



## **A RURAL-URBAN ANALYSIS OF THE COMPOSITION OF WASTE DUMPSITES AND THEIR USE FOR SUSTAINABLE AGRICULTURE IN ZARIA**

**\*AKPU, B. AND YUSUF, R. O.**

Department of Geography, Ahmadu Bello University, Zaria

### **ABSTRACT**

Solid waste is increasingly being used as soil nutrient supplement for agricultural purposes. Though dumpsites in rural and urban area comprise organic and inorganic materials, an analysis of which can be effectively used in supplementing inadequate soil nutrient for farming purposes is improperly understood. This paper addresses the issue using two – fold objectives: i) to analyze the rural – urban disparity in the composition of waste and ii) to appraise which of these is most suitable as soil nutrient supplement. Data were primarily sourced in Sabon Gari and Zaria Local Government Areas of Kaduna State where waste from 10 dumpsites in rural and urban areas were collected and analyzed. Among the major findings is that rural waste contained 90% biodegradable materials while urban waste had 37% non – biodegradable. However, due to certain factors, the organic matter of soil from urban waste was 14.68% compared to rural waste which was 8.94%. Also, nitrogen content of soil from urban waste was 0.72% while that of rural was 0.26%. Based on the findings, it is recommended that soil from urban waste should be used for sustainable agricultural purposes. Consequently, individual and corporate investors should invest in technologies that convert waste to organic fertilizers.

**Keywords:** Rural-urban; sustainable agriculture; solid waste

**\*Correspondence:** [royusoba@yahoo.co.uk](mailto:royusoba@yahoo.co.uk)

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