

India: the catalyst for a sustainable future by rediscovering recycling habits

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ABSTRACT

#iamsomiddleclass was trending on Twitter in India, weird as it sounds, there are so many things that most Indian middle class people do so blatantly and without giving a damn. In an attempt to save money, the middle-class upbringing involuntarily empowers us to optimally use our planet's limited resources. The 3Rs of sustainability may seem to have started in the west, but they have existed in the sub-continent since the civilization came into existence. Over the period, due to western influence, people stopped promoting these habits as it was looked down upon. But this needs to be rediscovered and continued, as sustainable future is the only way to survival. Indians constitute 17% of the world population as per 2011 census, which has further grown in these past 6 years. If Indians start reusing their old habits of recycling, they could be the catalyst for promoting sustainability. From buying larger clothes for children so that they can be worn longer, to passing them down to younger siblings or the servants, to using them as cleaning wipes, Indians tend to have their "jugaad" for everything. Long before the rest of the world started the exchange practices, in India the housewives would barter their old clothes with new utensils. One can still find fabric scrap makers on the streets of India, who make scraps of fabrics from garments given to them. These scraps are recycled for multiple products including doormats and rugs. Apart from these street vendors, there is a cluster and community dedicated for recycling these scraps. Given that fashion is the second most polluting industry after oil, one really needs to bring in sustainable practices in this industry to curb pollution. This paper aims at rediscovering these habits and redesigning them for habits that work globally for a sustainable future. This paper aims at rediscovering these habits and redesigning them for habits that work globally for a sustainable future. The authors plan to create a collated educational guide for promoting fashion practices, which are economical, ethical and sustainable.

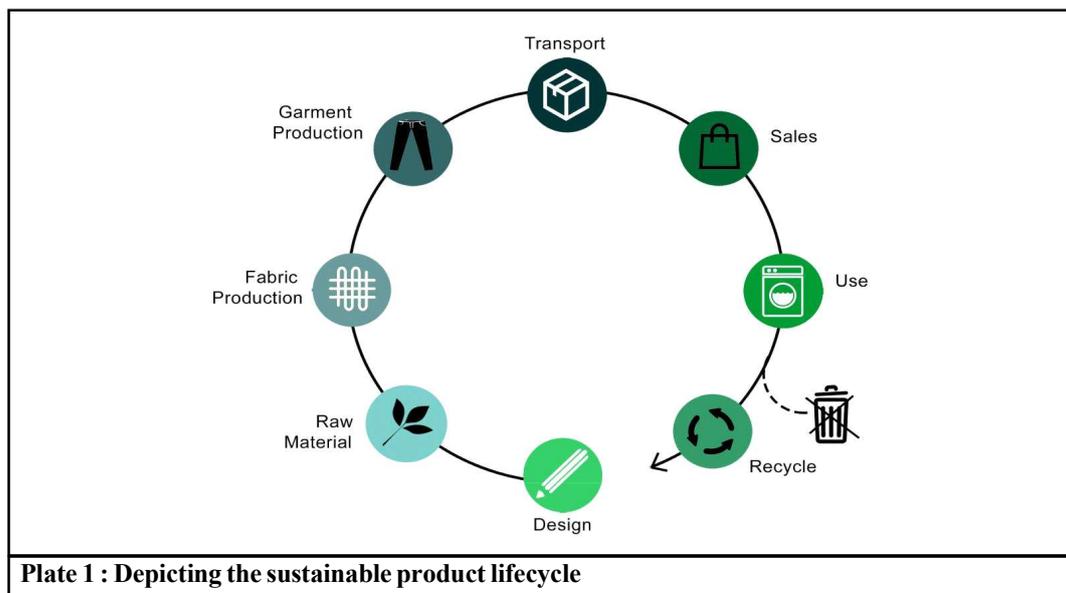
Key Words : Middle-class, Youth, Recycle, Habit, Culture

INTRODUCTION

“Call it ‘eco-fashion’ if you like, but I think it’s just common sense.” —Livia Firth, Founder of Eco Age and the Green Carpet Challenge on Chopard’s blog, Sustainability has traditionally been an indispensable part of the Indian way of living from time immemorial. Since Vedic times, the 3 Rs of waste management-Reduce, Reuse and Recycle have been a standard, unconsciously adhered to by the common man. As one of the most polluting industries in the world, second only to oil, it has become more imperative than ever that the fashion industry look to the past and the future equally,

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for a complete overhaul of its present systems, in order to become truly sustainable. India, with its rich heritage of craftsmanship and history of tried-and-tested sustainable lifestyle practices can prove to be the perfect reference point for transforming the industry. The following chart suggests an ideal product lifecycle for sustainable fashion.



The authors carried out an extensive research to understand how Indian brands and labels practiced Sustainability. The ‘*jugaad*’ practices followed in Indian households inspired a lot of design solutions and strategies. It has always been part of the Indian culture to have sustainable minds. The same has been proved by the international Greendex – National Geographic report based on a survey carried out by Globescan where India has fared to have the highest greendex amongst 17 countries. It is interesting to note that though India has the second highest population, the GHG emission per capita for India is much lesser than the world average. This culture dates back to the usage of *Khadi*, hand spun, hand woven fabric using either cotton, wool or silk fibres. One metre of *Khadi* fabric uses merely 3 litres of water against 55 litres consumed for the same metrage of fabric developed in a textile mill.

Reduce:

While fast fashion has been the norm for a long time, in the West, with most middle-income consumers shopping for cheap, disposable fashion every 2 weeks, as the latest styles hit the stores, adapted from the runway in no time, and disposing them off after simply a couple of wears, the Indian middle- class household has always maintained drastically different shopping habits. Clothes are bought with the intention of lasting a long time- a lifetime of 2 or 3 years or even more for a garment is common. Clothes bought are maintained carefully- broken zippers are fixed, loose buttons are sewed back on, unlike the west, where it is easier to throw the garment and buy a new one rather than ‘mending and make doing’. Labour is cheap and easily found- tailors and cobblers are easily accessible and charge minimal rates for mending items. However, in recent times, with the onset of globalization and the influx of high-street, fast fashion brands like Zara, H&M, and Forever

21 bringing their cheap, constantly changing merchandise to India, Indian consumers with an increasing disposable income are slowly succumbing to the western model of 'use and throw'. This in turn is being battled by designers striving to bring slow fashion back to Indian lifestyles, by making well-constructed clothes in classic styles that can easily outlast several seasons.

Reuse:

The concept of utilizing a piece of clothing to its fullest is undeniably followed in most middle-income households; clothes are either donated to household help, orphanages, charities, passed down to younger siblings or cousins or converted into cleaning rags to be used around the house depending on the condition of the garment, at the end of its original purpose. With a large population living under the poverty line in India, there exists a ready market for second-hand clothing, which makes it easy for these garments to reach new homes. Since middle-class households are also incredibly thrifty, clothes, especially kidswear that are outgrown are simply passed onto younger children that can fit into them. Torn clothes, worn beyond repair and recognition are also transformed into cleaning rags and wipes to be used around the house. The lifecycle of a garment is thus fully utilised, extended and exploited by the average middle-class Indian.

Recycle :

The ancient practise of patch-working and quilting old rags to make warm blankets (traditionally called rajai) has always been practised in India, especially in the states of West Bengal and Orissa. The art of Kantha emerged from ladies who would, in their time off from household work, would layer several old saris or dhotis and hand-stitch them together with running stitches across the surface. Kantha then developed into beautiful running-stitch hand embroidery on exquisite saris,

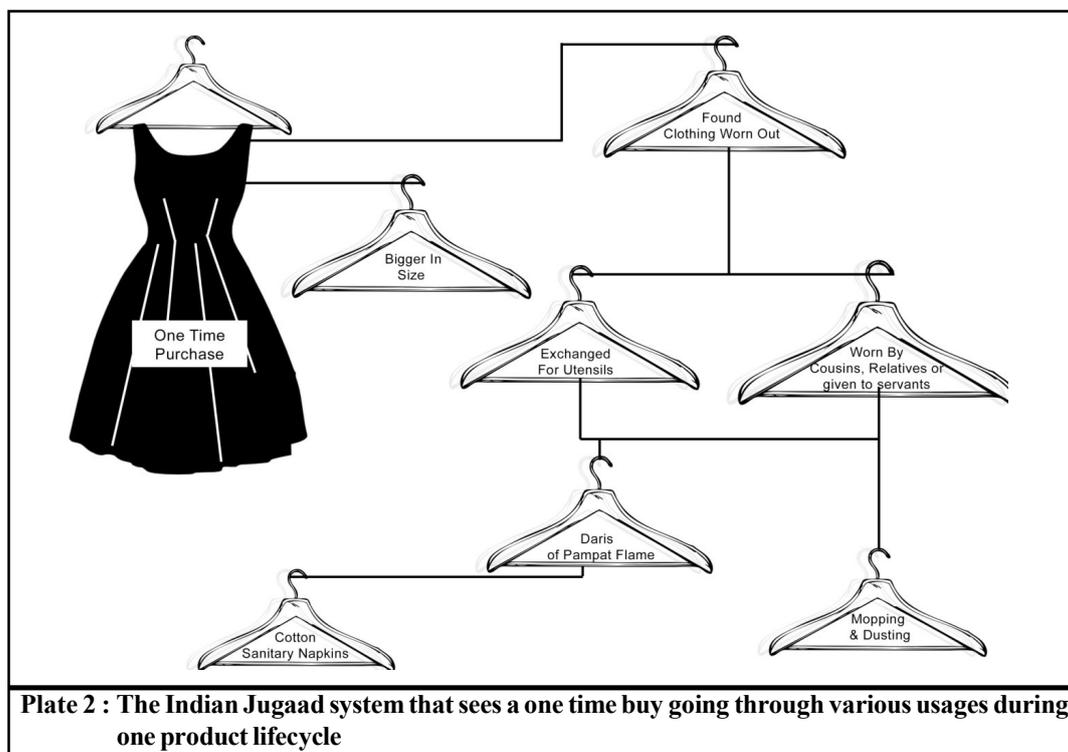


Plate 2 : The Indian Jugaad system that sees a one time buy going through various usages during one product lifecycle

not unlike the Japanese sashiko, but the base idea was to use these stitches to help recycle old fabrics and give them a new life. Street side vendors who accept old rags and scraps of fabric to be recycled into blankets or filling can still be found in the bylanes of small towns. Organizations like the NGO Goonj, also accept old garments and waste cotton fabrics to be recycled into blankets and reusable sanitary napkins by the women, that they teach these skills to and empower.

Considering a whopping 13 million tons of textiles are thrown away each year, by just the Americans, it is apparent that the West can look towards India to imbibe and absorb sustainable practices into their lifestyles as an integral part.

Case studies:

The researchers, studied various Indian brands/labels as well as practices to understand the sustainable mindset of Indian Middle class families and reviewed the same for evolving them into classroom learning for a sustainable future of the industry.

At current times when sustainable fashion is perceived as an expensive affair, it will be interesting to see how India and it's middle class practices have shaped a new direction for the west to look towards for a better future. From upcoming gen-next designers to NGO's all have joined hands for a better tomorrow.

Case study 1 :

Upasana Design Studio uses sustainable textiles and handicrafts for ecofashion clothing. Not just sustainable clothes, the studio envisions a conscious effort towards sustainable fashion with a purpose. The Tsunamika project is an example where they helped fisher women get over the trauma of tsunami and involved them in a creative work.



Fig. 1 : The Tsunamika Dolls developed by the fisherwoman. Image courtesy: www.tsunamika.org

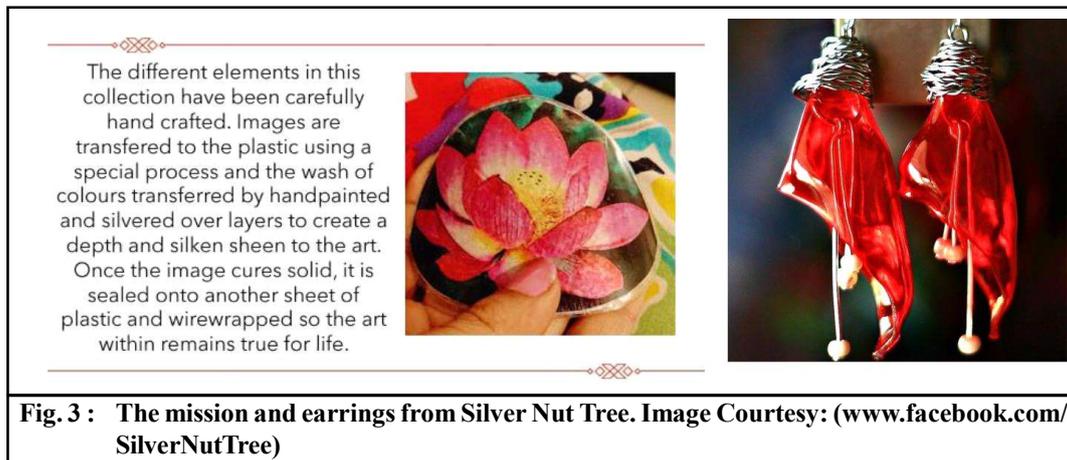
Case study 2:

Doodlage uses fabric wastes to make clothes. No two designs look similar as the fabrics are upcycled wastes from export houses. The founder of the brand during her internship, thought of putting to use the fabric rejects of the export houses. Most of the times these rejects are due to minor difference in the texture/color of the fabric.



Case study 3: Silver nut tree :

Indians offer solutions to the environmental needs in their own unique way. Similarly the brand is determined to have one less bottle in the landfill at a time by recycling plastic into beautiful and artsy jewellery. The founders call themselves as glorified *raddiwalas* (In India, there are *raddiwalas* who buy old newspaper, plastics and metals which are later recycled).



Case study 4:

The NGO's and fair trade organisations are not far behind. A fair trade organisation – Marketplace: Handwork of India, who employ and train slum women of Mumbai use their fabric waste of Indian textiles from apparel and home furnishing range to come up with a *chindi* collection of accessories and home décor. They have been able to manage their waste in a very creative way and also provide employment to the needy.

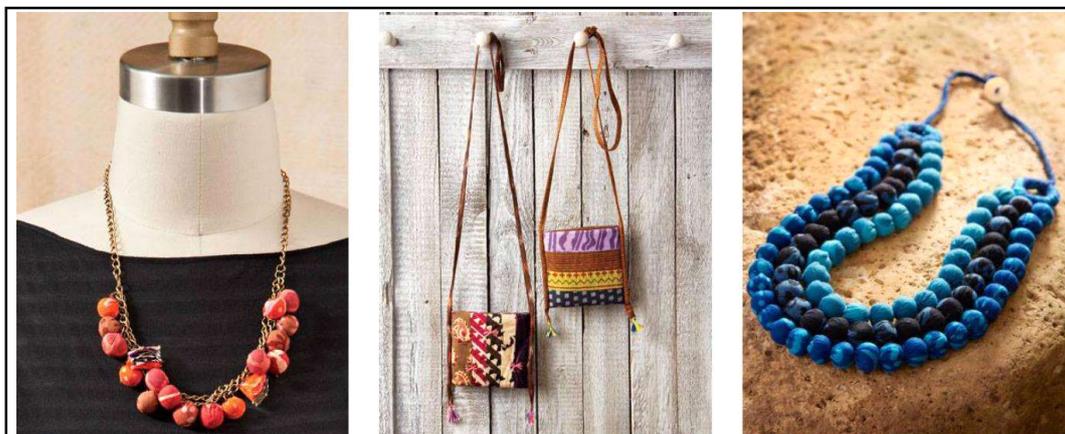


Fig. 4 : Chindi accessories line by MarketPlace: Handwork of India (Image Courtesy : www.facebook.com/pg/marketplaceindia)

Case study 5:

On the other hand there is Goonj, which uses fabric waste to provide a menstrual solution – “My Pad” to the women all over India who are deprived of an access to sanitary napkins. These cotton napkins are hygienic and provide these women with the basic necessity.

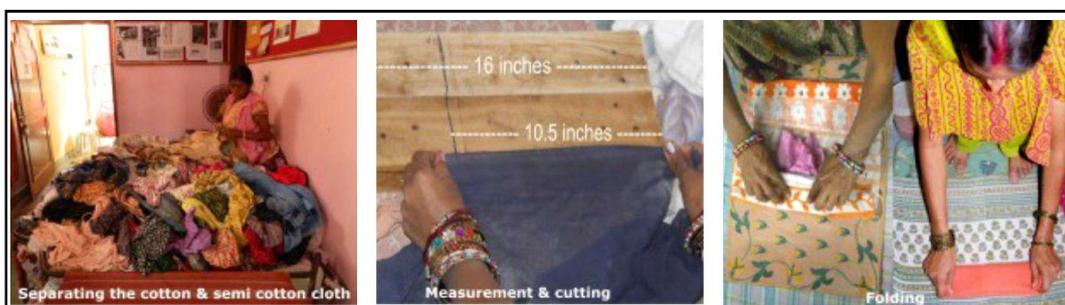


Fig. 5 : : The process of making MY PAD at Goonj. (Image Courtesy : www.njpc.goonj.org)

Case study 6 : Silk India, Mumbai :

Silk india has been in the textiles business for over 25 years now. They have their office in Kalbadevi, and a production house of over 60,000 sqft in Bhiwandi. Originally they had started the business with variety of fabrics and gradually moved on to sarees, unstitched suits, dupattas and now are making men’s kurta, kids kurta and women’s kurti. They offer an excellent range of Indian Ethnic Wear that uses patch work, prints, georgette, silk, crepe and a huge variety of fancy fabrics. As they were making short kurtas for men, they received an order of 15,000 pieces. The fabrics used were of 36” width and the sizes of the kurtas were 38(1), 40(2), 42(2) and 44(1) of each design. The fabric was layered in a way that eight pieces could be cut at one go. An average of 2.50 m fabric was consumed per piece. An average wastage of 8”-10” was generated. All the waste collected was tried to be reused for making men’s kurta but it didn’t work out. Later, they made such designs that would be aesthetically pleasing and at the same time the waste fabrics could be used. Three such designs were selected for women’s kurta and 10,000 pieces were produced. All the waste was used up, and the designs were well accepted. The demand was so

high that after using up the waste fabric, the company had to make the same designs from fresh fabric stock.



Fig. 6 : The above images show the original design of men's kurta, the fabric waste of 8" and then the creation using fabric waste

Case study 7: KVIC (Khadi and village industries commission) :

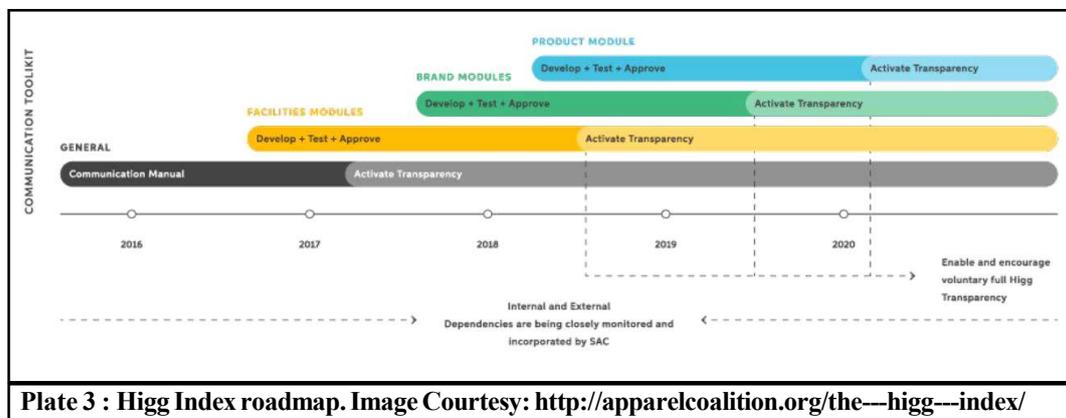
Since the historic times, Indians used to wear loin clothes that were rectangular pieces which were draped. Still today, saree which is the traditional attire is majorly handwoven, can be draped in various ways and also fits any size, making it a sustainable product. From vedic times to British Raj, recycling has always been prevalent. During the British rule time, the British used to import fabric rags as well from India so as to use them to make handmade paper. The handmade paper creation from fabric rags still continue with KVIC which produce different varieties of handmade paper from fabric rags which can be used for drawing, artwork, greeting cards, certificates, tissue paper, carry bags, etc.

Present day scenario:

Presently the Sustainable Apparel Coalition has been able to come up with Higg Index which has been considered as one of the fashion law to set the standards and measure the levels of sustainability. They have been able to involve not just retailers, manufacturer but the academias and organisations as well. It is required to educate the students about these latest developments. They should be aware about the Sustainable Apparel Coalition and Higg Index, to promote their brand/manufacturer/retailer to be part of this esteemed coalition which adds to the brand value and helps their client trust the sustainable practices followed.

The future:

Partnerships with textile mills, retail and export houses to gain access to end-of-roll fabrics and dead stock: Improper stocking, excess production and post-consumer textile waste forms a sizeable



percentage of the total amount of waste contributed by the waste industry. These perfectly useable fabrics and garments often end up in landfills as many companies find it the easiest thing to do. Diverting these resources through partnerships with these mills and houses into the hands of creative design students, who could create upcycled, marketable clothing, as part of their varied projects could prove to work towards both alleviating the issue of and creating awareness among the students about the excesses of the industry. Students can be taken to visit warehouses where excess stock lies and understand the grave issue first-hand while exercising their grey cells.

The EP&L account:

Following Kering’s open-source Environment Profit and Loss Account methodology to understand how each and every decision in the process of sourcing affects the environment cost of the garment, can make a student understand how the design process is crucial to lessening the impact of the blow on the environment. The decisions of whether a basic jacket is made from cashmere wool or satin , or whether its buttons were made in India or China, all add up to the big picture. A basic mobile application designed by Parsons already exists, but a fully functioning application that is constantly updated with consultations with the industry including designers and the ministry, and that advises on how to lower impact can be designed. Students can be encouraged to create their own EP&L accounts for their varied projects.

Waste from the studio:

Zero waste pattern making is being increasingly used by designers to eliminate waste in the cutting stage, and forces design students to stretch their brains to find solutions. Waste from conventionally cut garments can also be upcycled, such as being woven or knitted into home furnishings, while collaborating with textile or knitwear design students and creating solutions together. Composting the enormous amount of muslin scraps from the cutting process can also be explored as an option; this is currently being followed in FIT, New York. On an average, a student uses 15-20 m muslin cloth in a term. If the waste scraps were recycled then the consumption would be lowered by 3m per term/semester. For recycling fabric scraps of muslin, it is proposed to have two cartons with segregation of waste as per the sizes. Fabric scraps that were smaller than 6”x6” were discarded. The fabric scraps that are smaller than 12”x12” approx. were stored in the carton labelled as small scraps and the bigger ones were stored in the carton labelled big scraps. The students can reuse these leftover scraps. In this scenario the incentives for the main player –

students would be that they save money spent in buying the supplies for their assignments and also save visits to the stores. It works as a motivation for them. This practice holds its inspiration from Indians buying and segregating their clothes based on sizes to define the uses and longevity of the product usage.

The other alternative to this is promoting circular economy practices. Indians as part of their culture have believed in circular economy concept. For example, a pair of trousers bought would be worn till it fades, and then would be cut and used as shorts to be worn at home. The cut away parts of the trousers would be used for wiping floors. These shorts after they are worn out would be made into pieces for wiping floors. After these wiping cloths turn dirty and can no more be cleaned, they would be then further made into thin strips which can be used as wicks for igniting fire during winters. The ashes from the same are then used later for cleaning utensils. This is one of the many ways in which a piece of clothing sees multiple usages till it cannot be used in any form. It is the need of the hour to include these practices while designing anything new. There is a rise of DIY (Do it Yourself) videos on social media, but not just the consumers, the designers at the start need to envision multiple usability options post the product has lived its primary need. The same may be taken up by the industries by setting up a department which caters to researching and recycling their surplus/rejects and unsold stock and upcycled into garments/accessories. This practice helps the company put to use their waste as well as adds to their CSR (Corporate Social Responsibility) practices. Such practices also help in gaining a better Higg Index score which adds to the credibility of the company on the global platform.

Conclusion:

It is important that the present generation looks at the environment and the available resources as being borrowed from the future generations. The more we use and waste them, lesser the future generation will have. There is a strong need to develop a model(s) where the students, who are the future of the fashion industry are imbued with the sustainable design practices.

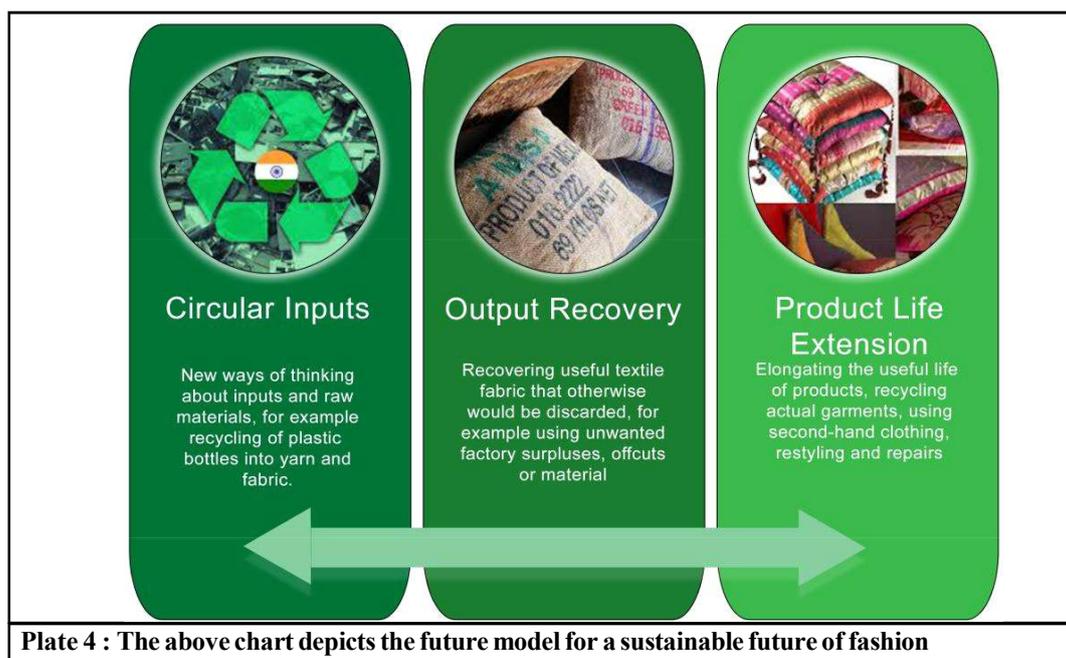


Plate 4 : The above chart depicts the future model for a sustainable future of fashion

Thus the study aims at igniting the concept of sustainable fashion, and getting the students to think beyond just a product development and have a foresight of the footprint that the product causes. It is required that as designers they should plan the journey of the product till the time it lives up its every possible usage. And Indians have mastered the art of recycling, whether it comes to recycling leftover food or clothes, they have their own unique way at managing the resources and utilise them fully; thus following a circular economy model.

“There is no beauty in the finest cloth if it makes hunger and unhappiness.” – Mahatma Gandhi.

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