

Effectiveness of domestic solid waste management through provision of composting bins in Rajagiriya, Sri Lanka

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Some Municipality Councils distributed compost bins at subsidized rates to encourage domestic composting. This is one of the good practical solutions for the waste disposal problem in the country. A large amount of money has been spent by Municipal councils in the implementation of this project with the main objective of reducing the amounts of domestic waste received by the municipal council per day. However, the successes of these programmes have not been evaluated.

This study was conducted with the primary objective of evaluating the effectiveness of providing composts bins by the Sri Jayewardenepura Kotte Municipal Council (SJKMC) in reducing the quantity of waste received by them. The other objective of the study was to analyze the rate of use of compost bins by the people. Out of the wards where compost bins were distributed within the Jayawadenapura Kotte Municipal council, Rajagiriya ward was selected for this study. Preliminary discussions were held with the officers who were involved in solid waste management and the chief occupant of the selected households. Data were collected primarily through a questionnaire survey. Field survey was conducted among 52 randomly selected households.

Only 77% of the households were using these bins to dump biodegradable solid wastes. Some of them use these bins improperly even though they are educated by the SJKMC on the correct usage. More than 50% of the households felt that the compost bin is insufficient as the amount of biodegradable wastes generated varies with the size of the family. Only 21% of the households practice composting and handing over of recyclable wastes to recyclable centers while 56% of the households practice only composting.

The usage of compost bin has reduced the amounts of wastes disposed to the municipal waste collection system. The waste sorting is poorly practiced by the households.

Keywords: Household solid waste, composting bin