

# Green Loops: Exploring Sustainable Fashion Through Crochet-Based Upcycling

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## ABSTRACT

Much of the waste generated by the global textile sector is being burned or dumped in landfills, and this is a source of loss of resources as well as environmental destruction. The concept of this review article is the exploration of greening the fashion industry with the concept of Green Loops and finding a sustainable solution to the problem through the use of crochet-based upcycling. Crochet is a flexible handcraft that consumes less energy and chemicals in upgrading waste clothes and scraps of Fabric to valued products. The study shows that by lengthening product life cycles, making better use of old clothes crocheted helps to encourage circular fashion regimes and reduce Mold ages, as well as textile waste. It also promotes individualism, innovative small-scale production of products and artists to earn money, but the setbacks such as uneven acquisition of raw materials, lack of quality control, and unorganized supply chains do not allow its extensive application. Nonetheless, crocheting can be used in upcycling to create a sustainable fashion with a balance between social and economic benefits and environmentally friendly systems. To make upcycling more significant in the development of a more sustainable and cyclical textile ecosystem, the study also indicates that the elements of innovation, regulatory support, and consumer awareness are required.

**KEYWORDS:** Upcycling, Crochet, Textile Waste, Fabric Scraps, Sustainable Fashion, Circular Economy, Reduction of Waste.

## INTRODUCTION

There is visible and fast growth of the fashion industry in the last few years, but the growth has also come along with a corresponding phenomenal growth of the textile waste. Each year, millions of products are produced, and constantly shifting trends associated with the fast fashion only keep the situation worsened. The fact that production processes are run in large high quantities, as well as the constant shifts in fashion, produce large amounts of unused and unwanted cloths and wasted clothes. A lot of the clothing that is produced is worn around very little before they are discarded. People can discard clothing even on minor problems like holes, stains, tear or even just change of fashion trend. This over time forms a mountain of textile wastes which pollute the environment and also consume the natural resources and human labour. Upcycling is one of the possible methods that people are starting to pay attention to. In its simplest explanation, the concept of upcycling implies that old clothing and/or excess fabrics are transformed into new items without even making the original fabric fully decompose. Instead of having to dispose or incinerate the excess cloth it is used creatively. Upcycling minimizes wastages and at the same time

conserves natural resources such as water, energy and raw materials that are usually required to produce new apparel. Also, upcycling encourages creativity in designs. Excessive cloth is now regarded as an asset, not a waste. Consumption through upcycling also offers the local craftsmen and smaller fashion industries a chance to create new products that foster sustainable ways of fashionable consumption. This has been facilitated by the advent of online platforms that deal specifically in the marketing of upcycled fashion over the last few years, at an affordable rate [7]. Upcycling will accommodate the desire of the environmentally conscious people. Nevertheless, it also has its disadvantages in regards to the inability to be consistent in terms of fabric availability and insufficient recycling logistics. The consumers, as well as designers, will start making more sensible buying choices as they tend to focus more on the disastrous consequences of fast fashion, and thus, upcycling is turning into a vital element of the new clean and socially responsible fashion sector.

### **THE IDEA OF SUSTAINABLE FASHION**

Fast fashion is growing at a rapid rate and some of these fashions generate massive wastage in terms of cloth material owing to reasons like obsolescence or minor damage by consumers. One of the ways that can be applied to solve this issue is through upcycling; through which used clothes, and unused fabric is recycled into new products by using partial recycling. Upcycling is also a way to save natural resources, promote creativity, and offer an opportunity to artists and small business owners to make sustainable fashion. Sustainability and Awareness: With the systematic application of upcycling, there is a great reduction in the waste of textiles and conservation of resources [9]. Although upcycling has been on the rise, there are a number of obstacles, which should be overcome. The major challenge has been the uncertainty in availability of high-quality surplus fabric, which is mainly because of absence of effective textile sorting mechanism. Nevertheless, this awareness of the adverse environmental effects of so-called fast fashion is encouraging consumers and fashion designers to have more stable and sustainable approaches to functioning.

### **UPCYCLE**

Upcycled fabric is becoming popular in the sustainable fashion industry, and designers are utilising old, unused, and discarded clothes in innovative approaches. The concept of upcycling is an integral part of modern fashion [1]. It distorts the initial speciality of garments as compared to recycling, which turns the garments without employing heavy and harsh chemicals, making it an exclusive product. Due to this, the life of the material can be increased, and the concept also promotes the idea of a cyclic fashion system, where the materials can keep being used as opposed to things being thrown away in a short period. Recycling is a new trend today that is driven by sustainability and environmental Friendliness [11].

The production of textile waste by the fashion sector is also influenced mostly by the production of scrap and discarded clothes, which are mostly burned or landed up in landfills. Nevertheless, a large number of designers apply different techniques, which include applique, patchwork, and embroidery, thereby saving them the hassle of having to use new textiles. Another problem besides the environmentally friendly advantages of using recycled materials, upcycling can also allow artisans and small business owners to develop unique wardrobes and accessories, and also offer an outlet to the continuing craftsmanship, and the promotion of eco-friendly design means. Our interest in entering the study was in knowing upcycling as a sustainability organising practice [5].

Uncontrolled materials and time to gather the fabric and sort them, and prepare the fabric are some of the

challenges facing upcycling. Nevertheless, the growing environmental consciousness has prompted design, brands and institutions to use the upcycling technique. Consequently, upcycling can cut down on waste produced by the fashion industry, enhance sustainability as well as foster creative thinking in regard to sustainable fashion production.

### **CROCHET TECHNIQUE**

Designers and product developers are currently being called upon to take greater responsibility for the problems presented by the inefficient and unsustainable systems used to create new fashion items [6]. Although most people view crochet as an old customary art form that dates back to decades, it is a simply known method of creating fabric by hand. All you need in order to make this cloth is a hook and yarn. You can make objects such as clothes, blankets and home decor as you create loops and sew. The best thing about crocheting is the fact that you can be very hands on when creating your object. The pattern of the stitch can be changed by the user of the hook or they can use other kinds of yarns or add various colours at any point to transform the final product.

The unlimited possibility to keep on experimenting is one of the most innovative aspects of crochet. In the case of a crochet project, the user is free to experiment and add more rows, cut the item in a different shape, or add more colour. This will make it a unique one off. The limitless chances of coming up with something new are what makes crochet desirable to the artisans and designers who prefer to generate smaller quantities.

Besides a source of creative outlet, crochet can also provide an opportunity in maintaining sustainable fashion. The sustainability has been applied by most of the crocheters who have used the leftover materials of other yarn projects or fabric scraps. Upcycling is a concept that tries to ensure that the number of materials that are discarded in the landfills is low because of reusing available ones. Moreover, crochet is available and affordable due to the availability of 2 essential materials, a hook, and the yarn.

### **TEXTILE WASTE AND ITS NECESSITY TO BE REUSED WITH UPCYCLING**

Fashion and textile industries are depleting amounts of natural resources; water, energy, land, chemicals, and raw materials are amazing. The wastes produced by the textile, such as clothing (retail stocks or personal used items) and fabrics (knitting, non-woven and woven industrial products) should lose negative image in gaining value with new consumers and become a source of raw materials to bridge the loop [10]. These are only some of the resource consumptions which result into colossal volume of waste during the entire process of garment production. Fast fashion is becoming a highly debated issue, and its role in the global textile waste has faced increased interest. The fashion system has a strong linkage with waste since fashion involves new materials to substitute the old ones [8].

In ensuring that textiles go to waste, more designers are using upcycling as a tool that ensures that sustainability is facilitated as opposed to making a profit. Though some of these discarded garments can still be worn, they are discarded in landfills and cause pollution to the environment. The factories also dispose of huge amounts of fabric wastes that have no use. Upcycling of these waste materials to create a new and unique product lowers the wastages; minimizes resource, and promotes environmental awareness in the fashion industry.

### **UPCYCLING AS A GREEN DESIGN POLICY**

The need to engage in recycling of fashion leadership can produce eco-friendly designs instead of interpre-

ting discarded clothing and textiles as waste over the past years. Increasingly, fashion designers are resorting to the idea of upcycling [2]. Most designers today consider worn clothes and garments discarded as a source of making new ones. Even though the principal outcome of upcycling is the creation of a new product, the value of the material, which would be thrown away seemingly without a second thought, grows. The modern discourse of sustainability in the fashion industry is turning more to rely on textile recycling and upcycling, which fall into the broader conceptualization of the circular economy [3].

Upcycled clothes generally transforms the form or purpose of used fabrics into one that is completely new. The designer is also encountering the following challenges such as; color, texture, size and condition inconsistency, which will require invention of solutions to all these challenges to come up with a unity in the design. It is a tradition of the designers to start with new fabric before they design some cloth. An upcycle on the other hand commences with the use of already available materials, and finally decides on the appearance that the final product will be. Creativity and experimentation are possible in the process. It also advocates Circular Fashion, which prolongs the life cycle of the textiles by reusing and repacking. Another advantage of upcycling is that it makes the individual item unique. People must assess and take responsibility for their personal consumption and waste and governments must mandate to regulate and prioritise these societal shifts [4]. Since every work will be done using various recycled products, then there will not be another work of the same kind that will re-look the same way. Due to this distinctive characteristic, it promotes sustainable and beautiful clothes.

### **SOCIAL AND ECONOMIC IMPACT OF UPCYCLE**

Upcycling encourages fashion that is environmentally friendly and cost effective. It encourages cooperation among designers, artisans and communities, hence they are able to retrain on sewing and reusing waste clothes. This develops confidence, skills and entrepreneurial skill on participants. This enables interaction and exchange of knowledge as well as connections and mutual profit because individuals live together in societies. With artisans and small designers, it facilitates a viable source of materials and innovativeness but a quality source of materials remains a challenge. Consumer awareness is significant in the uptake of sustainable fashion; environmental sustainability is significant in encouraging it to environment conscious individuals. Re-use products appeal to consumers due to its uniqueness but it comes at the cost of assurance of durability, supply of cost and quality. Trust among consumers can be achieved by enlightening them on the advantages of sustainability, and sustaining good quality designs to encourage them to purchase them.

### **CONCLUSION**

Fashion industry has become a major pollutant in terms of type of waste generated in the processing process and the also in terms of goods discarded by the consumers, thus leading to a cycle of environmental problems. This raises the demand of sustainable production processes that minimise consumption of resources and ensure viability of industries. Upcycling is yet another good solution as it converts old clothes and materials to other products with value added to these, cutting off pollution on landfills and resulting into a fresh, longer life of the product. It also reduces the pressure on the use of raw materials, water and energy, and promotes innovative design strategies. In addition to the social and economic benefits, upcycling promotes environmental goals through providing employment, developing practical skills, and facilitating community-level teamwork among designers, artisans, and communities. This paper is a review on literature about sustainable fashion and textile waste management that seeks to comprehend

the role of upcycling in mitigating the problems of sustainable fashion and textile waste management. To reach the goal of a sustainable fashion, it will need the cooperation of the designers, consumers, organizations, and educational institutions, and upcycling provides a good basis of a more responsible and sustainable fashion industry.

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