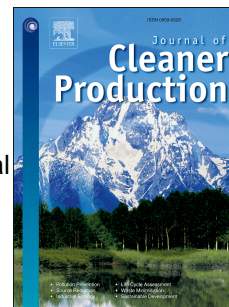


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Integrated optimization model and methodology for plastics recycling: Indian empirical evidence

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Research Highlights

- We develop a decision model to integrate three decisions pertaining to location, allocation, and routing of different varieties of recycled plastics.
- We validate the model using data retrieved from a case study in India using a conventional decomposed modelling approach.
- Our integrated model reduces over ten percent of total recycling costs for both single and multiple products in the Indian context.
- Managers need to cluster the customers based on the facility location and offer attractive incentives to reduce cost and increase benefits.

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