

Waste Scavenging as a Waste-to-Wealth Strategy for Waste Reduction in Port Harcourt City Nigeria: A Mixed Method Study

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Abstract : Until recently, Port Harcourt was known as the “Garden City of Nigeria” because of its neatness and the overwhelming presence of vegetation all over the metropolis. But today, the presence of piles of refuse dotting the entire city may have turned Port Harcourt into a “Garbage City”. Indiscriminate dumping of industrial, commercial and household wastes such as food waste, paper, polythene, textiles, scrap metals, glasses, wood, plastic, etc. at street corners and gutters, is still very common. The waste management problem in the state affects the citizens both directly and indirectly. The dumping of waste along the roadside obstructs traffic and, after mixing with rain water may seep underground with the possibility of the leachate contaminating the groundwater. The basic solid waste management processes of collection, transportation, segregation and final disposal appear to be very inefficient. This study was undertaken to assess waste utilization using metal waste scavengers. Highlighting their activities as a part of the informal sector of the solid waste management system with a view to identifying their challenges, prospects and possible contributions to the solid waste management system in the Port Harcourt metropolis. Therefore, the aim was to understand and assess scavenging as a system of solid waste management in Port Harcourt and to identify the main bottlenecks to its efficiency and the way forward. This study targeted people who engage in scavenging metal scraps across 5 major waste dump sites across Port Harcourt. To achieve this, a mixed method study was conducted to provide both experiential evidence on this waste utilization method using a qualitative study and a survey to collect numeric evidence on this subject. The findings from the qualitative string of this study provided insight on scavenging as a waste utilization activity and how their activities can reduce the gross waste generated and collected from the subject areas. It further showed the nature and characteristics of scavengers in the waste recycling system as a means of achieving the millennium development goals towards poverty alleviation, job creation and the development of a sustainable, cleaner environment. The study showed that in Port Harcourt, the waste management practice involves the collection, transportation and disposal of waste by refuse contractors using cart pushers and disposal vehicles at designated dumpsites where the scavengers salvage metal scraps for recycling and reuse. This study further indicates that there is a great demand for metal waste materials/products that are clearly identified as genuinely sustainable, even though they may be perceived as waste. The market for these waste materials shall promote entrepreneurship as a profitable venture for waste recovery and recycling in Port Harcourt. Therefore, the benefit of resource recovery and recycling as a means of the solid waste management system will enhance waste to wealth that will reduce pollution, create job opportunities thereby alleviate poverty.

Keywords : scavengers, metal waste, waste-to-wealth, recycle, Port Harcourt, Nigeria, waste reduction, garden city, waste

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