

Quantifying the organic waste generated from the fresh market in Kundasang town, Sabah

ABSTRACT

It is necessary to assess solid waste generation to identify the rate by which we generate waste. A rapid increase in solid waste generation constitutes a significant challenge for developing countries such as Malaysia. Municipal Solid Waste (MSW) is the primary source of solid waste generated in Malaysia and covers 64% of the total waste composition. 45% of the average composition of Malaysian MSW is dominated by organic waste (e.g. food, vegetable and fruits). This is followed by recyclable waste (e.g. plastic, paper and metal) at 30% with the remaining made up of non-recyclable waste (e.g. polystyrene). The Fresh Market in Kundasang town, Sabah is a major contributor to the increase of organic waste generated in the Ranau district. As such, it has the potential to implement effective composting practices. This study was conducted to determine the total amount of organic waste generated as well as the organic waste generation rate in the Fresh Market. The sampling was conducted among 148 sellers in the Fresh Market over a period of two weeks (5th August - 18th August 2017). Total organic waste generation was 13,147.50kg, while the organic waste generation rate was 6.35kg/premise/day. The value for municipal solid waste generation recorded by Majlis Daerah Ranau (MDR) in three varied routes of Kundasang during August 2017 (Jalan Pekan Kundasang, Jalan Mesilou and Jalan Kota Kinabalu) were 17 tonnes, 15 tonnes and 13 tonnes respectively. This shows that the solid waste generated in Jalan Pekan Kundasang was the highest compare to Jalan Mesilou and Jalan Kota Kinabalu. This study presents the current status of organic waste generation which can serve as preliminary baseline information.

Keyword: Compost; Municipal solid waste; Organic waste; Waste generation; Waste composition