

# **A Pilot Study on the Potential for Household Composting at a Rural Community in Guyana**

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Extensive waste production and population growth have given rise to incremental challenges in the national solid waste management sector. This established a need for sustainable and environmentally-friendly means of waste elimination or reduction. Composting can support this, while adding value to the agricultural sector. A number of composting technologies are available, which are specific to the scale of operation and the available resources. Rotary drum technology is recommended for household composting, while windrows or modular in-vessel containers are more suited to larger operations. Twenty-four (24) questionnaires were administered in the study area using stratified random sampling to collect data on factors that influence the amount and types of waste produced; and household organic waste collected for the purpose of composting. Only 22% of respondents had very good knowledge of composting, and household organic waste processed into compost returned useful results. It was determined that household size strongly correlated with the mass of waste generated. Chemical analysis of the produced compost indicated the presence of high levels of nitrogen, phosphorous and potassium, which can be beneficial for plant growth once correctly applied. Flyers, seminars, and community engagements were recommended as methods to increase rural community awareness of the benefits of composting.

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