HS UNEP- "Environmental Sustainability in the Textile and Fashion Industries"

Textiles are essential to humans in a variety of ways, especially for clothing purposes. Fashion is an underrecognized avenue for unsustainable consumerism, with some estimates placing productivity numbers at nearly 20 garments manufactured per person every year (160 billion new garments, annually). According to research by Chen et. al, these items end up in landfills at a rate of nearly one garbage truck (~30 cubic yards) per second. Upwards of 60% of all garments are disposed within a year of production. With a rapidly expanding global middle class, this trend is unlikely to stop based on consumer demands. Continued production also warrants low prices, perpetuating the cycle. Textile manufacturing is also highly dangerous due to the CO_2 emissions related to it, with some estimates placing the total tonnage at ~1.2 billion tonnes. Newer synthetic materials such as polyester are produced by processing petroleum, a process which adds further CO_2 pollutants to the atmosphere. Many textile giants, such as China and India, rely on coal power to fuel their industries as well, contributing more emissions.

Textile consumption and production is a major target of multiple UN Sustainable Development Goals (SDG's), most notably 12: Responsible Consumption and

Production and 8: Decent Work and Economic Growth. Environmental concerns are only half of the concern with textile production. According to the World Economic Forum, much concern stems from labor inequities, such as low pay, limited benefits and significant pay gaps. Many factories are also wrought with occupational hazards. The industry is also renowned for a lack of transparency, leading to more international concern.

Initiatives to change these conditions are in progress around the world. The recycling of used materials is a field that continues to develop, and has been doing so since the 1990's through companies like Patagonia. A major initiative is a shift towards sustainability-driven tariffs, wherein imports with less environmentally harmful materials (organic cotton, recycled fibers) are given preferential tariffs to those who use cheap, synthetic materials. Included in this preferential umbrella are products of higher quality with promised longevity. The United Nations, on top of its SDG's, has also created resources like the *Sustainability and Circularity in the Textile Value Chain* roadmap, which outlines how collaborative systems can be established to build sustainability in the industry. A key aspect of change must also be the consumer markets in major importers of textile goods, such as the European Union and the United States.

Significant alterations to the industry will be costly, and will require international communication. Reform evokes fear in nations with high production, such as China, Bangladesh, Vietnam, and India. Globally, 300 million people are employed in the textile industry. Finding ways to balance sustainable changes and the maintenance of global jobs is paramount, as failure to do so directly contradicts SDG 8: Decent Work and Economic Growth.

REFERENCES + FURTHER READING

World Economic Forum

[How can we make textile and garment production sustainable?](#)

UN Resources:

1. [Sustainable and Circular Textiles](#) **(UNEP)**

2. [Sustainability and Circularity in the Textile Value Chain - A Global Roadmap](#)

3. [The 17 Sustainable Development Goals](#)

Relevant Data

[Textile Exports by Country 2024](#) (worldpopulationreview.com)

[Leading 10 Textile Importers Worldwide 2022](#) (statista.com)

Readings

[The Price of Fast Fashion](#) (nature.com)

[A New Textiles Economy: Redesigning Fashion's Future](#)

(ellenmacarthurtfoundation.org)

[Circular Economy and Sustainability of the Clothing and Textile Industry](#)

(springer.com)