TOWARDS AN ALTERNATIVE STRATEGY FOR DOMESTIC SOLID WASTE MANAGEMENT IN KABARNET MUNICIPALITY.

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ABSTRACT.

The research sought to investigate current domestic solid waste problems in Kabarnet Municipality with a view to developing an alternative strategy for effective solid waste management for sustainable urban development. Its specific objectives were to estimate the quantity, composition and generation of domestic solid wastes, examining the existing management services and identify their resultant environmental impacts. It further sought to establish the role played by Kabarnet Municipal Council in identifying its operational constraints; and suggest alternative strategies for better management of the wastes in the municipality.

Both primary and secondary data were used. The primary data was obtained through interviews, questionnaires, direct measurements, and observation. Secondary data was obtained from published and unpublished materials. A sample of 105 respondents was selected both from households (95) and Kabarnet Municipal Council staff (10). Residential areas were categorized into three zones according to their environmental conditions based on the nature of houses and income- levels. Six estates were systematically sampled from the three zones. The collected data was subjected to coding. Descriptive and quantitative statistical techniques were utilised in the processing, analysing and presentation of the results using Statistical Package of Social Scientists (SPSS). The parameters required ranged from waste characteristics, generation, collection, storage, transportation, disposal, legislation on wastes and the role-played by the Municipality in waste management.

The findings indicated that wastes generated differed in characteristics and quantity from estate to estate with a range of between 1-14kg per week depending on family sizes, and income level; that KMC participated in waste management in NHC estate and that wastes were poorly collected, stored, and disposed in all the estates. The council also lacked adequate equipment, enough personnel and finances, enough disposal sites and that legal structure were not fully enforced due to lack of clear-cut policy framework.

The recommendations were to enforce the existing legislation on proper control of waste materials in the estates; introduce of public education programmes that promote environmental awareness in the municipality and develop waste minimization programmes such as re-use and recycle. Others included provide adequate disposal sites and equipment; improve collection and transportation frequency; properly utilise planning tools for environmentally sustainable domestic solid waste management and encourage adequate research into low-waste technologies suitable for the municipality.