



Forum: Environmental Commission

Issue: Measures to Control and Reduce the Waste Production in Textile Industries

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Overview of the Issue

The textile industry is one of the largest in the world, being an important source of income in countries such as China, Vietnam, the United States and Bangladesh. As textiles are found in everyday objects like the air and oil filters of cars, nearly every country worldwide is involved in the textile industry in some manner, whether it is harvesting the original resources, creating the actual textiles, developing technology for the industry or exporting and shipping. Textiles, made of various fibres, filaments and fabrics, go through rigorous processes in the textile industry where they are weaved, dyed, printed, packaged and warehoused.

Despite being such a lucrative industry, bringing an average of USD \$4 Billion for nations, the production of textiles can be incredibly harmful to the environment, damaging and polluting the air as well as being wasteful. With the increase of textile factories, there has also been an increase of respiratory diseases due to the amount of carbon emitted in the process with approximately 3 million tonnes of soot being produced from textile mills annually. Producing one fifth of the world's waste and requiring over 20,000 chemicals to create clothing, only one aspect of the textile industry, the average American discards 80 pounds of clothing a year with an approximate total of 16 billion tonnes of textiles being dumped yearly. Of those 16 billion tonnes, more than 10 billion are sent to landfills despite textiles being almost 100% recyclable. This issue is not only wasteful but also costly, with an average of USD \$45 needed to dispose of one tonne of textile waste, especially considering that synthetic clothing can take over 100 years to decompose in a landfill.

However, the most wasteful part of the textile industry is not only in the consumer use but also in the process. Requiring approximately 200 litres of water per dyeing and wet finishing, any 'run off' of the process is dumped, creating polluted water, heavy with chemicals. Therefore, water is the biggest waste product by volume in the industry. Per annum, the average environmental footprint of clothing in households is equivalent to filling 1000 bathtubs of water and producing the same amount carbon emissions as driving a car for 6000 miles. If households were to extend the 'lifespan' of their clothing garments by just 3 months, the reduction of their

carbon footprint would be drastic. The main issue lies in ‘overproduction,’ especially with the fast pace in which fashions change, encouraging people to throw out their clothes even when they remain in good condition. The textile industry also raises issues of ethics as in some nations, child labour is prominent or large workforces only exist due to exceedingly low minimum wages, meaning large percentages of populations live below the poverty line.

Several reports and studies have been conducted by organisations such as Greenpeace and Oxfam, assessing the effectiveness of recycling and selling second hand clothes (SHC’s). Mostly, all recycled clothes are taken to be sold abroad. According to Oxfam, 90% of the Ghanaian populous purchases SHC’s over new clothes as they tend to be less expensive and still in good quality thus showcasing the economic potential of reselling clothes. This not only helps reduce wastage, but also creates affordable clothing, especially beneficial in developing nations. Research by Greenpeace suggests that reducing textile production will not have economic drawbacks as the exportation remains a lucrative business and an opportunity to provide jobs for those living in the ‘receiving’ countries. For example, the importation of SHC’s in Senegal provides jobs for over 24,000 Senegalese people. Other solutions do not have to do with recycling but with the actual manufacturing process. By simply encouraging constant checks for the prevention of chemical leakages, recycling and reusing water and simplifying packaging to be less wasteful, the textile industry will already begin to reduce its carbon footprint. Methods such as management wherein, for example, dyeing is done in a specific order from light to dark to reduce the need to clean out washing machines are simple solutions to saving water.

Key Terms

Textiles: Textiles are made of various fibres, filaments and fabrics and go through rigorous processes in the textile industry where they are weaved, dyed, printed, packaged and warehoused.

Recycling: The action or process of reusing material or converting waste to reusable objects.

Carbon Footprint: The quantity of Carbon Dioxide (CO₂) released into the atmosphere as a result of activity of factories and other industries.

SHC’s (Second Hand Clothing): Second Hand Clothing is clothing garments that have been recycled and are then being resold, mostly in developing countries in West Africa such as Ghana, Senegal and Côte D’Ivoire.



Countries and Organisations Involved

China: China has approximately 40% of the world's textile exports and about 24,000 textile enterprises. 5% of China's energy usage goes to their textile plants, mainly for treating chemicals in plants. China's profit grew by 7% in 2018 and is expected to continue to grow, despite the difficult times local businesses are facing in the cities due to external growth.

United States: Since 2000, the productivity of the textile industry in the United States has increased by 60%. Worldwide, the US is the fourth biggest exporter of clothing and garments with a key buyer being their national defense which, on average requires an average of 8000 uniforms per annum. Between 2006 and 2016, the United States invested USD \$20 Billion in introducing recycling facilities into the textile industry, encouraging the treatment of waste products so that they can be reused.

Bangladesh: In the past decade, the textile in Bangladesh had significantly grown. The textile industry makes up approximately 20% of the nation's GDP and employs around 20 million people. With a goal to become a middle income country by 2021, Bangladesh hopes to achieve a level of exportation of readymade garments worth USD \$50 billion. The country is well on the way to achieving its goal with its exports growing by 8.76% in 2018. Due to a lower minimum wage in Bangladesh in comparison to some of its competitors such as China, Bangladesh has access to a vast workforce, though this raises ethical issues with only 2% of profit going to the makers of garments. 12.6% of children from ages 5 to 14 are involved in forced labour, mainly in the textile factories and this remains an issue for Bangladesh and its growing industry.

Brazil: Brazil's textile industry is worth approximately USD \$63 Billion, comprised of over 30,000 enterprises and companies. However, Brazil still imports clothing garments and other textiles into the country in an effort to increase the competitiveness of the Brazilian textile industry. The issue lies in the fact that hiring a vast workforce is expensive and that only 15% of production is exported. However, in comparison to the largest producers of textiles in the world, Brazil is based on internal distribution and sales of its textiles due to in-built ethical behaviours, according to the Guardian. Sustainably, big textile industries in Brazil are reluctant to switch to organic production of cotton, one of the most cultivated crops in the nation, because they believe that it is expensive and unreliable, thus causing an issue environmentally.

Vietnam: Similar to Bangladesh, though taking the third spot of being one of the world's biggest exporters, Vietnam's textile industry plays a huge economical role. With approximately 2.5



million employees and an average of 16% of all its profits coming from exportation of textile, the

industry plays a vital role in the country, providing job opportunities and a chance to embrace the long history of the clothing industry in Vietnam. Previously, the minimum wage was exceedingly low, meaning a vast workforce, but with the rise in the minimum wage and cost of transport and electricity, the textile industry is starting to face challenges in keeping its workforce. Vietnam is also heavily reliant on outside fluctuations of prices as many of its industries are outsourced by foreign brands. However, recognising the benefits of the textile industry, Vietnam continues to try and overcome its challenges and place more funding in the industry.

Greenpeace: Originally starting in the United States, Greenpeace is an organisation with goals to combat harmful environmental actions and encourage greener, healthier societies. Greenpeace has conducted studies, mainly in East Asia, on recognising the chemicals produced in the textile industries. They continue to look for methods to reduce the production of such harmful chemicals and seek environmental solutions to reducing waste in the textile industry in East Asia.

Oxfam: Not only does Oxfam encourage recycling, setting up recycling bins for garments and shops throughout England, but they also call for nations to end exploitation of labour, with attempts to raise the minimum wage and end poverty, especially in Vietnam, Australia and Myanmar.

Related UN Resolutions and Previous Approaches to Solving the Issue

1. A list of resolutions, relating to harmful environmental reduction and methods to reduce poverty in industries can be found [here](#). It includes UN resolutions discussing the reduction of chemicals and waste, promoting better air quality, environmental protection and the relationship between industries and the environment.
2. A draft resolution by the UNIDO (United Nations Industrial Development Organisation) to improving the relationship of industry and environment in Mongolia can be found [here](#).
3. Other useful sources for resolutions include Norway's [government initiatives](#) and the 2016 General Assembly [resolution](#) discussing the topic on Sustainable Urban Development.

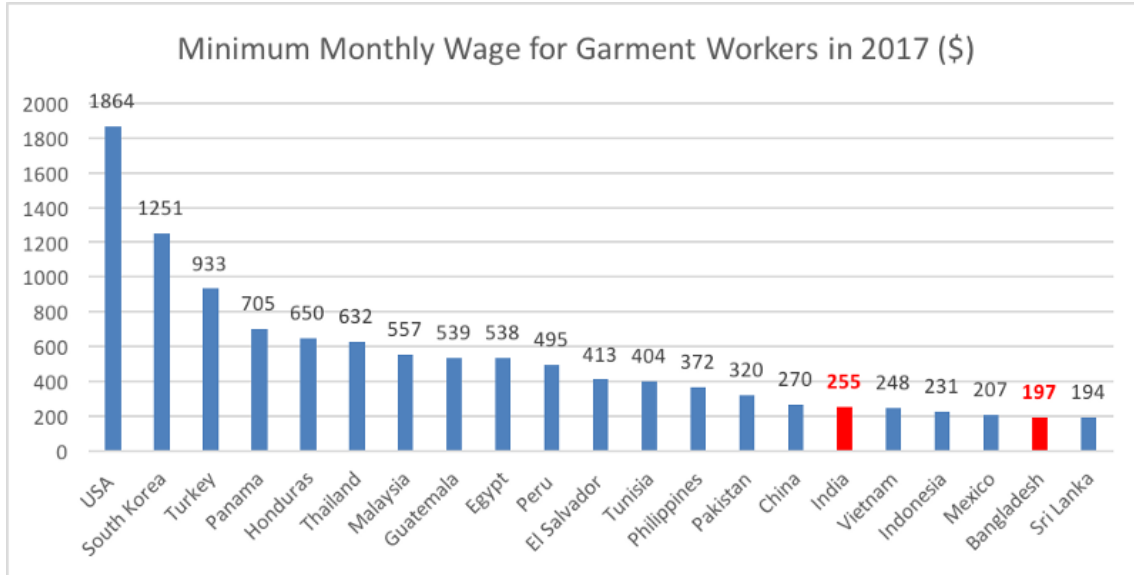


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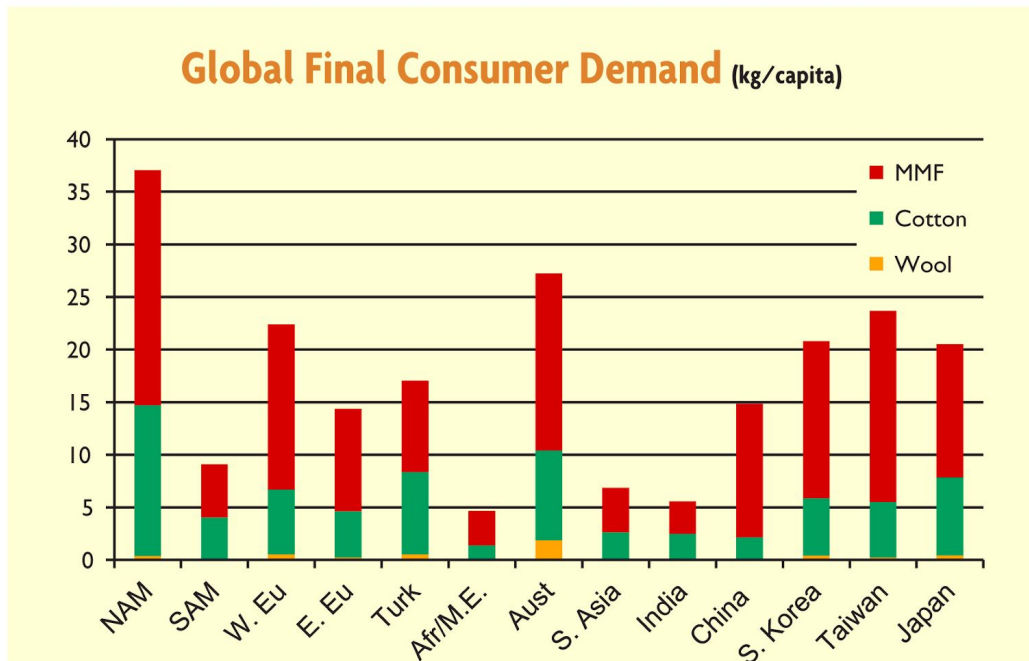
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Some of these sources have live links which can be used for research and statistics.

Appendix



Appendix 1: Minimum Monthly Wage of Garment Workers in 2017 by USD \$



Source: Textile World

<http://www.textileworld.com/textile-world/fiber-world/2015/02/man-made-fibers-continue-to-grow/>

Appendix 2: Global Consumer Demand of the Biggest Textile Producers