

An Analysis of Municipal Solid Waste in Kano Metropolis, Nigeria

Aliyu Baba Nabegu

*Department of Geography, Kano University of Science and Technology,
Wudil, Kano State, Nigeria
E-mail: marpelione@hotmail.com*

KEYWORDS Waste Density. Waste Recycling. Waste Generation. Waste Composition. Waste Disposal. Waste Management

ABSTRACT This paper reports the result of municipal solid waste analysis undertaken in Kano metropolis through the collection of secondary data from the government agency (Refuse Management and Sanitation Board, REMASAB) responsible for the management of solid waste, interviews with stakeholders and field surveys specifically to address the apparent gap in this information that is crucial for successful management. Field surveys were carried out in three residential zones that are representative samples of the city to understand the practice and identify the lacunae. The results show that the household sector in Kano metropolis produces the largest amount of waste in the city accounting for 62.5% and the waste generated by various institutions in Kano accounts for only 5.8%, while industries located within residential areas contributed 2.9%. It is estimated that Kano metropolis generates about 3085 tones of solid waste per day. It is also found that Kano metropolis's solid waste consists to a large extent of organic and other biodegradable matter (43%) and constitutes 68.26% by weight of solid waste generated in the study area. The results indicate that that solid waste is not properly managed since there is no ideal landfill and recycling is limited. The paper highlighted the implications of the result for the environment and sustainable management of solid waste. For example, because of poor management, the waste emits dangerous gases into the atmosphere and bacterial isolates were recovered from the waste sample, three of which were coliform bacterial (*E. coli*, *Klebsiella* sp and *Shigella* sp.). It is recommended, among other things, that the government should put in place facilities and opportunities to enhance proper management of solid waste and promote recycling and reuse of waste and should embark on environmental awareness campaigns to sensitize the citizen develop the right attitude about waste disposal.