

ABSTRACT

BACKGROUND AND OBJECTIVES: Whereas management of waste in urban areas across the globe is essentially a public service, there is dearth of knowledge on waste management efforts at the household level in developing countries. The study aimed to avail crucial information on the largely informal management of agro-food waste that is practiced in low- and lower middle-income countries. Insights of safety measures adopted in the utilization of agro-food waste among urban agro-producers were explored empirically.

METHODOLOGY: An electronically-structured questionnaire was administered on a sample of 456 urban agro-producer households for data collection. Descriptive as well as Multivariate Probit models were employed for analysis.

FINDINGS: The results indicated significant disparities in management options and safety risk management practices between the participating and non-participating livestock and mixed producers. Waste reduction (86%), utilization (86%), segregation (63%) and composting (58%) were the most preferred waste management practices. Waste disposal (18%) and mixing with salt/dry feeds (24%) were lowly preferred methods. Whereas the regression models showed disparities in the contextual factors influencing management options and safety risk measures, the knowledge variables (waste sorting and urban agriculture knowledge) had greater influence across these agro-food waste aspects. This implies that implementation of education programs in agro-food waste management and safety risk management practices among urban agro-producer households by urban authorities would enhance sustainable food safety in urban food supply chains.

CONCLUSION: The findings could inform self-management efforts of agro-food waste in small-urban agribusinesses thus increasing economic benefits and improving environmental wellbeing.

Keywords

Kenya

Safety risk

Self-management

Urban agriculture

Waste utilization