

Assessment of household solid waste management in Makina informal settlements, Nairobi Kenya

Author: Mwangi, Catherine Muthoni

Abstract:

The purpose of this study was to assess the household management of domestic solid waste in the Makina area informal settlements, Kibera division of Nairobi city. This is because of the increasing sites of unattended solid wastes in its public places. The objectives of the study were: To establish the types of domestic solid waste generated in Makina area; to evaluate the effectiveness of the solid waste management at the household level and to examine the role-played by stakeholders in domestic solid waste management in Makina area. The study adopted Quasi-experimental design (one shot case study) since the subjects sampled were not randomly assigned to groups but were all relevant cases in the study . The researcher used simple random sampling in selecting the desired sample of 200 households; the study also used purposive sampling method in identifying key informants with relevant information such as the Self-help Groups, the Nairobi City Council staff and other stakeholders involved in the management of the household wastes. Being a survey research, in collecting the primary data, the researcher designed and administered 200 household questionnaires to the randomly selected Makina residents as well as interview schedules that were used to collect the data from the snow-balled key informants. Four FGDs were also conducted in the four comers of the Makina area as well as observation that was done through transects walks with an aim of gathering more information that did not require interview. The secondary data was obtained from the previous documented information on Solid waste management, and informal settlements. The data collected was qualitative and quantitative in nature. Descriptive and inferential statistics were used in the data analysis. The results indicated that plastic and container ranks are the most generated DSW. The study also found that Makina residents have inadequate capacity to handle solid wastes generated from their households. The practice of the 3Rs: Reduction, Reuse and Recycling of the domestic solid waste is barely there. The 72% of the residents dump the generated domestic solid waste (DSW) in the unprotected dumpsites and only 28% can afford to pay for the existing collection services. The findings also identified various opportunities that exist in Makina area for improvement of the current situation like intensive community training how to reduce, reuse and recycle DSW. The study makes various recommendations as follows; there is need to create intensive community awareness on integrated solid waste management especially on the 3Rs for Makina residents since its only 7% of the population that has some knowledge about DSW. The many stakeholders handling DSW in Makina such as the Makina residents, civil societies, international organizations, Private Firms and the Local Government; should employ an integrated approach and work together in the management of the household solid wastes. Finally, the NCC should enforce the waste management's by-laws in order to ensure adherence among Makina residents.