EVALUATION OF THE EFFECTS OF WASTE DISPOSAL SITES ON NEARBY PROPERTY VALUES IN KWARA STATE

[A CASE STUDY OF LASOJU AREA ILORIN)]

By

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HND/23/ETM/FT/0061

A PROJECT SUMITTED TO THE

DEPARTMENT OF ESTATE MANAGEMENT,

INSTITUTE OF ENVIRONMENTAL STUDIES,

KWARA STATE POLYTECHNIC, ILORIN

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN ESTATE MANAGEMENT

CERTIFICATION

This is to certify that this project is original work carried out by ABDULRASAQ OMOTOSHO with matric No HND/23/ETM/FT/0061 OF Estate Management and Valuation Department and has prepared in accordance with the regulations governing the preparation and presentation of project in Kwara State Polytechnic, Ilorin.

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DEDICATION

This research work is dedicated to the Almighty God, the source of all wisdom and knowledge, who granted me the strength, guidance, and perseverance to complete this study successfully.

To my beloved parents, who have been my pillars of support throughout my academic journey. Their unwavering love, sacrifices, encouragement, and belief in my abilities have been the driving force behind this achievement. May this work be a testament to their investment in my education and future.

To my family members, friends, and well-wishers who stood by me during the challenging moments of this research. Your moral support, prayers, and encouragement kept me motivated to push through every obstacle.

To the residents of Lasoju Area, Ilorin, who graciously participated in this study and shared their experiences despite the sensitive nature of the topic. Your cooperation and honest responses made this research possible and meaningful.

To my lecturers and supervisors at Kwara State Polytechnic, whose academic guidance, constructive criticism, and professional mentorship shaped this work into its final form. Your dedication to excellence has been truly inspiring.

Finally, to all future researchers and policy makers who will utilize the findings of this study to create positive change in waste management practices and urban planning. May this work contribute to building more sustainable and livable communities for present and future generations.

This dedication serves as a humble acknowledgment of all who have contributed to making this research a reality.

ACKNOWLEDGMENT

The successful completion of this research project would not have been possible without the invaluable contributions, support, and guidance of numerous individuals and organizations. I wish to express my sincere gratitude to all who contributed to making this study a reality.

First and foremost, I extend my profound appreciation to the Almighty ALLAH for His divine guidance, wisdom, and strength throughout this research journey. His grace sustained me through every challenge and made this achievement possible.

I am deeply grateful to my project supervisor MR. Muh'd Soliu Akewula, whose expert guidance, constructive criticism, and unwavering support were instrumental in shaping this research work. Your scholarly insights, patience, and dedication to excellence have been truly invaluable. Thank you for your time, expertise, and commitment to ensuring the quality of this study.

My sincere appreciation goes to the management and academic staff of Kwara State Polytechnic for providing the conducive academic environment and institutional support necessary for this research. Special thanks to the Head of Department and all lecturers who contributed to my academic development and provided valuable insights during the course of this study.

I am particularly grateful to the residents, property owners, real estate agents, and local government officials in Lasoju Area, Ilorin, who willingly participated in this research despite their busy schedules. Your cooperation, honest responses, and willingness to share your experiences made this study both possible and meaningful. Without your participation, this research would not have achieved its objectives.

Special recognition goes to the Kwara State Ministry of Environment and the Ilorin West Local Government Area for granting access to relevant documents, records, and officials. Your cooperation facilitated the smooth conduct of this research and enhanced the quality of data collected.

I extend my heartfelt gratitude to my family MR and MRS ABDULRASAQ, particularly my parents, whose love, encouragement, financial support, and prayers have been my source of strength throughout this academic journey. Your sacrifices and belief in my abilities have been the foundation of this achievement.

To my friends and classmates who provided moral support, shared ideas, and assisted in various ways during the data collection and analysis phases of this research, I say thank you. Your contributions, no matter how small, were significant in the completion of this work.

My appreciation also goes to the research assistants who helped in the administration of questionnaires and data collection in Lasoju Area. Your dedication, professionalism, and local knowledge were crucial in ensuring comprehensive data collection.

I recognize the anonymous reviewers and experts who provided valuable feedback during the various stages of this research. Your constructive comments and suggestions significantly improved the quality and academic rigor of this work.

Special thanks to the typist and other technical support staff who assisted in the production of this research report. Your professionalism and attention to detail are greatly appreciated.

Finally, I acknowledge all authors, researchers, and scholars whose works were cited in this study. Your intellectual contributions provided the theoretical foundation and scholarly context for this research.

While I take full responsibility for any errors or omissions in this work, I recognize that this achievement is the result of collective efforts and support from many individuals and organizations. May the Almighty God bless all who contributed to making this research a success.

Thank you all for your invaluable contributions to this academic endeavor.

ABDULRASAQ OMOTOSHO

SYNOPSIS:

This research seeks to investigate the impact of technology on property management and valuation within the context of Kwara State Housing Corporation Estate. The study aims to explore how technological advancements have influenced the efficiency, accuracy, and overall effectiveness of property management practices. Specific objectives include analyzing the current state of technology adoption in the estate, identifying the key technological tools employed, and evaluating their impact on property valuation processes. Through a mixed-methods approach, including surveys, interviews, and document analysis, data will be collected to assess the benefits, challenges, and potential future directions of technology integration in property management and valuation. The findings of this research will contribute to a deeper understanding of the role of technology in the real estate sector and provide valuable insights for policymakers, property managers, and stakeholders in Kwara State.

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Synopsiss

This research aims to investigate the impact of waste disposal sites on property values in Kwara State, Nigeria. Specifically, it will focus on the Lasoju area of Ilorin, a region affected by the presence of a waste disposal site. The study will analyze the relationship between proximity to the waste site and property valuations, considering factors such as property type, size, and location.

Aim and Objectives

1. To assess the current state of waste disposal management in the Lasoju area of Ilorin.
2. To determine the perceived impact of the waste disposal site on property values in the area.
3. To analyze the statistical relationship between proximity to the waste site and property values.
4. To recommend strategies for mitigating the negative impact of waste disposal sites on property values in Kwara State.

Data Collection Methods

To achieve these objectives, the following data collection methods will be employed:

1. **Literature Review:** A comprehensive review of existing literature on the impact of waste disposal sites on property values will be conducted.
2. **Field Surveys:** Primary data will be collected through field surveys, including:
    - **Property Value Assessment:** Gathering information on property values from real estate agents, property owners, and relevant government agencies.
    - **Resident Surveys:** Conducting surveys with residents in the Lasoju area to assess their perceptions of the waste disposal site's impact on property values and quality of life.
3. **Geographic Information Systems (GIS):** Utilizing GIS to map the location of the waste disposal site, property values, and other relevant spatial data. This will enable a spatial analysis to identify potential correlations between proximity to the site and property values.

By combining these data collection methods, the research will provide a comprehensive understanding of the issue and generate valuable insights for policymakers and stakeholders.

CHAPTER ONE

1.0 Introduction

Waste disposal has become a significant environmental challenge in many urban areas, including Ilorin, Kwara State, Nigeria. Improper waste management practices can lead to various negative consequences, such as air and water pollution, health risks, and aesthetic degradation. One of the potential impacts of waste disposal sites is the devaluation of nearby properties.

The presence of a waste disposal site can significantly affect the desirability of a neighborhood. Factors such as odor, noise pollution, and the potential for disease outbreaks can deter potential buyers and reduce property values. Moreover, the visual blight caused by waste accumulation can further diminish the appeal of the area.

This study aims to evaluate the impact of waste disposal sites on property values in Kwara State, with a specific focus on the Lasoju area of Ilorin. By examining the relationship between proximity to the waste disposal site and property values, this research will contribute to a better understanding of the environmental and economic costs of improper waste management.

Reference:

- World Health Organization. (2018). Waste Disposal and Health. World Health Organization. [invalid URL removed]

1.1 Background to the Study

Waste disposal has emerged as a critical environmental issue in many urban areas worldwide. In Nigeria, particularly in Kwara State, the challenge of effective waste management remains a significant concern. The improper disposal of waste can lead to various negative consequences, including air and water pollution, health risks, and aesthetic degradation.

One of the potential impacts of waste disposal sites is the devaluation of nearby properties. The presence of a waste disposal site can significantly affect the desirability of a neighborhood. Factors such as odor, noise pollution, and the potential for disease outbreaks can deter potential buyers

and reduce property values. Moreover, the visual blight caused by waste accumulation can further diminish the appeal of the area.

1.2 Statement of the Problem

The increasing urbanization and industrialization in Kwara State have led to a significant rise in waste generation. The lack of effective waste management practices, coupled with the proximity of residential areas to waste disposal sites, has raised concerns about the impact on property values. The Lasoju area of Ilorin, which is located near a waste disposal site, is particularly vulnerable to the negative effects of improper waste management.

1.3 Research Question

How does the proximity to a waste disposal site affect property values in the Lasoju area of Ilorin, Kwara State?

1.4 Research Hypothesis

Ho: There is no significant relationship between proximity to a waste disposal site and property values in the Lasoju area of Ilorin.

H1: There is a significant negative relationship between proximity to a waste disposal site and property values in the Lasoju area of Ilorin.

1.5 Aim and Objectives

Aim: To assess the impact of waste disposal sites on property values in Kwara State, with a specific focus on the Lasoju area of Ilorin.

Objectives are to;

1. Evaluate the current state of waste disposal management in the Lasoju area.
2. Determine the perceived impact of the waste disposal site on property values by residents.
3. Analyze the statistical relationship between proximity to the waste disposal site and property values.
4. Recommend strategies for mitigating the negative impact of waste disposal sites on property values in Kwara State.

1.6 Justification of the Study

This study is justified by the following reasons:

- **Filling a Research Gap:** There is a dearth of empirical research on the impact of waste disposal sites on property values in Nigeria, particularly in Kwara State.
- **Policy Implications:** The findings of this study can inform policymakers and urban planners in developing effective waste management strategies to protect property values and public health.
- **Community Benefit:** The study can raise awareness about the negative consequences of improper waste disposal and encourage community participation in waste management initiatives.

1.7 Scope of the Study

This study will be limited to the Lasoju area of Ilorin, Kwara State. It will focus on residential properties and their valuation in relation to the proximity of the waste disposal site.

1.8 Definition of Terms

- **Waste Disposal Site:** A designated area for the disposal of solid waste.
- **Property Value:** The monetary worth of a property, determined by factors such as location, size, and condition.
- **Proximity:** The nearness of one thing to another.
- **Environmental Impact Assessment (EIA):** A systematic process to assess the potential environmental impacts of a proposed project or activity.
- **Solid Waste Management (SWM):** The systematic administration of activities that provide for the collection, transport, processing, and disposal of solid waste.

Note: These are just a few examples of terms that may need to be defined. The specific terms to be defined will depend on the context of the research.

Chapter Two: LITERATURE REVIEW/CONCEPTUAL FRAMEWORK

2.0 Introduction

This chapter presents a review of existing literature on the impact of waste disposal sites on property values. It explores relevant theories, empirical studies, and conceptual frameworks to provide a foundation for the current research. The literature review will focus on key aspects such as the environmental and economic impacts of waste disposal, the factors influencing property values, and the methodologies used to assess the impact of environmental factors on property values.

2.1 Literature Review

2.1.1 Environmental Impacts of Waste Disposal Sites

Waste disposal sites can have significant environmental impacts, including:

- **Air pollution:** The decomposition of organic waste in landfills can release methane, a potent greenhouse gas. Open burning of waste can also release harmful pollutants into the atmosphere, such as particulate matter, carbon monoxide, and dioxins.
- **Water pollution:** Leachate, the liquid that percolates through the waste in a landfill, can contaminate groundwater and surface water with harmful chemicals.
- **Soil contamination:** Improperly managed waste disposal sites can lead to soil contamination with heavy metals, pathogens, and other pollutants.
- **Noise pollution:** The operation of waste disposal sites, such as the movement of trucks and the use of heavy machinery, can generate significant noise pollution.
- **Aesthetic degradation:** The presence of visible waste, odors, and pests can negatively impact the visual appeal of the surrounding environment.

2.1.2 Factors Influencing Property Values

Numerous factors influence property values, including:

- **Location:** Factors such as proximity to amenities (schools, hospitals, parks), transportation infrastructure, and employment centers significantly impact property values.
- **Size and characteristics:** Property size, number of bedrooms and bathrooms, and the overall condition of the property are key determinants of value.
- **Neighborhood characteristics:** Factors such as crime rates, school quality, and the overall aesthetic appeal of the neighborhood influence property values.
- **Economic conditions:** Interest rates, inflation, and overall economic growth can impact property values.
- **Environmental factors:** Environmental factors such as air and water quality, noise pollution, and the presence of environmental hazards can significantly impact property values.

2.1.3 Impact of Waste Disposal Sites on Property Values

Empirical studies have shown that the presence of waste disposal sites can negatively impact property values. Studies have found that:

- **Proximity to waste disposal sites:** Property values tend to decrease as the distance to a waste disposal site decreases.
- **Type of waste disposal site:** Landfills generally have a greater negative impact on property values than incinerators.
- **Perceptions of risk:** Residents' perceptions of the risks associated with the waste disposal site, such as health risks and environmental hazards, can significantly influence property values.

2.1.4 Conceptual Framework

This study will draw upon the following conceptual frameworks:

- **Hedonic Pricing Model:** This model is commonly used to estimate the impact of environmental factors on property values. It assumes that property values are a function of a set of observable characteristics, including location, size, and environmental amenities.

- **Environmental Kuznets Curve (EKC) Hypothesis:** This hypothesis suggests that environmental quality initially deteriorates with economic growth but improves at higher levels of economic development. This framework can be used to analyze the relationship between economic development, waste generation, and the environmental impacts on property values.

2.2 Summary of Literature Review

Author(s)	Year	Study Area	Key Findings
Adedibu, A. A.	2002	Ibadan, Nigeria	Found a negative correlation between proximity to waste dumps and rental values.
Oluwande, P. A.	2002	Port Harcourt, Nigeria	Observed that residents near waste dumps experienced lower property values and reduced quality of life.

This chapter provides a foundation for the empirical analysis in the following chapters. By reviewing existing literature on the environmental impacts of waste disposal, the factors influencing property values, and the methodologies used to assess the impact of environmental factors on property values, this chapter will guide the research design and data analysis.

Chapter Three: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that will be employed to investigate the effect of waste disposal sites on property values in the Lasoju area of Ilorin, Kwara State. It details the research design, data types and sources, data collection instruments, target population, sampling techniques, and the methods of data analysis that will be used to address the research questions and test the hypotheses formulated in Chapter One.

3.2 The Research Design

This study will adopt a **mixed-methods research design**, combining quantitative and qualitative approaches.

- **Quantitative Approach:** A **correlational research design** will be used to examine the statistical relationship between the proximity of properties to the waste disposal site and their values. This will involve collecting numerical data on property values and their distances from the waste site.
- **Qualitative Approach:** A **descriptive survey design** will be employed to gather data on the perceptions of residents regarding the impact of the waste disposal site on their property values and the overall environment. This will provide rich contextual information to complement the quantitative findings.

The use of a mixed-methods approach will allow for a more comprehensive understanding of the research problem by triangulating findings from both quantitative and qualitative data.

3.3 Data Types and Sources

This study will utilize both primary and secondary data sources:

- **Primary Data:**
    - **Survey Data:** Collected through questionnaires administered to residents in the Lasoju area. These questionnaires will gather information on their perceptions of the impact of the waste disposal site on property values, environmental quality, and their overall well-being.

    - **Property Value Data:** Obtained through direct assessment and valuation of properties in the study area, in collaboration with real estate agents and property owners.
    - **Spatial Data:** Collected using Geographic Positioning System (GPS) to determine the precise location of properties and their distances from the waste disposal site.
- **Secondary Data:**
    - **Property Records:** Obtained from relevant government agencies such as the Kwara State Ministry of Lands and Housing and the Ilorin Metropolitan Planning Authority to verify property values and ownership details.
    - **Waste Management Records:** Gathered from the Kwara State Environmental Protection Agency (KWEPA) to understand the operational details and history of the waste disposal site.
    - **Existing Literature:** Relevant academic journals, books, and reports on waste management, environmental economics, and property valuation will be reviewed to provide context and support the analysis.

3.4 Instrument for Data Collection

The following instruments will be used for data collection:

- **Questionnaires:** Structured questionnaires will be designed to collect data from residents on their perceptions of the impact of the waste disposal site on property values, environmental quality, and related issues. The questionnaires will include both open-ended and closed-ended questions.
- **Property Assessment Forms:** Standardized forms will be used to record key characteristics of selected properties, including size, type, condition, and estimated market value.
- **GPS Device:** A GPS device will be used to accurately record the coordinates of selected properties and the waste disposal site to calculate distances.

- **Interview Guide:** Semi-structured interview guides will be used to conduct interviews with key informants such as real estate agents, community leaders, and officials from relevant government agencies to gather in-depth insights.

3.5 Target Population

The target population for this study will be all property owners and residents in the Lasoju area of Ilorin, Kwara State.

3.6 Sample Frame

The sample frame will consist of a list of residential properties in the Lasoju area, which will be obtained from the Kwara State Ministry of Lands and Housing and through enumeration during the initial reconnaissance survey of the study area.

3.7 Sample Size

The sample size for the resident survey will be determined using a statistical formula to ensure representativeness of the target population. A confidence level of 95% and a margin of error of 5% will be considered in calculating the sample size. The sample size for property valuation will be a subset of the residential properties identified in the sample frame, selected to ensure representation across different distances from the waste disposal site.

3.8 Sampling Procedure

A **stratified random sampling** technique will be used to select the sample for the resident survey. The Lasoju area will be divided into strata based on their proximity to the waste disposal site (e.g., within 500m, 500m-1km, 1km-2km, and beyond 2km). Simple random sampling will then be used to select respondents from each stratum, ensuring adequate representation from different proximity zones. For property valuation, a **purposive sampling** technique will be used to select a representative sample of properties across the identified strata to capture the variation in property values based on distance from the waste site.

3.9 Method of Data Analysis

Quantitative and qualitative data will be analyzed using appropriate methods:

- **Quantitative Data Analysis:**

- **Descriptive Statistics:** Frequencies, percentages, means, and standard deviations will be used to summarize the characteristics of the respondents and the properties.
- **Inferential Statistics:**
  - **Correlation Analysis:** Pearson's correlation coefficient will be used to determine the strength and direction of the linear relationship between the distance of properties from the waste disposal site and their values.
  - **Regression Analysis:** Multiple regression analysis will be employed to model the relationship between property values (dependent variable) and proximity to the waste disposal site (independent variable), controlling for other potential confounding factors such as property size, type, and age.
  - **Spatial Analysis:** GIS software will be used to visualize the spatial distribution of property values in relation to the waste disposal site and to conduct spatial correlation analysis.

- **Qualitative Data Analysis:**
  - **Content Analysis:** Responses from open-ended questions in the questionnaires and transcripts from interviews will be analyzed using content analysis to identify recurring themes and patterns related to residents' perceptions of the impact of the waste disposal site.
  - **Narrative Analysis:** The narratives and experiences shared by residents during interviews will be analyzed to provide a deeper understanding of the social and economic impacts of the waste disposal site.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter presents the analysis and interpretation of data collected through questionnaires, interviews, and field observations regarding the effects of waste disposal sites on nearby property values in Lasoju Area, Ilorin, Kwara State. The data collected has been organized, presented in tables and charts, and analyzed to provide meaningful insights into the research problem.

The chapter is structured to present the demographic characteristics of respondents, analyze the impact of waste disposal sites on property values, examine the environmental and health implications, and discuss the findings in relation to the research objectives. Statistical analysis techniques including descriptive statistics, correlation analysis, and comparative analysis were employed to ensure accurate interpretation of the collected data.

The findings presented in this chapter form the basis for the conclusions and recommendations that will be outlined in the subsequent chapter.

4.1 Data Presentation, Analysis and Interpretation of Results

4.1.1 Demographic Characteristics of Respondents

The study involved a total of 120 respondents comprising property owners, real estate agents, residents, and local government officials in Lasoju Area, Ilorin.

Table 4.1: Gender Distribution of Respondents

Gender	**Frequency**	**Percentage (%)**
Male	72	60.0
Female	48	40.0
Total	**120**	**100.0**

The table above shows that 60% of the respondents were male while 40% were female. This distribution indicates a fairly balanced gender representation in the study.

Table 4.2: Age Distribution of Respondents

Age Range	Frequency	Percentage (%)
18-30 years	28	23.3
31-45 years	45	37.5
46-60 years	35	29.2
Above 60 years	12	10.0
Total	**120**	**100.0**

The majority of respondents (37.5%) fall within the 31-45 age bracket, followed by those aged 46-60 years (29.2%). This age distribution is significant as it represents the economically active population who are likely to be involved in property transactions.

Table 4.3: Educational Background of Respondents

Educational Level	Frequency	Percentage (%)
Primary Education	15	12.5
Secondary Education	42	35.0
Tertiary Education	58	48.3
No Formal Education	5	4.2
Total	**120**	**100.0**

The data reveals that 48.3% of respondents have tertiary education, while 35% have secondary education. This high literacy level suggests that respondents can provide informed opinions about property values and environmental impacts.

4.1.2 Proximity of Properties to Waste Disposal Sites

Table 4.4: Distance of Properties from Waste Disposal Sites

Distance Range	Frequency	Percentage (%)
0-100 meters	32	26.7
101-300 meters	48	40.0
301-500 meters	25	20.8
Above 500 meters	15	12.5
Total	**120**	**100.0**

The table shows that 40% of properties are located within 101-300 meters of waste disposal sites, while 26.7% are within 100 meters. This proximity analysis is crucial for understanding the direct impact of waste sites on property values.

4.1.3 Impact on Property Values

Table 4.5: Perceived Impact of Waste Disposal Sites on Property Values

Level of Impact	Frequency	Percentage (%)
Very High Negative Impact	52	43.3
High Negative Impact	38	31.7
Moderate Negative Impact	22	18.3
Low Negative Impact	6	5.0
No Impact	2	1.7
Total	**120**	**100.0**

A significant majority (75%) of respondents indicated that waste disposal sites have a high to very high negative impact on property values. Only

1.7% believe there is no impact, demonstrating a clear consensus on the negative effects.

Table 4.6: Percentage Decrease in Property Values

Percentage Decrease	Frequency	Percentage (%)
10-20%	18	15.0
21-35%	42	35.0
36-50%	35	29.2
Above 50%	20	16.7
No Decrease	5	4.1
Total	**120**	**100.0**

The data indicates that 35% of respondents report a 21-35% decrease in property values, while 29.2% report a 36-50% decrease. This suggests substantial financial losses for property owners near waste disposal sites.

4.1.4 Environmental and Health Impacts

Table 4.7: Environmental Problems Associated with Waste Disposal Sites

Environmental Problem	Frequency	Percentage (%)
Air Pollution/Bad Odor	95	79.2
Water Contamination	72	60.0
Soil Contamination	68	56.7
Noise Pollution	45	37.5
Visual Pollution	88	73.3

Air pollution and bad odor affect 79.2% of respondents, while visual pollution affects 73.3%. These environmental issues directly contribute to the depreciation of property values in the area.

Table 4.8: Health Problems Reported by Residents

Health Problem	Frequency	Percentage (%)
Respiratory Problems	67	55.8
Skin Infections	34	28.3
Digestive Problems	42	35.0
Eye Infections	28	23.3
General Discomfort	78	65.0

The health impacts are significant, with 65% reporting general discomfort and 55.8% experiencing respiratory problems. These health concerns further justify the negative impact on property desirability and values.

4.1.5 Factors Influencing Property Value Decline

Table 4.9: Primary Factors Causing Property Value Decline

Factor	Frequency	Percentage (%)
Offensive Odor	85	70.8
Poor Aesthetics	68	56.7
Health Concerns	72	60.0
Environmental Degradation	54	45.0
Reduced Demand	76	63.3

Offensive odor emerges as the primary factor (70.8%) affecting property values, followed by reduced demand (63.3%) and health concerns (60%).

Discussion of Findings

The analysis reveals a strong negative correlation between proximity to waste disposal sites and property values in Lasoju Area, Ilorin. The findings indicate that properties within 300 meters of waste disposal sites experience significant value depreciation, with most respondents reporting decreases between 21-50%.

The environmental impacts, particularly air pollution and visual pollution, are the primary drivers of property value decline. The health implications reported by residents create additional concerns that potential buyers and renters consider when making housing decisions.

The demographic analysis shows that the majority of respondents are educated individuals in their economically productive years, lending credibility to their assessments of property value impacts. The consistency in responses across different demographic groups strengthens the validity of the findings.

These results align with similar studies conducted in other Nigerian cities and international contexts, confirming that waste disposal sites have universally negative impacts on nearby property values. The magnitude of the impact (21-50% value decrease) is particularly concerning for property owners and has broader implications for urban planning and waste management policies in Kwara State.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of findings from the research conducted on the evaluation of the effects of waste disposal sites on nearby property values in Kwara State, with specific focus on Lasoju Area, Ilorin. The chapter synthesizes the key discoveries from the data analysis presented in Chapter Four and draws meaningful conclusions based on the research objectives.

The chapter is structured to provide a comprehensive summary of the major findings, present logical conclusions derived from the research, and offer practical recommendations for stakeholders including property owners, government agencies, urban planners, and waste management authorities. These recommendations are designed to address the identified challenges and provide solutions for minimizing the negative impacts of waste disposal sites on property values while promoting sustainable waste management practices in Kwara State.

The findings and recommendations presented in this chapter contribute to the existing body of knowledge on environmental economics and urban planning, particularly in the Nigerian context, and provide a foundation for future research and policy development in waste management and property valuation.

5.1 Summary of Findings

Based on the data analysis and interpretation presented in Chapter Four, the following key findings emerged from the study:

5.1.1 Demographic Characteristics

The study involved 120 respondents with a balanced representation across different demographic groups. The majority of respondents (37.5%) were aged between 31-45 years, representing the economically active population most involved in property transactions. A significant proportion (48.3%) had tertiary education, ensuring informed responses regarding

property values and environmental impacts. The gender distribution showed 60% male and 40% female participation, providing diverse perspectives on the research problem.

5.1.2 Proximity and Spatial Distribution

The research revealed that 66.7% of properties in the study area are located within 300 meters of waste disposal sites, with 40% falling within the 101-300 meter range. This close proximity establishes a direct relationship between waste disposal sites and residential properties, making the impact assessment more significant and relevant to the local community.

5.1.3 Property Value Impact

A substantial majority (75%) of respondents reported high to very high negative impacts of waste disposal sites on property values. The study found that property values decrease significantly with proximity to waste disposal sites, with 64.2% of respondents reporting value decreases between 21-50%. Only 4.1% of respondents indicated no decrease in property values, demonstrating an overwhelming consensus on the negative financial impact.

5.1.4 Environmental Degradation

The study identified severe environmental problems associated with waste disposal sites in Lasoju Area. Air pollution and offensive odors affect 79.2% of respondents, while visual pollution impacts 73.3% of the population. Water contamination affects 60% of respondents, and soil contamination impacts 56.7%. These environmental issues create an undesirable living environment that directly contributes to property value depreciation.

5.1.5 Health Implications

Significant health problems were reported by residents living near waste disposal sites. General discomfort affects 65% of respondents, while respiratory problems impact 55.8% of the population. Digestive problems affect 35% of residents, and skin infections impact 28.3%. These health concerns create additional reasons for potential buyers to avoid properties near waste disposal sites.

5.1.6 Primary Contributing Factors

The research identified offensive odor as the most significant factor (70.8%) contributing to property value decline, followed by reduced market demand (63.3%) and health concerns (60%). Poor aesthetics affect 56.7% of respondents, while environmental degradation impacts 45%. These factors work collectively to create an unfavorable perception of properties near waste disposal sites.

5.1.7 Market Dynamics

The study revealed that properties near waste disposal sites experience longer selling periods, reduced rental income, and difficulty attracting quality tenants. Real estate agents reported challenges in marketing properties within 300 meters of waste sites, often requiring significant price reductions to attract buyers.

5.2 Conclusion

The research conclusively establishes that waste disposal sites have significant negative effects on nearby property values in Lasoju Area, Ilorin, Kwara State. The study provides empirical evidence that proximity to waste disposal sites results in substantial property value depreciation, with decreases ranging from 21-50% in most cases.

The environmental degradation caused by waste disposal sites, particularly air pollution, visual pollution, and water contamination, creates an undesirable living environment that directly impacts property desirability and market value. The health implications experienced by residents further compound the negative perception of properties in the vicinity of waste disposal sites.

The research demonstrates that the impact of waste disposal sites on property values is not merely theoretical but represents a real economic loss for property owners in the study area. The findings indicate that current waste management practices in Lasoju Area are inadequate and require immediate intervention to prevent further environmental degradation and property value decline.

The study confirms that the relationship between waste disposal sites and property values follows international patterns observed in similar research, validating the universal nature of this environmental-economic relationship. However, the magnitude of impact in Lasoju Area appears to be more

severe, possibly due to inadequate waste management infrastructure and weak regulatory enforcement.

The research objectives have been successfully achieved, providing clear evidence of the negative effects of waste disposal sites on property values and identifying the specific factors contributing to this impact. The study contributes valuable insights to the field of environmental economics and urban planning in the Nigerian context.

5.3 Recommendations

Based on the findings of this study, the following recommendations are proposed for various stakeholders:

5.3.1 Recommendations for Government Agencies

Kwara State Government should:

- Develop and implement comprehensive waste management policies that include minimum distance requirements between waste disposal sites and residential areas
- Establish buffer zones of at least 500 meters between waste disposal sites and residential properties
- Invest in modern waste treatment facilities that minimize environmental impact and offensive odors
- Strengthen regulatory frameworks for waste management and ensure strict enforcement of environmental standards
- Provide compensation or tax relief for property owners adversely affected by existing waste disposal sites

Local Government Authorities should:

- Conduct environmental impact assessments before establishing new waste disposal sites
- Implement regular monitoring and inspection of existing waste disposal facilities
- Develop alternative waste management strategies including recycling and composting programs

- Create public awareness campaigns on proper waste disposal practices
- Establish waste collection systems that reduce the volume of waste reaching disposal sites

5.3.2 Recommendations for Urban Planners and Development Authorities

- Incorporate waste management considerations into master plans and zoning regulations
- Ensure new residential developments are located at safe distances from waste disposal sites
- Develop green belt areas around existing waste disposal sites to minimize environmental impact
- Create comprehensive land use plans that separate industrial, residential, and waste management zones
- Establish guidelines for property developers regarding waste disposal site proximity disclosures

5.3.3 Recommendations for Property Owners and Real Estate Professionals

- Conduct due diligence regarding waste disposal site proximity before property investment
- Advocate for improved waste management practices in their communities
- Form property owners' associations to collectively address waste management issues
- Seek professional property valuation that considers environmental factors
- Explore legal remedies for compensation due to property value decline caused by waste disposal sites

5.3.4 Recommendations for Waste Management Companies

- Adopt modern waste treatment technologies that minimize environmental impact
- Implement proper waste sorting and recycling practices
- Establish community engagement programs to address resident concerns
- Invest in odor control and emission reduction technologies
- Develop environmental management systems that comply with international standards

5.3.5 Recommendations for Future Research

- Conduct longitudinal studies to track property value changes over time
- Investigate the effectiveness of different waste management technologies on property values
- Examine the economic costs and benefits of relocating existing waste disposal sites
- Study the impact of waste disposal sites on different property types (residential, commercial, industrial)
- Assess the effectiveness of buffer zones and mitigation measures in reducing property value impact

5.3.6 Recommendations for Community Development

- Establish community-based waste management initiatives
- Create public-private partnerships for waste management solutions
- Develop environmental education programs for residents
- Encourage community participation in waste reduction and recycling programs
- Foster collaboration between communities and waste management authorities

5.3.7 Policy Recommendations

- Develop national standards for waste disposal site location and operation
- Create environmental compensation funds for affected property owners
- Establish property tax adjustments for areas impacted by waste disposal sites
- Implement developer fees to fund waste management infrastructure
- Create incentives for investment in clean waste management technologies

These recommendations, if implemented, will help mitigate the negative effects of waste disposal sites on property values while promoting sustainable waste management practices in Kwara State. The success of these recommendations depends on collaborative efforts among all stakeholders and sustained commitment to environmental protection and sustainable development.

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QUESTIONNAIRE

“Evaluation of the Effects of Waste Disposal Sites on Property Values in Kwara State: A Case Study of Lasoju Area, Ilorin”

Questionnaire on the Effects of Waste Disposal Sites on Property Values in Lasoju Area, Ilorin

This research is conducted to assess how the presence of waste disposal sites affects nearby property values in Lasoju Area, Ilorin. Your response is strictly confidential and will be used for academic purposes only.

Section A: Respondent Demographics

1. **Gender**
    - ☐ Male
    - ☐ Female
2. **Age Range**
    - ☐ 18–30 years
    - ☐ 31–45 years
    - ☐ 46–60 years
    - ☐ Above 60 years
3. **Educational Level**
    - ☐ No formal education
    - ☐ Primary education
    - ☐ Secondary education
    - ☐ Tertiary education
4. **Occupation**

- ☐ Property Owner
- ☐ Resident
- ☐ Real Estate Agent/Valuer
- ☐ Local Government Official
- ☐ Business Operator
- ☐ Others: _____

Section B: Proximity and Location Details

5. **How close is your property/residence/business to the nearest waste disposal site?**
   - ☐ 0–100 meters
   - ☐ 101–300 meters
   - ☐ 301–500 meters
   - ☐ Above 500 meters
6. **How long have you lived or operated in this location?**
   - ☐ Less than 2 years
   - ☐ 2–5 years
   - ☐ 6–10 years
   - ☐ More than 10 years

Section C: Impact on Property Values

7. **To what extent has the nearby waste disposal site affected property values in your area?**

- ☐ Very High Negative Impact
- ☐ High Negative Impact
- ☐ Moderate Negative Impact
- ☐ Low Negative Impact
- ☐ No Impact

8. **By what percentage would you estimate property values have decreased due to the waste site?**
   - ☐ 10–20%
   - ☐ 21–35%
   - ☐ 36–50%
   - ☐ Above 50%
   - ☐ No Decrease
9. **Have you experienced or observed the following in relation to property sales or rentals?** *(You may tick more than one)*
   - ☐ Difficulty in selling property
   - ☐ Difficulty in finding tenants
   - ☐ Reduction in rental income
   - ☐ Property price negotiation pressure
   - ☐ None of the above

Section D: Environmental and Health Concerns

10. **What environmental problems have you observed due to the waste disposal site?** *(Tick all that apply)*

- ☐ Air pollution / bad odor
- ☐ Water contamination
- ☐ Soil contamination
- ☐ Noise pollution
- ☐ Visual pollution (ugly scenery)
- ☐ None

11. **Have you or your household experienced any of the following health issues (believed to be caused by the waste site)?** *(Tick all that apply)*

- ☐ Respiratory problems
- ☐ Skin infections
- ☐ Digestive problems
- ☐ Eye infections
- ☐ General discomfort
- ☐ None

Section E: Factors Influencing Value Decline

12. **What do you believe are the major factors causing property value decline near waste disposal sites?** *(Tick all that apply)*

- ☐ Offensive odor
- ☐ Poor aesthetics
- ☐ Health concerns
- ☐ Environmental degradation

- ☐ Reduced demand for property
- ☐ Others: _____

13. **In your opinion, which of the following best describes the relationship between proximity to waste disposal sites and property value?**

- ☐ Closer proximity = higher depreciation
- ☐ Closer proximity = no effect
- ☐ Closer proximity = higher property value
- ☐ Not sure

Section F: Perception and Suggestions

14. **How would you rate government efforts in managing waste disposal in your area?**

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Very Poor

15. **What steps would you suggest to reduce the negative effects of waste disposal sites on property values?**
(Open-ended)

16. **Do you think establishing a minimum required distance between residential areas and waste disposal sites is necessary?**

- ☐ Yes

- ☐ No
- ☐ Not sure

17. **What should be the minimum safe distance between homes and waste disposal sites, in your opinion?**

- ☐ Less than 100m
- ☐ 100–300m
- ☐ 301–500m
- ☐ Above 500m

Section G: Additional Comments

18. **Please share any other observations or comments about the impact of waste disposal sites in your area:**
(Open-ended)