

RECYCLING IN FASHION

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ABSTRACT

Recycling has gain high level of importance in the fashion industry in the last few years. Fashion has become wider in perspective by including environmental measures that has been further improved by government policies. The importance of rules implemented by the government of various countries regarding recycling is important but, more important is the merging of the three most important conditions product, the pressure it put on the environment (before and after its use) and its reusability. The paper focuses on recycling, designers working in this direction and various government measures for its implementation.

INTRODUCTION

Recycling can be said as the process of converting the waste products into useful, consumable products intended to be used by the end users. Reduce, reuse, recycle are the three Rs that have been very prominent in fashion industry since last decade. In the book Big and Green: Toward Sustainable Architecture in the 21st Century recycling is defined as “a series of processes (including collection, separation, and processing) by which products and raw materials are recovered and reused in lieu of disposal as solid or liquid wastes. (Giessen, 2003)

It is considered that maximum of textile waste is generated from various households. Usually clothing is rejected as old clothes every three years. These clothes are discarded as they become unfashionable or are worn out. The ‘not so worn garments’ goes to various sales and charitable organisations. The worn out clothing either goes to textile recycling or the landfill.

Apart from household, textile waste also arises during yarns and fabric manufacturing, apparel-making processes and from the retail industry. These are the post-industrial waste. Nowadays PET bottles etc. are being used for manufacturing recycled polyester fibres. Furthermore, an estimated 17 to 20% of industrial water pollution comes from textile dyeing and treatment and an estimated 8,000 synthetic chemicals are used throughout the world to turn raw materials into textiles, many of which will be released into freshwater sources. And it is not only the production of raw material that is water-intensive, the wet processing of clothing, such as washing and dyeing, also consumes huge amounts of water. (Environmental leader, 2014)

Recycling has gain high level of importance in the fashion industry in the last few years. Fashion has become wider in perspective by including environmental measures that has been further improved by government policies. The importance of rules implemented by the government of various countries regarding recycling is important but, more important is the merging of the three most important conditions product, the pressure it put on the environment (before and after its use) and its reusability. The paper covers process of recycling, designers who are working in the field of fashion product recycling. The paper also discusses about the environmental importance of recycling, recycling influence on fashion and the government measures undertaken by the government to spread exercise and showcase the importance of recycling.

METHODOLOGY

The project aims to explore recycling boundaries, its impact, government measures taken, designers who are taking active part in the recycling process. This research is accomplished by the application of secondary data. The secondary data has been collected from the various published statistics, reports, journals, previous studies conducted on similar topics, websites etc.

RECYCLING AND ITS IMPORTANCE

Recycling has become recently a new boom research area for fashion designers. It is a term that has been used in households and communities, by professionals and non-professionals, for education and as well as for economy, but has it really been justly used given its significance. If recycle words is broken down, it will sound as 're', meaning to repeat, and 'cycle', which means process. The process of recycling involves the recollection of waste materials prior to reaching the waste dump. The waste materials are sent to Recycling Centre.

Recycling provide various important environmental benefits. They are:

- ❖ Decreases the need for landfill space. Synthetic textile products do not decompose so are threat to the environment.
- ❖ It reduces the pressure on resources.
- ❖ It encourages the development of added markets. Recycled polyester fibres manufactured from PET bottles are being used by various manufacturers. The recycled content generally cost less and leads to development of more markets.
- ❖ Recycled products are affordable for the supplier as well as for the customer.
- ❖ As recycling encourages the development of added markets it could also provide ample employment opportunities.

Lee (2016) also stated that recycling unwanted clothing reduces landfill waste as well as the amount of resources needed to produce new clothing. It also lessens the waste produced by the manufacturing process --- clothing scraps end up in the landfill, too. Used clothing can be donated, sold or disassembled for the fabric.

PROCESS OF RECYCLING

Most of the clothing that is disposed of each year is still very wearable, but it is thrown out simply because it is out of style, old, or we are just tired of it; however, recycled fashion or up cycling means to use the perfectly good textiles and re-work them into up to date styles.

Recycling can be done in different ways:

1. Using second hand clothing:

There is huge amount of second hand clothing available both in developed and in developing countries. In Ghana alone the second hand clothing industry is an 80 million dollar a year industry. According to LizAlig (2016), she conducted an experiment of making garments out of second hand clothing was possible. When designing garments with recycled fabrics those fabrics or second hand clothes that can be available easily were taken. For example second hand grey t-shirts or blue plaid shirts a very easy to buy anywhere. When the purchase is done up to 100 of the same kind of garment, it was possible to mass produce the style using up cycled fabrics. The t-shirts or button down shirts were then cleaned and cut again as if they were fabric (there is actually a whole lot of fabric in a t-shirt). This process does take extra time, cutting around holes and stains and choosing high quality fabrics; also, when designing a garment designer have to

think about making pattern pieces that are smaller and can fit on a t-shirt. The t-shirts were reworked into dresses and were a great success.

2. Excess from large factory production:

Another way to recycle fabrics is to use some of the excess from large factory production. It is a little known fact that there are tons of factories left over from production, in country like India where there are a lot of factories we can purchase such left over of fabric. Some fashion businesses use fabric waste generated during the manufacturing process or material that is unusable due to minor faults. Few companies are specialised in creating collections of these kind of fabrics, and refer to this process as 'up cycling' rather than recycling.

3. PET fabrics:

Fabrics made from recycled items are now becoming more commonplace; recycled polyester made from recycled drinks bottles now being used by companies such as Patagonia , Marks and Spencer, and Armani jeans. Armani jeans has incorporated eco fabrics and design since mid-90's which was a revolutionary idea and jeans were displayed at the Science and Technology Museum of Milan. This experimentation has continued with the production of an organic knitwear range, the use of pure alpaca and the engagement with fair-trade cotton projects in Peru and Bolivia and recycled polyester.

DESIGNERS IN THE FIELD OF RECYCLING

"The designers are the key. The products need to be designed in a way so they can actually be recycled," says Annie McCourt, fashion and textile associate at the Cradle to Cradle Products Innovation Institute. According to her fashion designing should now be looked with different perspective, it should not be looked as just one generation of products.

Designers should be trained in areas such as zero-waste pattern design and disassembly which will have a positive impact on the environment and profit margins. As stated by Carol Rose, textile specialist advisor and fashion consultant at WRAP, even if the designers want to include sustainable ethics in their designs, they often have to face the constraints down the supply chain, such as choice of fabric or accessories.

Pattinson (2014) listed upcoming designers who are implementing recyclable fashion techniques. Some of them are:

Ed Marler

Ed Marler, Fashion East designer is one of the most creative and promising designers in the field of recycling. Marler recycles second hand clothing, furniture textiles, and surplus stock material into limited editions of fashionable garments. According to Marler up cycling has a competitive edge as it gives us product that are more original and far away from that we get in usual stores.

Tara MacSharry

Tara MacSharry, a ready to wear designer also practices recovery and recycling in a creative way. She sees the exercise as a pioneering opportunity rather than problem solving.

She says that thinking sustainably has inspired the fashion she creates; it gives her a design edge. Her collection focuses on multipurpose garments which can be worn or used in variety of ways. Using a same garment in different ways makes it cost effective and beneficial for the customers as they have to purchase less and extend the products life.

MacSharry an ASOS Marketplace retailer has an output of 15-25 pieces per week. Now she is moving away from seasonal collections towards produce-to-order monthly capsule collections in the £40-£150 price bracket.

BáraHólmeirsdóttir

***BáraHólmeirsdóttir is the founder of fashion brand Aftur.** The company has focussed on slow-fashion ideology long before the term was coined, and is celebrated among environmentally conscious fashionistas. Aftur, means “again,” and expresses the company’s philosophy: to recycle and up cycle old textiles so that they can be used again. The brand does not focus on seasons as they want people to buy less with better product life. By eluding seasons in fashion, the over consumption and the race to always be the latest trends can be slowed down to great levels.*

Green is the new black: Eco-friendly Indian designers have also started a fashion revolution.

Below are mentioned certain Indian Fashion designers who are working in the field of creating designs that highlights their attention to fair practices, social responsibility and environmental sustainability – elements that truly set their creations apart.

KarishmaShahani

KarishmaShahani has graduated from the London College of Fashion and started her label Ka-Sha. The motto of this eco-friendly designer is ‘Co-exist without contradiction’. Her label Ka-Sha represents her quest to rethink modern design, assimilate it with age-old techniques and create products that are truly global in their appeal. Her collection follows a zero-waste policy, and uses plastics, fabric waste and discarded clothing as well as recycle and reuse fabric scraps to create environmental friendly and creative designs. (The alternative, 2015)

Siddhartha Upadhyaya

Siddhartha Upadhyayais among young brigade of designers for whom good design is more than just aesthetic appeal. He has his own eco-fashion label August, and focuses on zero-waste design. DPOL (Direct Pattern on Loom) is the technological innovation of Siddhartha Upadhyaya which helps in restructuring manufacturing processes in ways that it generate less waste, thereby sending less of it to landfills. With DPOL, as it uses weaving the garment patterns directly on jacquard loom, Upadhyaya is able to upsurge fabric efficiency by using fewer raw material including yarn and dyes and create less fabric waste with his signature made-to-fit garments, guaranteeing designs that are creative and unique.(Thealternative,2015)

Swati Argade

Swati Argade, anIndian-American designer started her label Bhoomki. She was affected by the sheer waste taking place in the conventional fashion industry and resources that went into producing large collections that often went unsold. Her label Bhoomki, focuses on long lasting, ethically produced collection which preserves environment and help conserving the traditional textiles. She practices recycling, re-purposing and up cycling and has launched a collection of coats made from recycled bottles and organic cotton.

Sheena Matheiken

Sheena Matheiken is a designer working on sustainable fashion. She got famous for her ‘uniform project’; she showed that the common lament of ‘I don’t have anything to wear’ is often far from

the truth. Her experiment involved one outfit, a Little Black Dress, which she styled in different way for a whole year and proved that fashion is really about thinking out of the box by combining looks, accessories, and patterns in ways that appear fresh. The Uniform Project is focused on challenging women to simplify their wardrobes, turn usual to chic and get creative with a simple wardrobe.

GOVERNMENT MEASURES ON RECYCLING

Any work or process that has to be carried out in a large perspective requires constant approval on the standardization of the product or the services offered by governing bodies and authority must be exercised in order to maintain quality. In context of recycling it is vital to understand that the limits as well as the influencing factors that affect the process of recycling.

As textile recycling and up cycling continues to gain importance worldwide, the companies devoted to processing used apparel or scraps increases as well, governments and industry alike are working to establish textile waste laws and legislation.

As stated by Osborn (2012) government measures by various countries are given below:

Europe

In Europe, textiles are covered by the European Union's (EU) waste framework directive (WFD), which came into effect in 2008 to encourage recycling and remove some of the administrative and legal obstacles impeding its development.

In March 2011 the government of Germany adopted a new 'Act to Promote the Recycling Economy and Secure the Environmentally Sound Management of Wastes', which strongly enforce recycling.

UK

As the UK government is also encouraging "zero waste economy" - around 40% of waste from UK households is currently recycled, compared to 11% in 2014.

Therefore, in UK, duty of care provisions in section 34 of the Environmental Protection Act (1990) stipulate that if any organization such as a charity, local authority or business passes second-hand clothing waste to a textile recycling merchant, they must make sure that merchant has the legal authority to take the waste. In effect, this means they are members of the Textile Recycling Association, and hold compulsory employers' liability insurance.

US regulations

As per the US Environment and Protection Agency (EPA), there are no specific federal norms to control the recycling of the clothing and textile industries. Yet, for the disposal of certain hazardous wastes, the US textile and clothing industries are regulated under the Resource Conservation and Recovery Act (RCRA), which is governed by the Office of Resource Conservation and Recovery (ORCR) which is a wholly owned subsidiary of the EPA. According to the EPA, 13.1m tones of textiles were produced in the US in 2010. Out of which 2m tones were recycled through export to developing countries as second-hand clothing or recycling.

Japan

While Japan, A nation that often boasts its environment-friendly achievements and comprehensive government controls - it may be a surprising that there is no regulation in terms of mandating the recycling of textile waste, due to this, any recycling conducted by Japanese company is done purely on a voluntary basis, according to Masaki Takao, COO of recycling firm Japan Environment Planning Co Ltd.

Currently, around 85% of textile waste in Japan gets destroyed. According to the government's environment ministry, 11% of that material is recycled into rags for wiping machinery, or melt for car interiors, while the remainder is sold as second-hand clothing - primarily overseas.

Indian government measures on recycling

Socio Economic Zone (SEZ) Division, Department of Commerce, Ministry of Commerce & Industry, Government of India (2013), has prescribed a new policy followed by the units in SEZs carrying on reprocessing/recycling of used clothing. The policy while outlining the procedure to be followed for verification of documents prior to clearing the consignment in SEZ. In case of false declaration regarding the materials being free from any toxic/hazardous substances by the importer, action would be taken as per the Foreign Trade (Development & Regulation) Act, 1992.

According to the Ministry of India "To ensure that used clothing reprocessing units in SEZ fulfil their export obligations, all such units would be required to ensure that certain minimum percentage of the unit's annual turnover is physically exported out of the country,". Further, the sales of domestic tariff area (DTA) of unmitigated clothing on account of export surplus or export rejects will not exceed 15 % of the physical export turnover of the unit. DTA means an area within India but outside the SEZs and/or export-oriented units (EOUs).

CONCLUSION

Recycling has gain high level of attention from the last decade, it has been witnessed that clothes are often discarded as when much of their potential lifetime is left. A common thread through the study has been the importance of the consumer in creating change in the sector. However, there are several barriers associated with the concept of recycling that affect the customer's choices. It is vital to educate consumers about the impact of recycling on the environment and the consequences if it is left unimplemented. Eco-Labels should be available with recycled products. Increased emphasis on durability of product would support consumers in moving towards purchase of fewer higher quality and longer lasting products. Research has led to the discovery that even through efforts are made to establish a better eco-friendly future but, still there is a long way to achieve it, but with product innovation, consumer education, responsible designers who understand their role in maintaining the environmental balance, pioneering brands a stability can be reached with environment growth and upcycling of recycled products going hand in hand.

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