

**POOR SOLID WASTE MANAGEMENT AND IT SOCIO- ECONOMIC
EFFECTS ON THE PEOPLE LIVING IN EGOR LOCAL
GOVERNMENT AREA BENIN CITY**

BY

**BLESSING OSAYANDE
MATRIC NO. SSC1909846**

**DEPARTMENT SOCIOLOGY AND ANTHROPOLOGY
FACULTY OF SOCIAL SCIENCE
UNIVERSITY OF BENIN
BENIN CITY**

MAY, 2024

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**A PROJECT WRITTEN IN THE DEPARTMENT OF SOCIOLOGY AND
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SOCIOLOGY AND ANTHROPOLOGY OF UNIVERSITY OF BENIN,
BENIN CITY.**

MAY, 2024

DECLARATION

I, **BLESSING OSAYANDE** do hereby declare that:

- This project is based on a study undertaken by me in the Department of Sociology and Anthropology, University of Benin, under the Supervision of DR MONDAY ABIOLA
- This work has not been previously submitted for the award of degree elsewhere.
- All ideas and views are product of my personal research and where the views of others have been expressed, they have been duly acknowledged.

BLESSING OSAYANDE

Date: _____

CERTIFICATION

We certify that **Blessing Osayande** with the matriculation Number SSC1909846 submitted this research work to the Department of Sociology and Anthropology, Faculty of social science, University of Benin, Benin City.

DR. MONDAY ABIOLA
Supervisor

Date

PROF. A. O DOKPESI
Head of Sociology and Anthropology

Date

DEDICATION

This research work is proudly dedicated to God Almighty, thank you for guiding me through this journey and blessing me with the courage to pursue my dreams.

To my parents your unwavering support, encouragement and sacrifices have been my foundation. This project is dedicated to you.

ACKNOWLEDGEMENT

Firstly, my gratitude goes to God almighty for his establishment, provision, and protection to complete this project. Him alone deserve all the glory.

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ABSTRACT

This research work is designed to examine the social economic impact of poor solid waste management in Benin City, Egor local government ugbowo. Employing a qualitative approach through interview, this study seeks to examine how inadequate poor solid waste management affects the lives of the residence in Egor community. By engaging directly with the life experience and perspectives of the residence, the research aims to analyses the different ways in which poor solid waste management have greatly affected the activities, environment and lives of residents in the area.

CHAPTER ONE

INRODUCTION

1.1 Background of the study

Solid waste is the useless, unwanted and discarded material resulting from day to day activities in the community. Solid waste management may be defined as the discipline associated with the control of generation, storage, collection, transfer, processing and disposal of solid waste (Ashish R. Mishra et al 2014). Most large African cities are overpopulated, as a result of urban attraction. Urban growth leads to poor management of solid and liquid wastes produced by cities. This leads to many health and ecological problems. Every human being deserves to be protected from many health issues such as dysentery, cholera, malaria, other serious infections that are caused by poor disposal of waste and an environment needs to be protected against ecological disasters. There is need to take necessary steps, as it was reported that the number of people without adequate sanitation will rise to more than 4.5 billion in just 20 years (Akrama, 2012). The author further observed that, human wellbeing is related to the principles and practices relating to the collection, treatment, removal or disposal of household waste, and other pollutants. The word sanitation also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal (Mmom and Mmom, 2011). People,,s apathetic and lackadaisical attitudes

towards matters relating to personal hygiene and environmental cleanliness, of which waste management in general is its focal point, should not be over looked. An average citizen has the mindset that the issue of solid waste disposal should be the sole responsibility of the government to collect the amount of wastes they generated in their households and dump them in designated sites. Besides the health problem, solid waste blocks the drainage system and creates severe flooding on the streets especially during the raining season when farm produce leaves litters the environment (Ilevbare, 2011). It is also widely recognized that a sanitary crisis exists in poor urban areas of the developing world. The health, welfare and livelihoods of huge numbers of people are at risk from diseases that are related to the improper disposal of refuse, excreta and wastewater. The environment has three components that support human existence which are land, air and water. Any abuse or alteration in any of these components will result in ill health, death of the people and other living creatures in such environment. Anunonwu et al; (2009) stated that a well-known fact to many United Nations specialized agencies such as the World Health Organization, United Nations Children,,s Fund, United Nations Development Programme , World Bank, among others, stated that the single most significant cause of morbidity and mortality in sub-Saharan Africa and other third world countries is poor standard of environmental sanitation. Anunonwu et al; (2009) further noted that each year, in spite of all the modern technologies available to medicine, health and bio-medical

sciences, millions of people still get ill or may even die from undue exposure to environmental hazards. It is also estimated that nearly half of the urban population in Africa, Asia, and Latin America have one or more of the main communicable diseases associated with inadequate refuse disposal and sanitation provision including diarrhoea and worm infections (Firdaus, 2012). Aremu (2012) stated that proper sanitation is a key development intervention as having access to improved health, well-being and economic productivity; however, the environmental sanitation and hygiene situation of some countries especially in the developing world is of great concerns, According to the Nigerian F. M. E. (2005), certain norms guided the maintenance of adequate sanitation in the communities. For instance, female gender, particularly the girls, sweep the homes/surroundings and empty refuse bins. Individuals living in poor neighborhood environments tend to have higher morbidity and mortality compared to those living in environmentally sound

Dealing with the environmental costs in rapidly growing economic development, urbanization and improving living standards in cities have led to an increase in the quantity and complexity of generated waste, representing a phenomenal challenge. This is particularly true in the area of solid waste management at the household level. While cities are generating an ever-increasing volume of waste, the effectiveness of their solid waste collection and disposal systems are declining (UNDP 2009).

In most African cities the situation of solid waste management is insignificant and inadequate that could associate with different factors. Solid waste management practice in Africa is often weak due to lack of appropriate planning, inadequate governance, poor technology, weak enforcement of existing legislation and the lack of economic incentives to promote environmentally sound development. The practice of solid waste management in the region is mostly open dumps without proper control over ecologically or hydrological sensitive areas. According to UNEP (2004), solid waste generation has become an increasing environmental and public health problem everywhere in the world, particularly in developing countries. Consequently, solid waste is not only increasing in quantity but also changing in composition from less organic to more paper, packing wastes, plastics, glass, metal wastes among other types, a fact leading to the low collection rates. therefore, this study is to investigate the effect of poor solid waste management and economic well-being of the people living in egor community environment.

1.2 Statement of the Problem

Nigeria cities and towns generate millions of tones of refuse annually . It has been estimated that over 9 million tones of refuse was created in most Nigerian cities as for back as 1983 (Chikwedu, 2009).

Commenting further on this, Ogwuleke (2009), noted that 25 million tones of municipal waste are generated annually in Nigeria. How such waste is disposed of has become an issue of serious concern particularly in communities. Inadequate management of solid waste resulted to health issues, loss of job opportunities, decreased in property values, community under development, slow business, no transportation, these result from wastes that are not well-conserved which as affected the socio and economic well-being of the resident in communities. It is therefore imperative that this study to uncover the effects of poor of solid waste management among resident of EGOR LGA, Edo State, Nigeria with a view to correcting any poor standards that may be found.

The Egor community faces significant challenges in managing solid waste effectively, leading to environmental degradation, public health risks, and social issues. Despite efforts to address the issue, poor solid waste management persists, exacerbating the community's environmental and socio-economic woes. At the heart of the problem lies a complex web of interrelated factors contributing to the inadequate management of solid waste. Firstly, insufficient infrastructure for waste collection, disposal, and recycling exacerbates the accumulation of waste in residential areas, streets, and open spaces. Limited access to formal waste management services leaves many residents with no choice but to resort to improper disposal methods, such as burning, dumping, or littering, further exacerbating the problem. Secondly, a lack of awareness and education about the

importance of proper waste management practices perpetuates misconceptions and apathy among community members. Many residents may not fully understand the environmental and health implications of improper waste disposal, leading to a disregard for responsible waste management behaviors. Moreover, cultural attitudes and societal norms may inadvertently promote practices such as littering or illegal dumping, further perpetuating the cycle of poor waste management. Thirdly, socio-economic disparities within the community exacerbate the problem, as marginalized or low-income households may lack the resources or access to proper waste management services. This not only perpetuates environmental injustice but also exacerbates public health risks, as communities living in close proximity to waste disposal sites or contaminated areas face heightened exposure to pollutants and diseases. Furthermore, the absence of effective governance and enforcement mechanisms hampers efforts to improve solid waste management in the Egor community. Inadequate regulatory frameworks, weak enforcement of waste management policies, and corruption within local authorities undermine initiatives aimed at promoting responsible waste disposal practices. Without robust governance structures and accountability mechanisms in place, efforts to address the problem remain fragmented and ineffective. Overall, the poor management of solid waste in the Egor community poses a multifaceted challenge with far-reaching consequences for the environment, public health, and socio-economic well-being. Addressing this issue requires a holistic approach that

addresses the underlying drivers of poor waste management, fosters community engagement and participation, strengthens governance and regulatory frameworks, and promotes sustainable waste management practices tailored to the needs and context of the Egor community.

1.3 Research Question

1. What type of solid waste practices are most commonly observed in the community?
2. What are the socio-economic consequences experienced by the residents of Egor community due to inadequate solid waste management?
3. What is the existing solid waste management infrastructure and how effective is this policy in Egor community?
4. What are the key challenges faced by Egor community in achieving efficient solid waste management?
5. Are there specific attitudes or behaviors that hinders effective solid waste management practices in the community.

1.4 Objective of the study

The general purpose of this study is to establish a linkage between between solid waste management and the socio economic effects

1. Investigate the extent of poor solid waste management practices in Egor community, Benin city, Edo state.
2. Access the socio-economic Impact of inadequate solid waste management on the residents of Egor community.
3. Examine the existing solid waste management infrastructure and policies in place in Egor community.
4. Identify the key challenges and barriers hindering efficient solid waste management in Egor community.
5. What are the specific attitudes or behaviour hindering solid waste management practices in the community.

1.5 Significance of the study

This study will be of great value to students in the field of waste management, environmental science, public health and other related fields of study. The information made available by this study will form a reference resource to other researchers in the field solid waste management, It will be useful to school authorities who wish to create and maintain a healthy physical environment. The general public will also benefit from the findings of this study in the area of creating and sustaining a healthy environment.

1.6 Scope of the Study

This study will cover the issue of poor solid waste management, the already existing practices and its effect on the people residing in Egor local government area. Although the issue of poor solid waste management exists among other communities in Benin city Edo state and beyond . But Egor local government will be our center of concentration in this project.

Operational Definition Of Terms

- 1: Socio-economic factors: the socio economic conditions that can affect a person's wellbeing.
- 2: Poor solid waste management: this refers to the inadequate or inefficient collection and disposal of solid waste.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Concept of solid waste management;

The concept of "waste" stands for any material of solid or semi-solid that the possessor no longer considers of important value to retain Goudie, (2011). Waste can be any garbage, sludge, gaseous emissions and other discarded materials resulting from various community activities.

2.2 Solid Waste Management: Solid waste management is the systematic process of waste generation, collection, storage, transportation, treatment, utilization and disposal of unused or waste items. This involves all the administrative processes, financial and legal implications and planning functions as well as the physical aspect of waste handling. Furthermore, solid waste management involves the activities and actions required to manage waste from inception to its final disposal. This includes among other things waste generation, collection, storage, transportation, treatment and disposal (Gilpin, 1976; Mishra, 2008; Ibrahim, 2016; Agbebaku, 2019, 2021). The studies of Wright and Boorse (2011) Cunningham and Cunningham (2015), Ibrahim (2016) and Agbebaku (2021), observed that over 1000 metric tonnes of solid waste materials are evacuated from indiscriminate dumps in public places every month in China, in England and United States of America over 900 metric tonnes were evacuated in

public places every month while in South Africa and Sweden over 600 metric tonnes are evacuated in public places every month. In Nigeria, over 200 metric tonnes of solid waste are evacuated from indiscriminate dumps in public places every month in Ibadan. This assertion was also corroborated by Ayo (2015), Imafidon, (2016) and Agbebaku (2021) in their studies in Lagos Island, Abuja and Benin Cities respectively where they identified that 30, 25 and 20 metric tonnes of waste items were evacuated from residential places and in associate areas in every quarter of the metropolitan areas. To this end, the situation varies in degree and typical in most towns and cities in developed and developing countries. Furthermore, studies have shown that majorities of the dumpsites in urban areas in Nigeria are temporal in transits to permanent dumpsites unlike in the developed nations where the theory of locational model were considered before establishment if comparative studies are to be carry out. However, in most of these towns and cities centers, urban growth, spread and development have engulfed such dumpsites as observed in major towns and cities in Lagos, Ibadan, Port Harcourt, Kaduna, Benin, Kano and Abeokuta (Agunwanba, 1988; Igbinomwanhia and Ohwovoriole, 2011; Edward and Ogubazghi, 2016; Egbenoma, 2016; Ibrahim, 2016; Agbebaku, 2021).

Graiser (2012) refers to solid waste as 'solid material which is discarded. This definition ignores the relevant issue of the usefulness, value, or desirability of the matter in question, but in as much as discarding is an intentional act, it

implies that the discarded judges the material to be of relatively little current value to him.

Rogdgers, (2011) contends that waste management is a systematic control of generation, storage, collection, transportation, separation, processing, recovery and disposal of solid waste. In the smallest of places, solid waste management is accepted as a major aspect of the indigenous community organization and traditional home management; hence every house/compound has a designed area for solid waste collection/disposal and or incineration Sanda, (2010). In Nigeria, wastes are generated in homes, commercial, industrial sites, hospitals, schools, on streets and even religious activities.

Poor solid waste management poses significant challenges to communities worldwide, impacting not only the environment but also the socio-economic well-being of residents. This literature review examines the existing research on the relationship between inadequate waste management practices and various socio-economic factors.

1. Environmental Health Impacts: Numerous studies have documented the adverse environmental health effects of poor solid waste management, including air and water pollution, soil contamination, and the proliferation of disease vectors. For example, a study by Xing et al. (2019) found that improper waste disposal contributes to the

contamination of water sources, leading to increased incidence of waterborne diseases in affected communities.

2. **Economic Costs:** In addition to its environmental impacts, poor waste management imposes substantial economic costs on communities. These costs arise from expenses related to waste collection, transportation, and disposal, as well as the loss of potential revenue from recycling and resource recovery. For instance, a study by Wilson et al. (2018) estimated the economic burden of inadequate waste management in low-income communities, highlighting the disproportionate impact on households with limited financial resources.
3. **Healthcare Expenditures:** Inadequate waste management also contributes to higher healthcare expenditures due to increased incidences of illness and disease. Research by Smith et al. (2020) found a correlation between poor waste management practices and elevated healthcare costs in communities exposed to environmental pollutants from uncontrolled waste disposal sites.
4. **Social Impacts:** Poor solid waste management can exacerbate social inequalities and undermine community well-being. Studies have shown that marginalized populations, such as informal waste pickers and residents of informal settlements, bear a disproportionate burden

of the negative effects of inadequate waste management. For example, research by Rahman et al. (2017) explored the social impacts of waste management on marginalized communities in urban areas, highlighting issues of stigmatization, discrimination, and limited access to basic services.

5. **Livelihoods and Employment Opportunities:** On the other hand, effective waste management practices can create employment opportunities and support local livelihoods. Studies by Martinez-Sanchez et al. (2019) and Haque et al. (2021) have demonstrated the potential for waste management initiatives, such as recycling and composting programs, to generate income for residents and stimulate economic development in communities.
6. **Policy and Governance Challenges:** Despite growing awareness of the socio-economic implications of poor waste management, many communities continue to face significant policy and governance challenges in addressing these issues. Research by Ghose (2018) and Das et al. (2020) has highlighted the importance of effective governance structures, stakeholder engagement, and policy interventions in promoting sustainable waste management practices and improving socio-economic outcomes for communities.

The literature reviewed underscores the complex interplay between poor solid waste management and socio-economic well-being. Addressing these challenges requires a multi-faceted approach that integrates environmental, economic, and social considerations, while also emphasizing the importance of community participation, policy support, and institutional capacity-building efforts. This literature review provides a comprehensive overview of the existing research on the topic and highlights the need for further interdisciplinary inquiry to inform evidence-based solutions for sustainable waste management and equitable socio-economic development.

2.3 Solid Waste disposal practices in the community

This is often called waste reduction meaning reducing waste by not producing it. Example of waste prevention would include purchasing durable goods and seeking products and packaging that are of less toxic substance. It can be as simple as switching from disposal to reusable products, or as re-designing from a product to fewer raw materials or by the following means;

Recycling: recycling makes use of materials that otherwise would become waste by turning them into valuable resources. Recycling helps reduce greenhouse gas emission, in part, by diverting waste from landfills. In some countries, a great deal of recycling occurs before the waste reaches the landfill. Scrap dealers by directly

from households and business, waste pickers or scavengers collect material from waste bin and waste collectors separate materials that can be sold as they load their truck Nzeadibe, T. C., Chukwu, J. O., Okonkwo, I. O., et al. (2020). Community-based solid waste management in Nigeria: Case study of Onitsha metropolis.

Open dumping: Some components of solid waste such as street sweepings, ashes and non-combustible rubbish are suitable for open dumping. Garbage and any other mixed solid wastes are not fit or suitable because of nuisance and health hazard creation. Generally, solid waste is spread over a large area, providing sources of food and harborage for flies, rats and other vermin. It causes unsightly odour and smoke nuisance and hazards. Carefully selected rubbish must be disposed in order to prevent fire accidents that might occur. The location of open dumping must be carefully chosen so that there will be a minimum chance of complaints from nearby residents, students, staff member and school visitors. Environmental Protection Agency (EPA). (2018). Solid Waste Management in Nigeria. Retrieved from <https://www.epa.gov.ng/solid-waste-management-in-nigeria/>

Sanitary landfill: Indiscriminate dumping of garbage and rubbish create favorable conditions for fly-breeding, harbourage and food for rodents, nuisances etc. In order to avoid such problems, garbage and rubbish should be disposed of under sanitary conditions. One of the simpler and cheaper methods is burning

garbage and rubbish under controlled conditions. Controlled or engineered burial is known as Controlled Tipping or Sanitary Land Fill System. . In places where there is no organized service, this system can be done by digging shallow 2 trenches, laying down the generated waste in an orderly manner, compacting the waste manually or mechanically and covering with adequate depth of earth or ash at the end of each day's work. The process is repeated each day systematically at appropriate locations. If properly done this system can prevent fly-breeding, rodent harbourage, mosquito-breeding and nuisances. It can be applied in areas where appropriate land is available for such practice.

The school with enough space can start and operate its own sanitary land fill. This will require plenty of funding and discipline. World Bank. (2019). Nigeria: A Diagnostic Assessment of Solid Waste Management. Retrieved from <https://documents.worldbank.org/en/publication/documentsreports/documentdetail/727441553318127946/nigeria-a-diagnostic-assessment-of-solid-waste-management>

Composting: Another form of recycling is composting the controlled aerobic biological decomposition of organic matter such as food scraps and plant matter into humus, a soil-like material compost acts as a natural fertilizer by providing nutrients to the soil, increasing beneficial solid organisms and suppressing certain plant diseases thereby reducing the need for chemical fertilizers and

pesticides in land scraping and agricultural activities. Organic material often comprises a large portion of the solid waste stream, particularly in communities that rely heavily on tourism. Composting can be particularly helpful to communities managing their waste and thus reducing their waste and thus reducing greenhouse gas emissions managing their waste and thus reducing their waste and thus reducing greenhouse gas emissions. In schools it can be used as practical experience in agriculture as school subject.

2.4 The socio- economic impact of poor solid waste

The impact of poor solid waste management is significant. First it leads to decreased quality of life for people living in affected areas. The poor sanitation and increased diseased rate caused by poor solid waste management can negatively impact on people's health and well-being, the environmental pollution caused by poor solid waste management can cause property values to decrease and make it difficult for people to live and work in the area, the lack of government action on issues can lead to frustration among the residence in the area. Poor solid waste management can have a number of negative socio-economic effects on a community

1 Uncollected solid waste clogs drains and causes flooding and subsequent water-borne diseases and environmental pollution, which in turn can cause health problems. This can impact on people's ability to work and lead increased in medical cost.

2 It can lead to decreased in economic activities as people will deterred from visiting and living in community with poor solid waste management.

3 It can lead to decreased in property values, as people may not want to live or invest in a community with a poor solid waste management system.

4 Poor solid waste management can create a negative image of the community, as people may view it as a dirty and unappealing .

Other socio-economic impacts on Egor community are:

1. **Health Risks:** Improper disposal of solid waste can lead to the spread of diseases. Open dumping and improper waste handling can attract pests such as rodents, flies, and mosquitoes that carry diseases like malaria, dengue fever, and cholera. This can result in increased healthcare costs, loss of productivity due to illness, and even fatalities.

2. **Environmental Pollution:** Poor solid waste management can result in environmental pollution, including air, water, and soil contamination. Improper disposal methods such as burning of waste release harmful pollutants into the air, contributing to respiratory problems and other health issues. Contaminated water bodies can harm aquatic life and affect water quality, impacting both human health and ecosystems.

3. **Aesthetic Degradation:** Improperly managed waste often accumulates in public spaces, such as streets, parks, and water bodies, leading to aesthetic

degradation. This can reduce property values, deter tourism, and negatively impact local businesses that rely on a clean and attractive environment.

4. **Economic Costs:** Inefficient waste management practices can impose significant financial burdens on communities and governments. Costs may include expenditures for waste collection, transportation, disposal, and cleanup of illegally dumped waste. Additionally, the long-term environmental and health impacts of inadequate waste management can result in higher healthcare costs and loss of productivity.

5. **Resource Depletion:** When waste is not properly managed, valuable resources are lost. Items that could be recycled or reused end up in landfills or incinerators, contributing to resource depletion and increasing the demand for new raw materials. Effective waste management, including recycling and composting programs, can help conserve resources and reduce the need for virgin materials.

6. **Social Impacts:** Communities with inadequate waste management systems may experience social issues such as social exclusion, discrimination, and conflicts over waste disposal sites. The burden of waste management often falls disproportionately on marginalized communities, exacerbating existing social inequalities.

7. **Legal and Regulatory Compliance:** Inadequate waste management can result in legal and regulatory violations, leading to fines, penalties, and legal action

against individuals, businesses, or government agencies responsible for waste disposal. Non-compliance with environmental regulations can also hinder economic development and foreign investment.

Addressing the socio-economic impacts of inadequate solid waste management requires coordinated efforts from government agencies, private sector stakeholders, and communities. This includes implementing comprehensive waste management policies, investing in infrastructure and technology for waste collection and disposal, promoting recycling and composting initiatives, raising public awareness about the importance of proper waste management, and enforcing regulations to ensure compliance. By taking proactive measures to manage solid waste effectively, communities can mitigate the negative socio-economic impacts and create a healthier, more sustainable environment for current and future generations.

8. Impact on Tourism and Recreation: Improperly managed waste can deter tourists and visitors from visiting an area, particularly if it leads to unsightly and polluted environments. Tourism is a significant source of revenue for many regions, and a decline in tourist numbers can have far-reaching economic consequences, affecting businesses reliant on tourism income such as hotels, restaurants, and souvenir shops.

9. **Loss of Livelihoods:** In communities where waste management relies on informal sector workers, such as waste pickers or scavengers, inadequate solid waste management can threaten their livelihoods. These individuals often rely on collecting recyclable materials from waste streams for income. When waste is not managed properly, there may be fewer opportunities for them to collect valuable materials, leading to economic hardship for these vulnerable groups.

10. **Climate Change Impacts:** Improper waste management contributes to greenhouse gas emissions, primarily through the decomposition of organic waste in landfills and the incineration of waste. Methane, a potent greenhouse gas emitted from landfills, contributes to climate change. Additionally, incineration releases carbon dioxide and other pollutants into the atmosphere. The socio-economic impacts of climate change, such as extreme weather events and sea-level rise, can exacerbate existing vulnerabilities in communities with inadequate waste management systems.

11. **Impact on Agriculture:** Improper disposal of waste, particularly through open dumping or uncontrolled landfill sites, can contaminate soil and water resources used for agriculture. This can affect crop yields and livestock health, leading to reduced agricultural productivity and economic losses for farmers. Contaminated soil and water may also pose health risks to consumers if agricultural products grown in polluted areas are consumed.

12. Loss of Biodiversity: Improper waste management can harm ecosystems and biodiversity. Pollution from waste can disrupt natural habitats, leading to declines in plant and animal species. Loss of biodiversity can have cascading effects on ecosystem services, such as pollination, soil fertility, and water purification, which are essential for human well-being and economic activities such as agriculture and forestry.

Addressing these socio-economic impacts of Egor community requires a multi-faceted approach that integrates waste management into broader sustainable development strategies. This includes adopting circular economy principles to minimize waste generation, investing in infrastructure for waste collection and recycling, promoting sustainable consumption and production patterns, and fostering partnerships between government, businesses, civil society, and local communities to tackle the root causes of inadequate solid waste management. By prioritizing sustainable waste management practices, societies can mitigate the socio-economic impacts while moving towards a more resilient and inclusive future.

2.5 The existing solid waste management infrastructure and policies in egor community

The existing solid waste management infrastructure in egor community are inadequate. There are limited waste collection services, inadequate waste disposal facilities, and lack of enforcement of existing waste policies which are every

Saturday sanitation. The government lack of funding for waste management programs was a significant issue as there are not enough collection of trucks to serve the entire population, the collection route are inefficient and don't cover all areas in the community.

The lack of proper collection has led to illegal dumping of waste, which as exacerbate to serious issues like erosion, breeding of different types of insects and reptiles, water contamination, Burning of waste which releases harmful pollutants in the air. There are only landfills in the area and they are all over capacity, and this has portrait a bad image of the community, causing hardship, business closure, less means of transportation and under development.

2.6 Barriers of solid waste management in egor community:

Efficient solid waste management in Egor faces several challenges and barriers, which can vary depending on factors such as the level of urbanization, economic development, infrastructure, and societal attitudes. Here are some common challenges and barriers:

1. **Lack of Infrastructure:** Many regions in the community lack adequate infrastructure for waste collection, transportation, and disposal. This includes insufficient landfill capacity, limited access to recycling facilities, and inadequate systems for hazardous waste management. Without proper infrastructure, it's challenging to implement efficient waste management practices.

2. **Informal Waste Sector:** In some areas, a significant portion of waste management is handled by the informal sector, including waste pickers and scavengers. While these individuals play a crucial role in recycling and waste recovery, their activities may not be integrated into formal waste management systems. This can lead to inefficiencies, lack of regulation, and health and safety risks for informal workers.

3. **Financial Constraints:** Implementing efficient solid waste management systems requires financial resources for infrastructure development, equipment procurement, and operational costs. Many municipalities and governments struggle to allocate sufficient funding for waste management, especially in low-income communities where resources are limited. As a result, waste management services may be inadequate or unavailable to large segments of the population.

4. **Lack of Public Awareness and Education:** Public awareness and education are essential for promoting behavior change and encouraging sustainable waste management practices. However, in many communities, there is a lack of awareness about the importance of waste reduction, recycling, and proper disposal. Without education and outreach efforts, individuals may continue to engage in unsustainable behaviors, such as littering or illegal dumping.

5. **Social Attitudes and Behavior:** Cultural norms and social attitudes towards waste disposal can pose significant barriers to efficient waste management. In

some communities, there may be a lack of motivation or willingness to participate in recycling programs or separate waste at the source. Addressing social attitudes and promoting a culture of environmental responsibility requires targeted communication campaigns and community engagement efforts.

6. Policy and Regulatory Challenges: Inadequate or outdated waste management policies and regulations can hinder efficient solid waste management. Weak enforcement mechanisms, lack of compliance monitoring, and inconsistent enforcement of regulations can undermine efforts to improve waste management practices. Strengthening policy frameworks and regulatory mechanisms is essential for creating an enabling environment for efficient waste management.

7. Rapid Urbanization and Population Growth: Rapid urbanization and population growth exert pressure on existing waste management systems, leading to increased generation of waste and strain on infrastructure and resources. Urban areas often face challenges in managing municipal solid waste due to high population density, limited space for landfilling, and competing demands for land use. Planning for sustainable waste management in rapidly growing cities requires proactive measures and long-term strategic planning.

8. Technological and Innovation Gaps: Technological advancements and innovation play a crucial role in improving solid waste management efficiency. However, many communities lack access to appropriate technologies for waste

collection, recycling, and treatment. Additionally, there may be a lack of capacity or expertise to implement and maintain innovative waste management solutions. Bridging the technological and innovation gaps requires investment in research and development, knowledge sharing, and capacity building.

2.7 The specific attitudes among residents that contribute to poor solid waste management in the community.

Specific attitudes and behaviors among residents in the Egor community that contribute to poor solid waste management include:

1. Littering: Disposing of waste improperly by throwing it on the streets, in open spaces, or water bodies rather than using designated bins or disposal sites.
2. Illegal Dumping: Deliberately dumping waste in unauthorized areas such as vacant lots, fields, or along roadsides instead of using proper waste disposal methods.
3. Burning Waste: Burning waste as a means of disposal, which not only contributes to air pollution but also fails to address the problem of waste accumulation.
4. Unsegregated Waste: Failing to separate recyclable materials from general waste, making it more difficult to recycle and increasing the amount of waste sent to landfills.

5. Neglecting Public Spaces: Ignoring the cleanliness of public areas such as parks, streets, and communal spaces, leading to the accumulation of litter and debris.

6. Passing Responsibility: Blaming local authorities or government agencies for the inadequate waste management infrastructure instead of taking individual or community responsibility for waste disposal. Addressing these specific attitudes and behaviors would require targeted education campaigns, enforcement of waste management regulations, community involvement in cleanup initiatives, and the provision of adequate waste collection and disposal facilities

2.8 Theoretical framework

Social cognitive theory by Bandura, 1986, discusses social learning in terms of observation and imitation of behaviours, attitudes and emotional reactions of others. The theory emphasizes the interaction between the cultural environment and the individual as a cause of his or her own behavior. Individuals are seen as both products and reproducers of their own cultural environments and of their social systems.

The social cognitive theory has the problem solving dimension that emphasizes collective process with emphasis on learning with each other not only as a prerequisite for individual behavioural change but also for collective action. This conceptualization agrees that social learning requires communication and

participatory interaction of different actors. These relationships foster development of social, technical skills and trust, which potentially forms the base for a common understanding of the problems concerned, creation of new ideas, and a sufficient level of consensus for the subsequent collective action to solving problems. In a school environment setting this may include problems of imparting adequate knowledge of and right practice of solid waste management to students. This study also refers to Gramsci's ideas of critical thinking, proposing that social change towards a more democratic and thus participatory society would require prior collective intellectual effort. This rejects voluntarism in belief that such change can occur spontaneously just by fostering participatory environments. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice hall

2.9 Empirical studies

These studies emphasize that solid waste problems have been intractable and appear to defy all policy options suggested for improvement. Rosenbaum (1974) argued that solid waste is an unofficial measure of prosperity since wealthy nations produce more wastes than poor ones.

However, Omuta (1988) argues that what causes waste problem is not volume produced but the degree of effectiveness of solid waste management. This explains why, although Americans have been quoted to be the most prolific

producers of solid waste on earth yet they have not produced the filthiest cities on earth.

Bartone (2011) also argued that the changing economic trends and rapid urbanization complicate solid waste management (SWM) in developing countries and solid waste is not only increasing in quantity but also changing in composition from less organic to more paper, packing waste, plastics, glass, metal wastes among other waste, a fact leading to the low collection rates.

Consequently, Cointreau (2010) argued that the past attempts to improve solid management in cities have focused on the technical aspects of different means of collection and disposal and no attention has been paid to enhancing institutional arrangements for service delivery, with a special emphasis on privatization. Snel (2011) who argued that if responsibilities are shared social stigma on waste disposal could be avoided.

Several intellectuals have written about Waste Management extensive.(smith,2009) for instance argues that improper solid waste management is as a result of basic equipment needed by the responsible waste agency. One cannot but concur the above point of view. However, mere assertions or words may not really culminate into action. The above author merely notes a problem without proffering practicable solutions to ameliorating it. This study is aimed at covering that gap.

Ezema (2009) and Bridgewater (2010) argues that the inadequate funding affects the proper management of waste. This was due to inability of the community and the government to provide the required finance to the agency responsible, coupled with the fact that there was very little exploitation of natural resources. Common wastes produced during the early ages were mainly ashes and human wastes; these were released back into the ground, which did not cause any harm to the environment. Before the inventions of metals, wood was widely used for most application. However, the reuse of wood has been well documented (Nwokocha, 2012). Best example being the reuse of timbers for shipbuilding purposes. With the invention of metals viz: bronze and iron, their use became common in most applications. Nevertheless, it is once again well documented that reuse and recovery of such metals have been carried out by early humans Goudie, (2011).

Dr. George O. igbokwe (2016) of the department of geography, university of lagos, Nigeria. Conducted a study “Waste Management Practices and Public Health. The researchers found that the lack of proper waste management was leading to poor sanitation, increased disease rates, and decreased economic development. In this study, the researchers used a combination of methods, including questionnaires, and case studies, to explore the impact of waste management on the environment and health.

Dr. A. O. Ogunleye (2011) of the department of geography and environmental management, university of Ilorin, Nigeria. His research focuses on the environmental and health implications of waste management in Nigeria. Specifically, the researchers examined the impact of improper waste management on water quality, air quality, and disease rates in the country. They found that the lack of proper waste management was leading to increased levels of pollution, decreased water quality, and increased disease rates. They also found that the government was not doing enough to address these issues. This research used a combination of qualitative and quantitative methods to collect data for this study.

Application of socio-cognitive theory to poor solid waste management in Egor:

The application of socio-cognitive theory to poor solid waste management in Egor can offer valuable insights into understanding the behaviors, attitudes, and social dynamics that contribute to inadequate waste management practices. Socio-cognitive theory, which encompasses concepts such as social learning, behavioral modeling, and self-efficacy, can help identify factors influencing individuals' and communities' waste management behaviors and inform interventions aimed at promoting more sustainable practices. These factors include:

1. **Social Learning and Modeling:** Socio-cognitive theory emphasizes the role of observational learning and modeling in shaping behavior. Individuals often learn by observing the actions of others, particularly those they perceive as

credible or influential. In the context of waste management, this means that people's behaviors and attitudes towards waste disposal are influenced by the actions of their peers, family members, and community leaders. By identifying influential individuals or groups within a community and promoting sustainable waste management practices through social modeling and peer influence, it's possible to encourage behavior change at the grassroots level.

2. **Self-Efficacy and Empowerment:** Self-efficacy, a key concept in socio-cognitive theory, refers to individuals' beliefs in their ability to perform a specific behavior successfully. In the context of waste management, individuals with high self-efficacy regarding recycling, composting, or waste reduction are more likely to engage in these behaviors. Interventions aimed at improving waste management practices should focus on building individuals' self-efficacy by providing them with the knowledge, skills, and resources necessary to adopt and maintain sustainable behaviors. This may involve educational campaigns, hands-on training, and the provision of infrastructure for waste separation and recycling.

3. **Social Norms and Peer Pressure:** Socio-cognitive theory highlights the influence of social norms and peer pressure on behavior. In many communities, there may be social norms that either support or discourage sustainable waste management practices. By leveraging social norms and harnessing peer pressure, interventions can promote pro-environmental behaviors and create a culture of

responsible waste management. This could involve highlighting positive role models who practice sustainable waste management, using social media and community networks to disseminate messages about waste reduction and recycling, and organizing community-based initiatives to clean up litter and improve waste disposal practices.

4. Environmental Cues and Habit Formation: Socio-cognitive theory also recognizes the importance of environmental cues in shaping behavior and habit formation. By modifying the physical environment to make sustainable waste management practices more convenient and accessible, it's possible to encourage individuals to adopt these behaviors as habits. This might include providing easily accessible recycling bins, implementing curbside recycling programs, designing public spaces with waste reduction in mind, and incorporating environmental education into school curricula to instill lifelong habits of sustainability.

5. Community Engagement and Collective Action: Finally, socio-cognitive theory emphasizes the importance of collective action and community engagement in promoting behavior change. By fostering a sense of community ownership and collective responsibility for waste management, interventions can empower individuals to work together towards common goals. This could involve organizing community clean-up events, establishing neighborhood recycling programs, forming community-based waste management committees, and

facilitating participatory decision-making processes to develop locally appropriate solutions to waste management challenges.

Overall, the application of socio-cognitive theory to this study can help inform more effective and targeted interventions aimed at promoting sustainable behaviors and attitudes towards waste disposal. By understanding the social, cognitive, and environmental factors that influence waste management practices, it's possible to develop strategies that empower individuals and communities to become active agents of change in creating cleaner, healthier, and more sustainable environments.

2.10 Summary of Literature Reviewed

The study was on poor solid waste management and its socio-economic effects on the people residing in egor local government area edo state. Concepts relevant to the study were highlighted and briefly discussed. These included the concepts of knowledge and practice of solid waste management, and its socio-

economic effect on the residents . The theoretical frame work that helped in putting the study in proper perspective involved social cognitive theory. Empirical studies revealed similar studies done in the same design and methods used by this study. Without exception all studies acknowledge the awkward state of solid waste management in low income third world countries and its urban areas. Solutions were accepted to lie in education, infrastructural development, facility erection and functional equipment of individuals and bodies charged with solid waste management.

CHAPTER THREE

METHODS

This chapter describes the methods, procedures and design employed by the researcher in carrying out this study. It specifically describes: the design, area of

the study, population of the study, sample size and sampling techniques, method of data collection instruments for data collection, method of data analysis. various methods used in conducting this study under the following sub-headings:

- Research Design
- Population of study
- Sample size
- sampling techniques
- Instrument of data collection
- Method of data collection
- Method of data analysis
- Validity and reliability of instrument

3.1 Research Design

A research design is a strategy or methodical technique used by a researcher to respond to a question or test a hypothesis. It describes the steps, techniques, and tools a researcher employs to gather, examine and evaluate data. The reliability, validity and generalizability of the data collected are enhanced by an effective research design. for this research, a case study design was used. A case study design involves an in-dept and detailed analysis of a single or multiple case4s within their real life context. By focusing on a specific case or cases with the case study design. The researcher can conduct an in-dept analysis of how socio

demographic factors play out in real life scenarios. This approach allowed then researcher to uncover nuances and complexities that might not be captured in broader quantitative studies.

3.2 Population of the Study

The whole of the people, things that make up a research investigations main focus is referred to as the population of study. It stands for the bigger group or category of interest that the researcher hopes to comprehend, examine, or come to sort of understanding about. The population of interest can have a wide range of characteristics, including age, gender, location, occupation, and any other pertinent qualities, depending on the research aims

The population targeted for this study includes residents of Egor community. Due to the high number of population in Egor community, it will be difficult to obtain statistical data regarding to the precise population in Egor. However according to (Google) Egor consist of five hundred and two thousand, seven hundred (445,800).

3.3 Sample Size

A sample size refers to the fractional representation of the population under consideration. Considering the large size and population in Egor, it was

impossible to cover the entire population in due time. The sample size were 10 individuals residing between uselu and ewvuotubu Axis.

3.4 Sample techniques

The sample technique are the methods used by researchers to select participants or samples from larger population for their study. For this research, a purposive sampling technique will be used. This type of sampling is frequently used in qualitative research, where researcher are interested in examining a phenomenon in depth rather than generalizing their findings to a larger population. The purpose of using this sampling technique is to make sure that the chosen participants can offer more insight comment on poor solid waste management and its socio-economic effects on the residents of egor local government area.

3.5 Instrument of data collection

In-depth interview guide were used as the main instrument for gathering data in this study. This goes into further detail on the rational for using interviews and offers information about how they fit in with the goals of this study. Residents of egor subjective opinions and perspectives can be captured in interviews effectively, allowing researchers to learn new information directly from the participants. To thoroughly examine participant narrative and experiences, in-dept interviews will be conducted. Participants have the opportunity to express their experiences, opinions, and thoughts during these interviews about the influence of socio-demographic factors on the relevance of tertiary education.

And an observatory method survey will be carried out to investigate the effect and socio-economic wellbeing of the people living in egor community.

3.6 Method of data collection

In-dept interviews were chosen as the primary means of data collecting for this study project. This part gives a thorough description of the justification, methods, and benefits of employing in-dept interviews to look at poor solid waste management and its socio-economic effects on the people residing at egor local government area Benin city Nigeria. Prior to the conducting interviews, informed consent was obtained from each participant. Participants will be provided with information about the study's purpose, procedures, and confidentiality safeguards. They will also be informed of their right to withdraw from the study at any time. Interview were auto-recorded to guarantee that the participant's comments were accurately documented. To provide written transcripts for analysis, audio recordings will be transcribed verbatim. The recordings will be anonymized to protect participant's identities.

3.7 Method of Data Analysis

Narrative analysis was used as the analytical approach because of its appropriateness for exploring the insight, experience and solutions shared by participants regarding their different opinions on poor solid waste management.

The research objective of this study is centered around understand poor solid waste management and how its effect on the lives of the people. Narrative analysis allows for the exploration of these factors within the context of participant's insights, and experience, providing holistic perspective. Thematic coding will be applied to narrative units to find recurrent themes, factors and effects.

3.8 Ethical considerations

In this in-depth interviews, participant's will be fully informed about the purpose of the interview, what participation involves, any potential risks or benefits, and their right to withdraw at any time, : participants' will also be allowed to control the extent of their participation, also their identities will be kept confidential.

CHAPTER FOUR

PRESENTATION AND DATA ANALYSIS

This chapter focuses on the analysis of data gathered from the interviewees. The qualitative data obtained from participants in the study will be carefully analysed and assessed in line with the study's objectives.

4.1 Demographic Characteristics of Respondents

The demographic characteristics are referred to as the background trait of the interviewees or participants in this study who served at the source of the qualitative data. The following are the nature of the study, the socio-demographic pictures of the respondents or interviewees that were focused on were their Gender, age, occupation and the corresponding data is shown below in table 4.1

Table 4.1 Demographic characteristics of interviewees

Variables	Frequency	Percentage
Gender		
Male	4	40
Female	6	60
Age group		
20-30	7	70
31-50	3	30

Source Field work, 2024

According to Table 4.1, there are more women than men among the interviewees. This is to say that more women than men participated in this research. Table 4.1 also indicated that interviewees for this study were primarily from age 20 - 50 in terms of age group. The age 31-50 had the lowest percentage of interviewees with 30%.

4.2 Result and analysis of collected data

In order to conduct an analysis and evaluation on poor solid waste management and its socio-economic effects on the people living in Egor local government area, the participants or respondents were asked to share their opinions, views, and

experience regarding how poor solid waste management as affected their lives. For everyone of the objective of the research, a question was given to the participants for each of the research objectives in order to get an understanding of their thoughts, perception, and experiences.

4.2 Objective 1: Type of poor solid waste management practices

The participants were asked about the typed of solid waste practices that is commonly observed in Egor community. And all interviewees gave their responses on the different type of practices normally observed in the community

Responses of the interviewee who shared the common solid waste practices that are being observed in Egor community

waste disposal using local government area agencies, also we have the use of burning them, also burry them. this are the practices that are commonly observed. **(Male, 25years, Single, Graphic designer, 23/4/2024)**

Many residents in the community rid their dirt by burning, disposing of n moving or stagnant water bodies, or dumping in areas not meant for dirt collection. **(Male, 28years, Single, Business owner, 20/4/2024)**

Many of the residents here store up their dirt and dump them off at market grounds sometimes in erosions. **(Male, 23years, Single, Self employed,20/4/2024)**

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Gathering of waste in one particular place and burning them up. **(Female, 25years, Single, Self employed,23/4/2024)**

Common solid waste management practices in Egor community include open dumping of waste in vacant lots or along roadsides, burning of waste, and improper disposal of plastics and other non-biodegradable materials. **(Female, 22years, single, Student, 20/4/2024)**

the solid waste management practices common here is the one that some house have tank or general waste bin or something like an attachment built to the house when the waste are gathered and then a vehicle will come and pick it up to somewhere probably where there are recycled or burnt I don't really know, but along side there are still persons that burn their waste. **(Male,35 years old, Married, self employed, 25/4/2024)**

Gathering of waste in one particular place and burning them up. **(Female,26years, Single, Self employed,23/4/2024)**

Solid wastes are gathered in bags and stored outside the house for the waste disposal company to pick it up each month. **(Female, 27years, Single, Fashion designer, 23/4/2024)**

The common waste practice her in my environment is burning of waste, although other areas in ego local government have other methods, like dumping of waste in abandoned site, and some even pay people to help them discard their waste. **(Female, 38years, Married, Business owner, 23/4/2024)**

The common practice in this area is the every first Saturday of the month general clean up. All household around must engage in the general cleanups, including shops and market traders. By the end of the day s garbage truck comes and take all gathered waste to the dump site. also if people are seen roaming around without engaging in the exercise they are normally fined or detained for some days. **(Female, 37years, Married, Business owner, 18/4/2024)**

From the above, almost all interviewees stated that residents in the community engage in different ways in disposing their waste, and most of them engage in dumping of waste on open gutters and also burning of waste.

4.2 Objective 2: Socio- economic consequences

Interviewees were asked about the socio-economic consequences residents face due to inadequate solid waste management. A lot of interviewees shared their experience on how inadequate solid waste management has negatively affected their lives and other residents in the community.

It may lead to pollution, especially areas were biodegradable waste are located, close to the farm lands and others, which leads to smelling areas, it as leads to erosional flooding in most area, especially along Ugbowo Lagos Road because of the waste blocking the drainage, which leads to traffic jams. **(Male, 25years, Single, Graphic designer, 23/4/2024)**

Increase in pests such as rodents, cockroaches ,mosquitoes and other disease

transmitting agents. Also the beauty of the place can be over shadowed by the site of the solid wastes. **(Male, 23years, Single, Self employed,20/4/2024)**

the first one is environmental pollution and this environmental pollutions is as a result of the smell from the waste and sme land degradations caused by nylons on the street everywhere looking dirty and for those who farm, this reduces the soil texture and make agricultural products poor so its recommended that this things are gathered and maybe burnt in a particularly place so that they won't be spread across different location. **(Male,35 years old, Married, self employed, 25/4/2024)**

They usually face frequent mosquitoes, thereby causing malaria, it goes a long way in affecting public health, because dumping refuse Inadequately can cause air and land pollution which can affect the human health badly and even at worse lead to death. **(Female, 22years, single, Student, 20/4/2024)**

Residents face numerous socio-economic consequences due to inadequate solid waste management, including environmental pollution, reduced property values, and increased health risks from diseases like malaria and respiratory illnesses. **(Female, 32years, Married, Business owner, 20/4/2024)**

Unhealthy environment , public environment will look unkept leading to dirty environment. . **(Female, 26years, Single, Self employed, 23/4/2024)**

The smell pollution from the waste, flies and rodents attracted by the waste. **(Female,**

**27years, Single, Fashion designer,
23/4/2024)**

One of the socio-economic consequence we face here is flooding, this is because most times when it rains heavily the drainage systems go blocked and it results to flooding.
(Female, 38years, Married, Business owner, 23/4/2024)

The affected environment has very poor passage as these neglected solid wastes tend to gather up and lead to these blockage. the smell is something else entirely as this discouraged one to even pass this area.
(Female, 37years, Married, Business owner, 18/4/2024)

A large number of interviewees shared that inadequate poor solid waste management has greatly affected their lives.

4.2 Objective 3: Existing infrastructure and policies

Interviewees were asked about the current solid waste management infrastructure in Egor community. And also the existing policies and regulations regarding waste management and how effective these policies are. A large number shared there are no infrastructure in place, while others shared they have no idea about any infrastructure in the community

we know of the local ones which are implemented by the local government using people to come pack the waste and the residents pay. Although it hasn't been effective because of a lot of challenges like some areas have bad roads that the waste vehicles can not reach. **(Male, 25years, Single, Graphic desighner,23/4/2024)**

The most common is the every last Saturday of the month disposal. Here residents of the community clean and gather up their solid wastes and wait for the disposal truck to come pick them and dispose them off at the choosing dump site. During this process of gathering of dirt by residents, there is a curfew in place that no one should be seen walking around or selling of goods till the hour of 10am. **(Male, 28years, Single, Business owner, 20/4/2024)**

well there's actually none, apart from the traditional one that is practice which is the one I explained before, there's really no political structure put in place to see that waste management are taken care of. **(Male,35 years old, Married, self employed, 25/4/2024)**

Residents gather up at a specific time of the month to clean their environment. The gathered up wastes are then burnt. **(Male, 23years, Single, Self employed,20/4/2024)**

Using if waste bag in gathering waste. **(Female, 25years, Single, Self employed,23/4/2024)**

There's currently none that I know of. **(Female, 22years, single, Student, 20/4/2024)**

The current solid waste management infrastructure in Egor community includes sporadic waste collection services by government agencies and informal waste pickers.

There are room for improvement. **(Female, 32years, Married, Business owner, 20/4/2024)**

A Monthly waste carriage of waste by the waste company. **(Female, 26years, Single, Self employed,23/4/2024)**

hmm let's say the local government has set up team that collect waste although this is just for the market alone, they pay a sum of 100 naira every day, while we residents on the other hand the only policy is to fined any caught disposing waste in abandoned site and drainage a sum of 50,000 naira ,so there's current infrastructure. **(Female, 38years, Married, Business owner, 23/4/2024)**

I don't know of any. **(Female,37years, Married, Business owner,18/4/2024)**

The interviewees also talked about the existing policies they know of and how the are not very well effective.

Although it hasn't been effective because of a lot of challenges like some areas have bad roads that the waste vehicles can not reach. **(Male, 25years, Single, Graphic designer, 23/4/2024)**

it is only effective in a very few part of Egor. **(Male, 28years, Single, Business owner,20/4/2024)**

there's currently none, but if there is any its really adamant cause nobody really know

about it. **(Male,35 years old, Married, self employed, 25/4/2024)**

not effective. **(Male, 23years, Single, Self employed, 20/4/2024)**

Effective in some parts of Egor. **(Female, 25years, Single, Self employed,23/4/2024)**

Existing policies and regulations are often not effectively enforced, leading to widespread noncompliance. **(Female, 22years, single, Student,20/4/2024)**

The rules and regulations especially in market places are quite effective and efficient .yes there are programs in place. **(Female, 32years, Married, Business owner, 20/4/2024)**

Not very effective, sometimes the waste van miss some months before they arrive to collect the wastes. **(Female, 26years, Single, Self employed,23/4/2024)**

not effective at all, the waste from the market are disposed opposite the market and which is close to the main road and this causes environment pollution. **(Female, 38years, Married, Business owner, 23/4/2024)**

low, some residents do not engage in the exercise at all and the bodies responsible for taking action on them do nothing at all, probably because if lack of monitory personel. **(Female, 37years, Married, Business owner, 18/4/2024)**

4.2 Objective 4: Key challenges faced

Interviewees were asked their opinions on what they see as the main challenges in achieving efficient solid waste management in Egor community.

One of the challenges I know is problem of finance, the government is not serious about the waste Management, Alot also refuse to pay. **(Male, 25years, Single, Graphic designer, 23/4/2024)**

lack of awareness of the residents on the dangers of not cleaning your environments. I believe when its being made clear to them their perspective might change. **(Male, 28years, Single, Business owner, 20/4/2024)**

First of all the challenges are financial challenges because for good policies to be appropriated they have to be good agencies or parastaters that will be in charge of carrying this humongous task and this people needs to be adequately remunerated, and because of the nonchalant attitude of the government either be it state or federal, a lot of persons are not really willing to participate Secondly, the careless attitude of the workers, I think there are some persons who were actually employed to take care of street and those persons are not really putting in their efforts because there's no regulatory body or monitoring agent to really see to it that they are actually doing their work Thirdly, our kind of street planning, which doesn't allow for solid waste management to be effective, especially our drainage system, and the way our houses are built we want to have a communal collection of waste management

knowing the different street to start collecting this waste is a problem because our house are built hazadarsly. **(Male, 35 years old, Married, self employed, 25/4/2024)**

inconsistency of the residents to do the exercise. Consistency is a key to totally eradicating bad solid waste behaviours. **(Male, 23years, Single, Self employed, 20/4/2024)**

illiteracy, ignorance. **(Female, 25years, Single, Self employed,23/4/2024)**

the people don't comply with the government's instructions. **(Female, 22years, single, Student, 20/4/2024)**

Main challenges include insufficient waste collection infrastructure, limited awareness about proper waste disposal, and inadequate funding for waste management programs. **(Female, 32years, Married, Business owner, 20/4/2024)**

lack of cooperation from citizens and unstructured rules. **(Female,26years, Single, Self employed, 23/4/2024)**

in my own point of view, solid waste management can be tackled in an easy way, but people are reluctant about the consequences, some know the effect of improper dispose practices but because choose to dispose their waste in a way that is convenient for them. **(Female, 38years, Married, Business owner, 23/4/2024)**

the residents are not motivated to participate in the clean up activities. **(Female, 37years, Married, Business owner,18/4/2024)**

4.2 Objective 5: Attitudes and Behaviours

For this objective, the interviewees were asked if they believed that there are specific attitudes or behaviour among residents that contribute to or hinder effective solid waste management.

A lot refused in paying the fee of local government agencies to pack their waste, some discard their waste on erosion so it goes to the nearest river not knowing it also pollutes the water. **(Male, 25years, Single, Graphic designer, 23/4/2024)**

yes. Many residents show no interest in the clean up process, maybe due to laziness or lack of proper orientation on the importance of the exercise. **(Male, 28years, Single, Business owner, 20/4/2024)**

yes there are and I think it's in our traditional mindset of living especially in Africa continent, an average Nigerian doesn't know what it means to be hygienic or to practice hygienic lifestyle, when we look at an average Nigerian when they get something especially those things that are packaged in nylons or take away after eating they just trashed on anywhere even though I think in some part we have waste bins close by, some of them are not patient enough to dispose it off there, we have this dirty culture which I think we have to be reorientated about. The government's lack of proper financing for the waste companies affect the waste company from doing their jobs. **(Male,35 years old, Married, self employed, 25/4/2024)**

some residents do not partake in the exercise at all. I believe knowledge is power so the residents should be told the importance of the exercise. **(Male, 23years, Single, Self employed,20/4/2024)**

yes, like nonchalant attitude. **(Female, 25years, Single, Self employed,23/4/2024)**

I don't know of any. **(Female, 22years, single, Student, 20/4/2024)**

Specific attitudes such as a lack of awareness about waste management practices and a cultural acceptance of dumping waste in open spaces contribute to ineffective solid waste management. **(Female, 32years, Married, Business owner, 20/4/2024)**

I think lack of awareness and also most people feel the consequence of poor solid waste management is not something serious, like it comes and go. **(Female, 26years, Single, Self employed, 23/4/2024)**

in my own point of view, solid waste management can be tackled in an easy way ,but people are reluctant about the consequences, some know the effect of improper dispose practices but because choose to dispose their waste in a way that is convenient for them. **(Female, 38years, Married, Business owner, 23/4/2024)**

Yes, many residents here are too lazy to clean up, but very energetic to throwing dirt on the floor. When the appropriate disciplinary bodies make example of one person, the rest would behave. **(Female, 37years, Married, Business owner, 18/4/2024)**

4.3 Discussion of Finding

From the interviews, it was discovered that most of the residents in Egor local government area don't a common waste disposal practice as some of them engage in practices like burning of waste, dumping of waste in open gutters and erosion.

Based on my research Egor local government face socio consequences like floods, spread of diseases, bad roads, environmental pollution, increase in transportation fares. Poor solid waste management poses significant challenges to community, impacting not only the environment but also the socio-economic well-being of residents.

Solid waste management is a critical aspect of environmental sustainability, public health, and socioeconomic development in communities worldwide. However, inadequate management practices often lead to various adverse effects on both the environment and human populations.

Overview of Egor Local Government Area Egor Local Government Area is situated in the southern part of Nigeria, within the Edo State. With a diverse population and economic activities ranging from agriculture to commerce, the region faces significant challenges in managing its solid waste effectively. Rapid urbanization, population growth, and insufficient infrastructure exacerbate the problem, leading to widespread environmental degradation and health hazards.

The participants of this study were made to share their opinion, perception, thoughts and experiences on poor solid waste management and its socio-economic effects on them and other residents.

Looking at the objective 1 of the study which is: To investigate the extent of poor solid waste management practices in Egor community. Base on the analysis and evaluation of the answers to the related question under this objective, there are different ways in which residents dispose their waste, this includes burning, open dumping. Sanitary land filling, which is there is no common solid waste management practices.

From the analysis of objective 2 of the study which is: To access the socio-economic impact of inadequate solid waste management on the residents of Egor community. A significant number of interviewees have reported that inadequate solid waste management has greatly affected the community badly, leaving residents with series of problems like erosions, high cost of transportation, environmental pollution and easy contraction of diseases and illness.

Open waste dumping has left a devastating effect on the aesthetic outlooks of the immediate and surrounding environment of open dumpsite locations. The offensive odour emanating from the waste has exposed residents' close by to health risks such as shortness of breath, headaches, eye irritation, and possibly death when large amount of such offensive odour is inhaled as indicated by McKendry, P., Looney, J. H., & McKenzie, A. (2002). *Managing odour risk at*

landfill sites: main report. MSE Ltd& Viridis. Also the dilapidated road networks is observed as a result of flooding caused by eroded waste from the dumpsites which end up obstructing the free flow of flooded waters in the drainage system. This has the effect of holding waste water on road surface which reduces the strength and consequently the design life of the road. Another effect caused by the eroded waste is the spread of water-borne diseases from contaminated waste water flowing through the dumpsite to residential and commercial areas. One common illness from the areas open dumpsite is located is Malaria which is a major cause of infant mortality in Nigeria Maigemu, A. Y., & Hassan, K. R. H. (2015). Malaria as a cause of morbidity and mortality: A socioeconomic overview. *Research on humanities and social sciences*, 5(8). <https://www.iiste.org/>

From the analysis of objective 3 of the study which is: Examine the existing solid waste management infrastructure and policies in Egor community. Based on the interviewees feedback there are none or less infrastructure in the community, Although there are but not in all areas of the community. Also the policies are not very effective as few resident comply to the policies made available by the local government chairman. This also plays a huge factors contributing to poor solid waste management in the community.

In the fourth objective , interviewees identifying the key challenges and barriers hindering effective solid waste management in Egor community as residents having attitudes which some expressed as laziness, nonchalant attitudes, no proper

awareness or illiteracy, and some feel the consequences of poor solid waste management can be managed. Also a previous research done on the assessment on the waste management system in Benin city by AE IPKE, the lack of any planned and routine general environmental sanitation practices makes it difficult to lead a personal hygiene. From the response, there is little of no practice of the R3 (Reduce, Reuse, and Recycle) waste management system in both residential and commercial areas. Scavenging was however seen at the heart of the open dumpsite. It was observed in all open dumpsites visited that there is no safety measure such as protective wears or practice is taken by these scavengers as most of them were seen to be fully exposed to bacteria contamination. This also revealed that the open dumpsites are “uncontrolled”. Such uncontrolled open dumpsites also create room for human aside rodents and insects to be a vector for spreading disease. Discussion with some of the scavengers revealed that most of them had no knowledge of contaminating any disease or getting sick from scavenging at open dumpsites.

In the fifth objective which is: what are the specific attitudes or behaviour hindering solid waste management practices. The interviewees responses indicated that the attitudes of the residents hinders effective waste management practices, and some of this attitudes are reluctancy, illiteracy, self center attitudes and some are okay with their own practices of disposing their waste.

According to the result of the interviews and examination of the participants responses, poor solid waste management as played a huge effect on the development of Egor community and also the socio and economic activities of the residents in the community. In this study, respondents in Benin City metropolis revealed that the waste management characterized by open dumping, open dumpsites, indiscriminate disposal of waste at road sides, bush and any available spaces are the commonest method of waste disposal in Egor community.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study was aimed is to establish a linkage between solid waste management and its socio-economic effects in Egor local government area. Solid waste management is the systematic process of waste generation, collection, storage, transportation, treatment, utilization and disposal of unused or waste items. This involves all the administrative processes, financial and legal implications and planning functions as well as the physical aspect of waste handling. Poor solid waste management is as a result of ineffective disposal of solid waste causing air pollution, infection and diseases. In Egor local government area poor solid waste management is a big major issue as residents faces different challenges as a result of poor solid waste management in the area, this study focused on the relationship between poor solid waste management and the socio economic impacts on the residents of Egor local government area, also the type of solid waste practices residents engage in, the consequences faced in the area as a result of poor waste practices, the infrastructure and policies put in place, key challenges in achieving effective solid waste management and the attitudes among residents that hinders effective solid waste management in the community. Five objectives, seven research questions were used to guide the

study. Literatures related to the study were reviewed. The General objective of this study is to establish a linkage between solid waste management and the socio economic effect of poor solid waste management in Egor community. The specific objectives were to investigate the extent of poor solid waste management practices in Egor local government community, assess the socio economic impact of inadequate solid waste management on the residents of Egor, examine the existing solid waste management infrastructure and policies in Egor, identify the key challenges and barriers hindering efficient solid waste management in Egor and identify the specific objective or behaviour hindering solid waste management practices in the community.

The research design was qualitative in nature. The research was conducted in Egor Local Government Area, Benin City, Edo State, Nigeria. The research's target population of study included residents in Egor Local Government Area. The sample size for this study was 10 individuals consisting of residents based on their experiences and insights on poor solid waste management. This study adopted the snowballing sampling technique. The basic instrument that was adopted in this study was an in-depth interview. Data was collected through face-to-face interviews conducted with the selected participants which was audio recorded with the participants' consent. Thematic content analysis was employed to analyze the interview data.

5.1.1 Summary of finding

This chapter dove deep into the core of the study on the effects of poor solid waste management in Egor Local Government Area. In this research work, 10 persons were interviewed on the common solid waste management practice observed in Egor community, the socio economic consequences residents face due to inadequate solid waste management, the current existing solid waste management infrastructure in Egor community, the main challenges in achieving efficient solid waste management in the community and the specific attitudes among residents that contribute or hinder effective solid waste management.

According to the results of the findings, different respondents shared their opinions, observations and experiences they have on the issue of poor solid waste management in Egor community.

Regarding the common solid waste practices in the community many interviewees noted that there is no common practices observed in the community. They observed different practices like burning, dumping of waste on open gutters, empty sites and erosion. While Some mentioned that they pay to some private waste packer to help them disposed their waste.

Regarding to the socio-economic consequences faced in the community interviewees explained that the environment is always polluted and smelling, and also this area becomes breeds of mosquitoes and flies causing malarias and also food and water pollution.

In terms of the existing solid waste management infrastructure and policies in the community the interviewees expressed that there are no infrastructure in all areas of the community but only on market space and the policies are not effective.

Regarding to the main challenges in achieving efficient solid waste management interviewees pointed out on some important points like financial challenges, short of facilities and also no formal education of the residents on solid waste management and the effect of poor solid waste management.

Lastly on the specific attitudes or behaviors among residents that contribute to or hinder effective solid waste management interviewees pointed out some attitudes like nonchalant attitudes, lacedestic and lazy attitudes, lack of cooperation and also self centered attitudes as what hinders effective solid waste management.

The results of the study indicate that there is a linkage between poor solid waste management and socio- economic effects in Egor community which affects the lives of residents in the community. The result shows that there are common practices of solid waste management, no infrastructure due to low financial funding and residents are contributing to the effect of poor solid waste management.

5.2 Conclusion

In conclusion this study shows the type of solid waste practices observed, socio- economic consequences faced in the community, the infrastructure and policies set up In place to manage solid waste, the attitudes of residents that contribute to poor solid waste management and also the main challenges in achieving efficient solid waste management . Poor solid waste management in Egor local government has been a major issue because of the consequences faced by the residents occupying the area. Some of this consequences are bad roads, poor environment appearance, floods and erosions, wide spread of malaria and diarrhoea , contaminated water.

5.3 Recommendations

The government should employ an urban renewal strategy in the areas like Egor so as to implement effective environment policy in the area. Urban renewal strategy will pave way for the accessibility of refuse disposal vehicles to the core area and also allow the public container to be placed in places accessible to the public. Additional hands are needed for effective solid waste management practices. Moreover, the residents should be enlightened in the way the public containers are to be used. Environmental education should stress on the set of people that can use the container instead of young and adolescent. The government should vote sizeable amount of money for refuse management in the

city. The amount that will cover education of the people, training, workshop, maintenance of vehicle and purchasing additional one to complement the existing stock. A comprehensive survey should be carried out in the city. The survey should cover areas such as the quantity of waste generated daily, the number of people in a particular locality and the types of waste generated in different zone. The knowledge of these will help government to prepare a comprehensive masterplan for solid management. More so, the private companies that are specializing in waste management should be encourage by given the tax free holiday and supplying spare parts at a subsidized rate for the maintenance of their vehicles. Lastly, since most of the refuse are organic, they can be easily converted into organic fertilizer and sell to the public for agriculture and horticultural purpose.

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APPENDIX I

Poor solid waste management and the socioeconomic effect on the people living in Egor Local Government Area, Benin City.

IN-DEPTH INTERVIEW GUIDE

Interview guide: Investigating Solid Waste Management in Egor Community, Benin City, Edo State, Nigeria.

1. Types of poor solid wastes management practices in Egor Community.
 - a. Can you describe the common waste management practices observed in Egor Community?
2. Socio-Economic Consequences of poor solid waste management in Egor Community
 - a. In your opinion, what socio-economic consequences do residents face due to inadequate solid waste management?
3. Existing infrastructure and policies of poor solid waste management in Egor Community
 - a. How effective do you perceive the existing policies and regulations regarding waste management to be?
4. Key challenges faced in Egor community
 - a. What do you see as the main challenges in achieving efficient solid waste management in Egor Community?
5. Attitudes and behaviours of residents living in Egor community
 - a. Do you believe there are specific attitudes or behaviours among residents that contribute to or hinder effective solid waste management?