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Exploring Determinants of Farmers` Perceptions of Domestic Compost Production in Urban Agriculture

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Abstract: Solid waste in urban areas, especially from organic materials like garden waste, food, and degradable sources, can create health and environmental problems if not managed properly. Urban agriculture has emerged as a potential solution in developing countries to mitigate these issues. It offers the possibility of low-carbon economies and knowledge and innovation dissemination. Domestic composting is a significant aspect of urban agriculture, and its success relies on the attitudes of those who practice it. This study examines the perspectives of 402 urban farmers in the Colombo District, Sri Lanka, regarding domestic compost production. It aims to identify the factors that influence these perspectives. The research found that urban farmers are willing to participate in domestic composting because they believe that it facilitates effective recycling of organic waste within their households. The study used an ordinal regression model to determine the factors that shape farmers' perspectives. Age, family size, and crop preferences are significant determinants of the adoption of domestic composting practices among urban farmers in the Colombo District. These findings highlight the importance of understanding and addressing farmers' attitudes in designing effective waste management strategies. In addition, the study also emphasizes the need for tailored interventions that align with farmers' beliefs and preferences to enhance the adoption and implementation of domestic composting practices in urban areas. The insights gained from this study contribute to the academic discourse and offer practical guidance for policymakers and urban planners seeking to promote sustainable waste management practices and support the adoption of urban agriculture in the broader context of urban development.

Keywords: urban agriculture, domestic composting, farmers` perspectives, sustainable urban development **Conference Title:** ICWMRE 2025: International Conference on Waste Management, Recycling and Environment

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