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Perception and Determinants of Utilisation of Urban Household Organic Waste for Home Garden in Kumasi

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Abstract

Households in urban towns and metropolitan areas can convert urban waste into resources such as organic fertiliser or compost for agricultural production to help reduce their cost of disposal, save resources, reduce health risk and improve productivity. Unfortunately, most households do not consider the waste they generate as a resource, but as waste with no economic value. Thus, the objective of the study was to assess urban households' perceptions and factors affecting their utilisation of organic solid waste for home gardens in Kumasi. A multistage sampling technique was used to select communities and respondents for the study. The stratified random sampling technique was also used to select 6 communities from each stratum since they were clustered into low, middle, and high-income groups. The visual reconnaissance survey and systematic random sampling approach was employed to select 180 households involved in home gardens from the communities. Urban households' knowledge was sought to explore their awareness on the use of organic solid waste and to investigate their perception and determinants of the reuse of organic solid waste for their home gardens. The results showed that most of the respondents were aware of the reuse of organic solid waste but few of them had adequate knowledge on the application of organic solid waste for home garden. It was found that urban households had an agreeing perception on the use of organic solid waste for home gardens. A binary probit regression model was employed to estimate the determinants of utilisation of organic solid waste for home gardens. Empirical results from the probit model showed that socio-economic characteristics such as age, occupational status and perception on the ability of organic solid waste to help improve the soil structure and perception of organic waste as an important resource had a significant influence on utilisation of organic solid waste for home garden. Insufficient knowledge on application was identified as the main constraint to the utilisation of solid waste for home gardens. The study recommends that educational and media institutions should educate urban households to increase the scope of knowledge on the use of organic solid waste.

Keywords: Organic waste, perception index, probit model, random-utility theory

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