The Cost of Clothing

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Figure 1

Clothing variation depicted in store



(<a href="https://packhelp.com/branding-of-a-clothing-line/">https://packhelp.com/branding-of-a-clothing-line/</a>)

The fashion industry is one of the world's biggest money makers. Whether or not you are into fashion, clothing is something that is necessary in today's day and age. For some, clothes symbolize their personality: the way they think, their creativity, the message they want to put out there. For others, clothing and apparel is a fashion statement to show that you are following up with all the latest trends. There are 7 billion people in this universe, all of which need clothing for their everyday lives. This stirs up many questions. How is so much clothing produced? Who creates all of the clothes? Is creating the multitude of textiles eco-friendly?

Textiles are fibers that have been conjoined together through the process of weaving, sewing, knitting, etc. Textiles come in many different forms such as: cotton, nylon, polyester, wool, leather and so on. In other words, whatever you are wearing is considered to be a textile. Asia, specifically India and China lead the textile industry by producing the most amount of clothing in the world. With the United States coming in third (O'Connell, 2019). Just like any popular item with high demand, textiles go through mass production in order to meet the required demand of all human beings. Yet sadly, the process is not very eco friendly. There are seven distinctive stages that take place in order to make a single garment. Each one of these steps contributes to the growing problem of greenhouse gases that we have today. In a recent study done by Quantis which is an environmentally active company assessed the environmental influence of the international clothing industries. The study was named Measuring Fashion: Insights from the Environmental Impact of the Global Apparel and Footwear Industries. The study showed that currently, the textile industry is accountable for 8 percent of world GHG emissions. In addition to that, the textile industry generates 6.7 percent of world greenhouse gas emissions, which is equivalent to around 3.3 billion metric tons of carbon dioxide. These numbers are staggering (The Impact Of Textile Manufacturing On The Environment, 2018). We are all familiar with the concept of greenhouse gases being necessarily for life but once they are man made, that is when it starts affecting the Earth negatively. Putting two and two together, these greenhouse gas emissions created by the textile industry play a key role in climate change today.

Synthetics such as polyester and nylon are one of the most toxic textiles. Nylon is made from petrochemicals. Petrochemicals are a product of petroleum after it is done refining. Some chemical compounds made from petroleum are also obtained from other fossil fuels, such as coal or natural gas. In order to produce synthetics, manufacturers have to create nitrous oxide, which is another toxic gas. In fact, it is even more robust than carbon dioxide (Green Choices, Environmental Impacts). Also, making polyester uses large quantities of water for cooling. Which also uses lubricants that can end up a supply of contamination. This also includes mass

amounts of water withdrawals. Water withdrawals refers to freshwater that is quickly extracted from groundwater sources and carried to an area to be used for a range of processes such as dying and washing. During this withdrawal process the key stages in the production of textiles are fibre production, dyeing and finishing, and yarn preparation. Yarn preparation, dyeing, and finishing in particular use massive quantities of water so that the yarn can be washed constantly. Since all materials of usable water are confined to a certain extent, withdrawing water at a faster rate than it can be refilled means that there will be a loss of potential to meet our water needs now and in the future(The Impact Of Textile Manufacturing On The Environment, 2018). Regardless of the process, it is clear that creating textiles in any form is very energy consuming for both people and the environment.

Figure 2



 $\underline{https://www.textileschool.com/191/nylon-fiber-and-characteristics}$ 

There are better alternatives when it comes to creating textiles. For instance, instead of using synthetics, companies can switch to organic cotton. "Organic" means the cotton is produced to a set of strict USDA standards. Which are enforced by USDA-certifying agents and their job is to annually inspect fields and the operation for adherence to National Organic Program (NOP) standards. One of the world's biggest companies, Adidas, did not shy away from the concept of using organic cotton. There are many benefits that come along with switching to organic cotton. For starters, organic cotton is grown in a way that makes use of methods and materials that lessen the effect on our environment. A large effort in the organic motion is to use growing structures that replenish and hold soil fertility and construct biologically various agriculture (Dietz, 2018). In addition to which, organic cotton uses less water. Especially compared to synthetics or yarn. The main benefit of organic materials, however, is that the crops are not treated with pesticides, insecticides, herbicides and Genetically Modified Organisms. According to the World Health Organization, there have been up to 20,000 deaths each year caused by pesticide poisoning in developing countries. Here in the US alone, more than 10,000 farmers die each year from cancers related to such chemicals. Chemical pollutants also affect wildlife, killing upto 7 million birds annually in the U.S. (Diez, 2018). By switching to organic cotton, you are preventing the earth from losing water and keeping it from being polluted by chemicals that do not need to be there.

Figure 3
Organic Cotton

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https://www.ecotextile.com/2020031625839/materials-production-news/everlane-commits-to-fully-organic -cotton-switch-by-2023.html

Synthetic Cotton



https://shop.matuskataxidermy.com/products/cottonbatting-synthetic

There are many steps that can be taken to make the textile industry more eco friendly. For starters, the government should create new laws that prevent the usage of toxic chemicals. Realistically, in the world we live in today, there is so much technology that you can create an alternative for literally anything. Pesticides are something that can not be fully banned due to the fact that naturally, there are bugs on farms. Yet there can be laws passed to reduce the amount of pesticides released onto the non-organic cotton. There can also be laws that prevent companies from constantly using the groundwater. An alternative to which would encourage them to recycle the water and reuse it. Manufacturers have a significant role when it comes to making their products more eco friendly. Any company can switch to using organic cotton. Yes, there are some benefits that come with the usage of polyester or nylon, but in the grand scheme of life, there is way too much toxicity in the process of creating those textiles. By switching to organic cotton, manufacturers will be saving money because they will need less water, and will be saving the earth because less toxic chemicals will be going into the air. The most important factor in this is the consumers, meaning us. People can vow to themselves to only buy clothes that are made by organic cotton. People are so quick to jump to eating organic foods because it is "better for their body." The same concept should be applied to using organic cotton because it is better for the environment. Companies only produce what the consumers want, so if the consumers demand eco friendly alternatives, eventually companies will start providing that because at the end of the day that is where the profits will lie.

The fashion industry is very glamorous and flashy. So much so that it masks the reality of the industry. Before doing the research, I had no idea how deadly the textile industry is for the environment. Now my eyes are wide open. One thing I can never forget is the fact that tons of water is used in order to produce clothing. That is one thing I would never have guessed before taking this course. Also how fast fashion has really escalated the detrimental effects of fashion onto the environment. People blame cars and fossil fuels for climate change but they do not realize that the clothes they are wearing also contribute to the increasing downfall of the environment. Earth is one thing we all share so it is our duty to do whatever it takes to make sure it is protected. Switching to eco friendly fabrics is a small but steady step to having a better Earth for all of us to live in.

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