

Good Governance: A Solution to Urban Solid Waste Management Problem

¹Olasunkanmi Stephen Abatan, ²Aina Thompson Adeboyejo,
³Akinropo Oluremi Akindele

¹Department of Urban and Regional Planning, Federal Polytechnic, Ede, School of Environmental Studies,
Osun State, Nigeria

^{2,3}Department of Urban and Regional Planning, Ladoke Akintola University of Technology, Oyo State, Nigeria

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ABSTRACT: High rate of urbanization in emergent countries has led to solid waste management problem, thus, an incessant search for an effectual strategy to control waste problem. This paper is an attempt to explore the role of good governance in solving solid waste management problem. It examines how and to what extent operational problems due to lack of good governance can hinder the service delivery of waste management agency. The methodology is the interview of 300 residents that were randomly taken across the two municipal councils (Ibadan North and Ibadan South West) in Ibadan as well as investigation of the waste management practice in Ibadan using Oyo State Solid Waste Management Authority (OYOWMA) as a case study. The result was a revelation of poor waste management service delivery to the citizen due to operational problems of the waste agency. In conclusion, the paper submits that good governance based on justice, corruption free, nonpartisan and stable political system will naturally lead to sustainable waste management.

KEYWORDS: Governance, Solid Waste, Strategy, Management, Solution

I. INTRODUCTION

The basis of solid waste management problems is increased population. It is not only unrealistic to ever think of stopping it, but also seems impossible to do so. It should also be recognized that as city grows in population and physical size, so does its land - use become complex and its solid waste generation increase in quantity (Afon, 2005). Therefore, since it is unthinkable to stop urbanization, thus as the city grows in population and physical size, adequate planning and management should be given to its attendant waste management problem to prevent it from causing harm to human health and the environment at large.

However, the rate of urbanization and the rate of solid waste volume generation seem to have completely overwhelmed the institutions and government of developing countries. This is in agreement with the view of Ahmad and Ali, 2006 cited in Bhuiyan (2010) that cities in developing countries are confronting a twin dilemma. On one hand, the urban population is growing rapidly, causing a huge increase in demand for waste management services. On the other hand, the traditional public sector is responding poorly to the growing demand for such services. The above scenario is the situation in Ibadan where urban population growth seem to have outstripped the capacity of city governments to provide effective and efficient delivery of waste management services as a result of which solid waste management problem remains unresolved in the city of Ibadan. This paper therefore is an attempt to explore the role of good governance in resolving the solid waste management problem.

II. CONCEPTUAL ISSUES: CONCEPT OF WASTE

Solid waste consists of domestic waste generated by urban residents (households) with addition of commercial wastes but typically excludes industrial hazardous waste and domestic sewage sludge (James, 1997) cited in (Buchi M. and A. Amatobi, 2013). Thus, USEPA (2011) declared that solid waste includes durable goods, non-durable goods, containers and packaging wastes, Food wastes, yard trimmings and miscellaneous inorganic wastes. Therefore, solid waste is an accumulation of rejects from households, market women, traders, shop owners and other commercial activities in the urban and rural areas. Furthermore, the New York State Department of Environmental Conservation

(NYSDEC), (2011) also define solid waste as any garbage, refuse sludge from a treatment plant or air pollution control facility and other discarded materials resulting from individual, commercial, mining and agricultural operations and from country activities. Examples of solid waste according to NYSDEC, 2011 are waste tyres, scrap metal, latex paints, furniture, domestic refuse, discarded appliances and vehicles, empty cans, paint cans, construction and demolition debris. Also, Hammed (2010) sees solid waste as any solid material which is discarded by its owner, user or producer. They are left over's arising from human, animal or plant activities that are normally discarded as useless and not having any consumer value to the person abandoning them.

III. CONCEPT OF GOVERNANCE

According to Pierre (2000) cited in Bhuiyan (2010) governance has a dual meaning: on the one hand, it refers to the empirical manifestations of State adaptations to its external environment. On the other hand, governance also denotes a conceptual or theoretical representation of coordination of social systems and, for the most part, the role of the state in that process. However, in its broadest sense, governance concerns performance of the government, including public and private sectors, global and local arrangements, formal structures, informal norms and practices, and spontaneous and intentional system of control (Roy, 2006) cited in Bhuiyan (2010). In recent times, the terms "governance" and "good governance" are being increasingly used in development literature. Bad governance is being increasingly regarded as one of the root causes of all evil within our societies. Infact, international financial institutions are increasingly basing their aid and loans on the condition that reforms that ensure "good governance" are undertaken. Good and Bad Governance - According to the World bank (1992) report cited in Bhuiyan 2010 bad governance is the one that exhibit the followings:

- Failure to make a clear separation between what is public and what is private, hence a tendency to direct public resources for private gain.
- Failure to establish a predictable framework of law and government behavior conducive to development or arbitraries in the application of rules and laws.
- Excessive rules, regulations, licensing requirements and so forth which impede the functioning of markets and encourage rent-seeking.
- Priorities inconsistent with development, resulting in misallocation of resources.

- Excessively narrowly based or non-transparent decision making. In the same vein, OECD 1992 (cited in Bhuiyan 2010) identified the salient features of good governance as follows:
- Promotion of democracy and open pluralistic societies.
- Strengthening of transparent, accountable, efficient and effective national government.
- Reinforcement of the rule of law, including fair and accessible legal and judicial system.
- Promotion of an independent media and dissemination of information.
- Anti-corruption initiatives and efforts to reduce excessive military expenditure

To harmonize the above discussion Kanffmann et. al. (2008) cited in Bhuiyan 2010 reported that World Bank gave six public sector indicators which has been recognized as an effective measurement tool across the world. These are

- Voice and Accountability: Measuring the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of press, association and expression.
- Political Stability and Absence of Violence: Measuring the likelihood that the government would be destabilized or overthrown by violent means, including politically motivated violence and terrorism.
- Government Effectiveness: Measuring the quality of public and civil services and their degree of independence as well as degree of quality policy formulation and implementation.
- Regulatory Quality: Measuring the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
- Rule of Law: Measuring the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police and the courts as well as the likelihood of crime and violence.
- Control of Corruption: Measuring the extent to which public power is exercised for private gain, including petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

A diagrammatical model of good governance is presented below to capture the above discussion

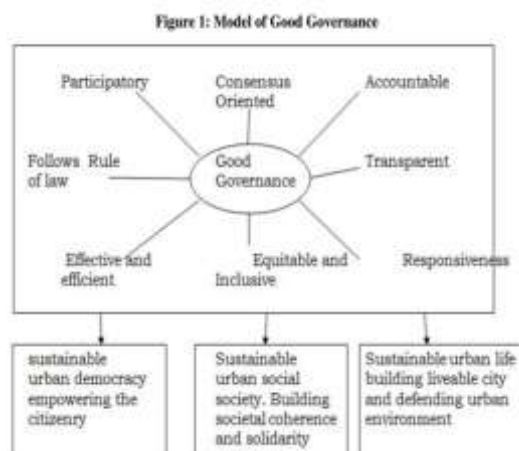


Figure 1: Model of Good Governance

Source: Author, 2024

In figure 1 above, it is seen that when good governance with all its characteristics i.e. accountability, transparency, responsiveness, effectiveness and efficiency, participation, equity and inclusiveness are implemented it will naturally lead to sustainable urban democracy that will empower the citizenry, sustainable urban social society that will build societal coherence and solidarity and also lead to sustainable urban life that will build liveable city and defend urban environment.

IV. STUDY AREA

Ibadan was established in 1829 by Lagelu (a warrior from Ile - Ife). Ibadan with a population of 1,338,659 (NPC 2006) and capital of Oyo State, is located in the South Western Nigeria where the climate is tropical i.e. distinct wet and dry season (see figure 2). Her role as the capital of the old western region and presently the capital of Oyo State in Nigeria has influenced her growth and development to become the third largest metropolis in Nigeria after Lagos and Kano. This administrative function has attracted economic, social, educational and political development. Thus, Ibadan has witnessed massive public and private development. Among these are the University of Ibadan (U.I.), University College Hospital (UCH), Cocoa Research Institute of Nigeria (CRIN), an International Airport, two sports stadia, television

stations (public and private) golf course and residential estates. Although, these developments have brought economic prosperity and employment opportunities, yet, it has serious implication for solid waste generation, disposal and over all waste management in the city. This is because the high rate of urbanization and development as well as rate of solid waste volume generation seems to have completely overwhelmed the institutions and government of the city.

V. METHODOLOGY

Two local government councils were randomly selected. These are Ibadan North and Ibadan South West. Another random selection of 300 residents distributed across the two local government councils as follows - Ibadan North (153), Ibadan south West (147) was also taken. There was also secondary information from the Oyo State Solid Waste Management Authority.

VI. OVERVIEW OF GOVERNANCE AND SOLID WASTE MANAGEMENT

According to the Oyo State Solid Waste Management Authority law of 2004, the responsibility of the operations and management of solid waste in Ibadan is borne by Oyo State Solid Waste Management Authority. However, in the process of carrying out this responsibility, there are operational challenges. In the area of personnel, there are only about 275 workers and (300 casuals) available to the Waste Management Authority for the purpose of waste collection and disposal. This number will be shared among five municipalities. With this situation, it is doubtful if the standard as put -forward by Khandakar (1995) cited in Bhuiyan (2010) for satisfactory cleaning of a city at least two sweepers are required per 1000 population, could be met. Despite the presence of human and material resources, organizational objectives cannot be achieved without financial guarantees (Bhuiyan, 2010). Thus, with an annual subvention of N100m, from which N34m goes for salaries, it is doubtful if the Authority can achieve its objective of effective sustainable solid waste management. To run an organization effectively material resources are important. Table 1: show the list of equipment and their condition available to the Agency.

Table 1: List of Equipment and their Condition

Machinery	Functional	Non-Functional	Total
Pale loader caterpillar	3	1	4
Skip eater (Trucks)	15	26	41
Roll in roll of trucks	17	10	27
Skip bins	100	-	100
Tippers	5	1	6
Bulldozer	2	6	8
Fork	30	15	45

Source: Survey, 2024.

The above table illustrates the insufficient quantity and quality of the equipment available to the Waste Authority which hinders effective service delivery to the citizenry. Yet another operational

challenge is lack of environmental awareness of the people. Table 2 below shows the level of environmental awareness in the two local government council

Table 2: Level of Environmental Awareness

Municipalities	North	South West	Total
Aware	55(17.0)	122(48.9%)	177(66%)
Not aware	98(30.9)	25(3.2%)	123(34%)
Total	153(47.9%)	147(52.1%)	300(100)

Source: Survey, 2024.

From table 2 above, a huge 34% of respondents in the two municipalities are not environmentally enlightened or educated. 30.9% of these came from Ibadan North municipal council. This high percentage of poor environmental awareness hinders effective solid waste

management. Thus, the above operational challenges due largely to lack of good governance naturally led to irregularity in waste collection and unsustainable waste disposal methods as discussed in table 3 below.

Table 3: Regularity of Solid Waste Collection

Municipalities	North	South West	Total
Frequency of Waste Collection			
Once daily	27(6.4%)	27(7.5%)	54(13.8%)
Once every two to three days	42 (6.4%)	45(17.6%)	87(32.5%)
Randomly	27(6.4%)	24(6.4%)	51(12.8%)
Once weekly	57(20.2%)	51(20.6%)	108(40.9%)
Total	153(47.9%)	147(52.1%)	300(100)

Source: Survey, 2024.

From table 3 above, a huge 40.9% of respondent says their wastes are collected once weekly, 32.5% says it is collected once in every second or third days, 12.8% says it is collected randomly and only 13.8% says their waste is

collected daily. The above is a reflection of the inadequacy of the Waste Management Authority in providing effective service to the people which is due to lack of good governance.

Table 4: Major Solid Waste Disposal Methods

Municipalities			
Solid Waste Disposal Methods	North	South West	Total
Burnt in compound	12(1.1%)	0()	12 (1.1%)
Compositing within compound	0()	10(1.1%)	10(1.1%)
Dump in dustbins	49(19.6%)	19(5.8%)	68(25.5%)
Collected by Waste Board	14(2.1%)	59 (26.6%)	73 (28.5%)
Dumping in uncompleted building	15(2.6%)	0	15(2.6%)
Dump in open space	19(4.7%)	14(3.2%)	33(7.9%)
Indiscriminate dumping	44(17.5%)	14(3.2%)	58(70.7%)
Paid private disposal	0(0)	31(5.7%)	31(5.7%)
Total	153(47.9%)	147(52.1%)	300(100)

Source: Survey, 2024.

Table 4 above shows that a huge proportion of respondents (70.7%), (7.9%) and (2.6%) still engage in unsustainable solid waste disposal methods such as indiscriminate dumping, dumping in open spaces and uncompleted buildings

This again is an indication of lack of good governance typified by poor funding of waste agency, lack of equipment, and poor enlightenment programme which compelled the residents to engage in these unsustainable solid waste disposal methods.

VII. FINDINGS

The followings are the major findings of this research:

- Inadequate staffing of the waste management agency
- Poor funding of the solid waste management agency
- Inadequate and obsolete equipment for the waste management agency.
- Low environmental awareness of residents.
- Irregular solid waste collection.
- Use of unsustainable solid waste disposal methods.

VIII. CONCLUSION

The paper identified urbanization as the source of huge waste generation, which has completely overwhelmed the solid waste management agency's capability due largely to lack of good governance. This situation coupled with poor environmental awareness has compelled the residents to engage in unsustainable solid waste disposal method. The paper submit that good governance with its attendant characteristics and benefit will naturally lead to sustainable environment where solid waste management problem will be adequately addressed.

IX. RECOMMENDATIONS

Based on the above analysis, findings and conclusions the following recommendations are put forward.

- The author recommends good governance that is based on justice, corruption free and non-partisan. This will guarantee the followings:
- Human capital development in terms of recruitment, training and welfare packages.
- Technological revolution whereby the equipment available to the waste management agency could be adequate in terms of quantity and quality i.e. enough and modern.
- Ensure availability of funds such that corruption will be reduced to the bearest minimum.
- Ensure rigorous enlightenment and massive environmental education to raise the environmental awareness of the people.

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