

Mapping of Textile Waste Generation across the Value Chains Operating in the Textile Industry

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Abstract : Globally, the textile industry is a key contributor to the generation of solid waste which gets landfilled. Textile waste generation generally occurs in three stages, namely: producer waste, pre-consumer waste, and post-consumer waste. However, the different processes adopted in textile material extraction, manufacturing, and use have their respective impact in terms of the quantity of waste being diverted to landfills. The study is focused on assessing the value chains of the two most common textile fibres: cotton and polyester, catering to a broad categories of apparel products. This study attempts to identify and evaluate the key processes adopted by the textile industry at each of the stages in their value chain in terms of waste generation. The different processes identified in each of the stages in the textile value chains are mapped to their respective contribution in generating fibre waste which eventually gets diverted to landfill. The results of the study are beneficial for the overall industry in terms of improving the traceability of waste in the value chains and the selection of processes and behaviours facilitating the reduction of environmental impacts associated with landfills.

Keywords : textile waste, textile value chains, landfill waste, waste mapping

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