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**Analysis of Municipal Solid Waste (MSW) generation and waste characterization in Sri Lanka**

Disposal of Municipal Solid Waste has become a major problem in Sri Lanka. The impact of this problem is sensitive to our social, health and economic development. Since, Municipal Solid Waste is qualitatively heterogeneous; it is difficult to find a unique solution for proper disposal. I.e. The solution is always an integrated one, which consists of biological/thermal/chemical treatment, recycling and land filling. However quantification and characterization of solid waste is an important factor prior to select the suitable technology. Therefore, it is required to find the waste quantity, composition, density, moisture content, annual growth rate of waste generation and calorific value of waste ect. As the moisture content and organic fraction is reasonably high and lack of high thermal value materials in solid waste stream, has led to overall calorfic value of MSW in Sri Lanka.

Some waste analyses were done with simple methods to find out the waste density, composition and total waste quantity in selected areas. Then the composition was categorized as Non-biodegradable, long-term biodegradable and short-term biodegradable materials. After that, the results were compared with the data in "Database of Municipal Waste in Sri Lanka" published by the Ministry of Forestry and Environment. In district basis analysis, it was found that more than 80% of the waste stream is biodegradable while in certain rural areas, it was varied from 39% to 95%. Waste density was varied from 217 kg/m3 to 350 kg/m3.

Therefore the composition analysis gives more important evidences for resource allocation to collect and transport the waste selecting and designing appropriate method to treat the solid waste etc. however, standard sampling and statistical methods should be followed to estimate the reasonably accurate values.