

## Gap between Knowledge and Behaviour in Recycling Domestic Solid Waste: Evidence from Manipal, India

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**Abstract :** In the educational town of Manipal (located in southern India) households dispose their wastes without segregation. Mixed wastes (organic, inorganic and hazardous items) are collected either by private collectors or by the local municipal body in trucks and taken to dump yards. These collectors select certain recyclables from the collected trash and sell them to scrap merchants to earn some extra money. Rag pickers play a major role in picking up card board boxes, glass bottles and milk sachets from dump yards and public areas and scrap iron from construction sites for recycling. In keeping with the Indian Prime Minister's mission of Swachh Bharat (A Clean India), the local municipal administration is taking efforts to ensure segregation of domestic waste at source. With this in mind, each household in a residential area in Manipal was given two buckets - for wet and dry wastes (wet waste referred to organic waste while dry waste included recyclable and hazardous items). A study was conducted in this locality covering a cluster of 145 households to assess the residents' knowledge of recyclable, organic and hazardous items commonly disposed by households. Another objective of this research was to evaluate the extent to which the residents actually dispose their wastes appropriately. Questionnaires were self-administered to a member of each household with the assistance of individuals speaking the local language whenever needed. Respondents' knowledge of whether an item was organic, inorganic or hazardous was captured through a questionnaire containing a list of 50 common items. Their behaviour was captured by asking how they disposed these items. Results show that more than 70% of respondents are aware that banana and orange peels, potato skin, egg shells and dried leaves are organic; similarly, more than 70% of them consider newspapers, notebook and printed paper are recyclable. Less than 65% of respondents are aware that plastic bags and covers and plastic bottles are recyclable. However, the results of the respondents' recycling behaviour is less impressive. Fewer than 35% of respondents recycle card board boxes, milk sachets and glass bottles. Unfortunately, since plastic items like plastic bags and covers and plastic bottles are not accepted by scrap merchants, they are not recycled. This study shows that the local municipal authorities must find ways to recycle plastic into products, alternate fuel etc.

**Keywords :** behaviour, knowledge, plastic waste management, recyclables

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