

EFFICIENCY OF MUNICIPAL SOLID WASTE MANAGEMENT:

THE CASE STUDY OF BOR TOWN AREA, SOUTH SUDAN

BY

AKUEI KUR JOHN

REGISTRATION NUMBER: MEM/46152/151/DF

SUPERVISOR

PROFESSOR J.A. OPARA



A THESIS PRESENTED TO THE SCHOOL OF ENGINEERING AND APPLIED  
SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD  
OF MASTER OF SCIENCE IN ENVIRONMENTAL MANAGEMENT OF KAMPALA  
INTERNATIONAL UNIVERSITY.

MAY, 2017

## ASBTRACT

The study sought to identify the existing methods of solid waste management and ascertain the effect of social and economic factors on efficiency of solid waste management. The study was carried out primarily through survey method and interview of Bor municipal council (BMC) and households in Bor Town.

Inadequate dustbins supply was a major factor affecting waste disposal in Bor Town especially among the low class residential areas. The survey established that about 86.82 per cent of respondents have no access to dustbins for disposing their waste particularly those living in the low class residential area. This implies that respondents resorted to dumping waste in nearby drainage channels, by roadside, opened spaces and other unapproved ways of managing their domestic waste.

Additionally, the dustbins ratio to population was very high (1: 276) compared to the maximum number of fifteen people to a dustbin (1:15). These include high populated areas like Arek, Achiengdier and Langbar. This goes to reaffirm the inadequacy of dustbins supply in the Bor vicinity.

Indeed there was irregular or lack of routine collection of waste by Bor municipal council, especially in the low class residential areas in the Town. Waste collection was mostly carried out twice a week and in some areas like low class residential areas no collection took place. This resulted in people dumping their waste in opened spaces and in most cases burning was the alternative to final disposal at the landfill.

Unlike the door-to-door collection which attracted a monthly charge of SSP 50 in the high class residential areas, the communal collection was carried out at no cost to the residents in all the low class residential areas. This is because respondents in these areas were not