

85. Assessing the farmers' perceptions towards the use of humanure in Tharaka Nithi and Kajiado counties for agricultural sustainability

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Abstract

In the wake of growing global concerns on environmental degradation and resource scarcity, effective management of human waste remains crucial, especially in the urban and peri-urban environments. Effective waste management is sometimes achieved through green toileting system (GTS) innovations such as the Urine Diversion Dry Toilet (UDDT). UDDT represents a sustainable and innovative sanitation solution with multifaceted benefits. Unlike traditional toilets, the UDDT segregates urine and feces at the source, reducing the need for water-intensive flushing and allowing for efficient nutrient recovery. This diversion process not only conserves water but also mitigates environmental pollution by minimizing the release of nutrients and pathogens into water bodies. The collected urine, rich in nitrogen and phosphorus, serves as a valuable resource for agricultural fertilization, promoting circular economy principles. Overall, the UDDT emerges as an ecologically sound, water-saving, and health-promoting sanitation solution suitable for diverse settings, contributing to sustainable development goals and improved community well-being. The current study sought to assess factors influencing the uptake of the Green Toilet System (GTS) in Kenya, with a focus on factors such as gender, design, attitude, awareness, and perceptions. The research was conducted in Kajiado and Tharaka Nithi counties. Purposive sampling was used in this study to choose the target population. The research employed semi-structured qualitative interview guides to gather data from the target population. A total of 335 participants were invited for the interviews. The study findings revealed significant gaps in awareness and uptake of GTS technology among respondents from Tharaka Nithi and Kajiado Counties. 75 per cent of the 335 respondents were unaware of the GTS technology, with varied levels of exposure across counties and demographic groups. The researchers recommend awareness creation and active involvement of community to speed up the uptake of GTS in Kenya.

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