

MITIGATION OF DOMESTIC WASTE IN THE URBAN AREA: STUDY BASED ON MATTAKKULIYA GRAMA NILADARY DIVISION, COLOMBO

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Abstract

Waste is defined as an unwanted object. Also, it is regarded as an unusable substance and emitted into the environment. It can be classified into different types, depending on their content, degradability, and their source of generate. The study was conducted under the title "Mitigation of Domestic Waste in the Urban area: Study based on Mattakkuliya GN division, Colombo". The objectives of this study are to mitigate the production of household waste through individuals, to classify waste and identify their generating factors. To achieve the objective of the study, 50 houses in Mattakkuliya were randomly selected and both Qualitative and Quantitative data were collected for this Statistical Descriptive Analis. Providing Questionnaire, Unstructured interview, and observation were the primary data collection method. Secondary data such as research papers, statistical reports, and the Internet were used for further data. Based on the study, waste is classified as commercial waste (CW), industrial waste (IW), agricultural waste (AW), and domestic waste (DW). About 3.5 - 16 kg of DW is produced daily from each household in the study area. Meanwhile, the daily per capita waste production is found to be 0.5 - 5 kg. Of these, food scraps (45%), paper (20%), glass (5%), plastic bags (18%) and others (12%) were the most important. When sorting such wastes based on risk, 18% of Hazardous waste and 82% of non-Hazardous waste were found in the study area. Thus, High-Density Polyethylene bags, Kraft Paper Bags, NWPP Bags, and Laminated PP Bags are the best recyclable materials instead of single-use grocery bags, through avoiding sachets packets, production of fertilizers using DW for the home garden, waste segregation in a proper way, donating unused clothes and items to needy people are recommended to short out generating DW through individuals.

Keywords: Domestic Waste, Household, Mitigation

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