

## Determinants and Management of Plastic Waste in India: State-Level Analysis

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### Abstract

This study mainly addresses the problem of the emerging plastic pollution and its increasing threat to the environment including humans, animals and marine life. The plastic industry is booming in its production capacity and simultaneously the states are trying to curb down the plastic waste generation by various fiscal measures such as tax, fees etc. The paper explores the possible determinants of plastic waste generation such as urbanisation rate, income, sectoral value added from manufacturing, construction, hotels and restaurants etc. For empirical analysis, the paper uses a random effects model of sixteen large states in India during the years 2013-14 to 2018-19. The findings confirm that plastic waste generation depends on various factors like urbanisation rate, income, manufacturing, construction, hotels and restaurants. The study also explored the extent of effectiveness of ban of plastics undertaken by various states in India. The results of paper shows that results of plastic ban have been mixed so far due to lack of proper implementation, monitoring and proper designing regulatory policies to eliminate plastic waste. As a part of policy suggestions, the study argues that there are prerequisites required before the ban is implemented and some guidelines post-ban to make it successful. The certain question still remains when India, which is diverse in policy structures, will be able to sustainably manage plastic waste and on which instrument it would rely to achieve efficient results.

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**Key Words:** Ban, management, compliance, environmental literacy, disposal, treatment, framework.