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The main problem within the textile industry and water pollution starts with the need for a lot of water to produce textiles. Consumers today are consuming 60% more than they did 15 years ago. Cotton is the most widely used natural fiber and requires large amounts of water. 3rd world countries like Bangladesh are the most affected by water waste considering that the resources needed for irrigation and treatment are depleted from local freshwater and groundwater resources. In garment factories and mills, 1,500 billion liters of water are used annually (Bandera, 2022). One of the most water-abundant countries is Nepal but unfortunately, water pollution is a significant issue. More than 85% of the population does not have access to safe drinking water (Chan, 2020).

Colorfix's mission according to its website is to transform industrial dyeing into an environmentally friendly, socially responsible, and economically viable process. Colorfix improves each step of the dyeing process when it comes to natural resources and pollution but specifically, The Colorfix technology reduces water consumption by at least 49% (Colorfix, 2023). Colorfix eliminates the need for toxic chemicals. While using up to 90% less water and up to 40% less energy than the conventional dyeing process (Chan, 2020). I believe that many consumers are ignorant of the harm the fashion industry is to the environment because of how much damage clothes do but the answer is a significant amount. A French textile firm PILI is using microorganisms to sustainably create colorful dyes. The process of creating dyes from sugar removes having to use high temperatures. The bacteria that turn sugar into colors are able to be used at an industrial scale but won't damage the earth in the process. The bacteria that turns sugar into colors can be used at industrial scales but does not cost the earth (Pilkington, 2022).

My experience working with sustainable materials made me realize how much I was a part of the problem and chose to be ignorant. I am an over-consumer whenever there is a new event I will always need to go shopping for a new outfit and my strategy would be to buy a cheap garment because I know I won't wear it again and it is quite easy to fall into that trap. Over the last few months, I have been enjoying the creative outlet of upcycling my preloved garment and elevating the piece. I am also eager to see my improvements from here.

I would like to see the industry be more transparent about its story. The production of their textiles and garments, the story of the people behind the brand who are hands-on creating these textiles. While doing research on the sustainable brand KOTN I appreciated their transparency and honesty on their website. It was refreshing to read and see. It would be ideal to find a more resourceful and effective solution for the water pollution that is detrimentally affecting these 3rd world countries in particular.

References

- 2022, B. P. 3. (2022, August 30). *Pili: Reducing pollution in the dyeing industry using microorganisms*. AZoCleantech.com.
<https://www.azocleantech.com/article.aspx?ArticleID=1429>
- Bandera, G. (2023, May 11). *How the Fashion Industry Pollutes Our Water*. FairPlanet.
<https://www.fairplanet.org/story/how-the-fashion-industry-pollutes-our-water/#:~:text=In%20Bangladesh%20alone%2C%201%2C500%20billion,contaminants%20to%20nearby%20water%20sources.>
- Chan, M. (2020, August 12). *This company thinks bacteria can help fix fashion's water pollution problem*. CNN.
<https://www.cnn.com/style/article/colorifix-sustainable-dyeing-water-pollution-spc-intl/index.html>
- Colorifix. (n.d.). <https://colorifix.com/>