

Building Sustainable Cities through
Effective Urban Solid Waste
Management

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Introduction

- Climate and economic growth have impacted negatively on the composition of wastes
- Volume of solid waste generated continues to increase faster than ability to improve environment
- Nigeria Federal Environmental Protection Agency was created in 1988 which introduced national environmental policy
- Despite the protection agency policy, environment had not been properly protected.
- Federal government then introduced the monthly environmental sanitation monitored by states.
- Thereafter, Lagos State established its own Lagos State Waste Management Authority(LAWMA) which created Lagos State waste disposal board

Waste collection

- ▶ The level of public and private participation is more felt at this stage
- ▶ Individuals sell household wastes to waste pickers and scavengers for token amount of money or in exchange for other useful items.
- ▶ Waste wheelers bins are offered to places of residence based on payment of land use charge
- ▶ Waste collection service by truck is mostly exclusive to the urban cities
- ▶ Government agency normally engages, coordinates and evaluates the activities of the private sector participants into solid waste collection.
- ▶ Collection frequency is either twice or thrice a week which may be door to door in local government areas or designated areas in mega cities.
- ▶ The private sector under the scheme has improved the collection system

Recycling

- ▶ Recycling activities operated mostly by the public are in some mega cities like Lagos, these include:
 - ❑ Compost plant for the treatment of market waste
 - ❑ Waste to energy plant which is used to generate biogas from the market waste
 - ❑ Plastic recycling plant for the conversion of water sachet into garbage bags
- ▶ Informal recycling sector either as itinerant waste buyers or scavengers.

Disposal

- ▶ Solid wastes are disposed in dumpsites at designated land owned by the government and private owners
- ▶ Solid wastes are also disposed in burrow pits
- ▶ Solid wastes disposed in empty spaces illegally pose serious environmental and health challenges
- ▶ Landfilling appears to be the main method of disposing waste generated

- ▶ Lagos State has three landfills and two dumpsites:
 - Olushosun landfill with the land area of about 43 hectares
 - Abule Egba landfill with the land area of about 10 hectares
 - Alimosho landfill divided into two locations covering eight and five hectares of land areas

Conclusion

- ▶ Generally, over the years the activities of public and private partners have reduced the volume of solid wastes especially at the level of waste collection
- ▶ Participation of the cooperating partners has to be deeper in the areas of integration, funding and technology
- ▶ The level of academic research and industry linkages should be stepped up with increased collaboration with international organisation
- ▶ Government policy on waste should be revisited, reaffirmed, restructured and upgraded in a comprehensive tune and form.