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Title:	Recovery of consumer waste in India - A mass flow analysis for paper, plastic and glass and the contribution of households and the informal sector
Authors:	Nandy, Biplob (/jspui/browse?type=author&value=Nandy%2C+Biplob) Sharma, G. (/jspui/browse?type=author&value=Sharma%2C+G.) Garg, Saryu (/jspui/browse?type=author&value=Garg%2C+Saryu) Kumari, Shweta (/jspui/browse?type=author&value=Kumari%2C+Shweta) George, Tess (/jspui/browse?type=author&value=George%2C+Tess) Sunanda, Yengkhom (/jspui/browse?type=author&value=Sunanda%2C+Yengkhom) Sinha, B. (/jspui/browse?type=author&value=Sinha%2C+B.)
Keywords:	Resource recovery Paper Plastic Glass
Issue Date:	2015
Publisher:	Elsevier B.V.
Citation:	Resources, Conservation and Recycling, 101
Abstract:	<p>In most municipalities in India, the collection, transportation and disposal of municipal solid waste deviates from the mass flow envisaged by the municipal agencies and planning authorities. While multiple studies have focused on the environmental problems arising due to uncontrolled waste dumping and combustion, we present a qualitative study of the efforts towards resource conservation and recycling by various actors involved, and a quantitative estimate of the amount of material recovered at various stages. Both the informal sectors (garbage collectors, waste pickers, waste dealers, small stores and itinerant merchants) and the households in India, play a vital role in recovering consumer waste. In order to have an in-depth understanding, a case study has been performed to better understand the contribution of households, garbage collectors and itinerant waste merchants towards recovering consumer waste. Our study shows that consumer waste is far more efficiently recovered in India than what has been reported in literature until now. The waste recovery takes place in multiple-stages and the final waste that reaches the municipal corporation mostly comprises of biodegradable waste, inerts and highly non-recyclable waste. Households, itinerant waste merchants and garbage collectors in India jointly recover 1.2-2.4 million tonnes of newspapers, 2.4-4.3 million tonnes of cardboard and mixed paper, 6.5-8.5 million tonnes of plastic, more than 1.3 million tonnes of glass, more than 2.6 million tonnes of metal waste and 4-6.2 million tonnes of other recyclable material per year. Overall, 30-60% of all paper and cardboard, 50-80% of all plastic and close to 100% of all glass bottles produced in India are recycled</p>
URI:	https://www.sciencedirect.com/science/article/pii/S0921344915300082 (https://www.sciencedirect.com/science/article/pii/S0921344915300082) http://hdl.handle.net/123456789/2866 (http://hdl.handle.net/123456789/2866)
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