Recycling of Waste for Environmental Sustainability in Fashion and Lifestyle Sectors

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Abstract

Environmental sustainability is the keyword for almost every developmental activity of concern. The author being a Designer and Design academician, has witnessed a lot of non sustainable issues in the form of harmful gas emmision, toxic wastages piling up in the clothing and other related sectors and therefore suggests little but effective efforts to be undertaken for recycling of waste obtained from different activities in growing sectors. If the suggestions are considered by the industries the cost of finished products will be reduced and the labour will be properly paid which will make sustainable environment.

Keywords: Environmental Sustainability, Toxic Wastages, Emmision. **Introduction**

Fashion world in a broad context is more superlative than being objective. On one hand it fulfills the 'desires' of the mankind, on the other, it hampers ecology on a huge scale, catering more and more to the environmental damage. The fashion industry is estimated to account for 4 percent of annual carbon emissions on the world wide scale.

The whole concept of building or creating something new from the scratch involves the meticulous process of utilizing resources very efficiently. Careful planning and thought process is required for even a little thing. How the industry and the Government takes action across key sectors leads to minimal wastage and effective march towards more resource efficient economy. These key sectors could belong to construction, textiles, furniture, electrical and electronic products, road vehicles, packaging, single use commodities like plastic, rubber sheets, and more recently one time usage face shield and masks.

Gone are the days when, simple debate on sustainability or planting a sapling once a month - as a part of environment drive could contribute ample amount to one's social responsibility towards sustainability. Now, effective steps should be taken at all levels in order to sustain earth's life to few more lifespan of generations. Fashion and lifestyle sector being a major manufacturing area because of its presence in the holy trio of (Food, Clothes and Home) needs to pull up socks all the more.

In order to work out a product's environmental impact - the entire lifecycle should be understood decisively. The extractions and processing of raw materials, usage (the resource utilization - how much energy and of what kind is used in the process and how to minimize the energy wastages), recycling, disposal and up-cycling at the end of product's lifespan should be planned quite ahead in order to avoid, land fill and destructive degeneration.

Since the production facilities of most of the industrial manufacturing these days are machine driven or digitally controlled, it becomes all the more important to mind the energy efficiency. For instance, for a production facility of finished leather skin for clothing a modern condensing gas boiler could turn 90% of energy it consumes into useful heat compared to old one, that could manage just 60-65% ofit. The skudding, liming, pickling all process could be better conducted by 'controlled machine, that are maximum energy efficient than the human hands or old machines.

The packaging sector should try and minimize the wastages. It will not only reduce the manufacturing cost but also by saving paper, avoiding plastic and synthetic non-biodegradable material, environment friendliness

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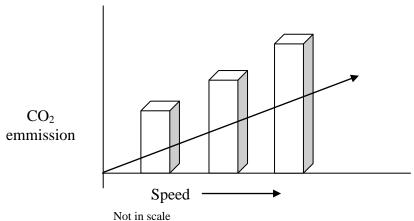
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could be ensured. These days the creative minds of the innovators have come up with alternative material like wood shaving, leather shaving MDF Board, waste material recycled into rolled paper sheets and even 'elephant poop' paper. We should open our minds and eyes and accept/apply new changes more readily. Nature can recycle many things like water and carbon all by itself, for the rest of it, human being has to put in effort and that too on a massive scale.

Concept of Re-use, Re-assembly and recycling should be understood and applied very stringently.

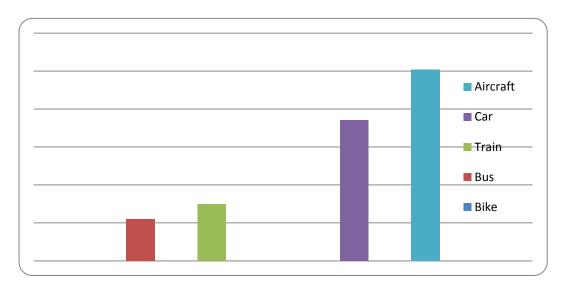
For example -Old vehicles can be reused in different way. Body's steel, aluminium and other metals could be reused in building other things. The all fine motor parts could be fitted in second hand cars as it is. While the upholstery materials could be revamped and re-used.

The vehicles used for transportation/ travelling should have a speed check. By and large the fast you travel, more energy it takes, more fossil fuel burns and more CO₂ (Carbon dioxide) is emitted.



The mode of transport used for inter-industry travelling or carrying the raw material/ furnished products should be optimized by choosing the median speed with less fuel consuming mode of travel than

the high speed more fuel using vehicle. For example a shipment of Women's apparel should be preferably carried to and fro by ship or pollution checked truck containers than the high speed airplanes.



Graph to shows emmission of CO₂ per kilometer per person for various mode of transport

This concept of sustainability is more vast than reckoned. The spread of communication and globalization has made manufacturing of even a tiny product pass through many-hands. For example, while a T-shirt might be designed in UK by a set of designers, itis sampled in low suburban facility of another country, while it is mass produced in some developing nation where the labour is cheaply available and the infrastructure cost is quite low. After

production it is packaged and shipped. The innate laborers and manufactures might be paid minimal amount. Whereas some big designer brand after receivingthe shipment might label it and sell it through retail chains after increasing the manufacturing cost ten times. Hence, the end customer benefits the previledged members of the chain much more than the actual producer. That is where the term ' Fair trade' comes into being. It should be applied more

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strictly to implement the right and benefits of the by previledged developing material for a sustainable living.

Objective of the Study

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The purpose of this study is to introspect the sustainability issues - the major growing sector like apparel, home décor, lifestyle etc are facing and are finding it difficult to combat it in a effective manner. Before trying out some innovative measures in these highly trendy sectors, it becomes compulsory to know the pros and cons of it. This study is thus aimed at pondering over the background resources and available options so that some new ideas of improvising ecology on a broader scale can be achieved.

Conclusion

The highly toxic environmental damage is evident in recent times when we are witnessing the outbreak of a Pandemic like Covid 19, the California's forest fire, catastrophe caused by Himalayan landslide, kerala floods, so on and so forth. The Leather skin tanning facility in kanpuremits volumes of heavy metal like chromium infused wastage and permanently rendered the water of the Ganges

flowing through it useless. The land has become infertile and human average life span of the workers inside such tanneries is not more than 40 years! The pollution safeguarding measures are not at all strictly implemented. I had a first hand experience of all this during one of my industry exposure as astudent. The river and ocean cleaning drive which are now being taken should have been initiated quite many years ago, yet better late than never. We should indulge more and more in massive environment conservation activities to preserve the future generations from extinction.

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