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Issues and Solutions for Municipal Waste Management in Sri Lanka

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The waste disposed into the open environment from day today human activities, gradually has increased and created significant socio- economic, health and environmental issues. Ultimately it has become a burning political problem at present. Inefficiency in waste management strategies further aggravate the issues preventing national objective of the clear environment. The main objective of this paper is to discuss the factors that influence technical efficiency of waste management and ways and means to maximize that efficiency under Pilisaru Project funded by Central Environmental Authority in Sri Lanka, The data has collected from the sample size which is represented 22% of currently active compost plants by the stratified random sampling considering all forms of administrative local authorities (LAs).

Though several Pilisaru projects have achieved a satisfactory level of expected results. The majority are inefficient due to some reasons. The projects mainly target to produce only organic compost and some biomass power generation but no other alternatives concerned. Segregation of waste for compost production is a prerequisite, however, waste segregation is an unsolvable issue due to the various reasons. Another issue is whether condition which is beyond the control of human effort of the natural process of composting. LAs mainly collects only solid waste and they do not collect liquid waste from the sources of waste generation. Basically, compost production in the Pilisaru compost plants is labour intensive. Therefore, it requires more man power for handling the compost production. Lack of land for the expansion of the compost plants and the ongoing process of composting is time consuming are other barriers. Finally, ongoing compost production system is not the eco-friendly. Compost users do not satisfy and trust with the quality of compost produced by the municipal solid waste and no proper market mechanism and distribution. Labourers and other employers are not satisfied with the benefits they get including salary.

The efficient waste management system must ensure to produce all possible product other than organic compost. For this new technology should be introduced. Compost should be promoted among the small scale/subsistence farmers at first and then in large scale agricultural areas with the proper certification procedure. Municipal waste is hidden treasure on the development of righteous agriculture in Sri Lanka with the application of proper scientific and technical method of waste treatment. Therefore, we recommend establishing "Waste Recycling Centres" with the environmentally recycling system (ERS) such a High Speed Indigenous Microbes Fermentation System (ERS).

Key words: Waste management, Pilisaru Projects, ERS

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