Cradle to Grave Cotton Product Life-Cycle:

How can excess water waste be recycled?

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Abstract

Through literature review, this study entails concerns of waste-water used in the process of making apparel. Consumers’ behavior was not a determining factor in apparel purchased due to lack of knowledge of harmful environmental effects. This study is about how consumers perceive water waste and practices to extend the life of excess water use attained during the cotton product life-cycle. This study will implement an experimental design to answer the research question. Conducted research will challenge dye inclusive water waste practices by formulating an experiment using the variables 1lb of cotton t-shirts 3 gallons of water, and blue dye. The expected outcome of our study is, after continuous dye processes the fabric will begin to show color fading or inconsistencies once dye is continuously re-absorbed. This will result in adding more dye to remaining water. In conclusion, the study results will be expect to demonstrate the maximum amount of water from the cotton samples; water can maintain approximate dye to water ratio (3 gallons of water : 2 tbls dye) in order to fulfill the expectation of dying 1 lb. of cotton t-shirts with little to no color fading or variations.