Abstract:

Municipal solid waste management has emerged as one of the greatest challenges facing environmental protection agencies in developing countries. This study presents the current solid waste management practices and problems in Nigeria. Solid waste management is characterized by inefficient collection methods, insufficient coverage of the collection system and improper disposal. The waste density ranged from 280 to 370 kg/m$^3$ and the waste generation rates ranged from 0.44 to 0.66 kg/capita/day. The common constraints faced environmental agencies include lack of institutional arrangement, insufficient financial resources, absence of bylaws and standards, inflexible work schedules, insufficient information on quantity and composition of waste, and inappropriate technology. The study suggested study of institutional, political, social, financial, economic and technical aspects of municipal solid waste management in order to achieve sustainable and effective solid waste management in Nigeria.

Municipal solid waste management has emerged as one of the greatest challenges facing environmental protection agencies in developing countries. This study presents the current solid waste management practices and problems in Nigeria. Solid waste management is characterized by inefficient collection methods, insufficient coverage of the collection system and improper disposal. The waste density ranged from 280 to 370 kg/m$^3$ and the waste generation rates ranged from 0.44 to 0.66 kg/capita/day. The common constraints faced environmental agencies include lack of institutional arrangement, insufficient financial resources, absence of bylaws and standards, inflexible work schedules, insufficient information on quantity and composition of waste, and inappropriate technology. The study suggested study of institutional, political, social, financial, economic and technical aspects of municipal solid waste management in order to achieve sustainable and effective solid waste management in Nigeria.

References:

- ANALYSIS OF URBAN SOLID WASTE IN NSUKKA, NIGERIA
- LEAST COST MANAGEMENT OF SOLID WASTE COLLECTION
- PLANNING MODEL FOR REFUSE MANAGEMENT
Municipal solid waste management constitutes one of the most crucial health and environmental problems facing governments of African cities. This is because even though these cities are using 20–50 percent of their budget in solid waste management, only 20–80 percent of the waste is collected. In Nigeria, studies were centered on characteristics of solid waste and composition \[21, 22\], disposal, and management \[1, 23–26\] perception on payment for solid waste collection \[27, 28\]. In most cases, the economic tools used were percentages, severity index, chi-square, and ordinary least square models. Nigeria. *Corresponding author’s email: moedemao@gmail.com. ABSTRACT: The study was carried out in Ndola, the provincial capital of the Copperbelt province of Zambia with the aim of evaluating the methods of solid waste disposal, the level of access to solid waste management services, and Ndola residents’ attitudes towards solid waste management. Characterisation and composition of Municipal Solid Waste (MSW) generated in Sangamner City, District Ahmednagar, Maharashtra, India. Environmental. Monitoring and Assessment 170 (1-4): 1-5. Municipal solid waste composition determination supporting the integrated solid waste management system in the island of Crete. Waste Management 26 (6): 668 – 679. [13] Steffen R, Szolar O and Braun R. 1998. Energy recovery from Municipal Solid Waste (MSW) can also reduce the amount of fossils fuels utilization. It can also reduce the amount of land needed for MSW disposal and undesirable emission from landfills to air and water [6]. MSW is actually a re-source with huge potential in terms of material and energy recovery [7]. Waste to energy is one good option of alternative energy source. [13] Ogwueleka, T.C. (2009) Municipal Solid Waste Characteristics and Management in Nigeria. Iranian Journal of Environment and Health Science Engineering, 6, 173-180. [14] Zainab, A.B. and Hijab, M. (2013) Survey of Municipal Solid Waste in Jimeta-Yola, Northeastern Nigeria. International Journal of Scientific and Engineering Research, 4, 1-8.