

## **Value of Potential Resource Recovery of Domestic Solid Wastes in Kandy Municipal Area**

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This research was conducted to generate information that would guide decision making in finding a solution to the problem of environmental pollution due to accumulation of waste at the dumping yard located at Gohagoda, by resource recovery from waste. Gohagoda dumping ground is used to dispose waste collected from the Kandy municipal area. Resource recovery could be carried out through re-use, recycling and recovery of energy in wastes. Resource recovery could help to reduce the waste load on the Gohagoda dumping ground, environmental pollution, and expenditure incurred on the waste disposal. This will help to conserve resources.

The research was based on the results of a waste characterization study carried out within the Kandy municipal area. Field observations, questionnaire based interviews with sample households and relevant officers were used to collect information on the existing waste management systems and possibilities of resource recovery.

The results revealed that the dump yard is used to dispose nearly 80 tons of waste per day, which contains 9,689kg of paper, 3,112kg of plastics, 64,214kg of bio-degradable material, 152kg of regifoam, 136kg of natural and artificial leather, 440kg of glass, 1,168kg of metal and 1,096kg of other waste (cloth *etc.*) per day from the Kandy municipal area.

At present the Kandy municipal council is spending 20% of its revenue on waste disposal, whereas if resource recovery methods, i.e. recycling of paper, plastics, glass, metal, making compost and bio-gas from bio-degradable material are practiced, the municipal council has a potential of earning approximately a profit of Rs. 55,000 per day where the income and cost would be Rs. 100,000 per day and Rs. 45,000 per day, respectively.