

Forum: UNEP.

Issue: Addressing the Environmental and social impact of fast fashion waste in the Atacama Desert (Chile).

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Introduction

Fast fashion waste, specifically in the Atacama Desert has become a significant threat for the environment. The fast fashion industry is known to produce clothing at a rapid pace, creating overproduction and textile waste. Many discarded pieces of clothing pile up in landfills or natural environments, causing pollution and harm to the ecosystems.

This problem has been affecting the Atacama Desert as it has become a dumpster for fast fashion waste with large quantities of discarded clothing littering the place. This fact both causes damage to the natural environment and contributes to soil and water contamination while simultaneously posing a risk to wildlife. As a result of this threat, the United Nations has labelled the site "an environmental and social emergency."

Efforts to solve this issue include cleanup campaigns, sustainable fashion movements, and collaboration between the government, non-governmental organizations (NGOs), and fashion brands. The aim of these initiatives is to promote responsible consumption, raise awareness, and encourage recycling and upcycling practices.

Overall, dealing with this global problem of fast fashion waste requires a collective effort to move towards a more sustainable lifestyle in the fashion industry.

Definition of Key Terms

Lobbying

The act of influencing a political policy or influencing policy makers in the pursuit of one's personal interests.

Recycling

Recycling is any recovery process where waste is reprocessed into products, materials or substances for the original purpose or for different purposes, according to Directive 2008/98/EC (European Parliament and the Council of European Union, 2008)

Upcycling

The activity of improving a waste material's condition through creating a product of higher value.

Downcycling

When the product obtained by recycling is of lower value.

Incineration

The destruction of something, especially waste material, by burning.

Fibres

Thread-like structures that are thin and flexible which can be produced from plants or animals, and can be used to make fabrics.

Landfills

The disposal of waste by burying it in excavated pits, landfill sites

Fast-Fashion

Inexpensive clothing that are products of mass production and are up to date with latest trends. Since they are meant to be inexpensive, cheap and flimsy materials are used which end up becoming unusable after a few uses. Cheap labor is also a valued asset in fast-fashion which results in horrible working conditions

Ecotoxicological

In relation to a scientific discipline combining the methods of ecology and toxicology in studying the effects of toxic materials, especially pollutants—ecotoxicology.

Background Information

History

The industry of fast fashion developed in the early 2000s and is based on the latest trends which were at the time followed through global fashion weeks.

Even though fast fashion is generally considered comparatively cheap, it can be found in most high-end fashion brands as well. The reason why it is considered “fast” is because it bears the responsibility of creating the demands of consumers who expect the latest style as fast as possible.

Despite this industry being seemingly popular, it has been receiving severe criticism due to its impact on workers from third world countries and the environmental damage it causes.

Labor Cost

For the products to be cheap, the production needs to be even cheaper. Therefore, global corporations keep the prices down by taking advantage of workers from developing countries which are willing to work for highly low wages with unsafe conditions containing health and safety hazards. Simultaneously, child labor is at its peak at these organizations.

Although this fact remained unknown for a long time, it was in 2013 that people realized what had been going on in these corporations. In Bangladesh, the Rana Plaza factory collapsed, killing over a thousand workers due to the unsafe premises. This story led people to notice the shocking impact of cheap and fast fashion.

Environmental Hazard

Textiles account for 5% of global landfill as fast fashion items are usually made of non-biodegradable materials such as polyester or synthetic fibres. Since these materials are of lower quality, it means that they get thrown out faster, which creates this awful cycle and feeds overconsumption.

The dyes used in these clothing pieces are also a significant threat to the environment because a large amount of water is used during the dyeing process which then runs into our water systems resulting in released chemicals that pollute the air. The United Nations has stated that this contributes to 10% of greenhouse gas emissions which leads to global warming and other ecotoxicological effects.

The Atacama Desert has the largest accumulation of discarded clothing worldwide. Each year, approximately 56.000 tonnes of used clothing are deposited which are made of fast fashion polyester or water-intensive cotton fabrics.

Textile fabrics originating from washing machines and direct washing in water bodies are impactful sources of pollution.

A single laundry of polyester clothes can discharge up to 700.000 microfibers and in 2018, the global textile industry used 100 million tonnes of virgin fibers which were 60% petroleum based. These numbers show that the fast fashion industry is an important contributor to global pollution.

Projections

Textile waste is expected to increase by 62% by 2030, which will significantly affect climate change, pollution, and landfill usage since only 8% of textile waste is currently being recycled. This increase in waste is triggered by the increase in demand which is supposed to increase at an annual pace of 3% until 2030. This growth signals that the pollution will only worsen, creating an even more dangerous environment.

Countries and Organizations Involved

Chile

The country that is home to the Atacama Desert, Chile, has been dealing with this environmental crisis for years. Even though most of the residents are severely bothered and negatively affected by this phenomenon, the site being tax-free is opening the doors wide for an illegal dumpster to form. Another main problem is that the 2016 law that puts accountability on merchants fails to include textile waste. Therefore, it is obvious that an exploitable system is present.

In Chile, it is forbidden to dump textile waste in legal landfills since it causes soil instability. Brands that are highly common in this site are Zara, H&M, Wrangler, Calvin Klein and such; which are mostly made of polyester. Because of the fact that polyester takes 200 years to decompose, these clothes are bound to get incinerated which leads to the release of toxic fumes that damage the soil, the ozone layer, and the health of the local population.

United States of America

The United States of America is one of the major exporters of discarded clothing to Chile. The pre-existing culture of overconsumption in the country allows for a myriad of pieces of clothing to pile up gathering dust after only a few uses— a result of both low quality material which cannot last a long time, and the media's impact on trends that create an environment of extreme consumption that corresponds to the rapidly changing trends.

People's Republic of China

Most of the clothing that lies on the Atacama Desert, waiting to dissolve were produced in China. With an immense population of 1.4 billion, China has an opportunity of low-wage labor, which is to the liking of mass producers who are always searching the market for labor forces which can be the most productive for the least amount spent in salaries and wages.

The mass production site in China has allowed clothing to pass through Europe, from where they will complete their journey across the Atlantic for their final destination of the Atacama Desert which will end up being their forever home, or in this situation, graveyard.

The United Kingdom

In relation to the history of colonialism between the United Kingdom and Chile, it has become an interesting point of view that despite this colonialism no longer being existent, the effects are still rampant. The director of Fashion Revolution Brazil, Fernanda Simon has stated that there's an element of environmental racism and colonialism in systems that see products being consumed in developed countries then being gotten rid of in less developed ones.

Ghana

Chile is not the only importer of used clothing. In 2021, Ghana imported \$214 million worth of discarded clothing. Kantamanto, Accra is one of the world's largest secondhand clothing markets. Consumers give their clothes to these markets but the vendors are only able to sell 20% of the donated pile. After a few trades between vendors and traders, 100 tonnes of garments leave the market as waste of which only 30% are collected by the city while the rest ends up in illegal dumps, ditches, or drains. Textile waste piles into the Odaw River, Korle Lagoon and the sea from where they wash onto the shore causing pollution.

Dominican Republic

With the impact of the projects of The Textile Recovery Project, sustainability efforts are supported while promoting the reuse of textile waste and developing the circular economy in the Dominican Republic.

The UN Alliance for Sustainable Fashion

The United Nations Alliance for Sustainable Fashion is an initiative of the UN agencies and allied organizations to contribute to the Sustainable Development Goals through coordinated action. The Alliance works to support coordination between UN

bodies working in fashion and promoting policies that make sure that the fashion value chain contributes to the Sustainable Development Goals.

Fashion Revolution

Fashion Revolution was founded by Carry Somers and Orsola de Castro in 2013 after the Rana Plaza disaster. They have developed to be the world's biggest fashion activism movement, impacting brands and people by educating and raising awareness. Their aims include:

- Ending exploitation of workers and the environment,
- Providing safe working conditions,
- Redistributing and finding a more equal balance of power,
- Putting an end to fast fashion, focusing on quality over quantity.

Artplan

Artplan is a Brazilian advertising company that collaborated with Fashion Revolution. They put together a fashion show among the waste piles to showcase the reality people are living through.

Ecocitex

Ecocitex is a circular economy enterprise that aims to eliminate textile waste especially created by fast fashion. The company which was founded by Rosaria Hevia recycles 69 tons of used clothing annually. They also have a donation program and have contributed to the lives of 220 individuals by donating over 1.2 tons of clothing since 2022.

Ecocitex opened a production facility in Santiago, Chile where they have employed formerly incarcerated women and have given them roles which were seen as "a man's job."

Ananas Anam

Ananas Anam is an innovative company that focuses on processing pineapple leaf fibres (PALF) into sustainable textile options. They consider the opinions of their workers, customers, suppliers, and the impact on the environment. Their target is to reduce the environmental impact caused by the textile industry, addressing this by suggesting innovative solutions such as pineapple farming to offer products that meet their sustainability goals. They are best known for Piñatex, a vegan and natural non-woven textile.

Timeline of Events

Nairobi, 14 March 2019

The UN Alliance for Sustainable Fashion launches at the UN Environment Assembly, seeking to end the environmentally and socially harmful practices of fashion. Instead suggesting that the industry should focus on improving the world's ecosystem.

December 2018

The United Nations Fashion Industry Charter for Climate Action was launched at the UN climate summit COP24 in Katowice, Poland.

November 2021

The UN Fashion Charter was renewed at COP26 in Glasgow, UK.

December 2023

The United Nations Environment Programme Secretariat Report of Enhancing Circular Economy as a Contribution to Achieving Sustainable Consumption and Production was reported.

June 2024

The United Nations Environment Programme Resolution of Promoting Sustainable Lifestyles was reported.

Relevant UN Treaties and Resolutions

The United Nations Fashion Industry Charter for Climate Action

The UN Fashion Charter was created with the aim of addressing the undeniable environmental impacts of the global fashion industry and to lead the sector into net-zero greenhouse gas emissions by no later than 2050, while simultaneously ensuring that global warming is kept below 1.5C from pre-industrial levels declared in the Paris Agreement.

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UNEP/EA.6/RES.8 Promoting Sustainable Lifestyles

The Resolution aims to promote sustainable lifestyles that go along the 2030 Agenda for Sustainable Development. It reinstates the importance of the private sector, local authorities, communities and Indigenous Peoples in the promotion of sustainable lifestyles.

The Resolution encourages Member States and other stakeholders to create the conditions for sustainable development to thrive, foster collaborations, and pursue education and awareness initiatives.

UNEP/EA.5/RES.11 Enhancing Circular Economy as a Contribution to Achieving Sustainable Consumption and Production

This Resolution invites Member States to take measures in cooperation with the private sector to enhance the designs of products, taking into account life-cycle upgrades, to favor product lifetime extension, repair, and re-use in the context of circular economy.

Previous Attempts to Solve This Issue

Ananas Anam

As previously mentioned, Ananas Anam is an innovative company that focuses on processing pineapple leaf fibres (PALF) into sustainable textile options. They have named their product Piñatex. Piñatex is a natural and non-woven textile which ensures that natural fibers are used instead of synthetic fibers which take hundreds of years to decompose.

The Textile Recovery Project

The Textile Recovery Project is an initiative set by the Dominican Republic to support the development of sustainable fashion. They promote recycling methods and help raise awareness among people.

Rented Fashion

Services like MyWardrobeHQ or Rent the Runway have allowed consumers to rent previously purchased clothing pieces which both benefit the consumer since they are spending less, and the environment since no new waste has been made.

Awareness Campaigns

Campaigns such as #WhoMadeMyClothes by Fashion Revolution have had such great impacts on raising awareness and educating people. Nowadays, with the help of the media, knowledge has been made thoroughly more accessible and people strive towards educating themselves more and more everyday.

Possible Solutions

Transitioning into Sustainable Practices

Using sustainable fabrics, adopting energy-efficient methods, and using renewable energy resources are some of the most basic but effective ways of creating a better environment.

Slow Fashion Practices

Switching to slow fashion practices such as choosing timeless over trendy, minimalist over maximalist, and durable instead of flimsy and cheap are crucial aspects of our lives we have total control over. This control should result in consumers purchasing more consciously.

Sustainable Supply Chain

Sustainable supply chain is affected by two factors: ethical sourcing and safe labor. Ethical sourcing is the key factor since unethically sourced materials will inevitably harm the environment. Safe labor practices ensure that workers are not overworked and underpaid. This being ensured also eliminates the well-known characteristic of fast fashion which is unethical working environments.

Waste-Energy Cycle

Textile waste that cannot be recycled should be transformed into energy to create a sustainable energy source that could be used to power recycling activities.

Bibliography

Abdulla, Hannah, "Hanesbrands in textile waste initiative in Dominican Republic", Just Style, 2022, October 31.

<https://www.just-style.com/news/hanesbrands-in-textile-waste-initiative-in-dominican-republic/?cf-view>

A Patti, G. Cicala, D. Acierno, Polymers, 2020, 13 (1), 134.

<https://doi.org/10.3390/polym13010134>

Bartlett, John, "Fast fashion goes to die in the world's largest fog desert. The scale is breathtaking.", National Geographic, 2024, March 5:

<https://www.nationalgeographic.com/environment/article/chile-fashion-pollution>

Choudhary, Anisa, "The Dangers of 'Fast Fashion'", London College of Contemporary Arts, 2020, March 9.

<https://www.lcca.org.uk/blog/fashion/the-dangers-of-fast-fashion/>

De Jaegher, Sánchez, C. Atacama Desert's Solastalgia: Color and Water for Dumping. Biosemiotics 17, 67-92 (2024).<https://doi.org/10.1007/s12304-023-09551-w>

Fashion Revolution. <https://www.fashionrevolution.org/about/>

France-Presse, Agence, "Made in China, dumped in Chile: where world's unwated clothes go", South China Morning Post, 2021, November 8.

<https://amp.scmp.com/news/world/americas/article/3155231/made-china-dumped-chile-where-worlds-fast-fashion-leftovers-go>

Johnson, Sarah, "Castoffs to Catwalk: fashion show shines light on vast Chile clothes dump visible from space", The Guardian, 2024, May 8.

<https://amp.theguardian.com/global-development/article/2024/may/08/castoffs-to-catwalk-fashion-show-shines-light-on-vast-chile-clothes-dump-visible-from-space>

Johnson, Sarah, "It's like a death pit: how Ghana became fast fashion's dumping ground", The Guardian, 2023, June 5.

Lai, Olivia, "Explainer: What is the United Nations Fashion Industry Charter for Climate Action?", Earth, 2022, July 29.

<https://earth.org/what-is-the-united-nations-fashion-industry-charter-for-climate-action/#:~:text=Launched%20in%202018%20and%20renewed,their%20roles%20in%20climate%20change>.

Nijman, Shari, "UN Alliance for Sustainable Fashion addresses damage of 'fast fashion'", UN Environment News and Media, 2022, June 21.

<https://www.unep.org/news-and-stories/press-release/un-alliance-sustainable-fashion-addresses-damage-fast-fashion>

Nesst. <https://www.nesst.org/ecocitex>

Oxford Dictionary. <https://languages.oup.com/google-dictionary-en/>

UN Alliance for Sustainable Fashion. <https://unfashionalliance.org/>

UN Open Data Resolutions. <https://open.unep.org/resolution/>

