

Spatial Data Analysis of Solid Waste Management System in Port Harcourt Metropolis After 100 Years of Its Existence

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SUMMARY

During the early years of the discovery of Port Harcourt, it was generally addressed as the “Garden city of Nigeria” because of its neatness and the overwhelming presence of vegetation and flowers all over its metropolis. Along history lane, the presence of piles of refuse dotting the entire city brought about its public criticism as “Garbage city of Nigeria”, as indiscriminate dumping of solid waste such as food waste, paper, polythene, textiles, scrap metals, glasses, wood, plastics, etc at street corners, and gutters became very common. These heaps of refuse do not only affect the aesthetical nature of the city, but also block drains, and obstruct free flow of traffic. This study therefore is targeted at using spatial data to examine the nature of solid waste management system in Port Harcourt metropolis after 100 years of its existence. The study involves the collection of primary data from Waste Dumpsites and Collection Points by personal and field observation using Garmin 76 handheld GPS alongside a Digital Camara. These primary data abstracted were analyzed using their photographs and spatial location on the road map of Port Harcourt. The research reveals that; waste collection points are indiscriminately scattered in the study area with only four legally approved dumpsites, located at Oyigbo, Eliozu, Rumuolumeni, and Eleme; only the landscape method of disposal is practiced; method of waste haulage have drastically improved as compactors are now been used against the hitherto ugly open trucks; collection and disposal time have been restricted to 7pm-5am daily to enhance a speedy haulage, as well as protect the aesthetical nature of the city; the government have recently established the Rivers State waste management authority (RIWAMA), etc. Consequently, the study recommends among others that more waste collection carts and containers should be strategically located in the study area; provision of more dumpsites, strategically located within the Igwuruta/Eneka axis, Borokiri, Elelenwo, and Choba/Aluu axes of the city; adopt other methods of waste management, especially those that enhances wealth generation like recycling, mostly referred to as waste to wealth