

The Way's Synthetic Textiles Can Harm Environment

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Introduction

Ever since the Industrial Revolution, environmental pollution has gone up to an all time high. The rise of factories and major production has raised businesses to the top all while being detrimental to our ecosystem. The human race has done many things to make life easier, but in the process have sacrificed the health and quality of the environment. Many different types of industries and businesses are a part of the ongoing issue of environmental pollution, especially the fashion industry. Their process of creating synthetic textiles is causing discharges of high amounts of chemical loads into the environment. The effects of this are air pollution, water pollution, and the destroying of natural habitats. The fashion industries synthetic textile process is having a negative effect on the environment and they need to come up with ways that are less harmful.

Overview of the Major Textile Processes

The fashion industry has a very big role in harming the environment. One of the major textile processes that contributes to the environmental pollution is the production of cotton. Cotton is a highly-water intensive plant and is the most common natural fiber used to make clothing. It “accounts for about 33 percent of all fibers found in textiles; requiring 2,700 liters of water to make one cotton shirt (Drew and Yehounme).” That’s a lot of water being used just to make one cotton shirt. It takes a single person approximately two and a half years to drink 2,700 liters of water. This is a true slap in the face to the people who don’t have access to clean water around the world and to the places that are suffering from water shortages. “In Central Asia, for instance, the Aral Sea has nearly disappeared because cotton farmers draw excessively from the Amu Darya and Syr Darya rivers (Drew and Yehounme).” This is very sad, especially knowing that “the Aral Sea was once the world’s fourth largest lake, home to 24 species of fish and surrounded by fishing communities, lush forests and wetlands (Hoskins).” Not only did the fashion industry take water that could’ve been used to quench the thirst of many people around the world, but it also ruined the habitats of animals and plants who relied on the Aral Sea to survive.

Processes Most Harmful to the Environment

Another major textile process that contributes to environmental pollution is Textile dyeing. “Textile dyeing is the second largest polluter of water globally (UNEP).” Large bodies of waters are going to waste just to put coloring on clothes. “About 20 percent of industrial water pollution is due to garment manufacturing, while the world uses 5 trillion liters (1.3 trillion gallons) of water each year for fabric dyeing alone, enough to fill 2 million Olympic-sized

swimming pools (Drew and Yehounme).” The chemical waste from the dyes are being placed into fresh bodies of water and are not only polluting the water but the air as well. In Savar, Bangladesh there is a polluted canal in the back of the school. Many factories used for fashion dump their wastes into the canal. “Teachers struggle to concentrate, as if they were choking on air... A few boys fainted in late April (Yardley)” because of the toxic stench wafting through the school. People are literally becoming sick and nauseous just being around these dumps and breathing in their pollutant air.



Figure 1: <https://www.nytimes.com/2013/07/15/world/asia/bangladesh-pollution-told-in-colors-and-smells.html>

Top Places where Textiles are Produced

This comes by no surprise being that Bangladesh is one of the top 3 exporting countries of textile and apparel industry. According to the list on Fibre 2 Fashion, China, Germany, and Bangladesh are the three leading candidates of exporting textile. There's only but so much waste a country/place can hold and if these countries aren't careful people will start to die by just

breathing in the toxic air. Manufacturing companies need to use alternative solutions to help make the environment more healthy.

Sustainable Alternatives

There are alternative solutions to dye our clothes that would be beneficial for the environment. For example, “Instead of water, Adidas' supplier uses compressed and pressurised carbon dioxide as the agent to disperse dye within polyester fabric. The CO₂, which takes on liquid-like properties, is contained in stainless steel chambers (Kaye).” This process is good and an earth inviting alternative on the grounds that the gas is contained and can be utilized more than once without the danger of any outflows. Another company ColorZen, “modifies cotton's molecular structure and allows dye to settle within the fibres without requiring the massive discharge of water, eliminating the need to rise off fixing agents that keep a fabric's colouring consistent (Kaye).” This is great because their cotton fabric uses 90% less water and 75% less energy. Now that the manufacturers as well as the public are much more aware of what's going on, government officials can make laws that can be backed up easily due to the fact that the goal of making our ecosystem much more cleaner will benefit everybody. Law's need to be made about the things that manufacturers can't do that are extremely harmful to the environment like using up all the water supply just for cotton. Consumers need to do a better job finding other uses for clothes/garments that they don't want anymore. Instead of just throwing it away they can use it for things like a towel or even a face mask for times like we're in now. Doing this will lessen garbage found in oceans and garbage dumps with no use at all.

Conclusion

The fashion industries synthetic textile process is having a negative effect on the environment and they need to come up with ways that are less harmful. During this textiles class, I learned how different textiles were made and how different dye methods can negatively affect the environment. I also learned about different textures and what differentiates them from each other. This will change my perspective on apparel as a consumer and future industry professional by making me want to only buy and support products that are made in an eco-friendly way. Keeping our environment safe should be a top priority and everyone should be a part of it.

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