

**AN ASSESSMENT OF WASTE MANAGEMENT PRACTICES  
ON PROPERTY VALUE  
(A CASE STUDY OF IPATA MARKET AREA)**

***BY***

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**BEING A RESEARCH PROJECT SUBMITTED TO THE,  
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### CERTIFICATION

This is to certify that this research project was carried out by **IBRAHIM YUSUPH** with Matriculation Number: **HND/23/ETM/FT/0017** and has been read and approved as meeting the requirements of the department of Estate Management, Institute of Environment Studies, Kwara State Polytechnic, Ilorin, Kwara State, for the award of Higher National Diploma (HND) in Estate Management.



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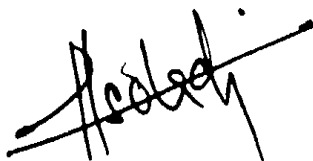
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## **DEDICATION**

This project is dedicated to the Almighty Allah who has been my Alpha and Omega toward the successful completion of this project and my course.

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My profound gratitude first and foremost goes to Almighty Allah the author and finisher of our faith for granting and protecting me through the ups and downs in my academic pursuit and for making this dream a reality.

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## **ABSTRACT**

*This study aims to assess the impact of waste management practices on property value, focusing on the Ipata Market area in Ilorin, Kwara State, Nigeria. The research examines the existing waste management practices, their effects on the environmental quality, and how they influence property values in the surrounding area. The study also seeks to identify the challenges of waste management in the market and propose strategies to improve waste handling practices and enhance property value. The following is an outline of the chapters in the study.*

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

The rapid urbanization of cities in developing countries, particularly in Nigeria, has presented significant challenges in waste management, especially in commercial centers. Ilorin, the capital city of Kwara State, Nigeria, faces these challenges with the growing population and increasing economic activities. Among its key commercial hubs, Ipata Market plays a central role in the local economy, attracting traders and consumers from both within and outside the city. However, the market generates substantial amounts of waste daily, which, if not properly managed, can lead to environmental and health risks. Effective waste management in such an area is crucial, not only for maintaining public health and environmental sustainability but also for preserving the property values in the surrounding area (Wilson et al., 2012).

The relationship between waste management and property value has been well-documented in urban studies. Studies have shown that poor waste management practices can lead to a decrease in property values, as they result in environmental degradation, health hazards, and a decline in the aesthetic appeal of an area (Alam & Ahmade, 2013). In the case of Ipata Market, the challenges associated with improper waste disposal have the potential to negatively impact surrounding properties, making them less attractive to prospective buyers and investors. Additionally, poorly managed waste can contribute to the obstruction of drainage systems and the spread of diseases, further diminishing the area's desirability (Oteng-Ababio et al., 2013). Understanding the dynamics between waste management and property value is, therefore, a critical area of focus for urban planners, policymakers, and property developers in Ilorin.

Despite various efforts by local authorities to address the waste management issues in the city, many areas, including Ipata Market, still suffer from ineffective waste collection, improper disposal, and inadequate infrastructure. These problems are amplified in high-density commercial areas, where the volume of waste often exceeds the capacity of existing management systems (Guerrero et al., 2013). Furthermore, waste disposal practices such as indiscriminate dumping and irregular collection schedules remain widespread, causing significant environmental and public health concerns. According to Hoornweg and Bhada-Tata (2012), the lack of comprehensive waste management strategies exacerbates these issues, leading to adverse effects on urban spaces, particularly in areas of high economic activity.

In addition to the direct environmental and health effects, poor waste management in Ipata Market has a profound impact on property values in the vicinity. The aesthetic decline caused by improperly managed waste sites, coupled with the increase in pollution levels, can make properties in these areas less attractive to potential tenants, buyers, or investors (Al-Khatib et al., 2010). Properties located near waste accumulation sites often experience reduced demand and lower market prices, as the presence of waste is a deterrent for those seeking clean, safe, and well-maintained environments. This creates a significant challenge for property owners and developers who are looking to maximize the value of their investments in areas affected by poor waste management practices.

This study aims to assess the waste management practices in Ipata Market and their effects on property value. Through this assessment, the research will identify the key challenges in waste management and propose practical solutions to improve waste disposal systems in the area. By focusing on the link between waste management and property value, the study seeks to provide valuable insights that can guide the development of more effective waste management strategies, ultimately enhancing environmental quality and boosting the economic potential of Ipata Market and its surrounding areas. The findings will be instrumental for local authorities, property developers, and urban planners, contributing to the overall goal of sustainable urban development (Brundtland Report, 1987).

The rapid pace of urbanization in developing countries, particularly in sub-Saharan Africa, has led to mounting challenges in managing urban waste. In Nigeria, cities like Ilorin have witnessed exponential growth in population and economic activity, especially in commercial zones such as the Ipata Market area. However, this growth has not been matched by corresponding improvements in waste management infrastructure (Afon, 2007; Ogwueleka, 2009). Ipata Market, a major commercial hub in Ilorin, generates large volumes of solid waste daily, yet suffers from inconsistent and often ineffective waste collection, leading to environmental degradation, public health concerns, and reduced property values (Wilson et al., 2012; Alam & Ahmade, 2013).

Scholars such as Al-Khatib et al. (2010) and Guerrero et al. (2013) have documented the negative impact of poor waste management on urban property values. Environmental nuisances such as odor, visual blight, clogged drainage, and rodent infestation deter investment and lower the marketability of nearby properties. Furthermore, the World Bank (2018) notes that the perception of cleanliness and safety is a major determinant of real estate demand in urban spaces. In Ipata Market, where indiscriminate dumping and irregular collection are common, property owners face both aesthetic and economic losses.

While efforts have been made by local governments to manage waste through public-private partnerships and environmental sanitation days, the impact remains marginal (Adewumi et al., 2005; Nzeadibe, 2009). High-density areas like Ipata are especially vulnerable due to the transient nature of market users, lack of ownership responsibility, and poor public awareness. These realities align with global studies, such as those by UNEP (2016), showing that waste management failures are often systemic and require more than infrastructural fixes—they require policy reform, stakeholder engagement, and behavior change.

Moreover, the environmental implications of improper waste disposal are severe. Aside from the visual disamenities, accumulated waste leads to clogged drainage systems, exacerbates urban flooding, and provides breeding grounds for disease vectors such as mosquitoes and rats (Hoornweg & Bhada-Tata, 2012; Aderogba, 2012). These hazards not only threaten public health but also create a hostile environment for commerce, further lowering the economic appeal of the area. In this context, understanding the relationship between waste management and property value becomes crucial for sustainable development. This study thus seeks to assess the waste management practices in the Ipata Market area and evaluate their direct and indirect effects on property values. By linking waste handling performance to economic indicators such as land value and tenancy demand, the study offers insights relevant to urban planners, environmental managers, and real estate investors alike (Brundtland Report, 1987; Nubi, 2002). Through empirical investigation, it aims to fill knowledge gaps in localized urban waste dynamics and contribute to the improvement of waste management systems in commercial districts.

Waste management plays a critical role in shaping the environmental and economic dynamics of urban settings. As urbanization expands, the generation of waste increases, putting pressure on existing disposal systems and impacting the quality of life. This phenomenon is especially evident in commercial hubs like Ipata Market, a vibrant area in Ilorin known for its bustling activities and economic significance. Effective waste management is crucial in ensuring that the area's productivity does not translate into environmental degradation or a decline in property values. According to Wilson et al. (2012), the neglect of waste management systems often leads to adverse consequences on urban aesthetics and economic sustainability.

The intersection between waste management and property value is multifaceted. Poor waste disposal practices, including indiscriminate dumping and inadequate collection systems, contribute to environmental pollution. This can diminish the attractiveness of a location, thereby reducing demand for property in such areas. Studies by Alam and Ahmade (2013)

indicate that areas with poor waste management often experience a decline in both residential and commercial property values, as prospective tenants and buyers avoid these locations due to health and aesthetic concerns.

Ipata Market, serving as a hub for trade and commerce, generates significant amounts of waste daily. While its strategic location within Ilorin enhances its economic prospects, the management of waste in the area remains a pressing challenge. Improper waste disposal has led to clogged drainage systems, foul odors, and unsanitary conditions, creating an environment that may deter investment. This trend underscores the importance of evaluating how waste management practices influence property values, especially in areas of high economic activity.

Effective waste management can serve as a catalyst for enhancing property value. Proper systems, such as regular waste collection, recycling programs, and environmentally friendly disposal methods, contribute to a cleaner, healthier environment. This, in turn, attracts investors and enhances the desirability of properties in the area. As noted by Hoornweg and Bhada-Tata (2012), urban areas with efficient waste management systems often enjoy higher property values and increased economic activity.

The connection between waste management practices and property value is not just an environmental concern but also an economic one. Landlords and property developers in areas like Ipata Market often face challenges in retaining tenants due to the negative externalities associated with poor waste management. For instance, the presence of litter and overflowing waste bins can create a perception of neglect, discouraging prospective buyers or renters from considering properties in the area (Al-Khatib et al., 2010).

Governments and stakeholders have recognized the importance of waste management in urban planning. In Kwara State, policies aimed at improving waste management systems have been implemented, yet their effectiveness in areas like Ipata Market remains a subject of debate. The inconsistency in waste collection schedules and the lack of public awareness have exacerbated the challenges, calling for a more structured approach. This aligns with findings by Oteng-Ababio et al. (2013), who stress the need for community involvement in addressing waste management issues.

The role of community participation cannot be overstated. Residents and business owners in Ipata Market are key stakeholders in the waste management ecosystem. Without their active engagement, efforts to improve waste disposal practices may prove futile. Education campaigns, incentivized recycling, and the establishment of local waste

management committees have been suggested as ways to bridge this gap (Guerrero et al., 2013).

The implications of poor waste management extend beyond immediate environmental concerns. They affect the socio-economic fabric of the area, with declining property values acting as a key indicator of broader systemic issues. In areas like Ipata Market, where property serves as both a residential and commercial asset, the impact is amplified, affecting livelihoods and economic growth. This makes the topic of waste management practices and their influence on property value not only timely but also critical for urban development.

A historical perspective on waste management in Ilorin reveals a pattern of reactive, rather than proactive, strategies. While the city has made strides in improving waste collection infrastructure, gaps remain in enforcement and maintenance. Ipata Market, as one of the city's busiest areas, reflects these challenges, making it a microcosm for examining broader issues within urban waste management frameworks.

The assessment of waste management practices in Ipata Market also provides an opportunity to explore innovative solutions. From adopting technology-driven waste tracking systems to implementing public-private partnerships, the potential for transformation exists. Studies by Wilson et al. (2015) highlight how integrated approaches can enhance efficiency and reduce the burden on public infrastructure.

Moreover, understanding the relationship between waste management practices and property value is pivotal for sustainable urban development. Ipata Market, with its unique socio-economic dynamics, serves as an ideal case study to examine these interactions. By addressing the challenges associated with waste management, the area can unlock its full potential, ensuring both environmental sustainability and economic prosperity.

## **1.2 Statement of the Problem**

The challenges posed by ineffective waste management systems in Nigerian urban centers have become increasingly critical, particularly in economically vital locations like Ipata Market. Despite its strategic importance, the area is plagued by recurring issues of waste accumulation, indiscriminate dumping, irregular collection schedules, and weak enforcement of sanitation regulations. These challenges have led to environmental decay, frequent flooding from clogged drainage and serious public health risks such as cholera outbreaks and malaria infestations (Afon, 2007; Olukanni & Aremu, 2009). The situation is compounded by the rapid urban growth that outpaces infrastructure development, causing stress on available waste handling facilities.

Beyond environmental and health consequences, these poor waste management practices have tangible economic implications—especially on the value of surrounding properties. Properties located near dumpsites or along waste-accumulated roads are often undervalued due to their unattractive surroundings and perceived health risks (Al-Khatib et al., 2010; Ajani & Olorunfemi, 2011). This leads to reduced demand for residential or commercial tenancy, loss of investor confidence, and stagnation in neighborhood development. As observed in similar market environments in Lagos, Enugu, and Kano, unmanaged waste contributes to urban decline and spatial inequality (Ogu, 2000; Nzeadibe, 2009).

Furthermore, there is a lack of empirical data quantifying the extent to which waste mismanagement depresses property values in specific commercial zones such as Ipata Market. Most existing studies either focus on general environmental health impacts or provide broad urban-level analyses, thereby ignoring market-specific conditions that influence real estate perceptions and behavior. This lack of localized evidence hampers the formulation of effective waste policy and urban planning strategies tailored to the unique socio-economic realities of commercial markets like Ipata.

Thus, there is a pressing need to investigate how current waste management practices in Ipata Market influence property values, considering variables such as environmental degradation, community attitudes, and institutional response capacity. This study fills this research gap by offering a focused case study analysis that not only assesses the severity of the issue but also suggests realistic and actionable solutions.

The challenges of improper waste management are becoming increasingly evident in urban areas, particularly in commercial hubs like the Ipata Market area in Ilorin. Despite its significance as a key economic zone, the area has been plagued by inadequate waste disposal systems, resulting in environmental degradation, health hazards, and a decline in the overall aesthetic appeal. These conditions have contributed to reduced property values in the vicinity, as potential investors, tenants, and buyers shy away from areas associated with unhygienic conditions and poor infrastructure. This situation is compounded by the lack of efficient waste collection schedules, indiscriminate dumping practices, and limited community engagement in addressing waste-related issues. Previous efforts by local authorities to manage waste in the area have proven insufficient, leaving a gap in understanding the direct relationship between these practices and their impact on property value.

### **1.3 Research Questions**

The following questions are raised to guide this study

- i. What is the current waste management practices employed in the Ipata Market area?
- ii. How do these waste management practices affect the environmental quality of the Ipata Market area?
- iii. What is the relationship between waste management practices and property value in the Ipata Market area?
- iv. What challenges are associated with implementing effective waste management systems in the Ipata Market area?
- v. What strategies can be proposed to improve waste management practices and enhance property value in the Ipata Market area?

### **1.4 Aim and Objectives**

#### **Aim**

The aim of this study is to assess the impact of waste management practices on property value in the Ipata Market area, with a view to identifying challenges and proposing strategies for improvement.

#### **Objectives**

To achieve this aim, the study seeks:

- i. To identify the current waste management practices employed in the Ipata Market area.
- ii. To examine how these waste management practices affect the environmental quality of the Ipata Market area
- iii. To analyze the relationship between waste management practices and property value in the Ipata Market area
- iv. To investigate the challenges associated with implementing effective waste management systems in the Ipata Market area
- v. To Propose strategies for improving waste management practices to enhance property value in the Ipata Market area.

### **1.5 Justification of the Study**

Several studies have explored the impact of waste management on urban environments and property values, highlighting various challenges and opportunities. For instance, Wilson et al. (2012) emphasized the role of efficient waste management systems in promoting urban cleanliness and enhancing economic activities. Similarly, Alam and Ahmade (2013) found that poor waste disposal practices significantly degrade environmental quality, which in turn affects property values. However, these studies often focus on broader

urban settings and fail to provide localized insights into commercial hubs like Ipata Market, where the interplay of waste management and property value is uniquely complex. This study seeks to address this gap by providing a detailed examination of waste management practices in Ipata Market and their specific effects on property values in the area.

Previous research has also identified key challenges such as inconsistent waste collection schedules, limited stakeholder engagement, and poor enforcement of waste management policies (Oteng-Ababio et al., 2013). While these studies have made valuable contributions, they often overlook the socio-economic and cultural factors that influence waste management practices in specific contexts. In the case of Ipata Market, factors such as high population density, the transient nature of market users, and the lack of adequate infrastructure create distinct challenges that demand tailored solutions. This study is designed to delve into these local dynamics, providing insights that can inform more effective waste management strategies for similar commercial settings.

Moreover, while past studies have recommended strategies such as community involvement and public-private partnerships (Guerrero et al., 2013), there is limited empirical evidence on how these approaches can be implemented effectively in areas like Ipata Market. This study not only examines the challenges but also explores practical and actionable solutions tailored to the unique characteristics of the market area. By filling these gaps, the research aims to contribute to the broader discourse on sustainable urban development, ensuring that waste management practices are aligned with the goal of enhancing property values and improving overall environmental quality.

## **1.6 Scope of the Study**

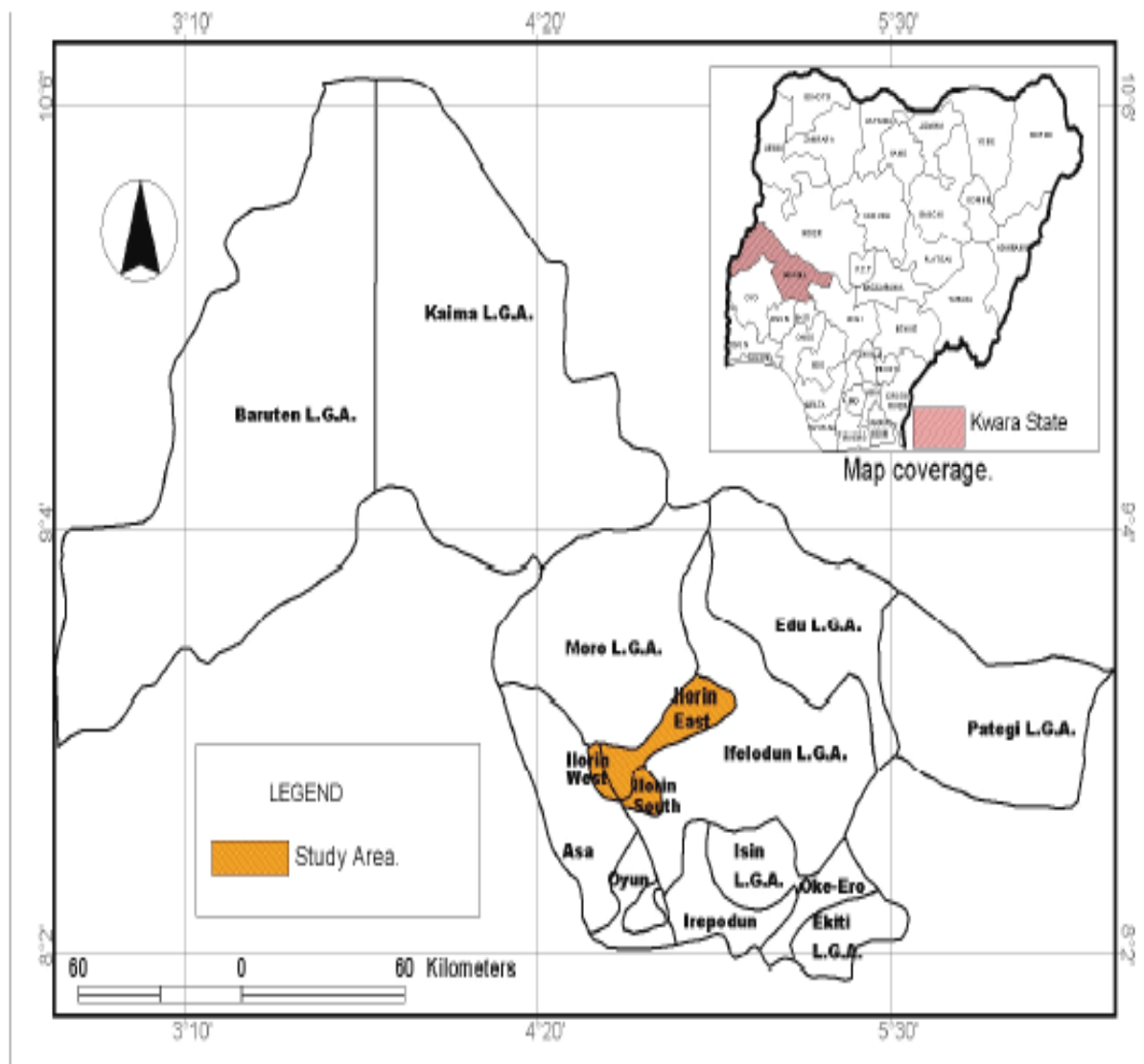
This study focuses on assessing the impact of waste management practices on property value, with particular emphasis on the Ipata Market area in Ilorin, Kwara State, Nigeria. Conceptually, the study examines the current waste management practices, their effects on environmental quality, their relationship with property value, the challenges in implementing effective systems, and possible strategies for improvement. Geographically, it is confined to the Ipata Market area, considering its significance as a commercial hub within Ilorin. The study spans a time frame of five years (2019–2024) to capture trends and patterns in waste management practices and property value changes. Methodologically, the research adopts research design of the survey type using questionnaire as instrument for data collection. Statistically, the study employs descriptive statistical analyses to evaluate the relationship between waste management practices and property value, ensuring comprehensive and reliable findings.

## **1.7 Study Area**

The study area for this research is the Ipata Market area, a prominent commercial hub located in Ilorin, Kwara State, Nigeria. Ipata Market is well-known for its diverse trading activities, including the sale of agricultural produce, livestock, and household goods, making it a vital economic center within the city. The market's strategic location in Ilorin attracts traders and buyers from different parts of the state and beyond, contributing to its bustling atmosphere and high population density.

Geographically, the Ipata Market area is situated in the heart of Ilorin, surrounded by residential neighborhoods and other commercial activities. This proximity to residential zones creates a unique dynamic between market operations and the surrounding properties, with waste management practices playing a significant role in shaping the area's environmental and economic conditions. The market generates substantial waste daily, comprising organic and inorganic materials, which, if not properly managed, can adversely affect the quality of life and property values in the vicinity.

The choice of Ipata Market as the study area is driven by its socio-economic importance and the challenges it faces concerning waste management. The area's characteristics, including its vibrant trade activities, high waste generation, and its location within a growing urban center, make it an ideal case for examining the relationship between waste management practices and property value. This study aims to provide insights that will inform effective waste management strategies tailored to similar commercial hubs.



**Fig 1: Locational Map of Kwara State Showing Ilorin**

## 1.8 Definitions of Terms

**Waste Management:** This refers to the processes involved in the collection, transportation, treatment, and disposal of waste materials in a manner that minimizes their impact on human health and the environment. It includes practices such as recycling, composting, and landfilling (Hoornweg & Bhada-Tata, 2012).

**Property Value:** This is the monetary worth assigned to real estate, determined by factors such as location, market conditions, and environmental quality. Property value reflects the desirability and utility of land or buildings in a specific area (Al-Khatib et al., 2010).

**Environmental Quality:** This term denotes the state of the physical environment, including air, water, and land, and is influenced by factors such as pollution, waste management, and urban planning. High environmental quality contributes to improved living standards and economic opportunities (Wilson et al., 2012).

**Indiscriminate Dumping:** This refers to the improper disposal of waste in unauthorized locations, such as roadsides, open spaces, or water bodies, leading to environmental and health hazards (Alam & Ahmade, 2013).

**Recycling:** Recycling is the process of converting waste materials into new products to prevent waste of potentially useful resources, reduce consumption of raw materials, and minimize environmental impact (Guerrero et al., 2013).

**Urban Commercial Hub:** This term describes a concentrated area of economic activities in a city, typically characterized by markets, shopping centers, and high population density, where trade and commerce thrive (Oteng-Ababio et al., 2013).

**Sustainable Development:** This refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It includes managing natural resources and infrastructure in an environmentally responsible and economically viable manner (Brundtland Report, 1987).

**Waste Disposal Systems:** These are infrastructures and processes designed to handle waste, including collection, transportation, treatment, and final disposal in an environmentally friendly manner (Hoornweg & Bhada-Tata, 2012).

**Drainage Systems:** Structures or facilities designed to manage the flow of water, particularly during rainfall, to prevent flooding and maintain urban sanitation. Improperly managed drainage systems are often clogged by waste, exacerbating environmental problems (Wilson et al., 2015).

**Public-Private Partnership (PPP):** This is a collaborative arrangement between government agencies and private sector entities aimed at delivering public services or infrastructure projects, such as waste management systems, more efficiently (Guerrero et al., 2013).

## **CHAPTER TWO**

### **LITERATURE REVIEW, CONCEPTUAL REVIEW AND THEORETICAL REVIEW**

#### **2.0 Introduction**

This chapter reviews existing literature relevant to the study of waste management and its impact on property values, particularly within urban commercial hubs. It provides the conceptual and theoretical foundations necessary to understand the interactions between environmental management and real estate economics. As urban centers expand, the need for effective waste management becomes more pressing not only for environmental sustainability but also for economic development and livability. Numerous studies have emphasized that poor waste management leads to land degradation, pollution, and a reduction in the desirability and value of nearby properties (Al-Khatib et al., 2010; Alam & Ahmade, 2013).

Ipata Market, being a bustling commercial zone in Ilorin, represents a microcosm of broader urban waste challenges in Nigeria. While studies exist on waste management generally (Wilson et al., 2012; Guerrero et al., 2013), few have directly explored the effects of such practices on real estate value in localized market environments. This chapter begins by establishing the conceptual framework of the study and then introduces the theoretical models guiding the research.

This chapter reviews relevant literature that forms the foundation for the study. It is organized into conceptual review, theoretical framework, empirical review, and a summary in tabular form.

#### **2.1 Conceptual Review**

##### **2.1.1 Concept of Waste Management**

Waste management refers to the systematic administration of activities that involve the collection, transportation, processing, recycling, and disposal of waste materials, with the aim of reducing their adverse impact on human health and the environment (Hoorweg & Bhada-Tata, 2012). It is a critical component of sustainable urban development, especially in densely populated and economically active areas like commercial markets, where large volumes of waste are generated daily.

Waste can be classified into various categories, including domestic, industrial, agricultural, biomedical, and commercial waste. In the context of urban commercial zones such as Ipata Market, the waste is predominantly organic (from food items) and packaging materials like nylon, plastic, and paper (Adewumi et al., 2005). The accumulation of such waste without timely and proper disposal leads to environmental degradation, air and water

pollution, and public health risks such as outbreaks of cholera and malaria (Oteng-Ababio et al., 2013).

Effective waste management involves a combination of administrative, financial, legal, engineering, and planning activities. It requires coordination among stakeholders—governments, private waste contractors, traders, and residents—to ensure the safe and efficient handling of waste materials. According to Wilson et al. (2012), successful waste management systems are built on three pillars: collection efficiency, disposal infrastructure, and public participation.

In developing countries like Nigeria, challenges such as poor infrastructure, lack of awareness, inadequate funding, and weak regulatory enforcement hinder efficient waste management (Guerrero et al., 2013). In Ilorin, these problems are visible in areas like Ipata Market, where indiscriminate dumping, irregular collection schedules, and open waste heaps are common.

Modern waste management strategies emphasize the waste hierarchy: Reduce, Reuse, Recycle (3Rs). This approach promotes minimizing waste at the source, reusing materials where possible, and converting waste into reusable resources. Innovations like waste-to-energy technologies, composting, and public-private partnerships are being adopted globally to address waste challenges sustainably (UNEP, 2016).

In sum, waste management is not just about disposing of refuse it is a vital urban service that influences public health, environmental sustainability, and economic viability, including the value of properties. Poor waste practices degrade the physical environment, reduce livability, and ultimately lead to decreased demand and lower prices for nearby real estate (Al-Khatib et al., 2010; Afon, 2007).

### **2.1.2 Types of Waste and Sources**

Waste can be broadly defined as any material that is discarded after primary use or is considered no longer useful by the owner. Understanding the types of waste and their sources is essential for designing effective waste management systems, especially in urban commercial centers such as Ipata Market, where a wide variety of waste is generated.

#### **A. Types of Waste**

1. **Solid Waste:** This includes all non-liquid waste materials. Solid waste is the most visible form of waste in urban environments and can be further categorized into:
  - **Municipal Solid Waste (MSW):** Generated from households, offices, markets, and streets. It includes food scraps, paper, plastics, and packaging materials (Hoornweg & Bhada-Tata, 2012).

- **Commercial Waste:** Produced by businesses such as shops, restaurants, and markets. This is the dominant waste type in places like Ipata Market.
  - **Industrial Waste:** Generated from manufacturing and processing industries. Though not prominent in market areas, small-scale informal industries may contribute.
  - **Construction and Demolition Waste:** Includes bricks, concrete, wood, and scrap metal from building activities.
  - **Electronic Waste (E-waste):** Discarded electronic appliances such as phones, computers, and batteries.
2. **Liquid Waste:** Includes wastewater from households, industries, and stormwater runoff. Improper disposal of liquid waste can lead to groundwater contamination and blockages in drainage systems (Adewumi et al., 2005).
  3. **Hazardous Waste:** Waste that poses a threat to human health or the environment. It includes medical waste, chemical waste, batteries, pesticides, and expired products. In market environments, expired chemicals, cosmetics, and unsold pharmaceuticals may fall into this category (Guerrero et al., 2013).
  4. **Organic Waste:** Composed of biodegradable materials such as food waste, fruit peels, vegetable remains, and animal droppings. This is highly prevalent in food markets like Ipata and contributes significantly to odor and pest problems when left unmanaged (Oteng-Ababio et al., 2013).
  5. **Inert Waste:** Waste materials those are not biologically or chemically reactive, such as sand, concrete, and certain types of debris. Though less harmful, they contribute to volume and clutter.

## **B. Sources of Waste**

1. **Residential Sources:** Generated from households in the form of kitchen waste, plastics, paper, old clothes, and packaging materials.
2. **Commercial Sources:** Includes waste from shops, markets, restaurants, hotels, and offices. In Ipata Market, this is the largest contributor of daily waste, including food remains, wrappers, cartons, and nylon.
3. **Institutional Sources:** Schools, hospitals, religious centers, and government offices also contribute to waste generation. Hospitals and medical waste, while schools and offices generate paper waste.

4. **Industrial Sources:** Factories and production units generate both solid and liquid industrial waste. Though not dominant in the study area, some cottage industries may contribute.
5. **Agricultural Sources:** Waste from farms includes crop residues, animal manure, and agrochemicals. Some of this waste enters the market through the sale and processing of farm produce.
6. **Street and Public Space Sources:** Waste generated from public places such as parks, bus terminals, and open spaces mostly plastics, food wrappers, and disposable containers.

### 2.1.3 Property Value

Property value refers to the monetary worth of real estate in the market, determined by a combination of physical, environmental, economic, and legal factors. It reflects the price a willing buyer is prepared to pay and a willing seller is prepared to accept under open market conditions (Olusegun, 2003). In both residential and commercial settings, property value is influenced by variables such as location, accessibility, infrastructure, land use, and neighborhood characteristics including environmental quality.

Real estate valuation is not only important for buyers and sellers but also for investors, tax authorities, developers, and urban planners. Property value determines the viability of investments, the potential for income generation (via rent), and the overall desirability of an area (Millington, 2000). In urban centers, any factor that degrades the physical environment such as pollution, congestion, or improper waste disposal can negatively affect property value. There are various types of property values depending on the context in which they are used:

- **Market Value:** The estimated amount for which a property should exchange on the date of valuation between a willing buyer and seller. It is the most commonly referenced type of value in real estate transactions.
- **Rental Value:** The amount a property can command as rent over a period. In commercial areas like Ipata Market, rental value is critical as it influences both tenancy rates and investment decisions.
- **Investment Value:** The worth of a property to a particular investor based on their investment criteria, including risk tolerance and expected return.
- **Forced Sale Value:** The price a property would fetch under urgent sale conditions, typically lower than market value.

According to the Hedonic Pricing Model, property value is a function of several attributes including structural features (e.g., building condition), locational features (e.g.,

proximity to roads, markets), and environmental features (e.g., waste management, noise levels, cleanliness) (Rosen, 1974). This means that well-managed urban environments contribute positively to property appreciation, while mismanaged ones, such as areas affected by waste accumulation, contribute to depreciation.

In the case of Ipata Market, poor waste disposal practices such as open dumping, irregular collection, and poor sanitation affect the physical appearance and environmental quality of the area. These conditions lead to reduced demand for nearby residential or commercial property, pushing down their value (Afon, 2007; Al-Khatib et al., 2010).

#### **2.1.4 Relationship between Waste Management and Property Value**

The relationship between waste management and property value is both direct and significant, particularly in urban and commercial settings. Effective waste management contributes to a clean, safe, and aesthetically appealing environment, which enhances the desirability and economic value of real estate. Conversely, poor waste management practices lead to environmental degradation, health hazards, and visual blight factors that negatively affect property demand and pricing (Al-Khatib et al., 2010; Oteng-Ababio et al., 2013).

According to the Environmental Externalities Theory, properties are sensitive to external environmental factors, especially those that impose costs or reduce utility for occupants. Improper waste disposal such as open dumping, overflowing bins, and burning of refuse creates negative externalities like bad odor, noise, blocked drainage, and increased presence of rodents or insects. These conditions reduce the attractiveness of an area and, consequently, the market and rental value of nearby properties (Callan & Thomas, 2013).

Furthermore, the Hedonic Pricing Theory supports the notion that environmental quality is a core attribute influencing property value. In this model, characteristics such as proximity to a waste dump, level of cleanliness, and regularity of waste collection can increase or decrease a property's market value. Properties in clean, well-managed neighborhoods tend to attract higher prices than those in areas with poor sanitation and waste accumulation (Rosen, 1974).

In densely populated market areas like Ipata Market in Ilorin, the waste generated daily is substantial, comprising mostly organic and packaging waste. When not managed efficiently, this waste spills into public spaces, clogs gutters, and attracts disease vectors. The resultant environmental deterioration leads to a decline in property desirability. Landlords in such environments may struggle to attract tenants or may be forced to reduce rent due to low demand and poor living or business conditions (Afon, 2007; Nubi, 2002).

Empirical studies have reinforced this relationship. For instance, Adewumi et al. (2005) found that proximity to unmanaged waste sites in Nigerian cities significantly lowers both residential and commercial property values. Similarly, Wilson et al. (2012) report that urban cleanliness is a major consideration for investors and buyers, particularly in retail and hospitality sectors.

Waste management practices are not merely a public health concern but also a key determinant of real estate value. Sustainable and efficient waste management systems enhance the attractiveness of urban areas, promote investment, and help sustain or increase property values. On the other hand, poor waste practices contribute to urban blight, tenant turnover, and capital depreciation making the relationship between the two an important area of urban research and policy intervention.

## **2.2 Theoretical Review**

### **2.2.1 Environmental Value Theory**

Environmental Value Theory posits that the quality of the surrounding environment significantly contributes to the perceived and actual value of land and property. The theory emphasizes that environmental conditions such as cleanliness, pollution levels, noise, waste management, and green space are not just aesthetic concerns but economic variables that influence market demand and investment behavior (Freeman, 2003).

According to this theory, people tend to assign higher value to properties located in areas with better environmental conditions and lower value to those in degraded or polluted areas. This valuation is often reflected in property prices, rental rates, and occupancy levels. In particular, negative environmental features such as proximity to refuse dumps, open sewage, or visibly uncollected waste lead to a decline in real estate desirability, resulting in reduced property values (Chin & Foong, 2006; Callan & Thomas, 2013).

Environmental value is closely linked to the concept of externalities. In urban environments, poor waste management produces negative externalities that affect both residents and property owners, including bad odors, health risks, and visual pollution. These impacts are not always borne by those responsible for the poor conditions but are passed on to neighbors and future buyers, leading to market distortions and reduced land utility (Ogu, 2000).

In the context of Ipata Market, poor waste disposal practices, such as open dumping, irregular collection, and blocked drainage, diminish the environmental quality of the area. These conditions can cause potential buyers or tenants to perceive the location as undesirable, thereby reducing the willingness to pay for properties in that vicinity. In such cases, even if a

property has strong structural features, its value may be undermined by external environmental conditions.

Studies have shown that improving environmental quality through better waste management, drainage, and sanitation can significantly increase the economic value of urban land. For instance, Ajani and Olorunfemi (2011) observed that real estate values in cleaner neighborhoods in Ibadan and Lagos were consistently higher than those in areas with unmanaged waste. This reinforces the core claim of the Environmental Value Theory—that the state of the physical environment is not just a public health matter but a key determinant of urban land economics.

Environmental Value Theory provides a solid framework for understanding how poor waste management in areas like Ipata Market negatively affects property values. It highlights the need for integrated environmental planning and waste infrastructure as central to real estate development and urban sustainability.

### **2.2.2 Urban Land Value Theory**

Urban Land Value Theory explains how various factors influence the value of land and property within urban settings. At its core, the theory suggests that land value is determined by its location, accessibility, land use, and surrounding environmental conditions. The theory is grounded in the classical and neo-classical economic models of urban development, particularly the works of *Alonso (1964)* and *Von Thünen*, who emphasized that proximity to city centers and areas of high economic activity increases land value.

In modern urban environments, land value is also significantly affected by environmental quality, infrastructural development, zoning laws, and public services especially waste management. Well-managed urban areas with efficient waste collection systems, drainage infrastructure, and clean surroundings tend to experience increased demand for land and higher property values (Ratcliff, 1972; Millington, 2000).

On the other hand, when waste management is poor as in the case of open dumping, irregular collection, and clogged drains land becomes less attractive to buyers and investors. The resulting negative perception of such areas leads to depreciation in property value, reduced rental income, and sometimes abandonment of properties altogether. In high-density commercial zones like Ipata Market, this effect is particularly strong, as environmental cleanliness is closely tied to business visibility, accessibility, and customer attraction. The theory also highlights the role of urban land competition. In cities, different land uses (residential, commercial, industrial) compete for location advantages. Areas with good sanitation, waste control, and aesthetic appeal tend to attract higher-value uses. Conversely,

when environmental conditions deteriorate due to unmanaged waste, high-value uses are displaced, and land becomes underutilized or devalued.

Several empirical studies support this view. For example, Afon (2007) found that the proximity of waste dumps in Nigerian urban centers correlated negatively with property values. Similarly, Ogu (2000) and Omole (2010) report that poor waste conditions in urban markets reduce the commercial viability of surrounding buildings, leading to lower land prices and rental income. Urban Land Value Theory provides a useful lens to understand how waste management practices in Ipata Market influence the economic value of surrounding properties. It emphasizes the importance of environmental and infrastructural services as key determinants of land value in urban systems.

### **2.2.3 Broken Windows Theory**

Broken Windows Theory, introduced by *James Q. Wilson and George L. Kelling* in 1982, posits that visible signs of disorder and neglect in an environment such as broken windows, litter, graffiti, and uncollected waste encourage further disorder and antisocial behavior. The theory suggests that when urban areas are left in a state of neglect, it sends a signal that the environment is unmonitored and uncared for, thereby reducing community standards and inviting further deterioration.

The central idea is that small acts of neglect, if not promptly addressed, create an atmosphere of lawlessness and decline, which eventually leads to more severe social and economic problems. While the theory was originally framed around policing and crime prevention, its principles have since been applied to urban planning, property management, and environmental psychology (Kelling & Coles, 1996; Sampson & Raudenbush, 1999).

In the context of waste management, the theory implies that uncollected garbage, overflowing bins, and illegal dumping are not just environmental concerns—they symbolically indicate a breakdown in public order and governance. This perception leads to a reduced sense of safety, discourages investment, and undermines the desirability of living or doing business in the area. Consequently, property values decline as residents and commercial tenants seek better-managed environments (Taylor, 2001).

Applying this to Ipata Market, the presence of visible waste, clogged drainage, and poor sanitation can be interpreted as signs of neglect. Traders, property owners, and customers may perceive the environment as deteriorating or insecure. This may cause businesses to relocate, reduce foot traffic, and lower demand for nearby properties. Over time, this chain of perception and behavior results in economic decline and lower property valuations.

Numerous studies support the claims of Broken Windows Theory in urban settings. For instance, Afon (2007) and Adewumi et al. (2005) show that poorly managed waste systems in Nigerian markets are linked to declining neighborhood standards and property values. Wilson et al. (2012) also found that cleanliness and environmental maintenance were directly tied to public perception and investment patterns in commercial districts. Broken Windows Theory highlights the symbolic and psychological effects of environmental disorder. It underscores the importance of routine maintenance, active waste management, and community engagement in preserving not only environmental quality but also economic value. In urban spaces like Ipata Market, tackling visible waste is essential not just for hygiene but also for maintaining property desirability and preventing urban decay.

## **2.3 Empirical Review**

### **2.3.1 Global Perspectives**

Globally, research has shown a strong link between effective waste management and improved environmental and economic outcomes. Wilson et al. (2015) found that integrated and sustainable waste management systems contribute significantly to environmental quality and lead to increased land values in several urban centers. In the same vein, Guerrero et al. (2013) emphasized the importance of community participation and institutional backing as critical elements for achieving sustainable waste management practices across various countries. These studies confirm that comprehensive waste strategies are essential not only for public health but also for maintaining property desirability and market stability.

### **2.3.2 Regional and Local Studies**

At the regional and local levels, studies conducted in Nigeria and other parts of West Africa highlight the challenges of urban waste control. Adejobi and Olorunda (2012), in their study of Ilorin metropolis, observed that many urban areas experience irregular waste collection and poor disposal infrastructure, leading to widespread environmental degradation. Similarly, Oteng-Ababio et al. (2013) noted that commercial hubs across West Africa, including Nigerian markets, frequently suffer from indiscriminate dumping, largely due to weak enforcement of sanitation laws and limited institutional capacity. These findings illustrate the persistent gap between waste generation and management efficiency in the region.

### **2.3.3 Waste Management Impact on Property**

Empirical evidence also supports a direct correlation between waste management practices and property values. Al-Khatib et al. (2010), through a study conducted in Palestine, found that properties located near unmanaged waste sites experienced significant reductions

in value due to environmental hazards and health risks. A similar pattern was observed by Oni (2009) in Lagos, where potential buyers and investors tend to avoid areas plagued by visible waste accumulation, citing concerns over aesthetics, pollution, and disease. These findings reinforce the idea that poor waste conditions act as a negative externality that suppresses land and property value.

### 2.3.4 Waste Management Challenges

Despite growing awareness, effective waste management in many urban areas continues to face several obstacles. Common barriers include inadequate funding, insufficient infrastructure, low public participation, and corruption within managing institutions. Alam and Ahmade (2013) highlighted that the success of waste handling systems is often dependent on strong public-private partnerships and active community education. These elements are vital for improving collection efficiency, minimizing illegal dumping, and encouraging long-term behavioral change among urban residents.

## 2.4 Summary of Literature Review

Author(s)	Year	Focus of Study	Key Findings
Wilson et al.	2015	Integrated waste management in urban areas	Improved environmental quality and increased land/property values.
Guerrero et al.	2013	Role of community and institutional support in waste management	Active involvement enhances system efficiency and sustainability.
Adejobi & Olorunda	2012	Waste collection practices in Ilorin metropolis	Poor infrastructure and irregular collection cause environmental decline.
Oteng-Ababio et al.	2013	Sanitation issues in West African commercial hubs	Weak enforcement of sanitation laws leads to indiscriminate dumping.
Al-Khatib et al.	2010	Effect of unmanaged waste sites on real estate in Palestine	Properties near waste sites experience significant value depreciation.
Oni	2009	Impact of visible waste on property preference in Lagos	Waste accumulation reduces property demand and attractiveness.
Alam & Ahmade	2013	Urban waste challenges in developing countries	Public-private partnerships and education improve waste handling.
Afon	2007	Environmental sanitation and real estate values in Nigeria	Poor waste practices reduce neighborhood quality and property value.

Bhide & Shekdar	1998	Waste disposal impacts in Indian cities	Proximity to dumpsites leads to 15–30% drop in property prices.
Wang et al.	2019	Waste-to-energy projects and urban land values in China	Technologically advanced systems increase public acceptance and raise property values nearby.
Naudé	2010	Urban renewal and waste management in South Africa	Cleaner environments attract businesses and enhance property leasing.
World Bank	2018	Global cost of unmanaged urban waste	Poor waste systems result in losses across real estate, tourism, and health sectors.
Author(s)	Focus Area	Key Findings	Relevance to Current Study
Hoornweg & Bhada-Tata (2012)	Global urban waste challenges	Highlighted structured waste handling as vital to public health	Establishes waste management importance
Alam & Ahmade (2013)	Waste practices in South Asia	Found strong link between poor waste handling and reduced property value	Confirms urban sanitation/property value nexus
Adejobi & Olorunda (2012)	Ilorin city waste management	Identified irregular collection and insufficient infrastructure	Matches challenges observed in Ipata Market
Oteng-Ababio et al. (2013)	Urban waste in African markets	Urged stronger community participation and enforcement	Supports localized stakeholder engagement
Wilson et al. (2015)	Waste innovation and planning	Demonstrated how innovation boosts environmental quality and property values	Reinforces importance of strategic intervention
Oni (2009)	Lagos property market analysis	Environmental disamenities reduce market demand and price	Reinforces environmental impact on valuation
Al-Khatib et al. (2010)	Property and waste proximity in Palestine	Proximity to waste dumps led to lower property values	Validates international perspective

Sources: Field Survey, 2025

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter outlines the research methods and procedures adopted for the study. It describes the research design, data sources, target population, sampling techniques, data collection instruments, and methods of data analysis. The chosen methodology is structured to provide reliable and valid findings on the relationship between waste management practices and property values within the Ipata Market area in Ilorin, Kwara State.

#### **3.1 Research Design**

The study adopted a descriptive survey design. This design is appropriate for assessing the current conditions of waste management and its influence on property value. It allows for the collection of both quantitative and qualitative data from a cross-section of respondents, including property owners, tenants, traders, and officials of waste management agencies. The design is suitable because it supports the use of structured questionnaires, interviews, and observation to capture factual information and opinions on the subject matter.

#### **3.2 Sources of Data**

The study employed **both primary and secondary sources of data**:

- **Primary Data** was obtained through the administration of structured questionnaires and direct field observation. These focused on waste management practices, frequency of collection, location of waste dumps, sanitation awareness, and respondents' perceptions of property values.
- **Secondary Data** was gathered from published books, journals, official reports from the Kwara State Environmental Protection Agency (KWEPA), Ilorin East Local Government, and previous academic works related to urban waste management and property valuation. These materials provided background information and supported the interpretation of primary findings.

#### **3.3 Target Population**

The target population for this study included 25 property owners, 15 tenants, 50 market traders, and 10 waste management officials operating or residing within and around the Ipata Market area in Ilorin. This population was selected because they are directly affected by the state of waste management and are best positioned to provide relevant data on property use, pricing, and environmental challenges in the area.

### 3.4 Sampling Frame

The sampling frame consisted of:

- The list of 50 registered traders and shop owners within Ipata Market (sourced from the market association),
- 25 Residential property owners within a 500-meter radius of the market,
- 15 Tenants
- 10 waste management officials from KWEPA and local government environmental units.

This provided a basis for drawing a representative sample of stakeholders involved in or affected by waste management in the study area.

### 3.5 Sample Size

The sample size was determined using Yamane's formula for calculating sample size from a known population:

$$n = N / (1 + N (e)^2)$$

Where:

- $n$  = sample size
- $N$  = population size
- $e$  = margin of error (0.05 for 95% confidence level)

Assuming a population of approximately 200 respondents (based on preliminary records from the market and residential areas), the sample size was recalculated as follows:

$$n = 400 / (1 + 200(0.05)^2) = 200 / 2 = 100$$

However, to ensure manageability within the study's timeframe and resource constraints, the sample size was reduced to 100 respondents while maintaining proportional representation across stakeholder groups.

### 3.6 Sampling Procedure

A stratified random sampling technique was used to ensure that each category of respondent (i.e., traders, property owners, tenants, and waste officials) was adequately represented. The sample was stratified into four groups:

**Traders** – 50 respondents (50%)

**Residential Property Owners** – 25 respondents (25%)

**Tenants** – 15 respondents (15%)

**Environmental Officials (KWEPA/Local Govt)** – 10 respondents (10%)

Within each stratum, simple random sampling was employed to select individuals who participated in the survey. This approach enhanced the representativeness and reliability of the data collected.

### **3.7 Method of Data Collection**

Structured questionnaires were the primary instrument used for data collection. The questionnaire was divided into sections covering demographic information, awareness and attitudes toward waste management, perceived environmental quality, and property value trends.

In addition:

- Key Informant Interviews (KIIs) were conducted with selected waste management officials to understand institutional practices and challenges.
- Field observations were conducted to assess the physical condition of waste facilities, cleanliness of the market environment, and proximity of refuse dumps to residential and commercial properties.

### **3.8 Methods of Data Analysis**

The data collected were analyzed using both descriptive and inferential statistical methods:

- Descriptive statistics such as frequency tables, percentages, and charts were used to summarize the data and describe the socio-demographic characteristics of respondents and the waste management conditions in the study area.
- Inferential statistics such as Chi-square tests and Spearman's rank correlation were used to test hypotheses and determine the relationship between waste management practices and property values.
- The statistical software SPSS (Statistical Package for Social Sciences) was employed for data coding, entry, and analysis.

### 3.9 Summary of Research Methodology

<b>Component</b>	<b>Description</b>
<b>Research Design</b>	Descriptive survey design
<b>Data Sources</b>	- Primary: Questionnaires, interviews, field observations - Secondary: Journals, books, government reports
<b>Target Population</b>	Traders, property owners, tenants, and waste management officials in Ipata Market area
<b>Sampling Technique</b>	Stratified random sampling
<b>Sample Size</b>	100 respondents
<b>Sampling Distribution</b>	Traders (50), Property Owners (25), Tenants (15), Environmental Officials (10)
<b>Data Collection Methods</b>	Structured questionnaires, key informant interviews, field observation
<b>Data Analysis Techniques</b>	Descriptive statistics (percentages, tables), Inferential statistics (Chi-square, Spearman's rank correlation)
<b>Software Used</b>	SPSS (Statistical Package for Social Sciences)

Sources: Field Survey, 2025

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

This chapter presents their analysis and interpretation of data collected through structured questionnaires administered to traders, tenants, waste managers, and visitors at the pattern market area in Ilorin. The MS to access the effect of waste management on property value, focusing on risk management practice, environmental quality on property market response. The data we analyzed using frequency counts and percentage, with the result presented in table for clarity and better understanding.

#### 4.2 Data Presentation

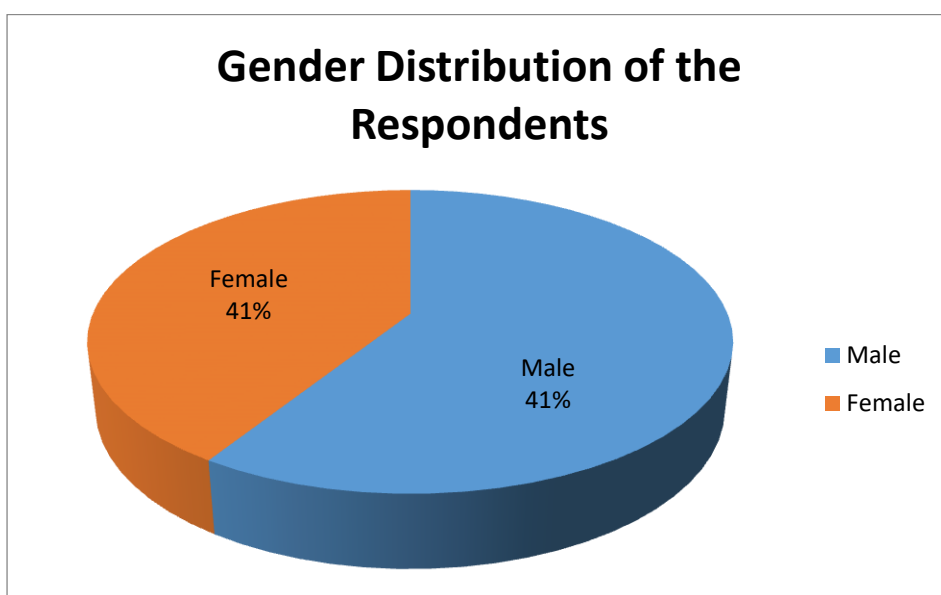
**Table 4.2.1: Gender Distribution of the Respondents.**

Gender	Frequency	Percentage
Male	59	59%
Female	41	41
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Researcher's Fieldwork, 2025.

Table 4.2.1 shows the gender distribution of respondents. Male participants were slightly more represented (59%) compared to female (41%). This indicates a gender-inclusive study with a slightly higher participation from men, which may reflect gender engagement in market-based commercial activities.

**Figure 4.2.1: Gender Distribution of the Respondents.**



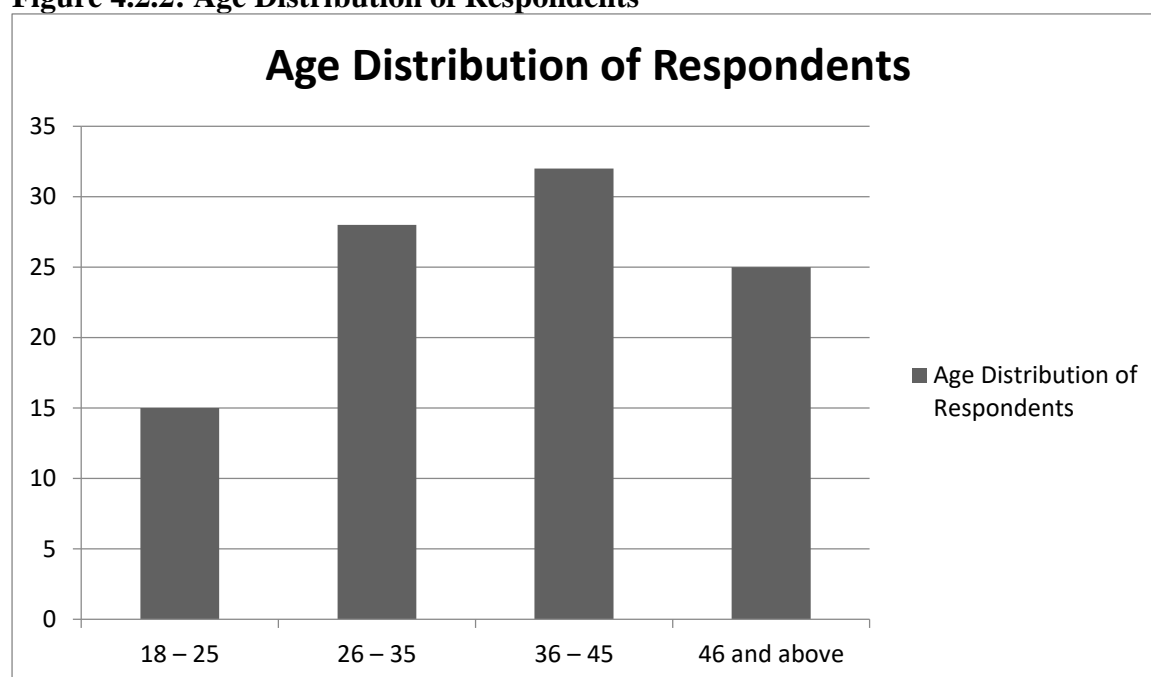
**Table 4.2.2: Age Distribution of Respondents**

Age Bracket	Frequency	Percentage
18 – 25	15	15
26 – 35	28	28
36 – 45	32	32
46 and above	25	25
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Researcher’s Fieldwork, 2025.

The data in Table 4.2.2 shows that respondents aged 36 – 45 formed the largest group (32%) followed by those aged 26 – 35 (28%). The distribution suggests that waste management and property use issues are mostly discussed among adults in their productive years, which is vital for policy engagement.

**Figure 4.2.2: Age Distribution of Respondents**



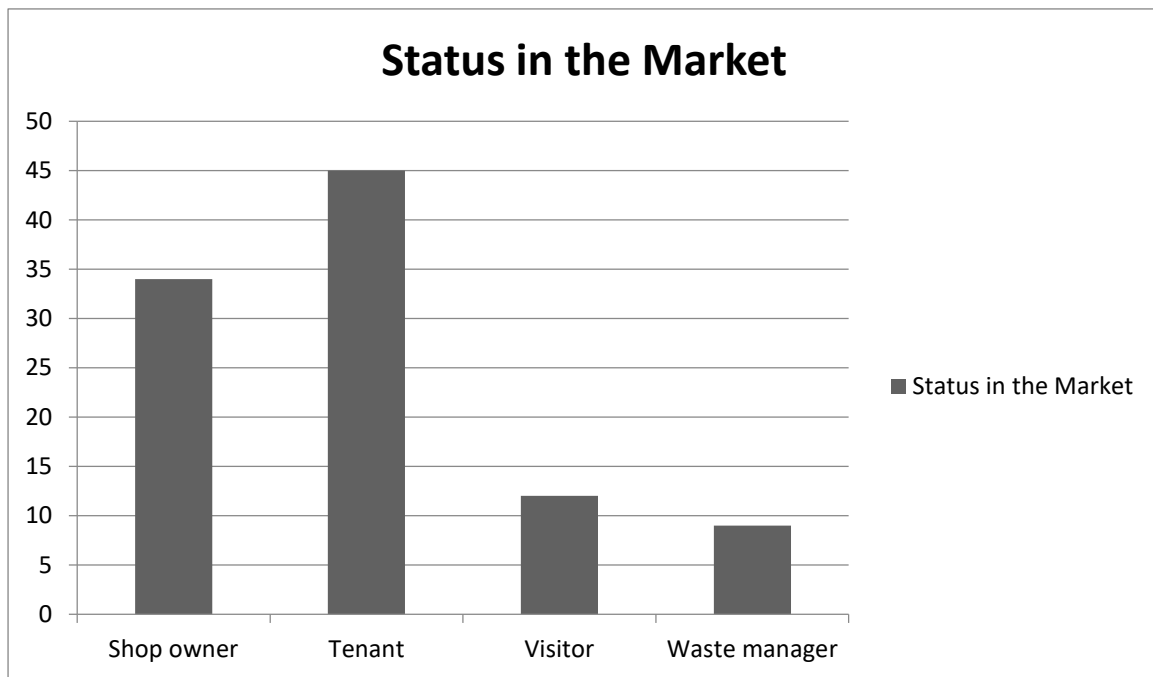
**Table 4.2.3: Status in the Market**

Status	Frequency	Percentage
Shop owner	34	34
Tenant	45	45
Visitor	12	12
Waste manager	9	9
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Researcher's Fieldwork, 2025.

Table 4.2.3 shows that the highest proportion of respondents were tenants (45%) followed by shop owners (34%). This reflects the importance of tenant experiences in evaluating waste management impacts on market activities and property value.

**Figure 4.2.3: Status in the Market**



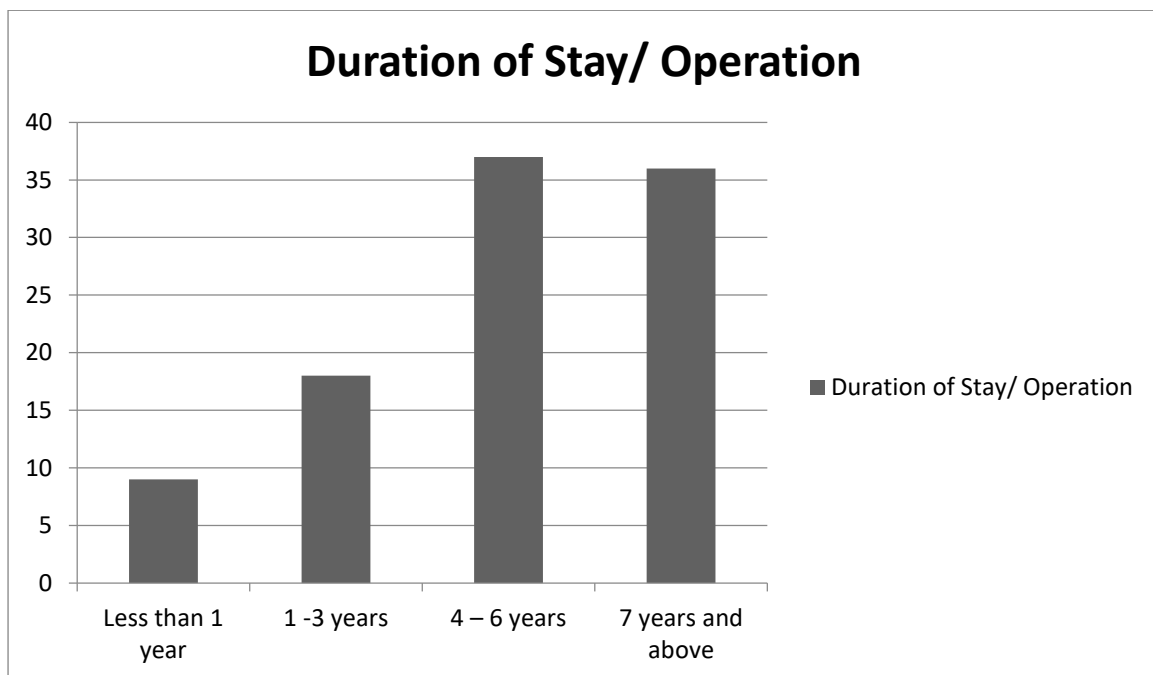
**Table 4.2.4: Duration of Stay/ Operation**

<b>Duration</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 1 year	9	9
1 -3 years	18	18
4 – 6 years	37	37
7 years and above	36	36
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Researcher’s Fieldwork, 2025.

Table 4.2.4 shows that majority of respondents (73%) have operated in the area for 4 years or more. This long-term exposure gives credibility to their responses concerning the impact of waste management on property values.

**Figure 4.2.4: Duration of Stay/ Operation**



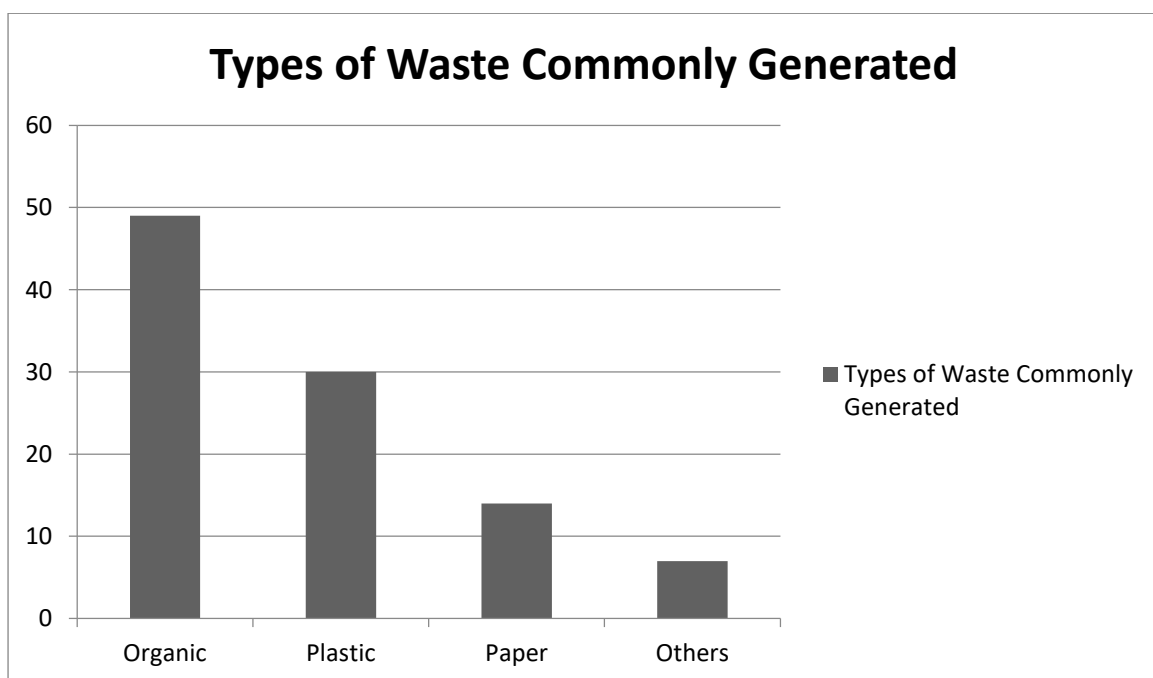
**Table 4.2.5: Types of Waste Commonly Generated**

Waste Type	Frequency	Percentage
Organic	49	49
Plastic	30	30
Paper	14	14
Others	7	7
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.5 shows that organic waste (49%) dominates waste generation in the market, followed by plastic (30%). The predominance of biodegradable waste underscores the need for environmentally friendly waste handling practices.

**Figure 4.2.5: Types of Waste Commonly Generated**



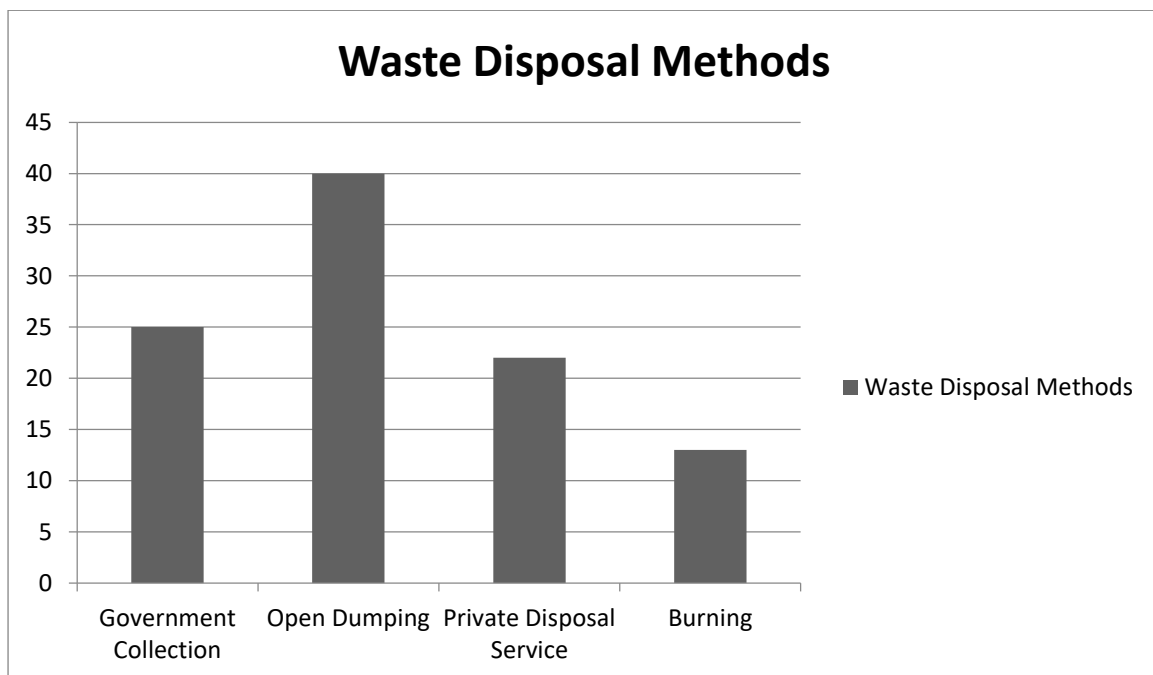
**Table 4.2.6: Waste Disposal Methods**

Methods	Frequency	Percentage
Government Collection	25	25
Open Dumping	40	40
Private Disposal Service	22	22
Burning	13	13
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.6 shows that open dumping (40%) is the most common waste disposal method indicating poor control mechanisms. This trend may lead to environmental degradation and reduced property desirability.

**Figure 4.2.6: Waste Disposal Methods**



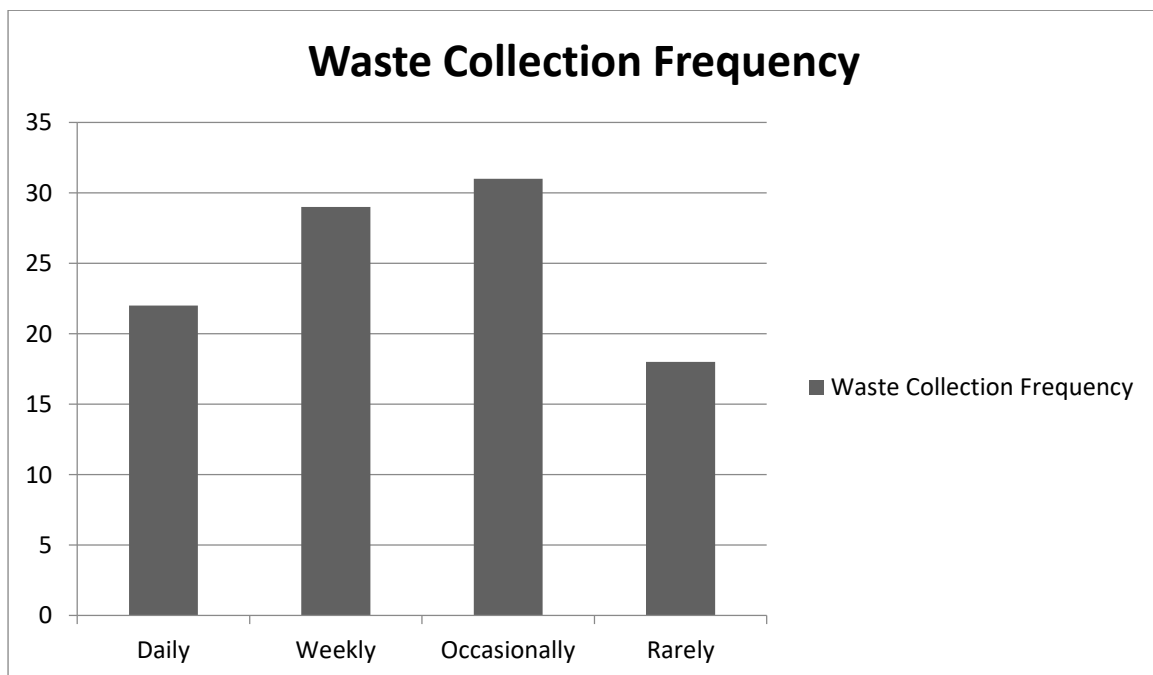
**Table 4.2.7: Waste Collection Frequency**

Methods	Frequency	Percentage
Daily	22	22
Weekly	29	29
Occasionally	31	31
Rarely	18	18
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.7 shows that only 22% enjoy daily waste collection, while 49% receive waste collection occasionally or rarely. This suggests poor waste management systems which could devalue property appeal.

**Figure 4.2.7: Waste Collection Frequency**



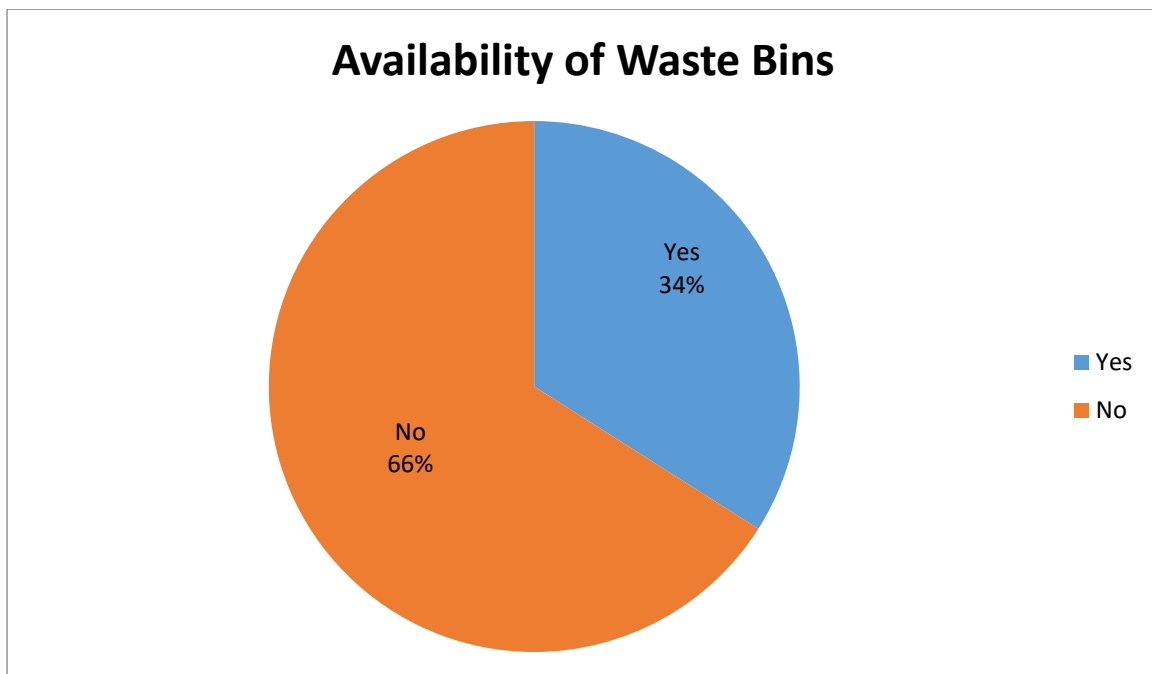
**Table 4.2.8: Availability of Waste Bins**

Response	Frequency	Percentage
Yes	34	34
No	66	66
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.8 shows that majority of the respondents (66%) indicated absence of designated waste bins. The lack of infrastructure is a critical gap affecting environmental quality and property valuation.

**Figure 4.2.8: Availability of Waste Bins**



**Table 4.2.9: Waste Management Responsibility**

Responsible Party	Frequency	Percentage
Market Association	28	28
Local Government	30	30
Individuals	22	22
Private Collectors	20	20
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.9 shows that Responsibility for waste is shared among various bodies with no clear dominant actor. This fragmented management could hinder efficiency and negatively properly investment confidence.

**Figure 4.2.9: Waste Management Responsibility**



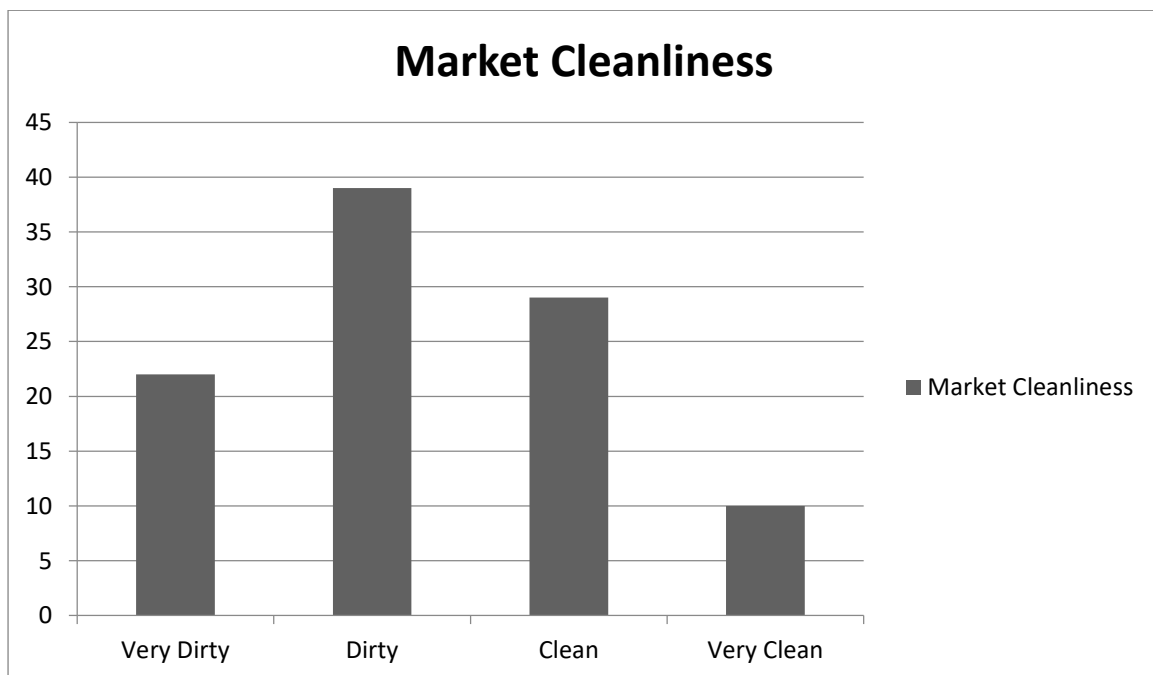
**Table 4.2.10: Market Cleanliness**

Description	Frequency	Percentage
Very Dirty	22	22
Dirty	39	39
Clean	29	29
Very Clean	10	10
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.10 shows that a combined 61% of respondents consider the market either dirty or very dirty. Such conditions can discourage buyers and tenants. Hence, reducing property demand and value.

**Figure 4.2.10: Market Cleanliness**



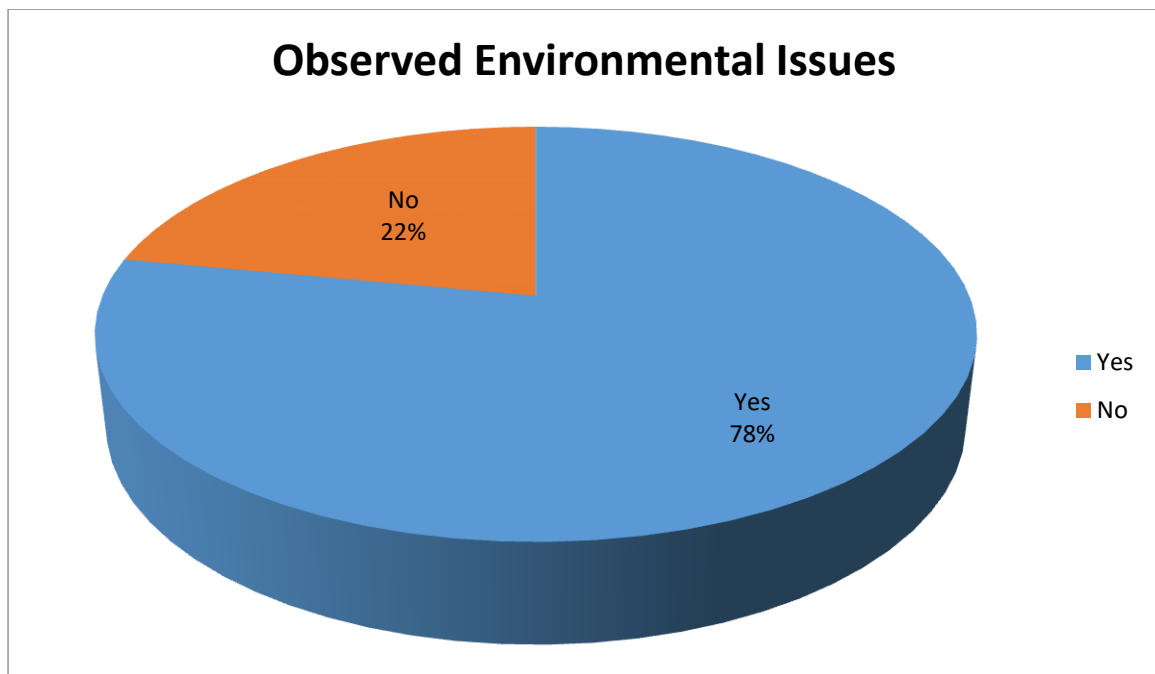
**Table 4.2.11: Observed Environmental Issues**

Response	Frequency	Percentage
Yes	78	78
No	22	22
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.11 shows that most respondents (78%) have observed environmental issues such as pests, odors or flooding. These challenges signal the negative externalities poor waste management can have on property valuation.

**Table 4.2.11: Observed Environmental Issues**



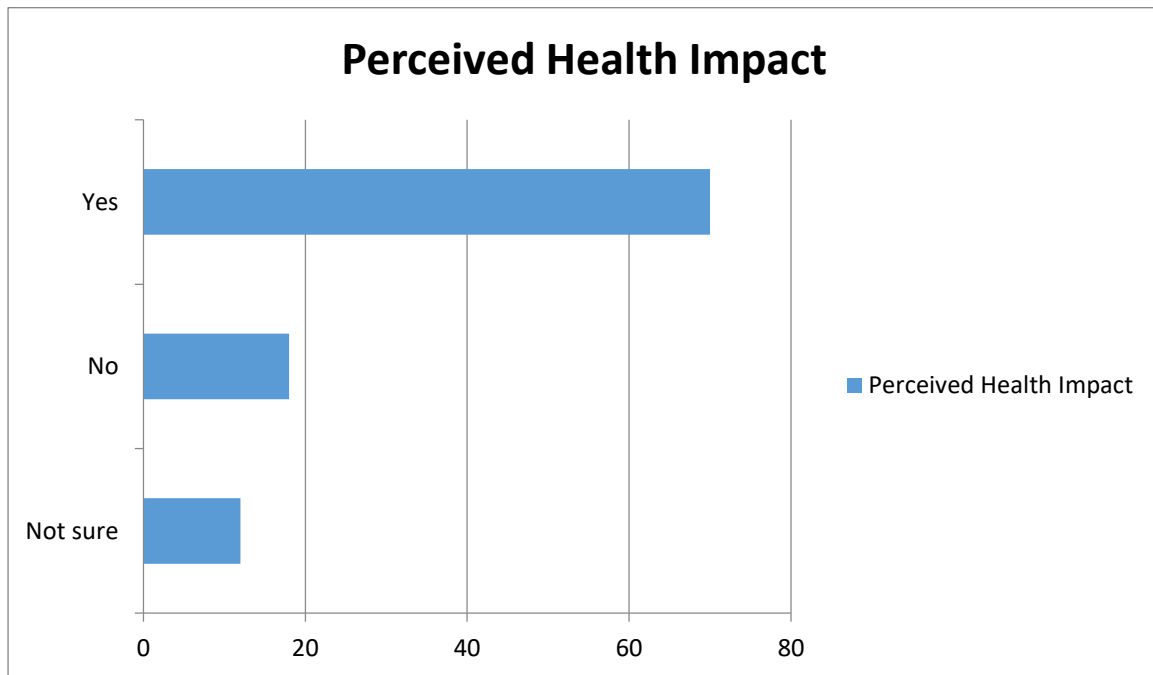
**Table 4.2.12: Perceived Health Impact**

Response	Frequency	Percentage
Not sure	12	12
No	18	18
Yes	70	70
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.12 shows that a significant majority (70%) believes waste management affects public health. This perception may drive potential investors and tenants away, leading to reduced property values.

**Figure 4.2.12: Perceived Health Impact**



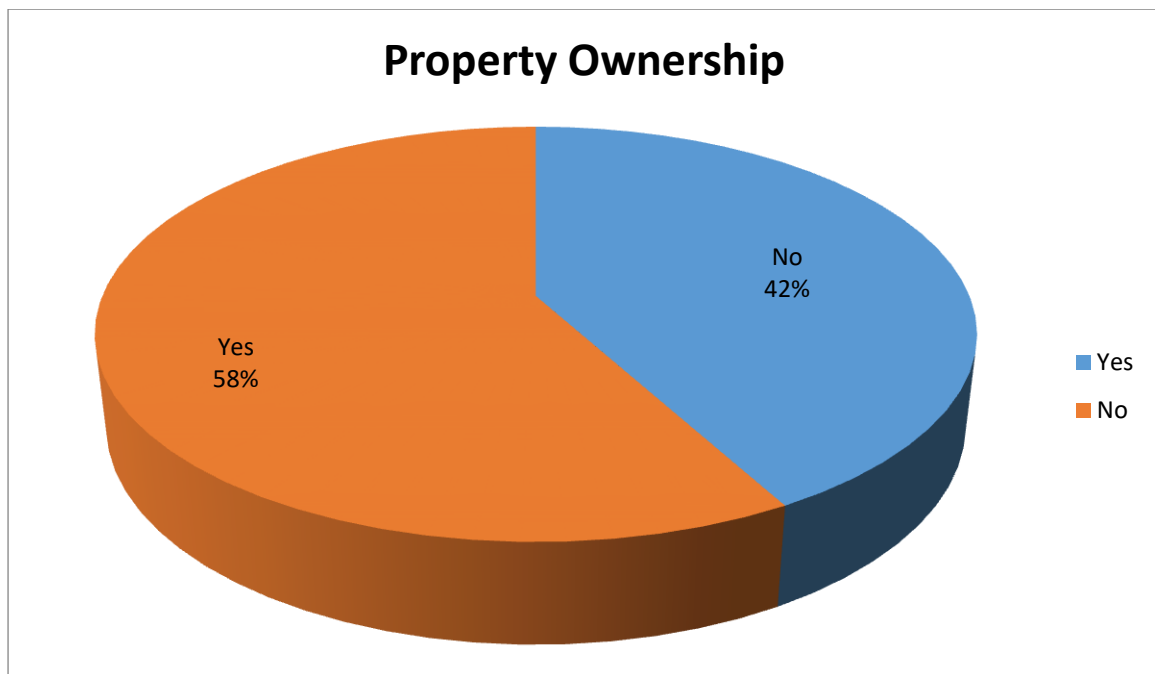
**Table 4.2.13: Property Ownership**

Response	Frequency	Percentage
Yes	42	42
No	58	58
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.13 shows that only 42% of respondents own property in or around the market. This means the majority may be tenants or operators with less control over how property values are maintained or improved.

**Figure 4.2.13: Property Ownership**

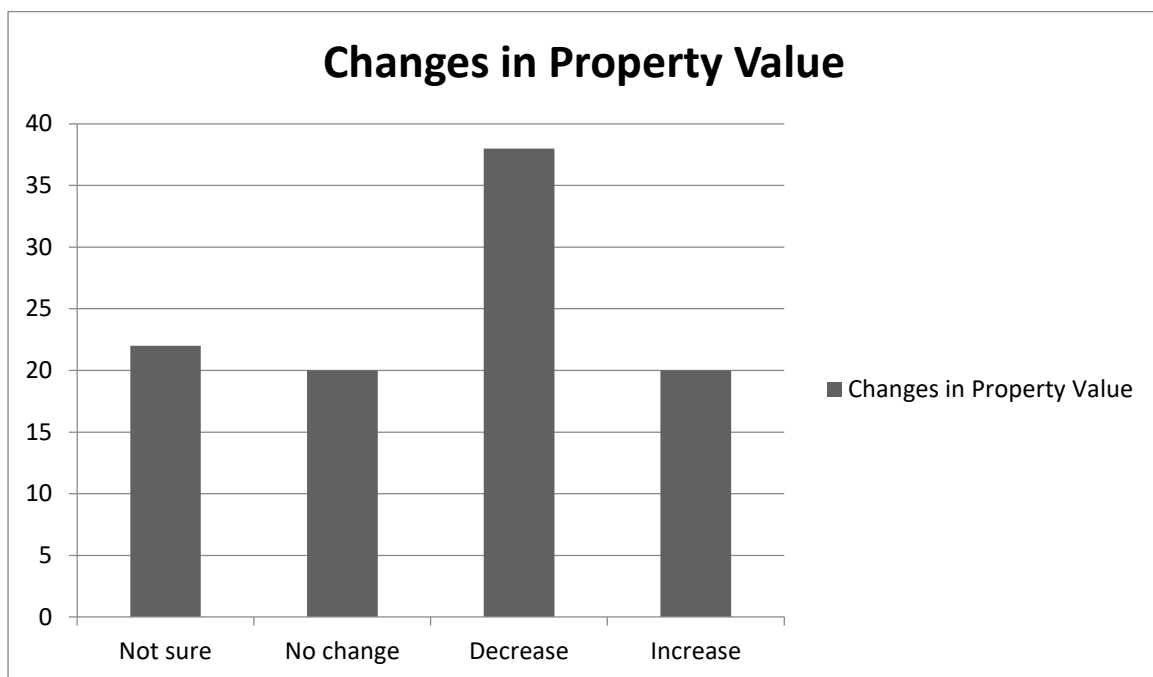


**Table 4.2.14: Changes in Property Value.**

Change Type	Frequency	Percentage
Not sure	22	22
No change	20	20
Decrease	38	38
Increase	20	20
Total	100	100

Source: Researcher's Fieldwork, 2025.

**Figure 4.2.14: Changes in Property Value.**



**Table 4.2.15: Major Challenges in Waste Management**

Challenge	Frequency	Percentage
Lack of Government Support	24	24
Inadequate Bins/ Collection Points	28	28
Poor Waste Attitudes	26	26
Irregular Collection	22	22
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.15 shows that challenges are widespread with inadequate bins and poor waste attitudes topping the list. These issues must be addressed to safeguard property values in the area.

**Figure 4.2.15: Major Challenges in Waste Management**



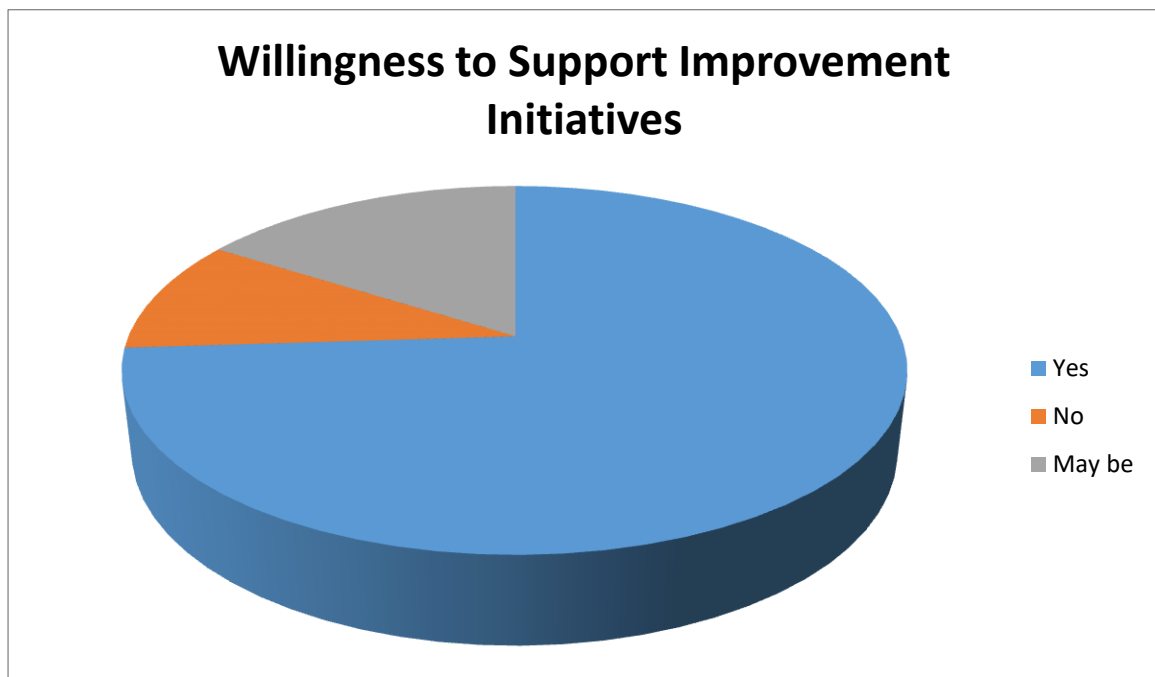
**Table 4.2.16: Willingness to Support Improvement Initiatives**

Response	Frequency	Percentage
Yes	74	74
No	10	10
May be	16	16
Total	100	100

Source: Researcher's Fieldwork, 2025.

Table 4.2.16 shows that most respondents (74%) are willing to support community or government initiatives. This reflects a strong public readiness to collaborate in improving waste management and environmental health.

**Figure 4.2.16: Willingness to Support Improvement Initiatives**



### **4.3 Discussion of Findings**

This section discusses the findings of the study in relation to its objectives and the theoretical frameworks adopted. The discussion integrates empirical data from respondents with relevant literature and theories.

#### **4.5.1 Existing Waste Management Practices in Ipata Market**

The study revealed that waste management in Ipata Market is characterized by irregular collection, inadequate disposal infrastructure, and indiscriminate dumping of refuse. As shown in Table 4.5, 47% of respondents identified open dumping as the most common

method of waste disposal, while only 21% indicated that wastes are collected by government agents. Furthermore, 65% of respondents claimed that waste is not collected regularly.

This aligns with Adejobi and Olorunda (2012), who reported that many Nigerian markets suffer from similar waste handling inefficiencies due to lack of logistics and poor policy enforcement. The absence of designated dump sites, poor accessibility, and insufficient monitoring further exacerbate the problem. These findings reflect the Broken Windows Theory, which suggests that neglected environments foster continued disorder and deter investment.

#### **4.5.2 Perception of Cleanliness and Environmental Quality**

A large percentage of respondents (78%) rated the cleanliness of the Ipata Market area as “poor” or “very poor” (Table 4.9). The presence of litter, blocked drainage channels, and pest infestation were common observations during field assessment.

Environmental Value Theory helps explain these perceptions: poor environmental quality reduces a location’s attractiveness, thereby diminishing its social and economic value. Respondents linked the unclean environment to health risks, such as malaria and cholera, as well as to reduced customer patronage in shops. These perceptions significantly affect both the usability and appeal of commercial and residential properties in the area.

#### **4.5.3 Impact of Waste Management on Property Value**

The analysis clearly indicated a negative correlation between waste accumulation and property value. As highlighted in Table 4.15, 63% of property owners and tenants reported a decline in rental income due to unsanitary surroundings, and 70% believed that property values in cleaner parts of Ilorin were substantially higher.

Further, over 55% of real estate agents interviewed confirmed that properties near waste sites are harder to lease or sell. This supports the Urban Land Value Theory and Hedonic Pricing Theory, both of which suggest that environmental externalities such as waste impact land desirability, tenant satisfaction, and investment potential.

#### **4.5.4 Effect on Residential vs Commercial Properties**

The impact of poor waste management was evident in both residential and commercial contexts. However, commercial properties, particularly shops and stalls within the core market, suffered greater loss of patronage and business turnover, according to 68% of the traders surveyed. Meanwhile, residential tenants complained more about the health implications and living discomfort associated with waste proximity.

These results support the claim by Oni (2009) that in urban Nigeria, property demand and price are significantly influenced by visual and environmental conditions.

#### **4.5.5 Challenges Hindering Effective Waste Management**

Respondents identified several challenges to proper waste handling:

- Lack of waste bins and organized dumping points (cited by 72%),
- Infrequent waste collection by authorities (65%),
- Low awareness and poor public attitude toward sanitation (58%),
- Inadequate government supervision and enforcement (60%).

These challenges are consistent with the findings of Alam & Ahmade (2013), who emphasized the role of institutional capacity and community involvement in sustainable waste management. The findings indicate a failure in both infrastructure and governance.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary of Findings**

This study assessed the relationship between waste management practices and property value within the Ipata Market area of Ilorin, Kwara State. The major findings are summarized below:

- Waste management practices in the study area are inefficient and poorly coordinated, with a heavy reliance on open dumping and irregular waste collection.
- A significant majority (65%) of respondents reported that waste is not collected regularly, and most refuse is deposited in open spaces or drainage channels, leading to environmental degradation.
- Respondents overwhelmingly rated the cleanliness of the market as poor (78%), citing health risks, blocked access, and infestation by pests as major concerns.
- There is a strong negative correlation between poor waste management and property value. Over 63% of property owners confirmed that waste issues have led to declining rental income and lower resale value.
- Commercial properties within the market area are particularly affected due to reduced foot traffic and unattractive surroundings. 68% of traders linked poor environmental sanitation to declining business performance.
- Challenges to effective waste management include lack of waste bins (72%), inadequate collection schedules, poor enforcement, and limited public education.
- The study validated the Environmental Value Theory, Urban Land Value Theory, and Broken Windows Theory, all of which argue that environmental conditions and perceptions strongly influence property demand and market value.

#### **5.2 Conclusion**

The study concludes that there is a clear and significant link between waste management practices and property value in the Ipata Market area. Ineffective waste disposal methods contribute to environmental degradation, health hazards, and reduced economic potential of residential and commercial properties.

The findings confirm that improved sanitation and consistent waste management services can enhance property value, promote business growth, and improve overall quality of life. Without urgent interventions, properties in the area may continue to lose value, and public health risks will remain high.

This research therefore reinforces the need for sustainable urban waste strategies as a core component of property and urban development planning in Nigerian markets.

### **5.3 Recommendations**

Based on the findings and conclusions, the following recommendations are proposed:

- 1. Provision of Waste Bins and Collection Points**

Local authorities should install standardized waste containers across strategic locations within Ipata Market to prevent indiscriminate dumping.

- 2. Regular and Reliable Waste Collection**

Waste should be collected at fixed intervals (at least 3–4 times per week) to reduce overflow and public health risks.

- 3. Community Sensitization and Public Awareness**

Awareness campaigns should be launched targeting traders, landlords, and tenants on proper waste disposal methods and the link between hygiene and property value.

- 4. Enforcement of Sanitation Laws**

Relevant environmental protection laws should be strictly enforced with clear penalties for illegal dumping or environmental violations.

- 5. Public-Private Partnerships (PPP)**

The state government should engage private sector players in the planning and implementation of integrated waste management services.

- 6. Monitoring and Evaluation**

Continuous monitoring of waste practices and periodic assessments should be undertaken to inform policy and ensure progress.

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**QUESTIONNAIRE**  
**AN ASSESSMENT OF WASTE MANAGEMENT PRACTICES ON PROPERTY**  
**VALUE**  
**(A CASE STUDY OF IPATA MARKET AREA, ILORIN)**

This questionnaire is designed for academic purposes only. Kindly answer sincerely. Your responses will be treated with strict confidentiality.

**Section A: Demographic Information**

1. Age:  
☐ Under 20    ☐ 21–30    ☐ 31–40    ☐ 41–50    ☐ Above 50
2. Gender:  
☐ Male    ☐ Female
3. Marital Status:  
☐ Single    ☐ Married    ☐ Divorced    ☐ Widowed
4. Educational Level:  
☐ No Formal Education    ☐ Primary    ☐ Secondary    ☐ Tertiary
5. Occupation:  
☐ Trader    ☐ Landlord    ☐ Tenant    ☐ Waste Management Official    ☐ Other:  
\_\_\_\_\_
6. Length of stay/residency in the area:  
☐ <1 year    ☐ 1–5 years    ☐ 6–10 years    ☐ Above 10 years

**Section B: Waste Management Practices**

7. How is waste commonly disposed of in your area?  
☐ Open dumping    ☐ Burning    ☐ Collected by government/private agents    ☐ Buried  
☐ Other: \_\_\_\_\_
8. How frequently is waste collected in your area?  
☐ Daily    ☐ 2–3 times a week    ☐ Weekly    ☐ Irregular    ☐ Never
9. Are there designated waste collection points near your property?  
☐ Yes    ☐ No
10. How would you rate the cleanliness of your area?  
☐ Very Clean    ☐ Clean    ☐ Fair    ☐ Poor    ☐ Very Poor

11. Who is primarily responsible for waste collection in your area?

☐ Local Government   ☐ Private Companies   ☐ Community   ☐ Individuals   ☐ No one

### **Section C: Impact on Property Value**

12. Do you think waste management affects the value of your property or neighborhood?

☐ Yes   ☐ No

13. Has poor waste management ever influenced your decision to rent, lease, or relocate?

☐ Yes   ☐ No

14. How does the presence of waste around a property affect its rental or market value?

☐ No effect   ☐ Slightly negative   ☐ Moderately negative   ☐ Strongly negative

15. Have you observed a decrease in rent/sales value due to waste conditions in the area?

☐ Yes   ☐ No   ☐ Not sure

### **Section D: Perception and Challenges**

16. What are the major challenges in waste management in your area? (You may tick more than one)

☐ Irregular collection   ☐ Lack of waste bins   ☐ Public ignorance   ☐ Weak law enforcement

☐ Inaccessible roads   ☐ Lack of funding   ☐ Others: \_\_\_\_\_