

ABSTRACT

The increased use of electronic gadgets has proportionately increased the accumulation of e-waste. In Kenya, a 200% rise was recorded in 2007 compared to 2005. E-waste is hazardous to the environment and health if not properly managed due to toxic substances contained in them. Currently, E waste in Kisumu is informally managed and it is not known whether the informal management of e-waste is sustainable. The purpose of this study was to evaluate e-waste management in Kisumu. The main objective of the study was to assess sustainability of e-waste management in Kisumu City. The specific objectives were: to assess the sources of e-waste; to assess the role of stakeholders in e-waste management; to establish management systems of 3R and to assess public awareness on sustainability of e-waste management. The research was carried out in Kisumu City using a cross-sectional study design. The sample size was 425 respondents out of a population of 148,494 households randomly sampled. Qualitative and quantitative data was collected through questionnaires, interviews, Focus Group Discussions and observation and subjected to descriptive analysis at a significance level of 0.05. Qualitative analysis involved thematic clustering and triangulation of results to other findings. The study concludes that the current e-waste management is not sustainable because: there is no monitoring of the volumes of e-waste generated making it difficult to plan for its disposal, there is a high turnover of e waste since 78% of the respondents purchased electronic equipment every 5 years without a corresponding mechanism for reducing, recycling and reusing, the current level of stakeholder awareness on e-waste management is not adequate, policy formulation and enforcement by relevant government ministries remains weak and investors and NGOs are unwilling to invest in this area due to expensive capital infrastructure and technology inadequacy. The study recommends that NEMA e-waste management guideline 2010 should be enforced to ensure proper reduce, reuse, recycling and disposal besides amendments to Public Health Act (1962), Urban Areas and Cities Act No.13 of 2011 (Cap. 265) to comply with the NEMA guideline. MIC should enforce their requirement for Extended Producer Responsibility on ICT Actors. The relevant ministries and the civil society need to create awareness of e-waste and its safe handling. NEMA and the County Government should offer incentives to interested investors. KEBS should train expertise in forensic audit of hazardous components included in electronic equipments and discourage importation of such substances.