

PLASTIC WASTE MANAGEMENT IN INDIA: EXITING REGULATIONS, CHALLENGES AND FUTURE PROSPECTS

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Abstract

Plastic waste (PW) has become a global concern in terms of waste recycling. In the value chain of plastics, India has gained international prominence. Despite low consumption, domestic production and imports place a heavy burden on the total waste management system, which needs a thorough comprehension of the situation and possible solutions. Although academic articles on technology-related concerns have been extensively explored by Indian scholars, there is still a significant information gap regarding the scope of the issue and potential solutions.

Regulations and policies have periodically been implemented in an effort to reduce plastic waste in clever and environment friendly methods. The Environment ministry's rules, ISO standards, IS standards and other regulatory guidelines have been continuously updated in the light of sustainable consumption and the reduction of plastic waste as per Indian scenario. The manufacturing, consumption, waste generation of plastics in India at the moment are the main topics of this review study.

This information and data pertaining to Indian PW management bare primarily analyzed, key critical regulations and rules, their challenges and future aspects that to be ascertain to achieve sustainable consumption and circular economy models in plastic waste management are highlighted. This review's thoroughness will aid in the identification of challenges that really encountered during the plastic waste management through its complete life cycle phases and describes the future possible techniques and policies that may drive a regulatory system to achieve circular business models. The possible workable policy making measures and future research prospects in India's holistic PW management to ascertain sustainable consumption and recycling, with an emphasis on the circular economy and sustainable development goals are also highlighted in this paper.

Keywords: Plastic waste management; Circular plastic economy; Resource efficiency; Plastic waste rule, India