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Estimating the quantity and composition of household solid waste in W*alpola* GN division

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One of the immerging and burning issues in Sri Lanka is the inefficiency in collection and disposal of solid waste and consequent widespread scattering and dumping grounds of garbage. Waste that are improperly dumped impede water flows in drainage canals, and provide breeding places for disease vectors such as rat mosquitoes, and flies. Waste is a by-product of human activity. Solid waste has great potential for adversely affecting the quality of the environment. In other hand it is a misplaced resource. Due to absence of proper household waste management method, several problems have emerged. The objectives of the study were to estimate the different composition of household waste, and to identify the present waste disposing methods.

The project was undergone in 1st and 2nd cross lanes, *Walpola* GN division in Matara municipality. House holders in above cross lanes were selected and initially under gone with questionnaire survey and participatory appraisal to estimate different categories of waste. Separate baskets were given to householders to measure the amount of wastes. Basically kitchen wastes, plastic/polythene, paper/cardboards, and glasses & tins were measured in volume basis and afterward it converted into weights. Data were analyzed with suitable parametric and non parametric techniques. Out of total household waste generation 48% was kitchen waste, 39% of glass, 7% of paper and 6% plastic and polythene. Out of total sample 30% separate waste while 70% were not. In disposing of kitchen waste, 57% supply their waste to municipal council (MC) tractor while 30% compost, 4% burry and 4% with no special practice. In disposing of polythene waste 74% supply to MC tractor 9% burn 9% throw and 8% burry. With concern of glass waste 44% sell, 26% supply to MC tractor 13% throw and another 13% no special practices is used. In disposing of glass 48% supply to MC tractor, 39% sell and 9% throw and 4% with no special practices. The study also reveals that out of different waste generated almost half have been supplied to MC tractor ex. kitchen waste 57%, polythene 74%, plastics 57%, glass 53%, and 48% metal. Number of family members has positively related to per capita house hold waste generation. But Income and expenditure on foods showed non-significant positive relationship with per capita household waste generated. Study concludes that majority of the house holders disposed there waste to municipal council tractor. Research finding revealed that per capita kitchen waste production per day is 0.280kg in *Wapola* GN division.

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