels, to prevent irreversible damage to the climate.<sup>22</sup> The best way to decrease CO<sub>2</sub> emissions associated with fibre production would be to substitute the use of polyester with the use of natural fibres. Shifting practices in the fashion industry to reduce carbon emissions is key to limiting warming to as close to 1.5°C above pre-Industrial Revolution levels, in line with the goals of the Paris Agreement on Climate Change. At last year's major UN Climate Change Conference in Bonn, Germany, the fashion industry outlined which steps it is taking to support the goals of the Paris Climate Change agreement. For example, the fast fashion retailer H&M shared their strategy to be 100% run on renewable energy by 2040 with a fully circular production model, where the by-product of one industry serves the objective of another. Additionally, the famous blue jean manufacturer Levi, Strauss & Co has announced a new climate change action plan, the company plans to reduce greenhouse gas emissions by 40% across its global supply chain by 2025.

### **Shift in perspective more towards sustainable fashion industry**

The existing business model in the fashion industry revolves around continuous growth in production and sales, rapid manufacturing, low-quality products, and short life cycles. These practices result in unsustainable consumption, high material turnover, significant waste generation, and worst environmental consequences. To address these burning issues, both production methods and consumer behaviours need to undergo a major transformation. Achieving this, however, demands collective action from all the stakeholders: the textile sector must adopt cleaner technologies, fashion companies need to develop innovative business strategies, consumers should shift their purchasing habits, and policymakers must revise regulations and global business standards. Eco fashion, ethical fashion, and sustainable fashion all thrive to address the negative environmental effects that fast fashion models otherwise reflect. Each of these attempts has slight differences where eco fashion is based on designing garments that are better for society and have decreased effects on the environment, ethical fashion based on fair trade and environmental standards, and sustainable fashion focusing on tailoring the clothing life cycle to align with the ideas of sustainable development, considering

---

<sup>22</sup> B. Wren, 'Sustainable Supply Chain Management in the Fast Fashion Industry: A Comparative Study of Current Efforts and Best Practices to Address the Climate Crisis' (2022) *Cleaner Logistics and Supply Chain*, <https://doi.org/10.1016/j.clscn.2022.100032>.

design, material, production conditions, and the consumer.<sup>23</sup> ” The International Standards Organisation (ISO) says that eco-fashion is the practice of looking at a product's total environmental performance across its whole life cycle in order to improve important environmental indicators and encourage sustainable consumption. The ISO is also working on setting guidelines for a labelling system that would show whether clothes satisfy environmental requirements.<sup>24</sup> Number of fashion brands have now become aware and are shifting their approach to sustainable practices. This includes IOT technology which is used by companies like as Ever Ledger to guarantee the sustainability of their products from the factory to the retail shelves. The purpose of H&M's conscious collection is to use organic and recycled materials as much as possible to have less of an effect on the environment. At the same time, Zara wants to switch to textiles that are 100% sustainable by 2025. The Join Life range from Zara also promotes environmentally friendly production and responsible sourcing. Also, businesses are making textiles out of ocean trash, plastic bottles that have been recycled, and other materials that break down naturally. Using recycled materials in their production processes is exemplified by well-known brands like as Patagonia and Everlane. They are effectively cutting down on waste and resource usage in this way. To facilitate this change in mindset, the following suggestions are outlined:

### **Suggestions-**

- **Sustainability:** Sustainable clothing should be prioritised which makes use of eco-friendly materials like organic cotton, recycled fabrics, hemp, bamboo, etc. These materials release fewer emissions comparatively and will eventually reduce the industry's carbon footprint. Moreover, the dyeing process in manufacturing discharges heavy metals and chemicals such as arsenic, lead, cadmium, mercury, nickel, and cobalt into rivers, along with other harmful pollutants like sulfur, nitrates, soaps, and chromium. Implementing recycling and water treatment facilities could also help to mitigate this problem. There are innumerable innovations coming up in sustainable materials. Polymers can also be used which are created from plant-based materials. Moreover, platforms for rent clothing can be supported
- **Technology contribution** When it comes to lessening environmental damage, technology is

---

<sup>23</sup> K. Bailey, A. Basu & S. Sharma, 'The Environmental Impacts of Fast Fashion on Water Quality: A Systematic Review' (2022) *Water*, <https://doi.org/10.3390/w14071073>.

<sup>24</sup> L. Claudio, 'Waste Couture: Environmental Impact of the Clothing Industry' (2007) *Environmental Health Perspectives* 115, A449–A454, <https://doi.org/10.1289/EHP.115-A449>.

incredibly beneficial. Supply chains can be made more efficient with AI so that only necessary quantities are produced. This reduces waste and overproduction. Supply chains are more transparent due to blockchain and Internet of Things technology. Blockchain technology allows customers to trace the provenance of the clothes they buy. Real-time monitoring and data collection are made possible by IOT and are essential for streamlining supply chain processes and minimizing environmental effects. For instance, IOT devices can keep track of energy consumption, pollutants, and waste along the supply chain. This helps businesses find places where they can save costs and make things better. IoT also helps the idea of a circular economy by making it possible to make closed-loop systems, where resources and products are reused, remanufactured, and recycled. 3D printing is another important innovation. This technology makes it simple for brands to create prototypes without wasting materials. This lowers energy use as well as fabric waste. Additionally, automated processes like AI-driven fabric cutting also cut down production related material waste.

- **Slow fashion approach:** In the fashion industry, the idea of slow fashion promotes considerate manufacturing and usage. Customers are urged to choose long-lasting, high-quality products and make fewer purchases. This mindset can aid in the fight against environmental problems such as pollution and waste brought on by fast fashion. In order to accomplish this goal, product design is essential. Using hemp buttons, which can be recycled along with the rest of the garment, is one example. Unlike disposable fashion, slow fashion guarantees the reduction of resource consumption, such as electricity and water, and promotes the manufacture of quality and value. In reality, sluggish buyers will purchase fewer but higher-quality goods. One of the most effective slow fashion tactics to greatly lessen the climatic and environmental impact of clothing is to extend the lifespan of textile goods.
- **Circular Economy:** The circular economy notion refers to an industrial economy that takes a zero-waste strategy, minimising waste and pollution by extending the useful life of resources and products, partly through their continued circulation. It's important to support and grow circular, slow fashion business models including product-as-a-service, reuse, redistribution, and second-hand retail and repair. Reverse logistics, which makes it easier for customers to send back obsolete items, is very important for these models to become popular. Clothing companies may frame rules and regulations for collecting abandoned clothing so that it can be recycled or repurposed with a small payment given to the client for each returned used item. Using blockchain to manage product traceability entails giving consumers a history of the

clothing's development, from the raw materials to every stage of processing. Both the brand and the customer can instantly confirm the process's sustainability and validity in this way.

- **Regulatory and policy support:** fashion industry's policy must align with the new government initiatives such as the EU Circular Economy Action Plan, the New York Fashion Act, and the French Anti-Waste Law, that establish guidelines for reporting, labelling, and responsible sourcing. Policies can also penalise unsustainable behaviour and offer financial incentives or tax incentives to businesses that adhere to environmentally friendly techniques.

## **Conclusion**

The paper presents several remedies as well as a thorough examination of the environmental impact of rapid fashion. Fast fashion is popular with people of all ages since it is affordable and offers a wide variety of stylish options. However, there are a lot of unspoken risks associated with rapid fashion. The negative effects of fast fashion should not be understated, whether those effects be the irreversible contamination of air and water sources brought on by the overuse of Earth's resources by large orders or the poisoning of the soil from the inappropriate disposal of enormous amounts of abandoned clothing. Though the business practices are difficult to change owing to the existing high-level competition in the market, yet, it is highly advised that the entire company, from fibre manufacturing to retail, shoulder responsibility for its environmental impacts, including waste production, CO2 emissions, and the use of chemicals, water, and power. Such changes necessitate global cooperation and the adoption of new perspectives by both consumers and businesses. There is an alarming need for greater transparency, traceability, and accountability across the fashion supply chain to address the deep-rooted issues. Governments and policymakers also have a vital role to play. It is the need of the hour that legislation must regulate labour conditions, encourage circular fashion models, and tackle textile waste. Along with that, Public-private partnerships can foster innovation which will further enable companies to adopt new technologies and practices that align with SDG 12.