
**ENVIRONMENTAL PROTECTION POLICY THRUST AND WASTE MANAGEMENT:
A STUDY OF KWARA STATE ENVIRONMENTAL PROTECTION AGENCY
(KWEPA).**

AMIN AMIN¹

08068704786

aminaminolohunoyin@gmail.com

amin.amin18@kwasu.edu.ng

MOSHOOB OLAYINKA SALAHU (Ph.D)²

07039089596

moshoodsalahu@gmail.com

moshood.salahu@kwasu.edu.ng

ABDULRASHEED HAMZA BAMIDELE (Ph.D)³

08034894146

abdulrasheedhbamidele@gmail.com

abdulrasheed.bamidele19@kwasu.edu.ng

¹Department of Public Administration, Kwara State Polytechnic, Nigeria

^{2,3}Department of Politics and Governance, Kwara State University, Malete, Nigeria

Abstract

The paper examined the challenges of public policy on waste management for environmental security in Kwara State. The study relied on both primary and secondary data. The population and sample size of this study is 32. The data gathered was analyzed using the Statistical Package for Social Sciences (SPSS) version 21.0 for easy analysis. Findings from the study showed that Kwara State Environmental and Protection Agency (KWEPA) has failed to implement its policies as a result of paucity of finance and insecurity in Kwara State. The paper recommends that the Kwara State Ministry of Environment and Forestry should deploy more environmental personnel to Kwara State Environmental and Protection Agency. The State Government should budget more capital into the ministry or agency. Security should be provided to environmentalists so as to enable them to discharge their duties diligently. The environmental laws should be enforced throughout the State so as to give room for sanctions for offences committed during environmental sanitation in the State.

Keywords: Environment, funds, management, policy, waste, sanitation

Introduction

The central role played by a quality environment in the life of humans and even animals cannot be over emphasized. Its health implication and the uncoordinated policy thrusts governing it at different levels of government leaves much to be desired. It is taken that qualitative environmental practices engender good health. These put to question, policy initiatives towards ensuring sustainable waste management. Weaving the challenge of waste management around globally

acclaimed principle or variable of sustainability cannot be more poignant in a country like Nigeria.

However, waste management system has continued to pose problem in many societies while population growth makes waste management even more challenging because the more the presence of people in a specific geographic location the higher the level of waste generation recorded with more waste to contend with within that area. Nevertheless, that poorly managed wastes are perceived as environmental hazards of high significance, the inabilities of societies to manage waste generation effectively play no small role in increasing extant environmental pressures and degradation (Alam, Chowdhury, Hassan, Karanjit, and Shrestha, 2007). Thus, the challenge that derives from the proper management of generated waste is not only just coping with the volume, but also its composition and having the ability to design and accomplish its management efficiently because waste needs to be disposed of safely to ensure environmental safety and lessen public health hazards.

In the United Kingdom, landfill is the most common method of disposal. Out of all of the waste that was from the household, commercial and industrial waste, approximately 57% of the waste was disposed of at landfill sites. In addition, some waste from sewage sludge, mining waste, and quarrying waste is moved to landfill sites. The landfill has been the most efficient way of disposal in the UK. Equally, fly tipping is another form of waste in the United Kingdom. This is the illegal dumping of waste, most commonly found among roadways or abandon areas, which has been increasing and becoming a problem within parts of the UK. Household items are the most commonly found items incidents. The United Kingdom Environmental Act became law in 2021 as the new framework of environmental protection. The law covered rules on nature protection, water quality, clean air, and other environmental protections. It allows the UK to enshrine better environmental protection into law and provide the Government with powers to set new binding targets.

In Nigeria, the waste generation rate is estimated at 0.65 to 0.95kg per day which gives an average of 42million tonnes of waste generated on annual basis with little or no capacity to manage them (Ike et al, 2018). Urban centres or cities need an environment that is free of health hazards, an environment where water, land, river and forest, public health, sewage and proper garbage disposal in factories are of great importance to sustainable environmental security but the reverse is mostly the case in Nigeria, thus leading to environmental degradation, health hazard and communicable diseases in many instances. Invariably, the weakness of public policies on waste disposal in Nigeria partly exposes citizens to environmental hazard, including flooding and environmental pollution. The administrative framework for waste management in Nigeria is anchored by the three tiers of government, consisting of national, State and local government agencies. The Federal Ministry of Environment is the body charged with overseeing the protection of the environment

towards achieving environmental security. As such, it promulgates of national environmental laws, and enforcement and monitoring sanitation activities. To ensure the protection of the environment is better managed, all states in Nigeria (and their local governments) have the legal capacity to create their own environmental protection agencies (Ogwueleka, 2009).

Kwara State is largely bedeviled by waste mismanagement as many areas are characterized by improper disposal of refuse in highly inappropriate places like the middle of roads and unauthorized disposal sites. In Ilorin, which is the capital of Kwara State, the problem of waste mismanagement in the State capital is very disturbing because the more these wastes are evacuated the newer ones are generated daily. Thus, huge refuse is found dumped in unauthorized places, while gutters and roads are filled up with solid and liquid wastes which at times obstruct the free flow of water, thereby causing floods during raining season. While the only approve dump site for the Kwara State capital is SokotoAyekale along Eye-Nkorin, illegal dump sites are springing up frequently in other areas in the metropolis. This prompts the establishment of *Kwara State Environmental and Protection Agency*. The paper will answer this research question. What are the challenges of environmental protection policy on waste management in Kwara State?

Literature Review

Waste

The United Nations Statistics Division (UNSD,2018) defines waste as “*materials that are not prime products (that is products produced for the market) for which the generator has no further use in terms of his/her purposes of production, transformation or consumption, and of which he/she wants to dispose of*”.Coker, Achi, Sridhar and Donnett (2016)define waste as a disposable, discarded, or unused portions of materials.Audu (2007), defines waste as the leftover, or already used items waiting for reuse or disposal Waste is a by-product of human activity that is unavoidable. Festus and Omoboye (2015) state that wastes are materials or substances that are either spoiled, rejected or no longer required for their original purpose.Babayemi and Dauda (2009) define solid waste as any useless, unwanted, non-liquid, and non-gaseous material that results from human and animal activity.

Waste Management

Waste management is defined as “*the discipline associated with controlling the generation, storage, collection, transfer and transport, processing, and disposal of waste in a manner that is by the best principles of health, economics, engineering, conservation, aesthetics, and other environmental considerations, and that is also responsive to public attitudes*” (Tchobanoglousetal, 1993).Globally, waste management system has 3R hierarchy system i.e. reduction, reuse and recycle is very commonly used as the most preferable management system that deals with sustainability and environment friendliness. The waste hierarchy arranges an order of

priorities for waste management with the preferred choice of waste prevention, followed by re-use, recycling, other procedures of retrieval which include energy from waste, and improved final disposal followed by monitoring. Management of waste should be done so that it does not endanger human health, harm the environment, pose risks to air, water, soil, plants or animals, be a nuisance through odours or noise, or adversely affect places of special interest. (Ritchie and Randall 2009).

Waste Management in Nigeria

Waste management in Nigeria is confronted with various challenges that hinder its effectiveness. One of these challenges is the inadequate waste management infrastructure in the country. The World Bank (2021) report indicated that Nigeria's waste management infrastructure is insufficient and poorly developed, with limited landfill capacity, poor collection services, and inadequate treatment facilities. In addition to inadequate funding and poor infrastructure, limited public awareness about waste management is another challenge in Nigeria. The World Bank (2000) suggested that budget provision for waste in developed countries, which are believed to have adequate infrastructure should be about 10% of Monthly Recurrent Expenditure. Whereas, it is 15% for less developed countries, including Nigeria, on the premise that such countries have poor infrastructure base which needs to be enhanced and improved to address the situation. Ogwueleka's (2016) study revealed that the lack of awareness and education on waste management among the public has resulted in poor waste disposal practices, such as littering, open dumping, and burning. Moreover, the enforcement of waste management regulations in Nigeria is inadequate, according to the United Nations Development Programme (2021) report. This lack of enforcement has led to widespread illegal dumping and unregulated waste disposal practices, contributing to environmental pollution and health risks.

Equally, lack of reliable data on waste generation and disposal makes it difficult to plan and implement effective waste management strategies (Federal Ministry of Environment, 2018). Additionally, the informal waste sector, which is poorly regulated and often operates outside the formal waste management system, leads to inefficient and unsustainable waste management practices (Amodu and Musa, 2021). Climate change impacts such as flooding and erosion exacerbate waste management challenges, especially in coastal areas (United Nations Environment Programme, 2021). The lack of inter-agency collaboration and coordination in waste management also results in duplication of efforts, inefficient use of resources, and poor service delivery (Ojekunle et al., 2020). Inefficient waste collection and transportation systems, often done manually or with outdated equipment, result in low collection rates and inefficient waste management (International Finance Corporation, 2019).

The absence of comprehensive waste management policies that address the entire waste management value chain, including waste reduction, reuse, recycling, and safe disposal, is a major challenge in Nigeria (Oladeji&Awodele, 2017).The required

technical and research support service for implementing acceptable waste management projects still suffers grossly deficient in quantity and quality. Also, posing a challenge is the paucity of pundits in modern reliable waste management data and information gathering methods and this inhibits genuine effective capacity building for best practice (Agunwamba, 2003). Inadequate funding is also a challenge to waste management, as highlighted in a study by Adetola et al. (2020). The study reported that waste management systems in Nigeria are poorly funded, which results in a lack of equipment, facilities, and personnel. **Equally, politics** affects programme formulation and implementation. At the inception of the PSP Programme, many operators enlisted for waste collection and transportation are paid monthly whether or not service delivery could be confirmed.

Empirical Review

Ola Adisa et al. (2015) studied knowledge, attitudes/beliefs, and practice associated with medical waste management; Binbol et al. (2013) evaluated the waste management activities of PEPSA; Egbere et al. (2001) researched the health impacts associated with waste handling; Jatau (2013) and Ola-Adisa et al. (2015) researched attitudes and practices to waste; Peter et al. (2014) and Musa et al. (2008) looked at planning aspects of waste management in Jos. Their work is relevant to this study but did not address waste management and environmental security in Kwara State. Afun (2009) and Ajibade (2007) have recommended that waste prevention be used as a strategy for reducing waste generation in Nigeria. Ajibade (2007) believes that the approach which could reduce waste to the barest minimum is the most desirable for Nigeria, while Afun (2009) advised that the waste hierarchy should be a fundamental element of the national policy thrust for waste management.

Ahmed (2008) writes on waste management in Ilorin metropolis. The study revealed that a metropolis (Ilorin) is often polluted with heaps of refuse that occasionally caused traffic hold-ups in some strategic areas of the urban centre. A lot of health incidences resulting from water, air and pest-borne diseases are not uncommon within areas where the prevalence of effluents prevailed. Management of waste in Ilorin and Kwara State, in general, has been the sole responsibility of the Kwara State Environmental Protection Agency (KWEPA) and other health management sectors in the recent past. The performance of these sectors had been rebuked as a result of their poor performance by the general public. The outcome results show that both the Government's financial support to KWEPA and other Health Agencies in the past in terms of funding, manpower and equipment had been grossly inadequate, and misused. Improvement measures are suggested in the new tasks ahead of Kwara State Waste Management Company (KWMC) under the new dispensation of Ola Kleen.

Theoretical Framework

This study adopts the Green theory leading by John Dryzek, Robyn Eckersley, Val Plumwood and Andrew Dobson (1980s-1990s). The approaches of the theory on

environmental issues are mainly based on the idea that the environment needs to be "secured", and not "securitized". The main object of reference shifts from the state toward the environment in which environment is understood concerning the activities of the individuals that live in it. Individual emancipation ultimately depends on people feeling secure in the environment where they live. People's welfare is interlinked with the preservation of surrounding ecosystems and therefore the main goal of environmental protection should be their preservation (Elliot 2004, 201-222). This approach makes important theoretical advances, especially by shifting the perception of the environment. Here, the environment is understood as the ultimate goal of security. To guarantee the survival of individuals and society (and, ultimately, even the survival of the state) one must, first of all, assure the security of the planet, and the elimination of elements that threaten the preservation of the environment.

The criticism of green theory in International relations did not reveal much in terms of current global scenarios. The critical view remains limited to the extent that its research agenda focuses much more on the normative dimension of the problem, without offering practical solutions to how to assess environmental issues (Peoples and Vaughan-Williams, 2010). The critical approach argues for the demilitarization of security thinking to focus instead on the mitigation of the causes that lead to environmental degradation. The literature consulted on Green theory has only pointed out so far that green theory is ineffective in the process of making environmental governance policies. The green theory posited that the environment needs to be secured, and not securitized. The environment must be sanitized and individual emancipation ultimately depends on people feeling secure in the environment where they live. People's welfare is interlinked with the preservation of surrounding ecosystems, and therefore the main goal of environmental security should be their preservation.

The theory is relevant to the study because the Kwara Ministry of Environment and Forestry embarks on mandatory monthly sanitation which is usually held on the last Saturday of the month. The Administration of Governor Abdulfatah Ahmed re-introduced the sanitation exercise after it has been cancelled by Federal Government nationwide. The present administration under the leadership of Governor Abdulrahman Abdulrazaq inherits a monthly sanitation programme. The Kwara State government established a mobile court to judge sanitation/environmental law falters with immediate effect. Yet, many do not comply with the key into the exerciser owing to the poor commitment of the Kwara State Government to enforce environmental laws on the members of the public across the state. Few areas like Maraba, Muritala, Challenge, Garage Offa, Fate, Taiwo, Sango and all prominent markets are seen as the places where sanitation takes place and environmental law is effective. Whereas, there is no sign of monthly sanitation in areas like Omoda, Ode-Alausa, Oloje, Ogidi, Okolowo, Pakalata, Akerebiata, Oke-Oyi, Bode-Saadu etc.

Methodology

The population of this study is drawn from the staff of the Kwara State Environmental and Protection Agency (KWEPA) with emphasize on environmental department with population of 32 staff. The data gathered is analyzed using the Statistical Package for Social Sciences (SPSS) version 21. The study relies on both primary and secondary sources. The primary data is analyzed through simple percentage using a 5-point Likert scale with "1 = Strongly Disagree, 2= Disagree, 3 = Undecided, 4 = Agree and 5=Strongly Agree".

Table: Challenges of Waste Management in Kwara State

Items	Opinion	Percent	Mean	Standard deviation	Remark
Financial handicap					
Strongly disagree	-	-			
Disagree	3	9.4			
Undecided	1	3.1			
Agree	12	37.5	4.2813	.92403	Strongly agreed
Strongly agree	16	50			
Total	32	100			
Insecurity					
Strongly disagree	-	-			
Disagree	-	-			
Undecided	1	3.1	4.4839	.50800	Agreed
Agree	16	50.0			
Strongly agree	15	46.9			
Total	32	100			
Inadequate of operational vehicles.					
Strongly disagree	1	3.1			
Disagree	3	9.4	3.7500	.91581	Agreed
Undecided	3	9.4			
Agree	21	65.6			
Strongly agree	4	12.6			
Total	32	100			
No enough technical					
Environmental					
Strongly disagree	-	-			
Disagree	4	12.5	4.3125	1.02980	Strongly agreed
Undecided	1	3.1			
Agree	8	25.0			
Strongly agree	19	59.4			
Total	32	100			

Source: Researcher's Field Survey 2023

Discussion of Findings

The study shows that majority of the respondents strongly agreed that financial handicap is one of the challenges of proper implementation of waste management in Kwara State. This is in line with (Hakeem, 2013) that the Agency is faced with many problems, such as lack of funds; lack of trained/professional waste managers; lack of effective monitoring and control; the peculiarity of the Nigerians' attitude; the "government-does-everything"; lack of modern technology/lethargy in implementing efficient waste management methods and corruption. The finding revealed that majority of the respondents strongly agreed that insecurity is a contemporary challenge to waste management in the State. In addition, the majority of the respondents agreed that inadequate of operational vehicles affect evacuation and disposal of waste in Kwara State. The study is in line with Onuminya and Nze (2017) that major drawback in service delivery is the breakdown of waste evacuation trucks while the majority of respondents strongly agreed that no enough technical environmental staff or workers hinder the effective operation of waste management in the State. This is similar to Onuminya and Nze (2017) that inadequate manpower and maintenance capacity as well as lack of cooperation from residents in ensuring proper waste management. It is also similar to previous study by (Agunwamba, 2003) that the required technical and research support service for implementing acceptable waste management projects is still grossly deficient (quantity and quality). Also posing a challenge is the paucity of expertise in modern reliable waste management data and information gathering methods and this inhibits genuine effective capacity building for best practice.

Conclusion

The paper examined the challenges of waste management in Kwara State. The study concluded that financial handicap, inadequate personnel and insecurity are the challenges of proper implementation of waste management policy in Kwara State.

Recommendations

The Kwara State Ministry of Environment and Forestry should deploy more environmental personnel to Kwara State Environmental and Protection Agency. More authorize dumpsites should be created. As a matter of urgency, security should be provided to environmentalists so as to enable them discharge their duties diligently. The State Government should budget more capital to the Ministry of Environment and Forestry. The environmental laws should be enforced throughout the State. Kwara State government should ensure the regular maintenance of the trucks used by KWEPA. There is need for orientation and awareness programs on proper waste handling through house to house campaign, print and electronic media.

References

- Adetola, A. O., Sridhar, M. K. C., & Balogun, A. L. (2020). Assessment of solid waste management in Nigeria: A case study of Oyo state. *Waste Management & Research*, 38(8), 910-918.
- Afun, S. (2009) Government Regulations and Legislations will ensure sustainable waste management in Nigeria. <<http://www.iswa.org/uploads/tx-iswaknowledgebase>. Accessed 5 May 2015.
- Agunwamba, J. (2003). Analysis of scavengers' activities and recycling in some cities of Nigeria. *Environmental management*, 32(1), 116-127.
- Ahmed . Y. A. (2008) Waste Management Inllori Metropolis: Lessons For Nigerian Cities *FUTY Journal of the Environment, School of Environmental Sciences, Federal University of Technology, Yola – Nigeria. Vol. 3 No.1, July, ISSN 1597-8826.*
- Ajibade, L. (2007). Indigenous Knowledge System of waste management in Nigeria. *Indian Journal of Traditional Knowledge*, 6(4), 642-647.
- Alam, R., Chowdhury, M., Hassan, G., Karanjit, B. and Shrestha, L. (2007) Generation, Storage, Collection and Transportation of Municipal Solid Waste- A Case Study in the City of Kathmandu, Capital of Nepal. *Waste Manangement*, 28(2008), 1088- 1097.
- Amodu, O. S and Musa, M. M. (2021). The informal waste sector in Nigeria: Opportunities and challenges for sustainable waste management. *Journal of Environmental Management*, 278, 111596.
- Audu, G. (2007). *Recycling of Municipal Solid Waste*. A seminar paper delivered in the Seminar lecture series, University of Benin. Nigeria. 19pp.
- Babayemi, J.O and Dauda, K.T (2009) Evaluation of solid waste generation, categories and disposakl option in developing countries: A case study of Nigeria. In *Applied science and environmental management*. 13(3) pp 83-88.
- Coker, A. O., Achi, C. G., Sridhar, M. K. C., & Donnett, C. J. (2016). Solid waste management practices at a private institution of higher learning in Nigeria. *Procedia Environmental Sciences*, 35, 28-39. doi:10.1016/j.proenv.2016.07.003.
- Egbere, O.J. Itelima, J.U. and Opiah, F.O. (2001) Municipal solid waste segregation and their health hazard: Implication in AngwanRogo ward of Jos, Plateau State Nigeria. *Journal of Environmental Sciences*, 4(1) pp. 14-20.

- Elliott, L (2004) *The Global Politics of the Environment*. New York: Palgrave Macmillan, 2nd edition.
- Federal Ministry of Environment. (2018). National waste management strategy for Nigeria. Retrieved from <https://www.minesandsteel.gov.ng/pdf/2018%20National%20Waste%20Management%20Strategy%20for%20Nigeria.pdf>
- Festus, I.A. and Omoboye, I.F (2015) Categorization, Characterisation, Management and Future Trends of Solid Wastes in Ado-Ekiti, Nigeria, *Mediterranean Journal of Social Sciences* MCSER, Publishing, Rome-Italy, Vol.6 No 4, ISSN 2039-9340.
- Hakeem .I. (2013) The Legal Framework for Solid Waste Disposal and Management in Kwara State, Nigeria, *Journal of Environmental Protection*, Vol.4 No.11.
- International Finance Corporation. (2019). Nigeria: Creating value from waste. Retrieved from <https://www.ifc.org/wps/wcm/connect/195e81d1-af87-44c3-85e9-eb29a924c523/Nigeria+Waste+Report.pdf?MOD=AJPERES&CVID=ng2-Hhe>
- Jatau, A.A. (2013) Knowledge, attitudes and practices associated with waste management in Jos South metropolis, Plateau State. *Mediterranean Journal of Social Sciences*. 4(5), pp. 119-127.
- Musa, N.Z. Eguaroje, O.E. Olorunfemi, J.F. (2008) Use of geospatial data for sustainable management of solid waste in Bukuru, Jos, Plateau State Nigeria. ACCRA2008 - 7th AARSE CONFERENCE: Application of Earth Observation and Geo-information for Governance in Africa 27-30 Oct. 2008. Centre for Remote Sensing & Geographic Information Services (CERSGIS), University of Ghana, Legon, Accra, Ghana.
- Ogwueleka, T. C. (2009). Municipalsolid waste characteristics and management in Nigeria. *Iranian journal of environmental health science & engineering* 6 173-180.
- Ogwueleka, T. C. (2016). Municipal solid waste characteristics and management in Nigeria: A review. *Journal of Environmental Science and Technology*, 9(4), 367-376.
- Ojekunle, Z. O., Oyedele, L. O. and Babajide, A. A. (2020). Evaluating waste management practices in Nigeria: An assessment of challenges and prospects. *Environmental Science and Pollution Research*, 27(33), 41206-41217.

- Ola-Adisa, E.O.,Elijah , M.Y, Yohanna C. S, James O. (2015 Knowledge, Attitudes/Beliefs and Practices in Medical Waste Management - An Appraisal of Jos North LGA, Plateau State, Nigeria,International Journal of Research in Humanities and Social Studies Volume 2, Issue 12, December 2015, PP 43-56 ISSN 2394-6288 (Print) & ISSN 2394-6296 (Online)
- Oladeji, O. S. and Awodele, O. A. (2017). An evaluation of the challenges and prospects of waste management in Nigeria. *Journal of Environmental Science, Toxicology and Food Technology*, 11(8), 64-73.
- Onuminya, T.O and Eze,E.C (2017) An appraisal of waste management in Lagos metropolis: A case study of Lagos State Waste Management Authority (LAWMA), *Nigeria Journal of Pure and Applied Sciences*, vol. 30 issue 3, ISSN 0794-0378.
- Peoples, C and Vaughan-Williams, N.(2010) *Critical Security Studies: an introduction*. New York: Routledge. Programme (UNEP); February 22, 2010.
- Ritchie, A and Randall T. (2009) *Sustainable Urban Design An Environmental Approach*,Taylor & Francis Publisher, ISBN 9780415447829.
- Tchobanoglous, G. Theisen, H. and Vigil, S.A (1993) *Integrated Solid Waste Management: Engineering Principle and Management Issue*. McGraw Hill Inc., New York.
- United Nations Development Programme. (2021). Solid waste management in Nigeria. Retrieved from <https://www.ng.undp.org/content/nigeria/en/home/library/poverty/solid-waste-management-in-nigeria.html>
- United Nations Environment Programme. (2021). Waste management and climate change. Retrieved from <https://www.unep.org/resources/report/waste-management-and-climate-change>.
- World Bank. (2020). *A Global Review of Solid Waste Management*.
- World Bank. (2021). *Nigeria - Integrated national solid waste management project: Environmental assessment*. Retrieved from <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/301891618727090238/nigeria-integrated-national-solid-waste-management-project-environmental-assessment>