

**URBAN WASTE MANAGEMENT IN PORT HARCOURT METROPOLIS
OF THE NIGER DELTA REGION IN NIGERIA**

By

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Supervisor

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Certification

Be it known that this research titled *Urban Waste Management in Port Harcourt Metropolis of the Niger Delta Region in Nigeria* was conducted by **Opara, Jacinta Agbarachi**. It has been supervised, certified and approved by me on behalf of Senate and The Graduate School as meeting the requirements for the award of the degree of **Doctor of Philosophy (PhD) in Environmental Studies**, Universidad Central de Nicaragua, Managua-Nicaragua.

Prof. Gerhard Bертold
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Declaration

I, **Opara, Jacinta Agbarachi** hereby certify that this research is my original work which to the best of my knowledge has not been previously submitted to the Universidad Central de Nicaragua, Managua or any other institution for the purpose of awarding any degree.

Dedication

This work is dedicated to my beloved husband and my children: Sixtus, Mildred, Turibus and Klaudia who have made enormous commitment, morally and more especially during the period of my studies.

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A study of this nature and scope necessarily relies heavily on the work of others. Some indication of the extent of my indebtedness is given by the references. Several people who were involved in the work gave documentations, textbooks and discussed their experiences willingly, especially my colleagues at the Universidad Central de Nicaragua, Managua whom I interacted freely and the research assistants.

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Abstract

This research examines the urban waste management in the Niger Delta with reference to the Port Harcourt metropolis. The study was propelled in view of the indiscriminate deposition of solid waste in Nigerian urban areas which has become a perennial and severe environmental task facing different governments and administration in Nigeria especially in Port Harcourt metropolis. The major objective of the study is to find out whether inhabitants of Port Harcourt are aware of public health impact of the environmental anomaly of indiscriminate waste disposal. In addition, we are also concerned with whether techniques/methods used or proffered by government are adequately creating awareness about the health implications of indiscriminate waste disposal in Port Harcourt Metropolis. Four research questions guided the study with the aid of a survey research design and an instrument referred to as Evaluation of Public Health Impact of Waste Disposal Questionnaire (EPHIWDQ). A total of one thousand two hundred (1200) questionnaires were used to elicit responses out of which 1000 were found useable for the analysis. Frequencies, percentages, mean and standard deviation were used for the collection of data from the respondents. The study was carried out using participant observation, primary and secondary methods of gathering data. The researcher accompanied the officials of Ministry of Environment, and Water Resources as well as Rivers State Environmental Sanitation Authority as a participant observer to various solid waste depots and dumping locations in Port Harcourt. All in all, the research is to identify the behavioural component of public health analysis of waste management and practices among citizenry in the light of environmental education and also to find out to what extent the measures and policies of the government have contributed to the sustainable management of solid waste in Port Harcourt metropolis. One of the major findings is that the strategies for educating the public in environmental and health issues are not adequate enough to create awareness of public health impact of the environmental anomaly of indiscriminate waste disposal. That in order to alter behaviour, awareness must be increased, with an associated reduction in situational barriers. The study indicates that environmental behaviour has a plethora of determinants that can be changed or influenced by adequate communication.

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