

Analysis of Improved Household Solid Waste Management System in Minna Metropolis, Niger State, Nigeria

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Abstract : This study analysed improved household solid waste management system in Minna metropolis, Niger state. Multi-staged sampling technique was used to administer 155 questionnaires to respondents, where Minna was divided into two income groups A and B based on the quality of the respondent's houses. Primary data was collected with the aid of structured questionnaires and analysed using descriptive statistics to obtain results for the socioeconomic characteristics of respondents, types of waste generated and methods of disposing solid waste, the level of awareness and reliability of waste disposal methods as well as the willingness of households to pay for solid waste management in the area. The results revealed that majority of the household heads in the study area were male, 94.20% of the household heads fell between the ages of 21 and 50 and also that 96.80% of them had one form of formal education or the other. The results also revealed that 47.10% and 43.20% of the households generated food wastes and polymers respectively as a major constituent of waste disposed. The results of this study went further to reveal that 81.90% of the household heads were aware of the use of collection cans as a method of waste disposal while only 32.90% of them considered the method highly reliable. Multiple regression was used to determine the factors affecting the willingness of households to pay for waste disposal in the study area. The results showed that 76.10% of the respondents were willing to pay for solid waste management which indicates that households in Minna are concerned and willing to cater for their immediate environment. The multiple regression results revealed that age, income, environmental awareness and household expenditure have a positive and statistically significant relationship with the willingness of households to pay for waste disposal in the area while household size has a negative and statistically significant relationship with households' willingness to pay. Based on these findings, it was recommended that more waste management services be made readily available to residents of Minna, waste collection service should be privatised to increase their effectiveness through increased competition and also that community participatory approach be used to create more environmental awareness amongst residents.

Keywords : household, solid waste, management, WTP

Conference Title : ICAB 2015 : International Conference on Agriculture and Biotechnology

Conference Location : Stockholm, Sweden

Conference Dates : July 13-14, 2015