BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SOCIAL SCIENCES AND HUMANITIES

DEPARTMENT PEACE AND GOVERNANCE

B210444B

REFUSE AND WASTE SERVICE DELIVERY MANAGEMENT AT MURAMBINDA GROWTH POINT: CHALLENGES AND OPPORTUNITIES.

BY

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RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF PEACE AND GOVERNANCE IN PARTIAL FULFILLMENT FOR REQUIREMENTS FOR THE BACHELOR OF SCIENCE HONORS DEGREE IN PEACE AND GOVERNANCE.

DR MADENGA

ABSTRACT

The study examines challenges and opportunities of refuse and waste service delivery management at Murambinda Growth Point. It seeks to identify key issues affecting the efficiency of waste management and to explore practical solutions for improving service delivery. This study addresses the problem of inadequate waste management, that causes significant environmental and public health risks to the community. A qualitative research design was used, grounded in the interpretivist philosophy to capture the lived experiences and perspectives of stakeholders. The study targeted an estimated population of 15,000. Data was collected through questionnaires, semi-structured interviews and two focus group discussions involving participants. The purposive and snowball sampling techniques were used to select local authorities, waste management officials and community members. The data was analyzed thematically to identify key themes and patterns. The findings revealed major challenges such as limited financial resources, weak enforcement of regulations, lack of infrastructure and low community participation. However, there were opportunities which were identified that include potential for public-private partnerships, community-based initiatives and capacity-building efforts. The study concludes that effective waste management at Murambinda Growth Point requires stakeholder collaboration, policy reinforcement and investment in sustainable waste systems. The findings provide valuable insights for policymakers, local authorities and environmental stakeholders in strengthening waste service delivery strategies in urbanizing rural centers.

DECLARATION

I, Comfort Vimbai Masheka (B210444B) declare that this project is my original work and it has not been submitted to this or any other University in support of any application for a degree or any qualifications.

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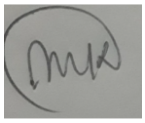
Chairperson's signature: 

Date:23/08/2024

DEDICATION

I dedicate this project to the residents of Murambinda Growth Point and the Buhera District council. Also dedicate this project, to my mother Mrs Mavis Magabaza and my brother for investing their time in me,

May God bless you.

ACKNOWLEDGEMENTS

Firstly, l am greatly indebted to my Almighty God, my faith in him gave me strength all the times. I give all the Glory to him for guiding and protecting me throughout my academic years and during the long run of my project.

I would like to extend my gratitude to my project supervisor for the patience and guidance to ensure that my work is perfect. I also appreciate all the Peace and Governance lectures who have made me a better and knowledgeable person through the four years of academics at Bindura University of Science Education.

I also appreciate my friends, my classmates and my favorite friend Nyasha Sharon Simbanegavi for the mutual support during my four year academic time. I also want to appreciate my best friend Eddie Tanaka Chirimuta for the emotional and financial support during my project.

May God bless you all.

LIST OF ACRONOYMSs/ ABBREVIATIONS

BRDC	Buhera Rural District Council
CSO	Civil Society Organization
NGO	Non-governmental Organization
WHO	World Health Organization

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

In Zimbabwe, effective waste service delivery is a component of sustainable urban development growing areas like Murambinda Growth Point. Many municipalities in developing countries face significant challenges in managing these services efficiently and equitably. This proposal investigates the challenges and opportunities of refuse service delivery management at Murambinda Growth Point with the goal of informing policy interventions and operational improvements.

The management of refuse service delivery in urban areas of developing countries is a well-documented challenge. Studies have highlighted issues such as inadequate infrastructure, limited funding, inefficient collection systems and lack of community engagement. In the context of Zimbabwe, research has shown that the deterioration of municipal services including refuse collection has been exacerbated by economic and political instability. Murambinda Growth Point located in Buhera District is growing in urban centers in Zimbabwe with a population estimated at 15 000 as of 2014 (Takawira, 2023). The governing body of Murambinda Growth Point is referred to as the Buhera Rural District Council. The swift urbanization and growth of the region have

imposed considerable pressure on the local authorities' capacity to efficiently manage waste service delivery.

Globally, the management of waste service delivery is an issue caused by urbanization, increasing populations (Hoornweg & Bhada-Tata, 2019). Schoolars emphasized that there is need for more practices to address complexities on refuse management, poor waste disposal contributes to poor health necessitating adoption in recycling and energy technologies. Technological advancements are transforming waste management practices. However effective governance remains a challenge as many countries lack policies and regulatory framework to support sustainable waste management (Kaza, 2018). Addressing these multifaceted challenges is crucial for developing effective, equitable and environmentally friendly refuse management practices worldwide.

Continentally, African continents face substantial challenges in waste management. This situation is exacerbated by insufficient infrastructure, lack of funding and inadequate governance. (Ndlovu, 2023) underscores the importance of comprehensive waste management systems that take into account the specific challenges encountered by cities in Africa.

Regionally, waste service delivery management presents a mixed landscape that is characterized by both progress and significant challenges. For instance, in Zambia waste management systems are generally efficient, supported by advanced technologies and extensive recycling programs. As reported by the Environmental Protection Agency (2021), about 35% of municipal solid waste in the United States was recycled in 2018, as part of efforts to minimize landfill contributions. According to (Chikodzi, 2021) 60% of waste generated in cities is collected and few is being

treated or recycled. This is compounded by the raped urbanization and population growth in the region (Wilson, 2012).

1.2 Statement to the problem

Refuse and waste at Murambinda Growth Point is inadequate and it causes significant environmental and public health challenge. The issues arise from the waste management system's inability to cope with growing waste volumes, leading to illegal dumping, pollution, and clogged drainage systems. This situation usually affects local residents, businesses, healthcare institutions and the Murambinda Rural District Council. It affects those who depend on a clean environment for their daily operations. The root causes include limited financial resources, weak infrastructure and poor enforcement of waste management regulations that affects effective service delivery. The issue is constant throughout the year but becomes critical during peak market days and during the rainy season when waste generation intensifies and blocked drains exacerbate health and sanitation risks.

1.3 Purpose of the research

The purpose of this research is to explore the difficulties and prospects in the management of waste service delivery at Murambinda Growth Point, with the intention of discovering solutions to improve the system's effectiveness and efficiency.

1.4 Research Objectives

The research objectives seek to;

1 identify types of refuse and waste at Murambinda Growth Point.

2 assess the refuse and waste management mechanisms available at Murambinda Growth Point.

3 explore the challenges faced by the Murambinda Rural District Council in waste management.

4 examine possible opportunities in waste management at Murambinda Growth Point.

1.5 Research questions

1 What are the types of refuse and waste at Murambinda Growth Point?

2 What are the refuse and waste management mechanisms available in Murambinda Growth Point?

3 What challenges does the Murambinda Rural District Council face in delivering effective waste management services?

4 What opportunities currently exist to enhance waste management practices at Murambinda Growth Point?

1.6 Assumptions of the study

1. It is assumed that institutional factors such as funding and policy enforcement influence waste service delivery at Murambinda Growth Point even though they might not be complete data.

2. The research posits that involvement from the community can enhance waste management results, even though the degree of its influence may not be entirely quantifiable within the scope of this study.

1.7 Significance of the study

This topic is important because it shows issues of ineffective refuse and waste service delivery at Murambinda Growth Point which are threats to public health and environment. It provides

practical insights that can help local authorities especially the Murambinda Rural District Council improving waste management systems. The findings help environmental and health agencies in identifying risk areas. Development partners and non-governmental organizations use the result to support targeted projects and policy advocacy. This study contributes to academic literature by offering new perspectives on waste management in emerging urban centers.

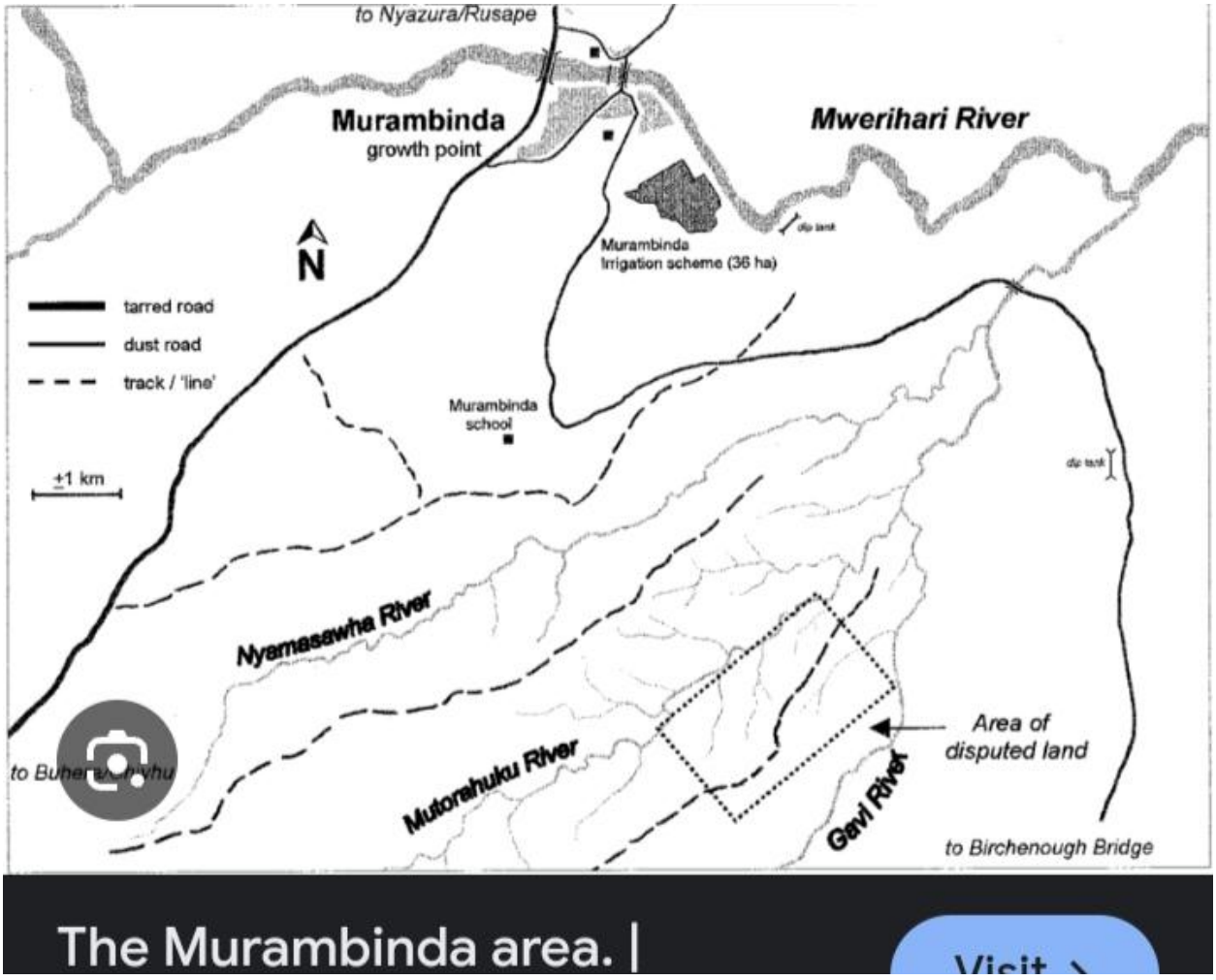
1.8 Limitations

The study does not relate a comparative analysis with other growth points or urban centers, which limits the applicability of the findings beyond Murambinda Growth Point. The study does not appraise the technical performance of specific waste treatment technologies or landfill engineering methods due to lack of access to such systems within the study area. It does not provide a cost-benefit analysis of proposed interventions or recommendations, because its focus is on identifying existing challenges and opportunities. The study does not review the long-term environmental impacts of waste accumulation using scientific testing for example soil or water sampling. While stakeholder insights provide rich qualitative insights, the study does not authenticate their claims through independent environmental audits. Despite these limitations, the research remains beneficial for informing local policy and encouraging community action

1.9 Delimitations

This research is geographically restricted to Murambinda Growth Point in Buhera District, Zimbabwe and does not prolong to other growth points or rural service centers in the country. The research targets on the challenges and opportunities connected to refuse and waste service delivery management and it excludes other dimensions of urban planning such as water supply, housing or electricity provision. The study is also limited to a specific timeframe during which data was

collected in 2025, hence may not capture long-term seasonal variations or historical trends. In terms of participants, the study includes local authorities, waste management personnel and community members but omit national policymakers or private companies that are not operating in the area. Although waste generation and disposal in surrounding villages may affect Murambinda, such external dynamics are surpassing the study's scope.



Map 1.1: Sketch map of Murambinda Growth Point

Source: Murambinda Rural District Council.

1.11 Definition of key words

Challenges refer to the difficulties or obstacles that must be surmounted to attain a goal or objective (Kotter, 2017).

Litter – these are discarded items that are improperly disposed in public spaces such as streets, parks and beaches for example food wrappers, cigarette butts, plastic bottles and other rabis (Kotter, 2017).

Management - is the process of planning, organizing, directing, and overseeing resources to accomplish specific objectives (Robbins & Coulter, 2017).

Murambinda Growth Point - is a rural growth point in Zimbabwe that has experienced rapid urbanization and growth (Muzondo, 2017). The Murambinda Growth Point map is shown in Map 1.1 above.

Opportunities – they are favorable conditions or circumstances that can be leveraged for improvement or allow for growth or progress (Drucker, 2017).

Refuse - these are discarded materials that are typically non-recyclable such as organic refuse, garden waste, and biodegradable substances (Bulkeley & Walker, 2017).

Service delivery – is the process of providing services to meet the needs of customers or clients (Clark, 2017).

Waste – these are unwanted materials generated from human activities which are recyclable materials, hazardous waste and other byproducts that are no longer useful (Walker, 2017).

1.12 Dissertation outline

Chapter 1: The research problem and its setting

The study shows the challenges and opportunities of refuse and waste service delivery management at Murambinda Growth Point. It starts with a background section outlining the current waste management situation including causes and effects of inadequate service del This chapter aims to delineate the purpose of the study, the problem statement, the research objectives, the central and specific research questions, the assumptions, the significance, the limitations, the delimitations, and the definitions of key terms.

Chapter 2: **Literature Review and Theoretical Framework**

This chapter will explore the existing literature concerning refuse and waste management, emphasizing scholarly articles, case studies, and relevant reports on the subject. Following this, the section will outline the theoretical framework that underpins the study, along with an analysis of both domestic and international research regarding waste service delivery. A synthesis will reveal gaps in the current understanding and pinpoint areas where this study can make a significant contribution.

Chapter 3: Research methodology

This chapter will detail the research methodology utilized in the study. It will encompass sections on research philosophies, approaches, design, population and sampling techniques, methods of

data collection, data presentation and analysis, as well as considerations regarding validity, reliability, and ethics.

Chapter 4: Data presentation, analysis and interpretation

This chapter will present the findings related to refuse and waste service delivery management at Murambinda Growth Point. The analysis will be directed by the primary objectives of the study, providing insights into the current status of service delivery and community perceptions.

Chapter 5: Conclusions, summary, recommendations, and areas for further studies

The concluding chapter will summarize the key findings and conclusions drawn from the study. It will offer practical recommendations for enhancing waste management services at Murambinda Growth Point and identify areas for future research to deepen the understanding of refuse and waste service delivery management.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Introduction

The previous chapter discussed the research problem along with the context surrounding the challenges and opportunities in the management of refuse and waste service delivery at Murambinda Growth Point. This chapter will present a literature review by introducing pertinent theories and will also analyze various scholars' viewpoints regarding the research. The research utilized the Systems Theory and Sustainable Development Theory. The literature will be examined under themes that are derived from the research objectives. These themes include:

Theme 1: Types of refuse and waste at Murambinda Growth Point.

Theme 2: Waste management mechanisms at Murambinda Growth Point.

Theme 3: Challenges in refuse and waste service delivery at Murambinda Growth Point.

Theme 4: Opportunities in refuse and waste management at Murambinda Growth Point.

2.1 Theoretical framework

This research on challenges and opportunities of refuse and waste service delivery management at Murambinda Growth Point is guided by the sustainable development theory. There is promotion of recycling and composting. The key challenges are limited infrastructure, resource constraints and lack of community awareness which together hinder effective waste collection and recycling efforts. There are also challenges in community engagement and in advanced technology where there is not always accessible in rural areas like Murambinda. There are also weak inadequate government policies and weak enforcement mechanisms (Daly & Amartya 2015). However, there

are also significant opportunities which are waste reduction initiatives, recycling programs and job creation in the waste sector can improve environmental health and support growth (Pellow, 2018). By fostering community participation and public-private partnerships, Murambinda aligns with sustainable development goals (Clapps, 2021).

2.1.2 Relevance of sustainable development theory

Resource Efficiency and waste minimization

Relevance of the sustainable development theory is on the resource conservation and waste minimization which are essential for Murambinda's limited waste infrastructure. Promoting recycling, composting, and reuse can reduce landfill pressure and conserve resources aligning with ecological sustainability principles.

Community engagement and environmental awareness

The theory of sustainable development emphasizes the significance of community involvement and public awareness in addressing waste management issues. By informing residents about appropriate waste disposal methods and encouraging their participation in recycling initiatives, the effectiveness of waste management can be enhanced, fostering a culture of environmental stewardship.

Environmental public health protection

The significance of sustainable development theory lies in its ability to mitigate pollution and safeguard public health, which aligns with the principles of sustainable development that prioritize environmental protection and overall well-being. By addressing waste disposal issues, Murambinda Growth Point can mitigate health risks, enhance residents' quality of life and prevent environmental degradation.

2.1.2 Weaknesses of sustainable development theory to the study

Resource constraints and financial limitations

The sustainable development theory often assumes access to resources and funding for implementing eco-friendly infrastructure and systems. However, in Murambinda limited financial resources affects recycling facilities and proper landfill management.

Lack of infrastructure

The sustainable development theory emphasizes efficient systems and infrastructure but in practice, Murambinda lacks the necessary facilities for sustainable waste collection, sorting, and disposal. Without adequate infrastructure, theoretical approaches to waste management are difficult to operationalize.

Social and cultural barriers

Community engagement is critical to sustainable development yet limited awareness and cultural norms around waste in Murambinda may impede effective implementation of sustainable practices. Changing community attitudes toward waste requires time, resources, and consistent educational efforts, which may not be readily available.

Dependence on external expertise and technology

Sustainable development theory often relies on advanced technologies and expertise that are not always accessible in rural areas like Murambinda. This reliance can make it difficult to establish self-sustaining waste management systems without external support, which may not be dependable or sustainable over the long term**.**

Institutional and policy gaps

Sustainable development theory assumes supportive institutional and regulatory frameworks. However, inadequate government policies and weak enforcement mechanisms in Zimbabwe can limit solutions.

2.2 The types of refuse and waste

Objective one seeks to find out the types of refuse and wastes that are found in Murambinda Growth Point. Waste and refuse management is important in environmental sustainability, public health, and economic growth (Kaza, 2023). As urbanization has continue to surge as it puts pressure on waste management systems worldwide. In developing regions like Murambinda Growth Point, managing waste poses difficulties due to inadequate infrastructure, limited resources, and a lack of public awareness (Gaul, 2022). Effective waste management starts with recognizing the various types of waste produced, as each type necessitates distinct handling and disposal methods. Murambinda Growth Point produces a range of waste types, including solid, industrial, hazardous, agricultural, electronic, and biomedical waste (Alobaid, 2023). Identifying these waste categories is essential for formulating targeted management strategies that address specific challenges. There is a pressing need for sustainable waste management practices that incorporate community involvement, regulatory frameworks, and technological innovations to effectively confront waste-related issues (Basu & Martin, 2023). 2.2.1 Solid waste

Solid waste refers to the routine garbage and refuse generated by households, businesses, and public services. In Murambinda, examples of municipal waste include food remnants, plastic packaging, and textiles. The rapid urbanization and population increase in Murambinda Growth Point are leading to significant environmental challenges (Zeng et al., 2020). Ineffective waste management systems are exacerbating environmental degradation and public health concerns. To

mitigate the issues associated with solid waste, community-based recycling initiatives can be implemented to motivate residents to sort their waste properly. According to (Wang, 2021), implementation of compositing initiatives for organic waste should be addressed to reduce landfill dependency and also produce valuable compost for local agriculture. These strategies not only alleviate waste-related issues but also promote sustainability within the community.

2.2.1 Industrial waste

Industrial waste these are byproducts of manufacturing processes and includes materials that are discarded after production. Local industries in Murambinda Growth Point contribute significantly to this waste stream with examples that include scrap metal, plastics and chemical. (Gupta et al., 2019) contend that the inappropriate disposal of industrial waste may lead to contamination of soil and water, posing threats to public health as well as the environment. To solve this issue of industrial waste, industries have to adopt cleaner production techniques that minimize waste generation (Kumar et al, 2021). Additionally, establishment of partnerships with recycling companies can facilitate the proper disposal and recycling if industrial by-product hence promoting a circular economy in the region.

2.2.2 Hazardous Waste

Hazardous waste encompasses materials that present considerable dangers to human health and the environment. In Murambinda Growth Point, this type of waste is mainly produced by medical institutions and industrial operations. Examples of hazardous waste include chemicals, solvents, and contaminated medical supplies. As noted by Al-Mamun et al. (2021), effective management of hazardous waste is crucial to reduce potential health risks. In Murambinda, it is vital to implement stringent regulations regarding the disposal of hazardous waste. The creation of

designated collection sites and treatment facilities is essential for ensuring safe handling (Thompson, 2020). Moreover, offering training to businesses and healthcare providers on safe waste disposal methods can significantly reduce health risks associated with hazardous waste.

2.2.3 Agricultural Waste

Agricultural waste refers to organic byproducts resulting from farming activities, such as leftover crops and animal waste. In Murambinda, agriculture plays a significant role in the economy, leading to substantial amounts of agricultural waste. Singh (2020) emphasizes the necessity of effectively managing agricultural waste for environmental sustainability and soil health. Encouraging the use of agricultural waste for composting can enhance soil quality and decrease dependence on chemical fertilizers (Ravindranath, 2021). Furthermore, using livestock manure for biogas production offers a renewable energy source, aiding in energy needs while simultaneously managing waste.

2.2.4 Electronic Waste

Electronic waste (e-waste) pertains to discarded electronic devices and components, which have become increasingly prevalent due to rapid technological advancements. In Murambinda Growth Point, common e-waste includes outdated computers, mobile phones, and malfunctioning appliances. Li et al. (2019) discovered that improper disposal of e-waste can result in environmental pollution and health hazards due to the presence of toxic materials. Tackling e-waste issues necessitates the establishment of collection points for appropriate recycling and disposal.

2.3.5 Landfilling and open dumping

Landfilling is also recognized as the most cost-effective waste disposal methods and it comes with environmental hazards in developing towns with limited infrastructure like Murambinda Growth Point. The landfilling practices lack proper waste segregation that led to low production and groundwater contamination (Muzenda, 2020). Moreover, inadequate landfill design and maintenance contribute to the challenges of pest infestation, odor pollution, and greenhouse gas emissions according to (Ngulube & Tshikhudo, 2021). Biocover systems can be used to improve landfill management through the adoption morden technologies to reduce methane emissions (Chen et al., 2023). The process of engaging local authorities at Murambinda in structured landfilling approaches helps in controlling environmental pollution that provides a cost-effective solution for waste disposal in the short term (Hove & Musasa, 2022).

2.4 Challenges of refuse and waste service delivery at Murambinda Growth Point

Objective three seeks to outline the challenges of refuse and waste service delivery management at Murambinda Growth Point. Refuse and waste service delivery is a component of urban and rural environmental management and has challenges that hinder its efficiency and sustainability. These challenges are experienced globally, continentally, nationally and locally including at Murambinda Growth Point. These challenges are inadequate funding and resources, poor waste separation practices, insufficient community engagement and awareness, lack of policy implementation and enforcement, rising waste volumes and limited disposal sites, dependance on informal waste management systems and environmental and health impacts.

2.4.1 Inadequate funding and resources

Lack of adequate funding and resources is a pervasive challenge in refuse and waste service delivery management at Murambinda Growth Point. Globally, some countries for example Brazil

and India they lack finances for management hence this results in adequate infrastructure and also inefficient services (Wilson et al., 2011). Then in Africa, this situation is worse because of competing priorities for limited budgets. Nigerian and Kenya they allocate just a small fraction of their budget to waste management (Adam,2022). In Zimbabwe, there is insufficient budgetary allocations and economic instability that affects waste management initiatives. Most of the municipalities they rely heavily on user fees which are insufficient to cover operational costs (Makwara & Magudu, 2022). Murambinda Growth Point faces more challenges with limited equipment such as garbage trucks and bins and this leads to irregular waste collection and accumulation of uncollected waste in open areas.

2.4.2 Poor waste separation practices

Effective refuse management requires proper waste separation at the source. Globally, countries like Indonesia and Mexico they have a struggle with the implementation of waste separation due to low public awareness and participation. In Africa, the informal settlements lack access to waste bins hence this makes separation difficult (Masocha, 2022). In Zimbabwe, there is lack of education and awareness campaigns and this makes separation practices difficult. Usually in Zimbabwe households and business mix organic, recyclable and hazardous waste hence this complicates waste process and separation becomes difficult (Chikowore & Mupfiga, 2023). Murambinda Growth Point residents are unaware of benefits of separation and there is insufficient infrastructure such as separate bins for recyclables and non-recyclables to support the practice.

2.4.3 Insufficient community engagement and awareness

Lack of community engagement affects the waste management of Murambinda Growth Point. Globally, there are developed countries for example Germany and Sweden that have succeeded in

involving citizens in recycling programs but developing countries like Zimbabwe face challenges in engaging their communities (Wilson et al., 2021). One of the major causes why participation is low in Africa, is due to culture (Moyo & Zvigadza, 2023). Public awareness campaigns are limited in Zimbabwe and municipalities are struggling to mobilize communities effectively. There are low levels of education in Murambinda on waste impacts and its leading to poor habits like littering and continuing to strain the already limited waste management systems.

2.4.5 Lack of policy implementation and enforcement

Most third world countries have set up policies and laws which govern waste management but they don't implement them. Globally, some of the countries like Pakistan and South Africa have comprehensive waste management frameworks, but there is a lot of corruption and limited institutional capacity hence enforcement remains weak (Adam,2022). In Africa waste management laws are ignored and are enforced in a poor way and leaving informal systems to dominate. Beside that the Environmental Management Act (EMA) in Zimbabwe mandate proper waste disposal, the enforcement is still weak because of the factors that there is inadequate staffing and corruption (Gumbo & Munyati, 2022). The situation is worse in Murambinda Growth Point because there are no local by-laws to waste management and there is no enforcement of national policies that results in widespread dumping and pollution.

2.4.6 Rising waste volumes and limited disposal sites

Urbanization and the population growth has caused a challenge of rapid increase in waste generation. Globally, the United States and China have produced million tons of waste annually and other countries have shortages of landfills (Kaza et al.,2018). In Africa, landfills are operated without adequate capacity to handle growing waste volumes and they are unregulated (Chanza &

Chirisa, 2023). In Harare Zimbabwe, there are overflowing dumpsites that lack proper lining and leachate treatment. At Murambinda there is absence of engineered landfills hence they face more challenges of overflowing dumpsites and dumpsites that are near residential areas causes health risks and they contribute to environmental degradation.

2.4.7 Dependance on informal

Globally, some countries depend on informal waste pickers who faces exploitation and unsafe working conditions for example India and Philippines (Wilson et al., 2021). Informal systems in Africa usually dominate with scavengers collecting recyclables from dumpsites and selling them to intermediaries (Makwara & Magudu, 2022). The informal sector in Zimbabwe accounts recycling activities but operates without government oversight that leads to inefficiencies. Then in Murambinda Growth Point they rely on informal waste collectors who sometimes lack protective equipment and proper training hence making the system unsustainable and unsafe.

2.4.8 Environmental and health impacts

Improper waste management causes environmental and health problems. Globally, waste mismanagement causes greenhouse gas emissions with open dumping and burning harmful pollutants (Kaza et al., 2018). In Bangladesh and Nigeria there are unregulated dumpsites because of public health challenges. Open dump sites contaminate waste sources and affects air quality in Africa. In Zimbabwe waste burning from dumpsites causes risks to public health and also including respiratory diseases and waterborne illnesses. At Murambinda Growth Point there is no exception with residents exposed to untreated waste and pollution from uncontrolled dumpsites.

2.5 Opportunities in refuse and waste service delivery at Murambinda Growth Point

Objective four seeks to address the opportunities of refuse and waste service delivery at Murambinda Growth Point. Refuse and waste service delivery at Murambinda Growth Point presents opportunities for sustainable and innovative wasteK management practices. These opportunities align with global trends and local needs and offers avenues for environmental conservation, economic growth, and community development. These opportunities are found within global, continental, national, and local. These opportunities encompass the establishment of community-oriented recycling initiatives, the promotion of waste-to-energy projects, the enhancement of community awareness and engagement, the creation of economic advantages through composting, the generation of employment in waste collection and management, the introduction of public-private partnerships, the implementation of educational and environmental awareness programs, and the adoption of digital tools and mobile applications for effective waste management.

2.5.1 Establishment of recycling initiatives rooted in the community

The establishment of community-oriented recycling initiatives Community-oriented recycling initiatives offer a sustainable method for waste management by decreasing landfill dependency, lowering collection expenses, and creating revenue. To promote environmental conservation and create employment opportunities, it is important to use recycling initiatives according to Mutekwa and Masocha 2022. Globally, recycling programs are integral to circular economies and they enable the reuse of resources to minimize waste for example Germany have advanced recycling systems and have reduced landfill dependency. In African, urbanization have increased the availability of recyclable materials have been supported by the governments and NGOs on the

recycling projects to address waste challenges. Zimbabwe has small-scale recycling companies that are emerging to demonstrate public interest to turn waste into valuable resources. At Murambinda Growth Point, community-based recycling programs could create jobs and they can enhance environmental sustainability and reduce the pressure on limited municipal resources.

2.5.2 Promotion of Waste-to-Energy Initiatives

Converting organic waste into energy offers two significant advantages—minimizing waste quantities while producing renewable energy. Chikowore and Mupfiga (2023) highlight the potential of biogas systems in addressing both energy and waste management challenges. Globally, waste-to-energy technologies are advancing as nations seek alternatives to fossil fuels. For instance, Sweden powers millions of homes through incineration plants that process municipal waste. In Africa, countries such as Kenya and South Africa are investing in waste-to-energy solutions to close energy gaps and reduce landfill dependence. In Zimbabwe, biogas projects have been successfully implemented in agricultural areas, offering renewable energy while managing organic waste. At Murambinda, the substantial quantities of organic waste from markets and farming activities present opportunities for small-scale biogas systems, which could supply cooking fuel and electricity, thereby improving both energy access and waste management.

Improving Community Awareness and Engagement

Community participation is crucial for the effectiveness of waste management programs. According to Moyo and Zvigadza (2023), community-led education campaigns promote proper waste disposal, recycling, and sustainable practices. Globally, public awareness programs have proven effective in encouraging waste segregation and recycling, as demonstrated in Japan, where citizens actively participate in waste management systems. In Africa, regional initiatives such as

"Clean Africa" aim to strengthen community engagement, while in Zimbabwe, national campaigns like "Go Green Zimbabwe" encourage the adoption of sustainable waste practices. At Murambinda Growth Point, local community groups and schools spearhead education drives, raise awareness.

2.5.4 Economic opportunities through composting

The management of organic waste while producing natural fertilizers it is wise to use composting. The benefits of composting are, they reduce landfill waste enhance agricultural productivity and minimize dependence on chemical fertilizers (Gumbo & Munyati, 2022). Globally, composting is practiced in agricultural economies to improve soil fertility and reduce environmental pollution and in Africa, there is abundance of organic waste presents opportunities for composting businesses and sustainable farming practices. In Zimbabwe there is increased adoption of composting in urban agriculture which is supported by organizations promoting organic farming. At Murambinda market and household organic waste can be converted into compost that benefits local farmers and reduce waste sent to open dumpsites.

2.5.5 Job creation through waste collection and management

An organized waste management sector reduces unemployment and improves environmental cleanliness. Waste collection, sorting and recycling create employment opportunities across the waste management value chain (Chigumira and Mupfiga, 2021). In global context waste management employs millions of people also countries like the United States seeing significant economic contributions from the sector. In Africa, growing waste generation has increased the demand for waste workers both in formal and informal sectors. In Zimbabwe initiatives like "Clean Harare," formalizes waste collection and recycling to create jobs. At Murambinda establishing organized waste management services employs local youths to reduce informal dumping and foster cleaner up campaigns that contribute to both social and environmental goals.

2.5.6 The introduction of public-private partnerships (PPPs)

Introducing public-private partnerships (PPPs) provide financial resources, expertise, and advanced technologies for waste management. The role of PPPs is to reduce financial burdens on municipalities and ensuring better service delivery (Ncube & Banda, 2020). In global context, successful PPPs in Europe and Asia have revolutionized waste management by introducing innovative practices and technologies. In Africa, countries such as Kenya and Rwanda have improved waste services through collaborations with private companies and Zimbabwe's waste management policy encourages private sector involvement to enhance efficiency.

2.5.7 Potential for educational and environmental awareness programs

The use of education is important because it fosters sustainable waste management practices. The environmental education programs target schools and communities to promote proper waste disposal, waste reduction, and recycling (Chanza & Chirisa, 2023). Globally, environmental education has gained power with countries integrating waste management topics into school curricula to build long-term sustainable habits and in African continent initiatives like the African Waste Management Academy provide resources for waste education and training. In Zimbabwe, the integration of environmental subjects into educational curricula is being implemented to foster awareness among the youth.

2.5.8 Utilization of Digital Tools

Mobile Applications for Waste Management Digital technologies and mobile applications offer innovative approaches to enhance waste management by improving communication, scheduling, and reporting. Mhike and Muzamani (2022) recommend utilizing technology to engage communities and optimize waste collection processes. Globally, mobile applications have

revolutionized urban waste management by enabling residents to report issues and track collection schedules, as demonstrated in Singapore. In Africa, Rwanda has adopted mobile technologies to enhance the efficiency of waste collection and promote recycling awareness. In Zimbabwe, the growing technology sector presents opportunities to create waste management applications suited to local needs. For Murambinda, tailored mobile applications could be developed to enhance service scheduling, monitor illegal dumping, and increase community involvement in recycling efforts.

2.6 Literature Review Gaps

The literature reviewed regarding the challenges and opportunities in refuse and waste service delivery at Murambinda Growth Point indicates several areas that require further investigation. While current studies highlight problems such as insufficient infrastructure, limited financial resources, and ineffective collection systems, there is a lack of research specifically addressing Murambinda. There has been minimal focus on community involvement and the influence of local governance in waste management. Potential innovations, such as resource recovery, waste-to-energy initiatives, and public-private partnerships, have not been thoroughly explored. Additionally, there is a lack of data concerning the socio-economic impacts of inadequate waste management on public health and local livelihoods. These gaps underscore the necessity for more localized and comprehensive studies to gain a better understanding of the distinct challenges and opportunities present in Murambinda.

Chapter Summary

This chapter analyzed the current literature concerning the challenges and opportunities associated with refuse and waste service delivery in Murambinda Growth Point. It utilized both academic

studies and practical case examples to investigate the intricacies of waste management systems in rural growth regions. The primary challenges identified include insufficient infrastructure, financial constraints, a lack of technical expertise, and minimal community awareness regarding appropriate waste practices. The review also highlighted potential avenues for enhancement, such as community-driven initiatives, advancements in recycling and resource recovery, and the significance of public–private partnerships in enhancing service delivery. Moreover, the literature uncovered deficiencies in data collection, waste categorization, and stakeholder collaboration, pointing to areas that necessitate further investigation. The subsequent chapter will elaborate on the research methodology employed for this study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter outlines the qualitative research methodology utilized to examine the challenges and opportunities related to refuse and waste service delivery in Murambinda Growth Point. The investigation is rooted in the interpretivist paradigm and adopts a descriptive qualitative approach to gather comprehensive insights into the lived experiences of community members, local

authorities, and other pertinent stakeholders. The chapter elaborates on the research philosophy, methodology, design, target population, sampling strategies, data collection techniques, data analysis processes, and ethical considerations. Furthermore, it clarifies how evidence was gathered, interpreted, and validated to ensure both validity and reliability throughout the research process.

3.1 Research Philosophy

The research adopts an interpretivist philosophy, that highlight the understanding of social phenomena from the perspectives of those experiencing them. The interpretivist paradigm is relevant for this study as it seeks to understand how different stakeholders sense and experience the challenges and opportunities of waste service delivery at Murambinda Growth Point. According to Creswell (2014), interpretivism supports the use of qualitative tools to gain deep insights into complex community issues by valuing subjective meaning and context.

3.2 Research Methodology

The study uses a qualitative research methodology, that enables the exploration of human experiences, behaviors and attitudes toward waste service delivery. Qualitative methods are suitable for this topic as they facilitate the collection of detailed and context-specific data through interviews and focus group discussions. Unlike quantitative approaches, qualitative research does not aim to generalize findings but instead focuses on understanding meanings and interpretations (Marshall & Rossman, 2016).

3.3 Research Design

This study used a descriptive qualitative design to explore the current conditions of waste management services, identify challenges and highlight emerging opportunities at Murambinda Growth Point. This design allows for the systematic description of practices, perceptions and institutional processes as they exist naturally in the community without manipulation (Kumar, 2014). It is relevant for generating deep understanding rather than testing hypotheses.

3.4 Population and Sample

The study population consists of an estimated 15,000 residents of Murambinda Growth Point. The key participants include local authority staff, environmental health officers, refuse collection personnel and community members. A sample of 20 individuals was selected from the population for semi-structured interviews, while 17 participants were involved in focus group discussions. These individuals were selected based on their knowledge, experience or engagement with waste service delivery issues in the area.

3.5 Sampling Method

This study used purposive sampling to select participants with specific roles or experiences relevant to waste management such as council officials, sanitation officers and waste handlers. Also snowball sampling was used to identify further participants through referrals from initial informants. These non-probability sampling techniques are suitable for qualitative research because they enable the identification of information-rich cases (Patton, 2015).

3.5.1 Purposive sampling

Purposive sampling, a non-probability sampling technique suitable for qualitative research, was used to select key informants who have specialized knowledge or experience relevant to refuse and waste service delivery management. This includes local government officials, environmental health officers, and waste management service providers. This method was effective for qualitative research as it enabled the researcher to target individuals who can provide in-depth insights into specific aspects of the research topic (Palinkas et al., 2015). By focusing on these knowledgeable individuals, the study aimed at gathering detailed information about the operational challenges and potential opportunities in waste management

3.5.2 Snowball sampling

This study used snowball sampling as appreciative technique to purposive sampling in identifying key informants. It involves the asking of questions to local authority staff and waste management officers to refer other individuals who explore important information or experience in refuse and waste service delivery management at Murambinda Growth Point. There are those participants that are hard to reach who play informal roles in waste management but are not I administrative records so this is whereby snowball sampling was involved. Snowball sampling is effective in qualitative research where the goal is to gather rich in-depth information from information rich cases (Patton, 2015). Snowball sampling enhanced the depth and credibility of the data by incorporating diverse yet interconnected perspectives within the local waste management systems.

3.6 Data Collection Methods

Primary data was collected through semi-structured interviews, questionnaires and focus group discussions. The interviews provided in-depth insights from key informants, while the focus group discussions allowed for diverse perspectives and interaction among participants.

Secondary data was obtained from council records, environmental health reports, policy documents and relevant academic studies. These documents helped validate the primary findings and provided context for interpretation.

3.6.1 Questionnaires

Structured questionnaires were used to gather quantitative data from community members including households, businesses, and service users. The questionnaires consisted of closed-ended and open-ended questions to assess the frequency of refuse collection, waste disposal practices, and community satisfaction with waste management services. Anonymity was emphasized to encourage honest responses. Online and in-person administration methods were used to maximize participation. This method ensured broad coverage and data consistency challenges such as ensuring clarity of questions and achieving a high response rate were mitigated through pilot testing and careful design (Bryman, 2012). This method provided a foundational dataset for identifying patterns and trends in community perceptions of waste service delivery.

3.6.2 Semi-structured Interviews

Semi-structured interviews were used with key stakeholders which includes local government officials, waste collection staff, and community leaders. This approach allowed for an in-depth exploration of systemic challenges such as resource allocation, policy enforcement, and the

integration of community participation in waste management initiatives. The use of an interview guide ensured that essential topics were covered while allowing flexibility for follow-up questions. Interviews conducted in person offered richer context while phone interviews facilitated access to participants in remote areas. This method provided nuanced insights into the operational and structural aspects of waste management (Creswell, 2014). However, logistical issues, such as scheduling conflicts were managed through clear communication and alternative arrangements.

3.6.3 Focus group discussions

Focus group discussions were conducted with diverse participants including community members, business owners, and youth representatives. Each group consisted of 5–10 fostering dynamic discussions on barriers and opportunities in waste service delivery. Topics included waste separation practices, recycling efforts and collaboration between community members and local authorities. Facilitators used a discussion guide to ensure balanced participation and to cover all relevant themes. While challenges such as dominant voices overshadowing quieter participants were observed, strategies like guided moderation created an inclusive environment. This method provided collective insights and highlighted community-driven solutions to waste management challenges (Flick, 2018).

3.7 Validity and Reliability

To ensure credibility (validity), the research used data triangulation by using multiple data sources interviews, focus groups and documentary analysis. Dependability (reliability) was ensured through consistent procedures in data collection, use of audio recordings and detailed field notes. All interviews were transcribed and data analysis was conducted to maintain transparency.

3.8 Data Presentation and Analysis

Data was collected from participants and the transcripts were read repeatedly and feedback papers were assigned based on both pre-determined categories from literature and themes that emerged during data collection.

Qualitative data

Qualitative data obtained from semi-structured interviews and focus group discussions will be studied using thematic analysis to provide profound understanding into the challenges and opportunities of waste service delivery at Murambinda Growth Point. This approach involves transcribing, coding, and categorizing data into themes such as "community involvement," "policy gaps," or "innovative waste management solutions" to identify cycling patterns and stakeholder perspectives. For example, the analysis may highlight how limited funding and weak policy enforcement affect effective waste management or brings out the role of local initiatives in promoting recycling. Direct quotes from participants will visualize and contextualize the findings, ensuring that diverse voices are captured. This thematic analysis will explore the understanding of systemic issues and provide actionable insights that complement the quantitative data (Braun & Clarke, 2006).

3.9 Pilot Testing

Before data was collection, the interviews, questionnaires and focus group guides were pretested with four individuals (two community members and two council staff) to ensure clarity and relevance. Adjustments were made based on their feedback to improve question phrasing and flowing enhancing the quality and effectiveness of the instruments.

3.10 Ethical Considerations

Ethical clearance was obtained from the applicable institutional review body. Participants were given informed consent forms explaining the study's purpose, procedures and their rights. Confidentiality and anonymity were maintained, as well as participation was strictly voluntary. The researcher also committed to using the findings deeply for academic purposes and storing data securely.

3.11 Summary

This chapter detailed the qualitative research methodology applied in analyzing the challenges and opportunities of refuse and waste service delivery management at Murambinda Growth Point. This chapter discussed the interpretivist philosophical foundation, purposive and snowball sampling, and data collection methods suited for qualitative inquiry. Data was analyzed thematically, ensuring the integrity and richness of findings. Ethical principles and pilot testing were also merged to support the study's credibility and relevance.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

The previous chapter presented the research methodology used in this study. This chapter presented and analyses the findings on the challenges and opportunities of refuse and waste service delivery management at Murambinda Growth Point. The research findings were done according to the research themes generated from specific objectives of the study obtained during data analysis. The main objectives were to explore the types, opportunities, mechanisms and challenges for managing refuse and waste at Murambinda Growth Point. The quantitative data will be presented in tables and pie charts while the qualitative data will be presented in thematic narratives.

4.1 Bio data of the participants

Response rate

Leedy (2015) defined response rate as the proportion of subjects in a statistical study who responded to the research questions. Initially, the researcher intended to administer and receive 50 filled-in questionnaires. Nonetheless, 40 questionnaires were filled in and returned, making a response rate of 80 percent which according to Mugenda (2003) is ideal in any research to generalize findings. The response rate is therefore shown in Table 4.1

Table 4.1 Response Rate

Expected Response	Actual Response	Non-Response	Response Rate (%)
50	40	10	80%

Source: field data, 2025

4.2 Demographic variables

The demographic features of the respondents will be presented in accordance with their gender, age, and educational background.

4.2.1 Gender

It was discovered that 26 (65 percent) of the respondents recruited for the study were females, while 14 (35 percent) were males. This indicates a significant representation of women in the refuse and waste service management sector at Murambinda Growth Point, although this distribution did not impact the findings of the study.

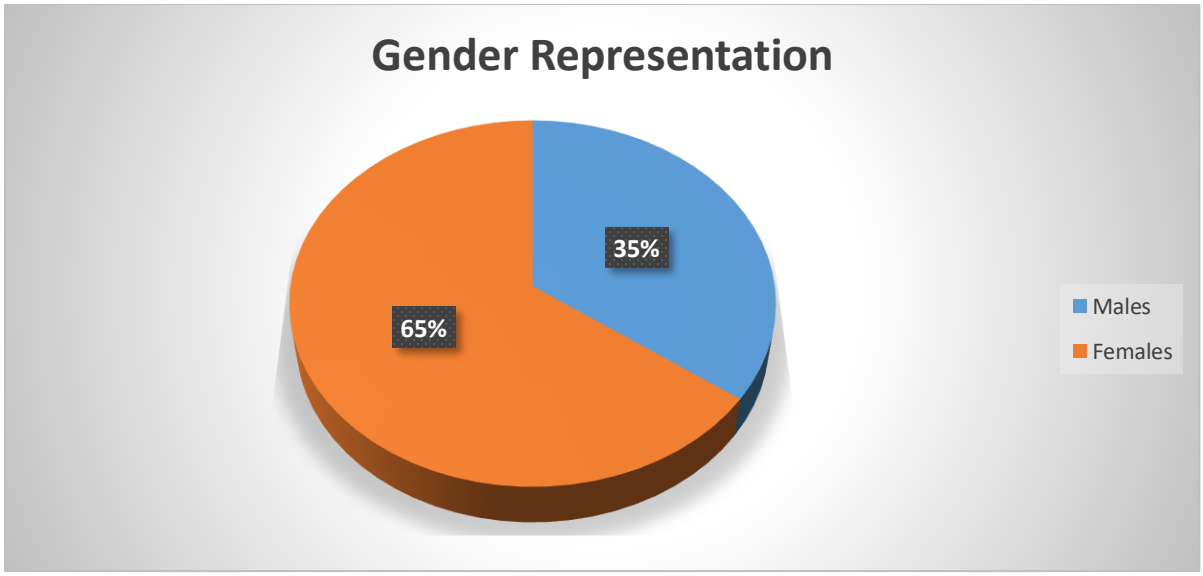


Figure 4.2 Gender representation

Source: field data, 2025

4.2.2 Age

From the respondents, it emerged that 20 percent were in the 25-30 years age group. Another 20 percent indicated they belonged to the 31-40 age cohort. The majority, 22.5 percent, were in the 41-50 age group, and another 22.5 percent fell within the 51-64 age range. Lastly, 12 percent were above 65 years. The age distribution suggests that a significant portion of the workforce is older, which may impact innovative thinking and adaptability to new waste management practices. Therefore, it may be beneficial to recruit younger individuals who are more likely to bring fresh perspectives and agility to the service delivery process. Table 4.2 illustrates the age distribution.

Table 4.2 Age distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	"25-30 years"	8	20.0	20.0	20.0
	31-40 years	8	20.0	20.0	40.0
	41-50 years	9	22.5	22.5	62.5
	51-64 years	9	22.5	22.5	88.0
	65+ years	6	12.0	12.0	100.0
	Total	40	100.0	100.0	

4.2.3 Education level

Of the 40 respondents, 32.5 percent indicated that they had reached tertiary education, while 7.5 percent had completed primary education. The majority, at 42.5 percent, had attained secondary education, and 17.5 percent had other specialized qualifications. The relatively high level of

education among respondents suggests a well-informed and capable group, likely contributing to the quality of responses received. This educational diversity is essential for understanding the complexities of refuse and waste service delivery management. Specifically, those with tertiary and specialized education may bring valuable insights into effective waste management practices and innovative solutions to the challenges faced at Murambinda Growth Point. This underscores the importance of involving educated individuals in decision-making processes to enhance service delivery and foster improvements in waste management strategies.

Table 4.3 Education Level

		Percent	Valid Percent	Cumulative Percent
Valid	"Tertiary"	32.5	32.5	32.5
	Primary	7.5	7.5	40.0
	Secondary	42.5	42.5	82.5
	Other	17.5	17.5	100.0
	Total	100.0	100.0	

4.2.4 Employment status

When asked about their employment status, the responses revealed a diverse situation among the respondents. A majority, 50 percent, indicated that they were currently employed, reflecting a

strong presence of active workers contributing to refuse and waste service delivery management. In contrast, 45 percent of the respondents reported being unemployed, which highlights a significant portion of the community facing challenges in securing stable employment. This situation may impact the overall effectiveness of waste management services, as a lack of employment can lead to decreased community engagement in these initiatives.

Additionally, 5 percent of the respondents indicated that they were retired, suggesting that experienced individuals are still available to offer valuable insights and guidance based on their prior work experience. This mix of employed, unemployed, and retired individuals creates a complex landscape for waste management efforts, emphasizing the need for strategies that can leverage the strengths of all community members while addressing the challenges posed by unemployment.

Table 4.4 Work experience

		Percent	Valid Percent	Cumulative Percent
Valid	“Unempoyed”	45.0	45.0	45.0
	Retired	5.0	5.0	50.0
	Employed	50.0	50.0	100.0
	Total	100.0	100.0	

Source: field data, 2025

4.3 Presentation of findings

Objective one sought to identify the various types of waste generated at Murambinda Growth Point. The study sought to provide a comprehensive understanding of the nature of waste accumulation in the area as well as highlighting the implications for environmental health and the efficiency of waste management services. The findings revealed that Murambinda Growth Point generates diverse types of waste stemming from both domestic and commercial activities. The waste categories identified include organic waste, plastic waste, paper and cardboard waste, metal and glass waste, electronic waste (e-waste) and hazardous waste. The research question guiding this objective was: What types of waste are found at Murambinda Growth Point and what are their implications for waste management? The data collected provides valuable insights into the nature of waste produced highlighting the need for targeted waste management interventions to address environmental pollution and public health concerns. A pie chart was used to illustrate the proportion of different waste types providing a visual representation of the findings.

Question	**Strongly Disagree (1)**	**Disagree (2)**	**Neutral (3)**	**Agree (4)**	**Strongly Agree (5)**
I am aware of the different types of refuse and waste generated.	10%	15%	20%	30%	25%
The refuse and waste management services in Murambinda have improved over the past few years.	15%	20%	15%	30%	20%

I believe that the local council provides adequate resources for effective waste management.	20%	25%	15%	25%	15%

Figure 4.1: shows percentage distribution of waste types at Murambinda Growth Point

Source: Field Data, 2025

Through thematic analysis, the researcher identified key themes from participant responses regarding waste generation. By categorizing the different types of waste, the study was able to highlight the specific challenges associated with each category. The key themes identified include domestic and organic waste accumulation, plastic pollution and industrial and hazardous waste management. These themes were further divided into distinct categories.

4.3.1 Domestic and organic waste accumulation

Under this theme, there were three categories: organic waste, plastic waste and paper and then cardboard waste.

4.3.1.1 Organic waste

Organic waste comprising food scraps, fruit and vegetable peels and garden waste were identified as significant component of refuse at Murambinda Growth Point. This waste primarily originates from households, local markets and food vendors. 18.6 percent of the participants highlighted organic waste as a key environmental concern. Some respondents expressed the following views:

"Every day, food waste is dumped in the open attracting flies and rodents. This is a health hazard." (Participant 7) "We have the potential to compost this waste and use it for farming but there are no proper waste recycling programs in place." (Participant 15)

However, the study found out that the accumulation of organic waste contributes to foul odors and the spread of disease. Composting initiatives were suggested as a potential intervention to mitigate the environmental and health impacts of organic waste.

4.3.1.2 Plastic waste

Plastic waste, particularly single-use plastics such as bags, bottles and food packaging, were reported as major environmental challenge in Murambinda Growth Point. 22.3 percent of respondents identified plastic pollution as a pressing issue. Participants noted that:

"Plastic bags are everywhere. They clog drainage systems and cause flooding during the rainy season." (Participant 23)

"There is no system for collecting and recycling plastic waste. Most of it is burned, which pollutes the air." (Participant 32)

The lack of recycling facilities exacerbates the problem, leading to long-term pollution. Respondents suggested the need for public awareness campaigns, stricter regulations on plastic use and the promotion of biodegradable alternatives.

4.3.1.3 Paper and cardboard waste

Paper and cardboard waste, primarily from businesses, schools and households were another prevalent waste type in Murambinda. 15.4 percent of participants highlighted concerns about the disposal of newspapers, office paper, packaging materials and cartons.

Key observations from participants included:

"Paper waste is often burned which contributes to air pollution." (Participant 19)"We could recycle paper into new products, but there are no collection centers for paper waste." (Participant 28)

Although paper is biodegradable, improper disposal methods contribute to environmental degradation. Respondents recommended investing in paper recycling programs and promoting sustainable waste disposal practices.

4.3.2 Industrial and hazardous waste management

Under this theme, there were three categories: metal and glass waste, electronic waste (e-waste) and hazardous waste.

4.3.2.1 Metal and glass waste

Metal and glass waste including aluminum cans, scrap metal, broken bottles and discarded household items were found in waste collection points and illegal dumpsites. 12.7percent of respondents reported that metal and glass waste posed safety hazards. Participants raised the following concerns:

"Broken glass is everywhere. It is dangerous especially for children who play outside." (Participant 10)

"Scrap metalk could be recycled, but most of it ends up in dumpsites." (Participant 27).

Lack of a formal recycling system means that most of these materials end up in landfills or littering the environment. Some participants suggested that scrap metal collection programs and glass recycling initiatives could create employment opportunities while reducing waste.

4.3.2.2 Electronic waste (E-Waste)

Electronic waste, including discarded mobile phones, batteries, broken appliances and outdated electronic devices were identified as an emerging challenge in Murambinda. 6.8 percent of respondents highlighted concerns about improper disposal of e-waste. Respondents shared the following views:

"We don't know where to take old batteries and electronic devices, so we just throw them away." (Participant 4).

"E-waste contains harmful chemicals that can pollute water sources if not properly disposed of." (Participant 16).

The improper disposal of e-waste leads to the release of toxic substances such as lead and mercury, which pose serious environmental and health risks. Participants suggested the introduction of e-waste collection programs and awareness campaigns on safe disposal methods.

4.3.2.3 Hazardous waste

Hazardous waste, including medical waste from local clinics, expired chemicals and pesticide containers were poorly managed in Murambinda. 4.2 percent of respondents pointed out that hazardous waste posed significant health risks.

Participants voiced concerns such as:

"Medical waste is sometimes found mixed with other refuse. This is dangerous." (Participant 21)"There are no designated disposal sites for hazardous waste, so people just dump it anywhere." (Participant 37).

The improper disposal of hazardous materials exposes residents, especially children to serious health risks. Respondents recommended the establishment of dedicated disposal sites and stricter enforcement of waste management regulations. Hence the findings indicate that Murambinda Growth Point generates diverse types of waste, each requiring targeted interventions for effective management. Plastic waste emerged as the most significant environmental challenge, followed by organic waste and paper waste. The study highlights the urgent need for improved waste segregation, recycling initiatives and stronger community engagement to mitigate the negative impacts of waste disposal. These findings align with research by Mwanzo (2015), which states that unregulated waste disposal leads to severe environmental degradation and public health hazards. The study further supports Choudhary (2022), who emphasized the importance of community participation in waste management initiatives. Addressing these issues will require collaborative efforts from local authorities, businesses, and residents to implement sustainable waste management practices.

4.4 Waste management mechanisms at Murambinda Growth Point

Objective two of the study focuses on identifying and assessing the waste management mechanisms in place at Murambinda Growth Point. The findings revealed various aspects of the waste management system including waste collection efficiency, infrastructure adequacy, public awareness efforts and government communication. The primary question guiding this objective was: What are the waste management mechanisms in place at Murambinda Growth Point? Responses were categorized into three main themes: waste collection and disposal, public participation and awareness and governance and policy enforcement. A bar chart was used to illustrate the findings.

4.4.1 Waste collection and disposal

This theme covers the effectiveness of waste collection schedules (50percent approval) and the adequacy of waste disposal facilities (35 percent dissatisfaction).

Waste collection schedule

The study found that only 50 percent of respondents agreed that the current waste collection schedule is effective. This suggests inefficiencies in the frequency, timing and organization of waste collection. Participants expressed concerns about waste accumulation due to inconsistent or delayed collection services.

"Sometimes, waste is left uncollected for weeks, leading to overflowing bins and a terrible smell." (Participant 3) "We need a better waste collection schedule because the current one does not meet the needs of the growing population." (Participant 15)

These concerns indicate a need for more structured and frequent waste collection services to improve sanitation and environmental health. Studies such as those by Boateng (2021) and Njeru (2020) highlight the importance of regular waste collection in maintaining urban cleanliness and reducing pollution-related health risks.

4.4.2 Waste disposal infrastructure

The availability of waste disposal facilities was a major concern with 35 percent of respondents expressing dissatisfaction. Many communities lacked access to adequate waste bins, disposal sites and recycling facilities.

"Without enough bins and collection points, it's hard to manage waste effectively in our area." (Participant 7)

"We need a proper landfill or designated waste disposal sites to reduce illegal dumping." (Participant 22)

Studies such as those by Oduro et al. (2019) and Addo and Agyepong (2020) emphasized the need for adequate waste disposal infrastructure to minimize environmental hazards and promote sustainable waste management.

4.4.3 Public participation and awareness

This theme examines the effectiveness of public awareness campaigns (50percent dissatisfaction) and community participation in waste management programs.

4.4.4 Public awareness campaigns

Findings indicated that 50percent of participants felt that awareness campaigns were insufficient that led to poor waste disposal practices.

"Many people don't know the importance of proper waste disposal because there are no educational programs." (Participant 19)

"We need more workshops and campaigns to teach people how to recycle and reduce waste." (Participant 31)

Community engagement is a crucial component of effective waste management. According to Nyakudya (2022), public awareness campaigns enhance community participation and promote responsible waste disposal behaviors.

4.4.5 Community participation

Low community involvement was another issue raised in the study. The lack of proper engagement mechanisms has resulted in limited participation in recycling initiatives and waste management programs.

"People would participate more if we had clear programs and incentives." (Participant 25)

Studies by Koforidua and Kwaku (2018) suggest that successful waste management programs require active community involvement, particularly in areas where local governments face resource constraints.

4.4.6 Governance and policy enforcement

This theme explores the effectiveness of local government communication on waste management policies (65 percent approval) and enforcement of waste management regulations.

Local government communication

The study found that 65percent of respondents agreed that local government effectively communicates waste management policies.

"When the council shares information, it helps us understand our responsibilities better." (Participant 12)

While communication is relatively effective, execution remains a challenge. Studies by Mugadza (2023) emphasize the importance of policy implementation rather than just information dissemination.

4.4.7 Enforcement of waste management policies

Despite clear policies, poor enforcement remains a challenge, leading to illegal dumping and environmental degradation.

"There are rules, but no one enforces them. People dump waste anywhere because they know there are no consequences." (Participant 28)

According to Reddy (2018), strong policy enforcement is essential for sustainable waste management, as weak enforcement leads to non-compliance and environmental risks. The findings indicate that although certain waste management systems exist at Murambinda Growth Point, there are still considerable shortcomings in infrastructure, community participation, and enforcement measures.

Key recommendations include:

1. Improving waste collection schedules to ensure timely and consistent waste removal.

2. Expanding waste disposal facilities to reduce illegal dumping and enhance environmental sanitation.

3. Strengthening public awareness campaigns

4. Enhancing policy enforcement.

Table 4.6: Waste management mechanisms at Murambinda Growth Point

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)

The current waste collection schedule is effective in managing waste at Murambinda Growth Point.	10%	15%	25%	35%	15%
There are adequate waste disposal facilities available to the community.	15%	20%	30%	25%	10%
Public awareness campaigns on waste management are sufficient.	20%	30%	25%	15%	10%
The local government effectively communicates waste management policies to the community.	5%	10%	20%	40%	25%

Source: field data, 2025

4.5 Challenges in Waste management at Murambinda Growth Point

Objective three explores the difficulties associated with waste management and the significance of community participation at Murambinda Growth Point. Findings show that 70% of respondents agreed or strongly agreed that waste management faces significant challenges, 80% highlighted the importance of community participation, 50% acknowledged existing partnerships between local government and NGOs, and 65% recognized the potential benefits of training local leaders. Three themes emerged from the research findings: waste management challenges, institutional implications and community engagement. The guiding question for this objective was: What are

the challenges in waste management at Murambinda Growth Point? A pie chart was used to illustrate the findings.

Table 4.7: Challenges in Waste Management and Community Participation

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
There are significant challenges faced by Murambinda District Council in managing waste effectively.	5%	10%	15%	35%	35%
Community participation is essential for improving waste management practices at Murambinda Growth Point.	5%	5%	10%	30%	50%
I have seen evidence of successful partnerships between local government and NGOs in waste management initiatives.	10%	15%	25%	30%	20%
Training programs for local leaders can enhance the effectiveness of waste management efforts.	5%	10%	20%	40%	25%

Source: field data, 2025

Figure 4.3: Challenges in Waste management at Murambinda Growth Point

4.5Waste management challenges

Under this theme, three categories were identified: inadequate waste management infrastructure, funding constraints and ineffective waste collection systems.

4.5.1 Inadequate waste management infrastructure

Limited infrastructure significantly affects waste management at Murambinda Growth Point. The absence of proper waste disposal sites, recycling facilities and waste bins contributes to poor waste handling. Respondents noted that the available infrastructure is insufficient for the growing population, leading to illegal dumping and environmental pollution.

"The town is growing, but our waste management system is still outdated. There are no proper dump sites and people end up disposing of waste anywhere." (Participant 5)"We need more bins and designated collection points. Without them, waste just piles up everywhere." (Participant 12)

4.5.2 Funding constraints

Insufficient funding was highlighted as a major challenge by respondents with many stating that the Murambinda District Council (Buhera Rural District Council) lacks money. Without adequate funds, it becomes difficult to purchase equipment, hire more waste collectors and implement community awareness programs.

"The council struggles to keep up with the growing waste problem and without more funding, it's hard to see real improvements." (Participant 18) "If waste management was properly funded, we would not have these problems. The government should step in and help." (Participant 27)

This finding corresponds with Zaman and Lehmann (2018), who identified financial constraints as a major hindrance to waste management efficiency in low-income communities.

4.5.3 Ineffective waste collection systems

The current waste collection system was described as irregular and inefficient. Others noted that informal settlements often lack access to waste collection services altogether.

"Sometimes waste is left uncollected for weeks and the streets start smelling. It is a serious health hazard." (Participant 31)

"Certain areas do not even get waste collection services. It's as if the council only cares about the town center." (Participant 22)

Handley and Grofman (2018) observed that inadequate waste management services often heighten environmental and health hazards, underscoring the importance of effective collection systems.

4.5.4 Institutional implications

One category emerged under this theme: the absence of effective partnerships.

Absence of effective partnerships

Despite the potential for collaboration, many respondents felt that partnerships between local government and NGOs have not been effectively implemented. While some partnerships exist, their impact on waste management remains minimal.

"I've heard of partnerships, but I don't see any real impact on the ground." (Participant 14) "The council should work more closely with NGOs to improve waste collection and recycling." (Participant 33)

This aligns with Rathi (2006), who found that well-structured partnerships between local governments and NGOs can significantly improve waste management systems. However, the study also emphasizes that partnerships must be effectively implemented to yield positive results.

4.5.5 Community engagement

Under this theme, two categories were identified: the role of community participation and the potential for training programs.

Role of Community participation

Community participation was recognized as crucial for improving waste management, with 80percent of respondents agreeing or strongly agreeing that public involvement is necessary. Many participants noted that when communities engage in clean-up campaigns, awareness programs, and waste segregation, waste management becomes more effective.

"When the community takes part in clean-up campaigns, we not only clean our environment but also foster a sense of responsibility." (Participant 9)

"If people were more involved in managing waste, the situation would be better. Right now, most people just don't care." (Participant 25)

This finding is consistent with Zaman and Lehmann (2018), who stressed that community involvement is crucial for achieving sustainable waste management outcomes. The results indicate that Murambinda Growth Point faces major waste management challenges, including insufficient infrastructure, limited funding, and inefficient waste collection systems. Furthermore, weak institutional collaborations and low levels of community participation were identified as key obstacles to effective waste management.

While community participation was emphasized as essential, concerns about the lack of effective partnerships and training programs were raised. Comparing these findings with previous studies, the challenges in Murambinda align with global waste management struggles in developing regions. Studies by Zaman & Lehmann (2018) and Gupta et al. (2020) confirm that financial limitations, weak infrastructure, and lack of public involvement are common barriers. However, Murambinda's case differs in that existing partnerships have not been as impactful as in other regions. Moving forward, addressing these issues through increased funding, stronger institutional collaborations in Murambinda Growth Point.

4.6: Opportunities to Enhance Waste Management Practices

Table 4.8: Opportunities to Enhance Waste Management Practices

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
There are opportunities for improving waste management practices at Murambinda Growth Point.	5%	10%	15%	40%	30%
I believe that community awareness programs can play a	5%	5%	10%	25%	55%

significant role in enhancing waste management.					

Source: field data, 2025

Objective four examined the potential for enhancing waste management practices at Murambinda Growth Point. The findings revealed that the primary opportunities identified included community awareness initiatives (40 percent), collaborations with NGOs and stakeholders (25 percent), infrastructure development (15 percent), enforcement of policies and regulations (10 percent), and technological advancements (10 percent).

4.6.1 Institutional strengthening

Two key categories emerged under this theme: partnerships with NGOs and stakeholders and policy enforcement and regulation.

Partnerships with NGOs and stakeholders

Collaborating with NGOs, private organizations and community-based groups were identified as key strategies for improving waste management. Many respondents highlighted that partnerships could provide financial resources, technical expertise and innovative waste management solutions that are currently lacking in Murambinda. These collaborations could also lead to training programs, awareness campaigns and infrastructure development to support waste management efforts.

"Collaborating with NGOs could bring in expertise and resources that we currently lack." (Participant 14)

"We need partnerships with organizations that can help us with equipment and technical knowledge on how to properly manage waste." (Participant 27)

Research supports this finding, as Omran and El-Shafie (2021) state that collaboration with NGOs can significantly improve waste management effectiveness by leveraging external expertise and resources. However, establishing successful partnerships requires clear policies and accountability frameworks to ensure sustainability.

Policy enforcement and regulation

Strengthening the enforcement of waste management policies was another critical opportunity identified. While Zimbabwe has legal frameworks for waste management, weak enforcement and lack of penalties for improper disposal contribute to poor practices. Participants emphasized the need for stricter monitoring, penalties for non-compliance and incentives for responsible waste management.

"The council needs to enforce by-laws and penalize those who dump waste in unauthorized areas." (Participant 6)

"We have waste management policies, but they are not being enforced. If people knew there were consequences, they would take waste disposal more seriously." (Participant 30)

This aligns with Tchobanoglous and Kreith (2002), who argue that regulatory enforcement is crucial for effective waste management. However, Rathi (2006) warns that without adequate infrastructure and community engagement, enforcement alone may not be sufficient.

4.6.2 Community engagement and education

This theme included two categories: community awareness programs and infrastructural development.

Community awareness programs

A significant portion of respondents (40%) emphasized the importance of education and awareness in improving waste management. Numerous individuals noted that residents possess insufficient knowledge regarding appropriate waste disposal, recycling, and the environmental impacts of inadequate waste practices.They suggested that awareness initiatives delivered through community meetings, schools, and social media campaigns could help improve waste management practices.

"If we could organize regular workshops on waste management, it would help everyone understand their role in keeping our environment clean." (Participant 22)

"People throw waste anywhere because they don't know the consequences. We need awareness programs to educate them." (Participant 9)

Research by Tchobanoglous and Kreith (2002) confirms that educational initiatives can significantly influence waste disposal behavior. However, for these programs to be effective, they must be continuous and tailored to the community's needs.

Infrastructural development

Participants emphasized the need to improve waste management infrastructure, such as increasing the number of bins, establishing more collection points, and providing proper landfill sites. Inadequate facilities compel residents to dump waste in open areas, creating environmental and healthrisks.

As one participant explained: "There are no proper dumping sites, so people just throw waste anywhere. We need designated places for waste disposal." (Participant 18) Another participant stated: "An increased number of bins ought to be positioned in strategic areas to facilitate proper waste disposal for individuals." (Participant 35) Supporting this view, Rathi

(2006) found that without adequate infrastructure, even well-designed waste management programs face difficulties in succeeding. Closing these infrastructure gaps is therefore critical for sustainable progress.

4.6.3 Innovation and technology

A key category under this theme was the use of technology to improve waste management.

Participants pointed out opportunities to incorporate technology into waste management, including recycling initiatives, composting programs, and digital systems for tracking waste collection. Several noted that waste separation and recycling could both generate income and help reduce environmental pollution.

Technological innovation

"If we had a recycling facility, we could turn waste into something useful instead of just dumping it." (Participant 12)

"Technology can help us track waste collection and ensure that areas are cleaned regularly." (Participant 28).

According to Omran and El-Shafie (2021), technological advancements in waste management, such as smart bins and digital waste tracking, have significantly improved efficiency in various urban areas. However, the success of such initiatives depends on funding and technical expertise.

The findings highlight multiple opportunities for improving waste management practices at Murambinda Growth Point. Strengthening institutional frameworks, enhancing community engagement, developing infrastructure and leveraging technology emerged as key areas of focus. By implementing awareness programs, enforcing policies, improving infrastructure and

incorporating innovative waste management solutions, Murambinda Growth Point can make significant progress in sustainable waste management.

4.7 Chapter Summary

This chapter outlined and analyzed the study's findings on refuse and waste management mechanisms at Murambinda Growth Point. The results were presented through tables, bar graphs, and pie charts, and examined using both thematic and statistical analysis. The following chapter will wrap up the study by summarizing the main findings, drawing conclusions, providing recommendations, and suggesting areas for further research.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

5.1 Introduction

The previous chapter detailed and examined the results regarding the challenges and opportunities related to refuse and waste service delivery at Murambinda Growth Point. This chapter synthesizes those findings by summarizing the key aspects of the study, drawing conclusions, offering practical recommendations, and identifying potential areas for future research relevant to Murambinda Growth Point. The structure of this chapter aligns with the research objectives and thematic qualitative analysis approach outlined in Chapter Three.

5.2 Summary

Chapter 1

The first chapter introduced the study by providing an overview of refuse and waste service delivery at Murambinda Growth Point. It examined waste types, existing challenges, available opportunities, and current management mechanisms. The document also delineated the aim of the study, the statement of the problem, the objectives of the research, the questions posed for investigation, the foundational assumptions, along with the importance, constraints, and boundaries of the research.

Chapter 2

The second chapter reviewed relevant literature and the theoretical frameworks guiding the study. It drew on *systems theory* (Bertalanffy, 1968) and the *sustainable development theory* (Brundtland Commission, 1987). The literature review was organized according to themes

aligned with the research objectives, covering waste types, management mechanisms, challenges, and opportunities. It also identified notable gaps in previous studies.

Chapter 3

Chapter Three outlined the research methodology. A mixed-methods strategy was employed, integrating both qualitative and quantitative methods within a case study framework to achieve a comprehensive understanding of waste service delivery at Murambinda Growth Point. The target population comprised 50 participants, chosen through a combination of stratified and purposive sampling techniques. Data collection methods included questionnaires, semi-structured interviews, and focus group discussions with groups of five to eight participants. A pilot study was carried out before the main data collection to evaluate feasibility and enhance the instruments. Ethical considerations such as informed consent, voluntary participation, and confidentiality were rigorously upheld (Creswell & Creswell, 2018).

Chapter 4

The fourth chapter presented and analyzed the research findings utilizing both thematic and statistical analysis. Data were represented through tables, bar graphs, and pie charts, with qualitative responses offering deeper insights into the challenges and opportunities of waste management at Murambinda Growth Point. The findings were discussed in direct relation to the research objectives.

5.3 Summary of research findings

Types of refuse and waste

The first objective assessed community awareness and perceptions regarding refuse and waste management. Findings revealed that 55% of participants were aware of different waste types, while

25% exhibited uncertainty, highlighting the need for targeted educational initiatives. Perceptions of waste management services were mixed, with 50% acknowledging improvements in recent years, whereas 40% believed the local council lacked adequate resources. Qualitative responses emphasized the importance of community education on waste segregation and clean-up campaigns.

Waste management mechanisms at Murambinda Growth Point

The second objective examined existing waste management mechanisms. Findings indicated that only 50% of participants found the waste collection schedule effective, while 35% were dissatisfied with disposal facilities. Additionally, 50% believed public awareness campaigns were insufficient, despite 65% acknowledging that local government communication on waste management policies was effective. Participants stressed the need for improved infrastructure and continuous public awareness efforts. These results are consistent with the work of Hoornweg and Bhada-Tata (2012) and Zhu et al. (2008), who highlight that effective waste management relies heavily on adequate infrastructure investment and robust public education initiatives.

Challenges in waste management and community participation

The third objective examined the obstacles to effective waste management and community involvement. Findings revealed that 70% of respondents pointed to major issues such as limited funding, inadequate infrastructure, and a lack of sufficient training programs for local leaders. While 80% recognized the importance of community participation, only 50% reported successful partnerships between local government and NGOs. The findings align with studies by Zaman and Lehmann (2018), who argue that financial and infrastructural constraints hinder effective waste management.

Opportunities for enhancing waste management practices

The fourth objective aimed at identifying methods to improve waste management. The findings indicated that 70% of participants acknowledged the potential for enhancement, with 80% underscoring the significance of community awareness initiatives. Additionally, 55% supported the need for stronger partnerships with NGOs and local community organizations. Proposed strategies encompassed organizing workshops, enacting policy reforms, and encouraging active community involvement. These results are in line with the research conducted by Omran and El-Shafie (2021) and Tchobanoglous and Kreith (2002), who highlight the importance of participatory approaches and policy improvements.

5.4 Conclusions

5.4.1 Awareness and perception of refuse and waste management

The study concludes that although there is some community awareness regarding waste management, considerable gaps in knowledge and engagement remain. The lack of well-organized educational programs leads to misunderstandings and inadequate waste disposal practices. These findings are consistent with the research of Addo and Agyepong (2020) and Oduro et al. (2019), who emphasize the necessity of awareness for effective waste management. Further research is required to investigate the long-term effects of educational initiatives on waste management behaviors.

5.4.2 Waste management mechanisms at Murambinda Growth Point

The study concludes that existing waste management mechanisms are partially effective but require substantial improvements. The primary challenges include inadequate waste disposal

facilities and limited public awareness efforts. These findings are supported by research from Hoornweg and Bhada-Tata (2012).

5.4.3 Challenges in waste management and community participation

The research concludes that financial constraints, inadequate infrastructure and weak institutional support hinder waste management efforts. Although community participation is crucial, existing collaborations between local authorities and NGOs remain insufficient. These conclusions align with studies by Gupta et al. (2020) and Zaman and Lehmann (2018) which emphasized the need for increased funding.

5.4.4 Opportunities for enhancing waste management practices

The study concludes that enhancing waste management can be achieved through community awareness initiatives, collaborations with NGOs, and policy reforms. Nevertheless, long-term progress requires substantial investment in infrastructure. These conclusions are consistent with the work of Omran and El-Shafie (2021) and Tchobanoglous and Kreith (2002), who recommend comprehensive strategies that combine education, policy development, and infrastructural support.

5.5 Recommendations

5.5.1 Enhance community education programs

Targeted education initiatives should be implemented to increase public awareness of waste management practices. Workshops and outreach programs can foster responsible waste disposal behaviors.

5.5.2 Improve waste management infrastructure

Increased funding should be allocated for waste disposal facilities and service efficiency. Infrastructure upgrades are necessary to address existing gaps in waste management.

5.5.3 Foster partnerships with NGOs

Collaboration between local authorities and NGOs should be strengthened to support public awareness campaigns and enhance waste management initiatives.

5.5.4 Strengthen community participation

Clean-up campaigns, volunteer programs, and community feedback mechanisms should be promoted to increase public involvement in waste management decisions.

5.5.5 Monitor and evaluate Waste management initiatives

Regular assessments should be conducted to identify areas for improvement and ensure sustainability.

5.6 Areas for further research

5.6.1 Assessing the influence of educational initiatives on community waste management practices

Additional studies should explore the long-term effects of educational programs on shaping community waste management behaviors.

5.6.2 Evaluating the effectiveness of local government waste management policies

Future investigations should focus on how waste management policies are implemented and their overall impact in Murambinda Growth Point and similar contexts.

5.6.3 Assessing the potential for adopting new technologies and practices in waste management

Investigating modern waste management technologies and innovative solutions can provide insights into improving sustainability and efficiency.

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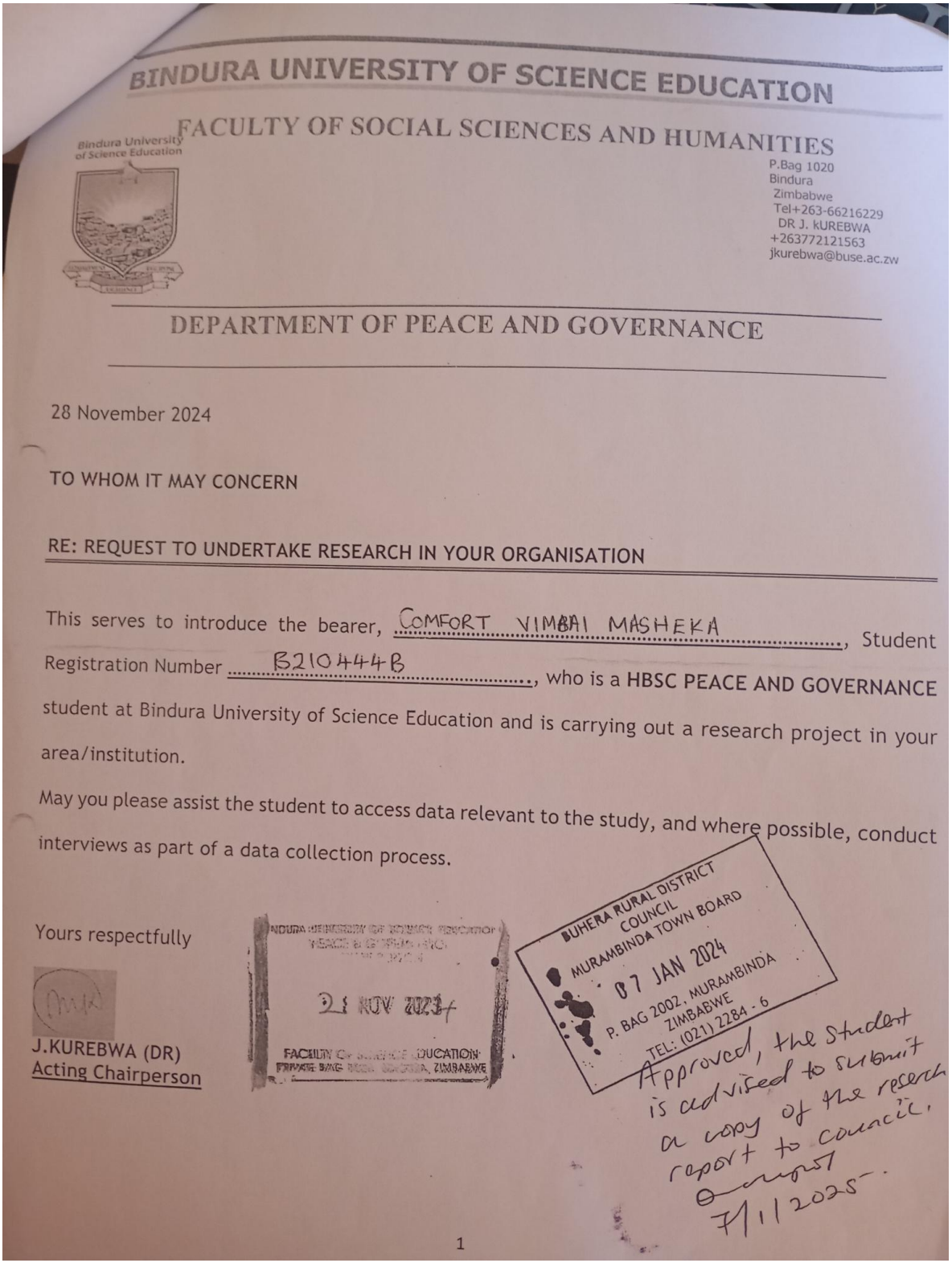
Appendix 1: Permission letter



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DEPARTMENT OF PEACE AND GOVERNANCE

28 November 2024

TO WHOM IT MAY CONCERN

RE: REQUEST TO UNDERTAKE RESEARCH IN YOUR ORGANISATION

This serves to introduce the bearer, COMFORT VIMBAI MASHEKA, Student Registration Number B210444B, who is a HBSC PEACE AND GOVERNANCE student at Bindura University of Science Education and is carrying out a research project in your area/institution.

May you please assist the student to access data relevant to the study, and where possible, conduct interviews as part of a data collection process.

Yours respectfully

J.KUREBWA (DR)
Acting Chairperson

BUHERA RURAL DISTRICT COUNCIL
MURAMBINDA TOWN BOARD
07 JAN 2024
P. BAG 2002, MURAMBINDA
ZIMBABWE
TEL: (021) 2284 - 6

Approved, the Student is advised to submit a copy of the research report to council.
7/1/2025.

1

Appendix 2 Informed Consent Form

Introduction

I am Comfort Masheka, a student at Bindura University of Science Education. I invite you to participate in a research study on the "Challenges and Opportunities of Refuse and Waste Service Delivery Management at Murambinda Growth Point."

Purpose

This study aims to explore the mechanisms for managing refuse and waste at Murambinda Growth Point, identify the challenges faced, and uncover opportunities for improving service delivery.

Participation

Your participation is entirely voluntary. You may withdraw from the study at any time without penalty or any impact on your relationship with me or the university.

Procedures

If you agree to participate, I will ask you to take part in an interview lasting approximately one hour. The discussion will focus on your perspectives and experiences regarding refuse and waste management in Murambinda Growth Point. Your responses will be kept anonymous.

Benefits

Your participation will contribute to a better understanding of waste management challenges and help develop strategies to improve service delivery in the community. Upon request, I will share the research findings with you.

Confidentiality

All information you provide will remain confidential. Research findings will not link your name to your responses or identify you in any way.

Questions

If you have any questions or concerns about the research, please feel free to ask me before signing this form.

Consent

By signing below, you confirm that you understand the purpose and procedures of the study, agree to participate voluntarily, and acknowledge your right to withdraw from the study at any time.

Signature (optional)

Date

Thank you for considering participation

Appendix 3 Questionnaire for Local Community Members
Introduction

Hello! My name is Comfort Vimbai Masheka, I am a student at Bindura University of Science Education. I am conducting a research study on the challenges and opportunities of refuse and waste service delivery management at Murambinda Growth Point in Zimbabwe. Your participation is vital to this study and your responses will be kept confidential. Thank you for your time and insights.

Demographic Information

Please provide the following information by ticking the appropriate box:

Demographic Information

Options

Demographic Information	**Options**
1. Age	15-25 ☐
	25-35 ☐
	35-50 ☐
	50-55 ☐
	55-60 ☐
2. Gender	Male ☐
	Female ☐
	Other ☐
3. Level of Education	Primary ☐
	Secondary ☐
	Tertiary ☐
4. Employment Status	Employed ☐
	Unemployed ☐

	Student ☐
	Retired ☐

5. I am aware of the different types of refuse and waste generated at Murambinda Growth Point.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

6. The refuse and waste management services in Murambinda have improved over the past few years.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

7. I believe that the local council provides adequate resources for effective waste management.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

8. There are significant challenges faced by Murambinda District Council in managing waste effectively.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

9. Community participation is essential for improving waste management practices at Murambinda Growth Point.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

10. I have seen evidence of successful partnerships between local government and NGOs in waste management initiatives.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

11. Training programs for local leaders can enhance the effectiveness of waste management efforts.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

12. There are opportunities for improving waste management practices at Murambinda Growth Point.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

13. I believe that community awareness programs can play a significant role in enhancing waste management.

Response: Strongly Disagree (1) ☐ | Disagree (2) ☐ | Neutral (3) ☐ | Agree (4) ☐ | Strongly Agree (5) ☐

Appendix 4 Interview Guide for Council Workers

Introduction

Hello! My name is Comfort, and I am a student at Bindura University of Science Education. I am conducting a research study on the challenges and opportunities of refuse and waste service delivery management at Murambinda Growth Point in Zimbabwe. Your insights as a council worker are crucial for this study, and your responses will be kept confidential. Thank you for your time.

Interview questions for council workers

1.What are the types of refuse and waste found at Murambinda Growth Point?

……

……

2. What problems does the council face in managing waste in Murambinda?

……

……

3. What are the refuse and waste management mechanisms available at Murambinda Growth Point.

……

……

4. What are the challenges faced by the Murambinda Rural District Council in waste management.

……

……

5. What are the opportunities in refuse and waste service delivery management at Murambinda Growth Point.

……

……

6. What extra resources or help does the council need to improve waste services?

……

……

7. How do partnerships with NGOs or community groups help with refuse and waste service delivery management?

……

……

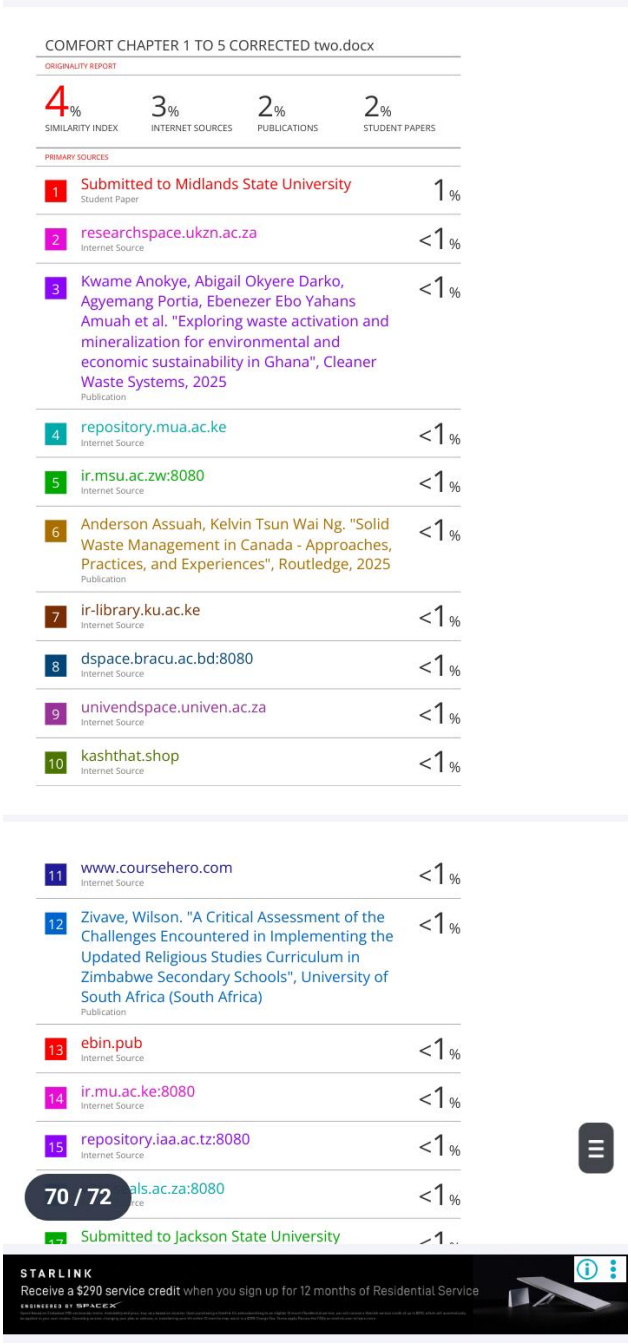
9. Which groups are affected by the ineffectiveness of refuse and waste service delivery management at Murambinda Growth Point?

……

……

10. Is there any improvement in refuse and waste service delivery management at Murambinda Growth Point?

……



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