

Environmental Hot Topic: Fast Fashions impact on our Environment

Waste Couture: Environmental Impact of the Clothing Industry discusses the life cycle of clothing, the impact clothing has on the environment, and ways to mitigate the problems the clothing industry can cause. Consumer habits affect those who grow or make the fabric, the individuals who assemble the clothing, the companies selling the clothing, and even what people may wear in a developing nation. Cotton is one of the most popular fibers for clothing and is one of our nation's largest exports. The cotton is sent to other countries where labor costs are low, which translates to low costs for the consumer. The low cost of clothing has increased our "national wardrobe" and this excess of clothing represents a large amount of what will eventually become waste. Companies, like Patagonia, are trying to make a difference by using clear plastic soda bottles to create a fiber that can be used for clothing. Even Walmart is selling clothing made from organically grown cotton. Other companies are considering putting labels on clothing regarding its carbon footprint or whether it is made from recycled fabrics or other products. While the clothing companies are making efforts to offset the environmental impacts of the industry, the biggest impact on the sustainability of the clothing industry lies with the consumer. What is bought and worn is now felt globally.

During World War I, clothing was not viewed as disposable like it is today. Families mended clothing to make it last longer, tailored it to fit another person, or used it to create quilts or rags. Extending the life of the clothing was very important. The government at that time campaigned to make clothes with "less fabric and [to] avoid needless decoration." The conservation campaign "resulted in an approximate 10% reduction in the production of trash." (Claudio). Fashion today, however, is fast moving, changing weekly and pushed by fashion magazines geared mostly toward young girls and women. Fashion magazines propagate the idea that we need more, and now. We live in a society fueled by rampant consumerism and the clothing industry has used that to create the booming fast fashion world. Because of this increase in consumption, the time it takes for a piece of clothing to be bought and thrown away has become much shorter.

Clothing starts as a fiber that is grown or man-made. Cotton, one of the U.S.'s largest exports, is a very versatile and popular fiber for clothing. However, cotton crops "account for a quarter of all the pesticides used in the United States." (Claudio). Cotton is also a water intensive crop, requiring vast amounts of irrigation to keep up with production demands. Historically, cotton was grown in the south eastern United States where annual rainfalls helped to keep crops healthy. Today, however, cotton farming is not limited to regions it would be suited for and is grown in climates not conducive to its water needs. This demand for water to simply grow the cotton depletes valuable freshwater resources. The pesticides and fertilizers used also contaminate water sources. In response to the growing demand for clothing and fabrics, and more versatile fabrics, synthetic fibers were created. Synthetic fabric production "has nearly doubled in the last 15 years" (Claudio). The process of creating synthetic fabrics requires large amounts of crude oil, increasing our demand for a non-renewable resource and the industries carbon footprint. The production of synthetic fibers is also energy intensive and its production byproducts include; volatile organic compounds, acid gases, and waste water containing solvents and chemicals (Claudio). The emissions from synthetic fiber plants cause respiratory issues and

the waste water can contaminate water systems affecting aquatic and human health. Once it is produced, these fibers are exported to other countries to be assembled where labor costs are low and the working conditions are poor. On the bright side, the low cost of labor equals low retail costs for the consumer. Which means we can buy and more for less and less.

Cheap clothes at a cheap price drives consumers to buy more, but also dispose more. It is estimated that “Americans throw away more than 68 pounds of clothing ... per person per year” (Claudio). Clothing and textiles represent a small portion of municipal waste, about 4%, but that number is growing. Clothing in our “national wardrobe”, clothing that is still in homes, represents a large amount of waste that has not yet entered landfills. Clothing does not always go straight to a landfill though. It is often resold at thrift or consignment shops, given to charity, shipped to developing nations, or recycled into new clothing or textiles. It is estimated, however, that “only about one-fifth of clothing donated to charities” is used or sold (Claudio). To reduce this latent waste consumers should be more proactive about how they dispose of old clothes. Or instead of immediately disposing of them, reuse them for another person, donate them to shelters or friends, or seek out retailers or companies that will help keep the clothes out of a landfill. Charities sell what they cannot use to textile recyclers. Like electronics, consumers can take old clothing and textiles to places that will recycle them. Companies can also make recycling clothing easier for the consumer by providing the recycling services, information on the importance of recycling and what organizations could use clothing donations.

According to one textile recycling company, Trans-America Trading Company, 30% of the textiles received are used to create absorbent rags for industrial use. Assuming that those rags are later thrown in a landfill, not only the industrial chemicals, but also the chemicals to produce the clothing will be exposed to light, heat, and water creating toxic waste that enters soil, water, and the atmosphere. While sending clothing to developing nations does help those who might otherwise struggle to find clothing, some suggests that it can hurt the economy. The amount of clothes being exported may help create jobs for the people selling the clothes, but it may also inhibit the “development of local industries” in those areas (Claudio). With consumerism and the waste from these products rising, there are hardly enough people in developing countries to make use of all those clothes. The clothing that is not bought for that purpose, ends up in landfills. Clothing is filled with chemical compounds used in its production and dying process. While in a landfill, they are exposed to water and heat which helps leach those chemicals into the soil and water. With the price of clothing in the fast fashion industry decreasing, buying and selling at thrift and consignment shops will decrease, and waste from clothing products will increase. On the bright side, there are companies trying to mitigate these problems.

A popular company in the world of fast fashion, H&M, is stepping up to make a difference. Walk in to one of their stores today and you can recycle clothing, and get a discount on your next purchase. They also have clothes that are made with recycled materials and are tagged differently so that difference is immediately known. Forever 21’s headquarters in California is solar powered and they donate clothing to different organizations. Unfortunately, one solar powered building is not going to cut it. While it is good that Forever 21 donates clothes, there is already a vast number of people doing just that. In the end, Forever 21’s efforts are not helping, as much as other companies, to create a sustainable industry. A leading and respected outdoor clothing brand, Patagonia, has been using postconsumer plastic bottles to make fibers for their clothing since 1993. It is estimated “that between 1993 and 2006 it saved 86 million soda bottles from ending up in the landfill. The use of the soda bottles also means less

cotton, less irrigation, and less pesticides. Even Versace is using a plant based polymer to create fabrics. One of the polymers Versace is using, called Inego, is created by corn byproducts and is compostable (Claudio). Other companies that could make more of a difference are at least trying. Walmart started selling organic cotton clothing in 2004. Organic cotton uses less pesticides and irrigation, although it represents only a small portion of cotton production in the U.S. Though companies across the globe are making an effort to reduce their waste, contaminants, and carbon emissions, the bulk of responsibility lies with the consumer.

Although fast fashion is great when you are living on a tight budget, as consumers, part of our responsibility is to look at the bigger picture. It is not just the production, transportation, and eventual waste that is hurting our Earth, what we do at home has an impact as well. How we wash and dry our clothes makes up “about 60% of the energy used in the life cycle” of our clothes. Clothing should also be washed using cold water and phosphate free detergents to reduce our carbon footprint and to help prevent damage our local water systems. Despite working conditions being poor in the developing countries where many of our clothes are made, it is still providing work for those people. If we decided to buy everything locally, we would hurt those people as well. When we are done with our clothes we can take them places that will recycle and/or donate them. As consumers, we should ask more about where our clothing is coming from, how it is made, and understand the impact of our individual choices better so that we can make better choices.

Through this research project I learned a lot about the effect my shopping habits have on the environment and people that are thousands of miles from me. I have always felt that I should be spending more money on better quality clothing that will last longer. Although, I now know that what I do with my clothes at home also has an effect on the environment. In class we discussed how eutrophication negatively affects local and regional water bodies. With this in mind, the importance of how often I wash my clothes, and what I use to wash them, has become more apparent. However, living on a tight budget makes purchasing higher quality clothing more difficult. I am a regular shopper of H&M and appreciate the efforts they are putting forth to make it possible for me to buy in-style clothing and also dispose of my clothing in a more responsible way. My shopping habits also have an effect on my carbon footprint. Not only through the production and transportation process, but how I take care of them and then dispose of my old clothing. The cotton in my t-shirt may have been grown in the south west where, despite the lack of natural fresh water resources, it requires heavy irrigation and pesticide use.

I care about the environment and know there is a lot I can do to lessen the negative impact I have on it. It is, however, a difficult issue to tackle. Consumerism drives our economy, we are dependent on non-renewable resources like fossil fuels and freshwater, and we have to wear clothing. How do we fix an issue that starts from a variety of sources and affects not only me, as the consumer, but also a woman in India or China? Not only does the purchase of clothing affect jobs, it affects agriculture, climate change, the development of new technologies and, ultimately, our environment. For some time I have been washing my clothes with cold water which saves energy. Though I love to shop, I do try to limit my spending and extend the life of my clothes by wearing them as long as possible. Now, when I go shopping, I will also focus my spending on clothes that are made with recycled products, and to bring my old clothes to places that will recycle them. I want to support companies that are making an effort towards sustainability and a healthy global economy by providing work to those who struggle to find it. But, as a consumer, I feel it also my responsibility to force companies to change. It is our

responsibility as consumers to demand that companies look to new resources for fabrics, use less water intensive production methods, provide safer and healthier working environments, and to educate their shoppers. We live in an age of unlimited access to information and global awareness. This means we are more aware and more responsible for the impact we have on the earth and each other, even when we are just buying a t-shirt.

Citation

Claudio, L. (2007). Waste Couture: Environmental Impact of the Clothing Industry. *Environmental Health Perspectives*, 115(9), A449–A454.