

ABSTRACT

Increased solid waste generation and change in composition of waste produced is one of the key problems associated with world-wide population growth, urbanization and consumerism. This change is necessitating a change in the ways in which solid waste is handled. Today, many countries, particularly in the west are moving towards more sustainable waste management practices which emphasise resource utilization as the most efficient means of solid waste management whereby waste is viewed as a resource. Practices in most developing countries have, however, not evolved and are reminiscent to those found in the developed countries several generations ago. This research set out to investigate the sustainability of the waste management practices in peri urban areas of Nairobi city, using the case of Uthiru/Ruthimitu. The study took a descriptive design in data collection and analysis. Stratified random sampling was used to administer questionnaires to a sample size of 80 respondents gotten through Cochran's formula. The data collected was cleaned, reduced and used to create an SPSS dataset that was analysed using descriptive statistics. The key findings of this research were that; main types of waste generated in the area are biodegradable, a majority of the residents (63.75%) dispose of their waste individually through either; burning, burying, composting or indiscriminate dumping. The study also found that there were no solid waste receptacles in the area and the narrow paths in some of the areas made solid waste collection by garbage collectors inefficient. The governance structure in the area comprises of CBOs, private garbage collectors and the NCC through the sub-county environment department. The structure provides an opportunity for sustainable waste management practices but as it is, is not completely effective with some CBOs dumping their waste at sights other than the specified collection sites. The fact that solid waste is largely seen as a nuisance with few people significantly benefiting economically from its re-use, the environmental degradation that comes with indiscriminate dumping coupled with the fact that current solid waste management practices don't discourage solid waste generation led to the conclusion that the waste management practices in the area are not sustainable. The practising of agricultural activities in the area provides an opportunity of effective reuse of organic waste through composting. This study recommends the streamlining and regularization of recovery of solid waste materials, subsidizing the cost of separated bins to make at source separation easier, the redesigning of some streets to enable solid waste collection and also setting up of a composting site in the area. This research anticipates that applying these interventions would make solid waste management practices in the area sustainable.