

## **Analysis of Solid Waste Management Practices and the Implications for Human Health and the Environment: A Case Study of Kayamandi Informal Settlement**

**Authors :** Peter Iyobosa Asemota

**Abstract :** This study on solid waste management practices addressed aspects of environmental and health impacts resulting from poor management of solid waste. The study was occasioned by the observed rate and volume of illegal and indiscriminate dumping of solid waste materials especially in informal settlements. The main focus of this study was to establish the impact of waste management practices on human health and the environment. The study, therefore, presents a critical analysis of the state of solid waste management in the study area and the implications for human health and the environment. The study was carried out in Kayamandi informal settlement within Stellenbosch municipality. The sustainable management of solid waste is very important in order to minimize the environmental and public health risks associated with improper solid waste management. There is no denying the fact that the problems of waste management will become critical as time goes on because of improper and inefficient waste management practices. Towns and cities exhibit the burdens of waste management which is a characteristics feature of most African cities. The study critically assess the implementation of waste management practices by the residents of the informal settlement; identify the factors affecting management issues in the operation of solid waste management system by the municipality; identify factors militating against the implementation of waste management policies and legislation. Furthermore, a waste assessment study was carried out to assess the generation; composition of the waste stream and also determine the attitudes and behavior of the residents with regard to waste management practices. Findings from the study revealed that Kayamandi is not different from other informal settlements with regards to waste management. People are of the opinion that solid waste management is the sole responsibility of municipal authorities and as such, the government should be responsible for bearing the cost of solid waste management.

**Keywords :** environment, waste, waste composition, waste stream, policy, waste categories, sanitary landfill, waste collection, integrated solid waste management

**Conference Title :** ICEBWEM 2015 : International Conference on Energy, Biomass, Waste and Environmental Management

**Conference Location :** Montreal, Canada

**Conference Dates :** May 11-12, 2015