

**CHALLENGES FACING WASTE MANAGEMENT IN LEARNING  
INSTITUTIONS IN UASIN GISHU DISTRICT**

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## ABSTRACT

The study aimed at finding challenges affecting waste management strategies in the learning institutions in Uasin Gishu district. The objectives of this study were to determine challenges related to the nature of waste materials in learning institutions; find challenges related to the amount of waste materials in these institutions and evaluate challenges related to the waste disposal mechanisms adopted by different learning institutions so as to reduce environmental pollution in learning institutions and ensure economical use of these wastes. Many learning institutions have heaps of waste materials including broken furniture and inorganic wastes such as thin polythene papers. The municipal council, an organization which collects this waste in most learning institutions are currently faced with constrains which limit the extent to which they operate. The study employed a survey design. Learning institutions in Uasin Gishu district were taken as the target population and four learning institutions from four levels of education; primary, secondary, colleges and university were considered. A sample of 788 participants was selected to be given questionnaires for which only 395 returned and the results were taken to be enough to generalize the result, as recommended by Mugenda and Mugenda (2003) who recommends a sample size of 384 for a population which is more than 10,000. Sampling techniques used were simple random, used to select participants to be included in the sample; and stratified sampling plan, used to select the learning institutions from which the sample was selected. The instruments used in data collection were questionnaires, observation schedule and interview method. The data collected was analyzed qualitatively and quantitatively. The study found that there are a variety and a lot of waste materials in learning institutions. Five main categories of waste realized involved plastics, wood, papers, sewerages and polythene bags. Other waste mentioned in small quantities were laboratory wastes and metallic materials. Waste materials were found to be disposed poorly. Factors which contribute to high amount and poor disposal of waste materials in learning institutions were: lack of policies governing waste disposal, lack of finance, lack of awareness and ignorance by the administration and students. Different challenges affecting waste management strategies were also realized and include: Lack of segregation of solid wastes before disposing, adoption of non- technology based waste disposal strategies, financial constrains, indiscipline within the institutions, diseases, limited number of official dumpsites, access and infrastructure, inorganic waste materials, poor sanitation and lack of environmental awareness. The study recommends the use of Integrated Solid Waste Management Plan, organization of outreach strategies such as sports and environmental day, creation of environmental awareness by mainstreaming the environmental related issues into media coverage and production of environmental publication. The study also recommends ways in which particular waste materials may be disposed. First waste wood and plastics should be used to produce recyclable wood/plastic composites; animal waste and sewerages be used to produce biogas; metallic materials, pan papers and polythene materials should be recycled into value added materials like pan papers into tissue papers.