

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF KIAMBU

RUIRU MUNICIPALITY.

**DEPARTMENT OF MUNICIPAL ADMINISTRATION AND URBAN
DEVELOPMENT**

SOLID WASTE MANAGEMENT POLICY

2025

Foreword

Rapid urbanization, population growth, and expanding economic activities continue to transform Ruiru Municipality into one of the most vibrant urban centres within Kiambu County. While this growth presents significant opportunities for economic development and improved livelihoods, it also brings increased pressure on urban infrastructure and essential services, particularly in the management of municipal solid waste.

Solid waste management remains one of the most critical environmental and public health challenges facing urban areas today. If not properly managed, waste can lead to environmental pollution, blocked drainage systems, spread of diseases, and degradation of the aesthetic value of our urban spaces. Conversely, when managed sustainably, waste can be transformed into a valuable resource that supports economic development, job creation, and environmental conservation.

This Solid Waste Management Policy for Ruiru Municipality provides a comprehensive framework for addressing the growing waste management challenges in the Municipality. The policy outlines strategic approaches for waste reduction, segregation at source, recycling, composting, safe transportation, and environmentally sound disposal. It is aligned with national legislation, particularly the Sustainable Waste Management Act 2022, which provides a modern legal framework for sustainable waste management in Kenya.

The development of this policy has been informed by the current waste management situation in Ruiru Municipality, where waste generation is estimated at over 240 tonnes per day and expected to increase with continued population growth. The policy therefore emphasizes the adoption of an Integrated Solid Waste Management approach that promotes waste minimization, resource recovery, public participation, and collaboration between government, private sector actors, and the community.

The successful implementation of this policy will require strong institutional coordination, adequate resource allocation, and active participation from all stakeholders including residents, businesses, waste collectors, community organizations, and development partners. It is only through collective responsibility that we can achieve a clean, healthy, and sustainable urban environment.

On behalf of the County Government of Kiambu and the leadership of Ruiru Municipality, I wish to commend all stakeholders who contributed to the development of this policy. I urge all residents and partners to support its implementation as we work together towards building a cleaner, greener, and more resilient Ruiru Municipality.



Joan Nduta Kihori.
Municipal Manager - Ruiru Municipality
County Government of Kiambu



Executive Summary

Ruiru Municipality is one of the fastest growing urban centres in Kiambu County. Rapid population growth, urbanization, and economic expansion have led to a steady increase in municipal solid waste generation. Effective management of this waste is essential to protect public health, conserve the environment, and enhance urban livability.

This Solid Waste Management Policy establishes a framework for integrated waste management in Ruiru Municipality. The policy aligns with national legislation including the Sustainable Waste Management Act, 2022, the Environmental Management and Coordination Act, and other relevant regulatory frameworks governing environmental protection and waste management in Kenya.

The policy promotes waste minimization, segregation at source, recycling, composting, and environmentally sound disposal. It also strengthens institutional capacity, encourages private sector participation, and promotes community involvement in waste management.

Implementation of this policy will support sustainable urban development, improve sanitation and environmental quality, create employment opportunities, and contribute to a circular economy within the municipality.

In addition, the policy provides strategic guidance for planning waste management infrastructure, improving service delivery, and strengthening coordination among county departments, regulatory agencies, private waste collectors, and community organizations. Through the adoption of modern waste management practices and technologies, the municipality seeks to enhance efficiency in waste collection, transportation, treatment, and disposal while minimizing environmental impacts.

The policy further recognizes the importance of public awareness and behavioural change in achieving sustainable waste management. Residents, businesses, institutions, and community groups are encouraged to take an active role in reducing waste generation, practicing proper waste segregation, and supporting recycling initiatives. Through collective action and shared responsibility, Ruiru Municipality aims to develop a cleaner, healthier, and more resilient urban environment for present and future generations.

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1. INTRODUCTION.

1.1 Title

Ruiru Municipality Solid Waste Management Policy

1.2 Adopting Authority

This Policy is adopted by the Ruiru Municipal Board under the County Government of Kiambu, pursuant to the provisions of the Constitution of Kenya, 2010 and other relevant national and county laws governing urban management, environmental protection, and solid waste management.

1.3 Date of Adoption

This Policy shall take effect upon its formal adoption and approval by the Ruiru Municipal Board and shall serve as the guiding framework for solid waste management within Ruiru Municipality.

1.4 Background

Ruiru is a strategically located municipality in Kiambu, approximately 20 km northeast of Nairobi's central business district within the greater Nairobi Metropolitan Region. It covers an area of about 201 km² to 292 km², lying on fertile highland terrain at an elevation of around 1,500 m above sea level, with a temperate climate and two rainy seasons that support both agriculture and human settlement. These geographic advantages underpin Ruiru's rapid urban and economic growth.

According to the 2019 Kenya Population and Housing Census, Ruiru has an estimated population of over 490,000 residents, making it one of the country's most populous urban centres. The area has experienced significant population growth in recent years, driven largely by migration from rural areas and Nairobi's expanding middle class seeking affordable housing and employment opportunities.

Economically, Ruiru is both a residential dormitory town for Nairobi commuters and a major industrial and commercial hub. It hosts several large manufacturing and processing industries, including steel, textiles, foam, and agro-processing plants, as well as the Tatu City industrial and mixed-use development park that attracts investors and creates jobs. Agriculture notably coffee, horticulture, and dairy farming remains important in the surrounding areas, while services, retail, real estate, and education sectors are growing rapidly.

Socially, Ruiru is a diverse and dynamic community, with long-standing agricultural traditions alongside a fast-growing urban culture. The youthful population, including students from higher education institutions, contributes to a vibrant labour market and rising demand for housing, transport, education, and social services.

The rapid pace of urbanisation and industrialisation has brought significant benefits in terms of economic opportunities and social development; however, it has also intensified

pressure on basic infrastructure and services, particularly solid waste management. Unplanned development, increasing population density, and the expansion of commercial activities have resulted in growing volumes of waste that challenge existing collection, transportation, treatment, and disposal systems. Proper management of solid waste is therefore essential to protect public health, safeguard the environment, and ensure sustainable economic growth.

This policy provides a comprehensive framework for managing solid waste in Ruiru, aligning local practices with national laws, international best practices, and community expectations to promote a clean, healthy, and sustainable environment for all residents.

2. SITUATIONAL ANALYSIS OF SOLID WASTE MANAGEMENT

2.1 Waste Generation and Characteristics

Ruiru Municipality is experiencing rapid population growth, urbanization, and expansion of commercial activities, which have significantly increased solid waste volumes over the past decade. The municipality comprises densely populated residential areas, commercial hubs, industrial facilities, institutional zones, peri-urban settlements, and public spaces such as streets, parks, and bus terminals. These diverse zones contribute to varying waste generation patterns and types.

Based on current demographic data, Ruiru Municipality has an estimated **population of 490,120 residents**, distributed across three wards:

Biashara Ward: 248,393 residents

Gatongora Ward: 146,840 residents

Gitothua Ward: 94,887 residents

Population density and economic activity heavily influence the amount and composition of waste, with Biashara Ward generating the largest share due to its high residential and commercial population.

Estimated Daily Waste Generation by Ward and Source

Ward	Population	Waste Generation per Person (kg/day)	Total Waste (Tons/Day)	Major Sources / Notes
Biashara	248,393	0.65	161.5	High-density residential & commercial hub; largest waste contributor
Gatongora	146,840	0.55	80.8	Mixed residential and commercial; moderate density
Gitothua	94,887	0.55	52.2	Low-density residential; peri-urban settlements
Total	490,120	–	294.5	Municipality-wide daily waste estimate

Municipal solid waste in Ruiru can be classified into four main categories:

Waste Type	Percentage of Total Waste	Approx. Daily Volume (Tons/Day)	Major Sources
Organic Waste	60%	176.7	Households, markets, restaurants
Recyclable Materials	18%	53.0	Plastics, paper, cardboard, metals, glass
Residual / Non-Recyclable	10%	29.5	Textiles, rubber, composite materials
Hazardous Waste	5–7%	14.7–20.6	Hospitals, industrial waste, chemicals

Based on population estimates and waste generation benchmarks, the municipality currently produces approximately 318 tonnes of waste per day. With projected population growth to over 568,000 residents by 2030, daily waste generation is expected to increase to around 369 tonnes per day, creating additional pressure on existing waste management systems.

2.2 Solid Waste Management Flow

Ruiru Municipality employs a combination of municipal and private systems for solid waste management. The waste management flow comprises the following stages:

Waste Generation – Occurs across households, commercial establishments, markets, industrial and institutional facilities.

Segregation at Source – Although encouraged, segregation is currently insufficient, resulting in mixed waste streams that complicate recycling and recovery efforts.

Collection and Transportation – Managed by a combination of municipal trucks and licensed private garbage collectors. Approximately **70% of household waste** is collected by private actors. Collection is organized by zoning:

1. **Red Zones:** High-density areas (e.g., Biashara Ward, CBD) serviced daily.
2. **Orange Zones:** Moderate-density areas (Gatongora Ward) serviced 2–3 times per week.
3. **Green Zones:** Low-density areas (Gitothua Ward) serviced weekly.

Treatment and Resource Recovery – Recycling and composting are emerging but limited. A few private enterprises recover plastics, metals, and glass, but overall capacity remains insufficient.

Final Disposal – Waste is transported mainly to **Kangoki dumpsite in Thika**, the municipality’s designated final disposal site. Illegal dumping still occurs along roads, streams, and idle plots.

2.3 EXISTING SOLID WASTE MANAGEMENT SYSTEMS.

Current solid waste management in Ruiru Municipality is delivered through a **mixed system of municipal services, private contractors, and informal actors**, with the following characteristics:

Higher service coverage in town centres and commercial areas, lower coverage in peri-urban and low-density zones.

Predominantly mixed waste collection, limiting recycling and composting potential.

Collection infrastructure challenges, including frequent truck breakdowns and mechanical failures.

Limited recycling facilities, with only a few private enterprises engaged in material recovery.

Informal waste collectors operating outside the formal system, often without safety measures.

Public awareness of proper waste management practices remains low, reducing community participation in recycling, segregation, and proper disposal.

2.4 KEY CHALLENGES AND GAPS

Ruiru Municipality faces multiple challenges that hinder effective solid waste management:

- ◆ Rapidly increasing waste volumes exceeding current collection and disposal capacity.
- ◆ Insufficient waste segregation at source.
- ◆ Incomplete collection coverage, especially in peri-urban and low-density wards.
- ◆ Illegal dumping along roadsides, drainage channels, and streams, leading to environmental and public health risks.
- ◆ Limited recycling, composting, and resource recovery infrastructure.
- ◆ Weak coordination between municipal authorities, private service providers, and community stakeholders.
- ◆ Inadequate public awareness and participation in proper waste management practices.
- ◆ Financial and operational constraints limiting expansion of services and infrastructure.

2.5 Opportunities and Emerging Trends

Despite these challenges, Ruiru Municipality presents opportunities for improved waste management:

- ◆ Growing private sector involvement in waste collection, recycling, and composting.
- ◆ High organic waste content suitable for large-scale composting and biogas production.
- ◆ Recyclable materials, such as plastics, paper, and metals, provide economic incentives for resource recovery enterprises.
- ◆ Increased public demand for cleaner, healthier environments, offering potential for community-based initiatives.

Alignment with national policy frameworks, including the Sustainable Waste Management Act 2022, which supports circular economy and sustainable practices.

Potential to integrate informal waste collectors and community organizations into formal service delivery to expand coverage.

By addressing these challenges and leveraging emerging opportunities, Ruiru Municipality can transition toward a sustainable, integrated, and circular solid waste management system, improving environmental protection, public health, and economic value from municipal waste streams

3. POLICY GOAL AND OBJECTIVES.

3.1. Policy Goal

The overall goal of this Solid Waste Management Policy is to establish an integrated, sustainable, and efficient solid waste management system in Ruiru Municipality that protects public health, preserves the environment, and contributes to socio-economic development. This goal is guided by the principles and requirements of the Sustainable Waste Management Act (SWMA) 2022, which obligates all levels of government, businesses, and residents to participate in responsible waste handling, recovery, and disposal. The policy aims to transition municipal waste management from traditional disposal-oriented practices to a modern, circular economy model that values waste as a resource.

3.2 Specific Objectives

a) Improve Waste Collection Efficiency

To ensure that waste collection services are accessible, reliable, and efficient across all urban, peri-urban, and commercial zones of Ruiru Municipality. The policy seeks to:

- ◆ Expand waste collection coverage to underserved areas.
- ◆ Establish optimized collection routes and schedules.
- ◆ License and regulate private and public waste service providers.
- ◆ Reduce instances of illegal dumping and environmental pollution.

These actions reflect SWMA 2022's requirement for local authorities to provide effective waste services and prevent unmanaged waste accumulation.

b) Promote Waste Segregation at Source

To institutionalize and enforce segregation of waste at the point of generation among households, institutions, industries, and businesses. Segregation will be carried out using a standardized classification system, including:

- ◆ Organic (biodegradable) waste
- ◆ Recyclable non-organic waste (plastics, paper, glass, metals)
- ◆ Hazardous waste (e.g., batteries, medical waste)
- ◆ Residual waste

Proper segregation will reduce contamination of recyclable streams, lower disposal costs, and improve downstream recycling and recovery, in accordance with SWMA mandates.

c) Enhance Recycling and Resource Recovery

To increase the quantity and value of waste diverted from landfills through **recycling, composting and other resource recovery processes**. The policy will:

- ◆ Support establishment of recycling and composting facilities.
- ◆ Facilitate public-private partnerships for waste transformation.
- ◆ Promote market development for recycled products.
- ◆ Encourage innovation in waste-to-energy and other recovery technologies.

This objective supports SWMA’s emphasis on waste reduction and the creation of value from materials that would otherwise be discarded.

d) Strengthen Institutional Coordination

To build a **coherent and collaborative institutional framework** that clarifies roles, responsibilities, and accountability for waste management. Key areas include:

- ◆ Coordination between Ruiru Municipality, Kiambu County Government, NEMA, and other agencies.
- ◆ Engagement of licensed private sector operators.
- ◆ Partnerships with community-based organizations and civil society.
- ◆ Integration of waste management into municipal planning, budgeting, and reporting.

Robust institutional coordination ensures effective implementation, enforcement of standards, and resource mobilization as envisioned under SWMA.

e) Promote Environmental Awareness and Behavioural Change

To empower residents, businesses, and institutions with knowledge and motivation to adopt responsible waste management practices. This will be achieved through:

- ◆ Public education campaigns in schools, markets, and neighbourhoods.
- ◆ Information on segregation, recycling, and proper disposal.
- ◆ Community clean-up events, competitions, and recognition programs.

Developing a culture of environmental stewardship is critical for long-term compliance and aligns with SWMA’s objectives of fostering public participation and awareness.

3.3. Linkage to Legal Framework

This policy is anchored in the Sustainable Waste Management Act (SWMA) 2022, which:

- ◆ Mandates segregation, reduction, reuse, recycling, and proper disposal of waste.
- ◆ Requires all levels of government to establish efficient waste management systems.
- ◆ Supports private sector participation and innovation.

Advances Kenya’s commitment to a green and circular economy. By implementing this policy, Ruiru Municipality will fulfill its legal obligations, improve environmental quality, and enhance the well-being of its residents.

4. VISION, MISSION AND GUIDING PRINCIPLES

4.1 Vision

A clean, healthy, and environmentally sustainable Ruiru Municipality where solid waste is managed efficiently through waste reduction, segregation at source, recycling, and responsible disposal, supported by strong stakeholder participation and a circular economy approach.

4.2 Mission

To promote integrated and sustainable solid waste management in Ruiru Municipality through effective policy implementation, enforcement of environmental regulations, waste segregation at source, stakeholder collaboration, and the promotion of waste reduction, recycling, and resource recovery in line with circular economy principles

4.3 Guiding Principles

The following principles guide the implementation of this Policy:

Polluter Pays Principle

All waste generators, including households, businesses, institutions, and developers, shall bear responsibility for the waste they produce and the environmental impacts arising from their activities. Polluters will be required to contribute to waste management costs and environmental restoration.

Waste Hierarchy

Waste management shall prioritize waste prevention, reduction, reuse, recycling, and recovery before considering final disposal, in order to minimize environmental impacts and promote resource efficiency

Circular Economy Principle

The municipality will promote systems that treat waste as a resource by encouraging recycling, composting, and material recovery, thereby reducing disposal site dependency and supporting sustainable economic activities.

Precautionary Principle

Where there is a risk of environmental harm from waste-related activities, preventive measures shall be taken even where scientific certainty is not fully established.

Sustainability Principle

Solid waste management practices shall ensure the protection of environmental resources, public health, and ecosystem integrity while supporting long-term urban development with integration of climate resilience.

Equity and Inclusivity

Waste management services should be accessible, fair, and responsive to the needs of all residents, including peri-urban and underserved areas within the municipality.

Public Participation and Accountability

Residents and stakeholders shall be actively engaged in decision-making, implementation, and oversight of solid waste management initiatives, in line with constitutional requirements for public participation.

Shared Responsibility and Partnerships

Effective solid waste management shall be a shared responsibility among the municipality, residents, businesses, waste service providers, development partners, and national and county institutions.

Partnership and Collaboration

The municipality will promote partnerships with private sector entities, community organizations, and development partners to enhance innovation, investment, and efficiency in solid waste management.

Compliance and Enforcement

All stakeholders shall comply with applicable environmental laws, regulations, and municipal by-laws governing waste management, with the municipality strengthening enforcement mechanisms.

5. LEGAL AND REGULATORY FRAMEWORK.

This Solid Waste Management Policy is anchored in and shall be implemented in accordance with the national constitutional provisions, legal statutes, and policy instruments that govern environmental protection, urban management, and waste management in Kenya. These frameworks establish the legal mandate for county governments and municipalities to plan, regulate, and implement effective solid waste management systems.

5.1 National Constitutional Framework

This policy derives its primary authority from the Constitution of Kenya, 2010, which provides the overarching legal framework for environmental governance and sustainable development in Kenya.

Key constitutional provisions include:

Article 10 – Establishes national values and principles of governance including sustainable development, public participation, transparency, and accountability, which guide the formulation and implementation of public policies such as this one.

Article 42 – Guarantees every person the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations.

Article 69 (1) (a), (g), and (h) – Places an obligation on the State to ensure sustainable exploitation, utilization, management, and conservation of the environment and natural resources, and to eliminate processes and activities that may endanger the environment.

Article 70 – Provides mechanisms for the enforcement of environmental rights where the right to a clean and healthy environment is threatened or violated.

Fourth Schedule, Part 2, Section 2 (g) – Assigns county governments the responsibility for refuse removal, refuse dumps, and solid waste disposal services. These provisions establish the constitutional basis upon which Ruiru Municipality and the County Government of Kiambu undertake solid waste management responsibilities.

National Legal Framework

Solid waste management in Ruiru Municipality is further guided by several national laws that provide regulatory standards and institutional mandates.

Environmental Management and Coordination Act (EMCA)

The Environmental Management and Coordination Act provides the overarching legal framework for environmental management and protection in Kenya.

Relevant provisions include:

Section 3 – Establishes the right of every person to a clean and healthy environment.

Section 9 – Mandates the National Environment Management Authority to exercise general supervision and coordination over environmental matters in Kenya.

Sections 87–90 – Provide for the regulation, control, and management of hazardous and non-hazardous wastes.

5.1.1 Waste Management Regulations

The Environmental Management and Coordination (Waste Management) Regulations, 2006 were enacted under EMCA to regulate waste handling and disposal.

Key provisions include:

Regulations 4 and 5 – Require waste generators to ensure proper storage, segregation, and disposal of waste.

Regulations 15–17 – Provide for licensing of waste transporters and waste disposal facilities.

Regulations 23–24 – Prohibit illegal dumping, littering, and improper waste disposal.

5.1.2 Sustainable Waste Management Act

The Sustainable Waste Management Act, 2022 provides a comprehensive legal framework for sustainable and integrated waste management in Kenya.

Key provisions include:

Section 6 – Establishes the national framework for sustainable waste management.

Section 13 – Introduces mandatory segregation of waste at source.

Section 28 – Provides for Extended Producer Responsibility (EPR), requiring producers to take responsibility for waste generated from their products.

Section 36 – Defines the roles and responsibilities of county governments in solid waste management.

5.1.3. Urban Areas and Cities Act

The Urban Areas and Cities Act provides the legal framework for governance and management of municipalities and urban areas. **Section 36** mandates municipalities to provide essential urban services including solid waste management, environmental conservation, and infrastructure development.

5.1.4 County Governments Act

The County Governments Act, 2012 establishes the legal framework for county governance and planning.

Key provisions include:

- ◆ **Section 104** – Requires county governments to undertake integrated development planning, including environmental management.
- ◆ **Section 115** – Provides for public participation in county planning and policy implementation processes.

Public Health Act

The Public Health Act provides measures to safeguard public health.

Relevant provisions include:

- ◆ **Section 115** – Declares the accumulation of waste or refuse as a public nuisance.
- ◆ **Section 118** – Empowers authorities to prevent environmental conditions that may be harmful to public health.

5.1.5 Environmental Quality Regulations.

Other relevant regulations include:

- ◆ The Environmental Management and Coordination (Water Quality) Regulations, which regulate discharge of pollutants into water bodies and protect rivers and streams from contamination.
- ◆ The Environmental Management and Coordination (Air Quality) Regulations, which control air pollution including open burning of waste.

5.2 National Policy Framework

This policy is also guided by key national policy instruments that promote sustainable environmental management.

These include: The National Sustainable Waste Management Policy, which provides strategic direction for integrated waste management including waste minimization, recycling, circular economy development, and private sector participation.

The National Environment Policy, which promotes sustainable environmental management and pollution prevention.

The Kenya National Climate Change Action Plan, which recognizes improved waste management as a key climate mitigation strategy through methane reduction, recycling, and resource recovery.

5.3 County and Local Development Framework

At the county level, this policy aligns with development plans and strategies adopted by the County Government of Kiambu.

These include:

- ◆ The Kiambu County Integrated Development Plan, which identifies sustainable environmental management and improved waste management services as key development priorities.
- ◆ Kiambu County spatial plans, municipal development strategies, sectoral policies, and county by-laws relating to environmental management and waste service delivery.

5.4 Policy Implications for Ruiru Municipality

The legal and policy instruments outlined above provide a comprehensive framework guiding the management of solid waste and environmental protection in Kenya. They establish the constitutional right to a clean and healthy environment, define the roles and responsibilities of national and county governments, and provide regulatory standards for waste handling, transportation, treatment, and disposal.

The Ruiru Municipality Solid Waste Management Policy therefore derives its authority and strategic direction from these national laws, regulations, and county development frameworks. By aligning with these instruments, the policy ensures that municipal waste management practices support national environmental objectives, protect public health, promote recycling and resource recovery, and strengthen regulatory compliance.

Ultimately, this policy provides a locally responsive framework through which Ruiru Municipality will operationalize national environmental goals while addressing the specific waste management challenges associated with rapid urbanization, population growth, and economic development within the municipality

6.GEOGRAPHIC SCOPE

This Policy applies to all areas within the administrative boundaries of Ruiru Municipality, covering diverse settlement types, including densely populated town centres, rapidly developing residential and commercial areas, peri-urban neighbourhoods, and agricultural lands. It recognizes differences in population density, land use, and development patterns and provides a flexible framework to guide solid waste management practices across all settings. The Policy addresses waste generated in residential, commercial, industrial, institutional, peri-urban, and agricultural areas, reflecting the municipality's socio-economic and environmental diversity.

6.1 Scope of Waste Covered

The Policy governs the management of all types of solid waste generated within **Ruiru Municipality**, including but not limited to:

- ◆ Household and domestic waste
- ◆ Commercial and market waste
- ◆ Institutional waste, including schools, health facilities, and offices
- ◆ Non-hazardous industrial waste
- ◆ Construction and demolition waste, including soil, debris, and building materials
- ◆ Special and bulky waste

Hazardous waste shall be managed in accordance with national laws and regulations, in coordination with licensed service providers and relevant authorities, ensuring safety, compliance, and environmental protection. The Policy also promotes waste reduction, segregation, recycling, and resource recovery across all waste streams.

6.2 Stakeholders Covered

The Policy guides all stakeholders involved in solid waste management within Ruiru Municipality, clarifying roles and responsibilities to ensure effective, inclusive, and sustainable practices:

Residents and Households

Segregate waste at source into biodegradable, recyclable, and non-recyclable streams.

Store waste in approved containers until collection.

Dispose of waste only through licensed service providers.

Participate in community awareness programs and clean-up initiatives.

Businesses, Markets, and Commercial Establishments

Implement waste minimization strategies in operations and packaging.

Segregate and safely store waste until collection.

Contain waste within premises for collection by municipal or licensed service providers.

Support recycling initiatives and circular economy practices where feasible.

Public and Private Institutions (Schools, Health Facilities, Offices)

Manage institutional waste responsibly, including segregation and safe storage.

Comply with environmental, health, and safety regulations.

Participate in municipal programs, awareness campaigns, and recycling initiatives.

Maintain records of generated and disposed waste, especially medical or hazardous waste.

Waste Service Providers and Contractors

Provide reliable, safe, and timely waste collection and transportation services.

Comply with licensing and environmental regulations.

Promote waste recovery, recycling, and composting where applicable.

Train staff in occupational health, safety, and environmental standards.

Recycling and Resource Recovery Enterprises

Operate licensed recycling, composting, and material recovery facilities.

Collaborate with households, businesses, and the municipality to enhance resource recovery.

Promote circular economy practices by converting waste into usable products.

Maintain records of recovered materials and report to the municipal authority.

Informal Waste Collectors and Recyclers

Collect recyclables responsibly, avoiding environmental or health hazards.

Coordinate with municipal authorities and licensed service providers to support formal recycling channels.

Participate in training and awareness programs on safe waste handling.

Community-Based and Civil Society Organizations

Mobilize communities to participate in clean-up drives, awareness campaigns, and waste reduction programs.

Advocate for environmental protection and compliance with municipal waste management policies. Support capacity-building initiatives for residents and informal waste collectors.

6.3 Municipal Authority

Plan, regulate, and coordinate solid waste management across the municipality.

Enforce environmental regulations, by-laws, and licensing requirements.

Facilitate awareness campaigns, stakeholder engagement, and capacity-building initiatives.

Monitor, evaluate, and report on solid waste management performance.

Collaborate with private sector actors and development partners to improve service delivery and resource recovery.

The Policy emphasizes shared responsibility, encouraging active collaboration among all stakeholders to achieve efficient, environmentally sustainable, and socially inclusive waste management.

6.4 Relationship with Other Laws and Policies

This Policy is consistent with national legislation, county laws, and relevant policies, including environmental, public health, and urban planning frameworks. It complements municipal and county development plans, regulations, and by-laws. In cases of conflict, applicable national and county laws prevail, while this Policy provides local guidance tailored to Ruiru Municipality's operational context.

6.5 Exclusions and Limitations

This Policy provides a strategic, overarching framework and does not replace detailed operational regulations, technical standards, or by-laws, which will be developed to support its implementation. It sets the direction for sustainable solid waste management while allowing flexibility to address emerging challenges, technological innovations, and changes in population or land use patterns within the municipality.

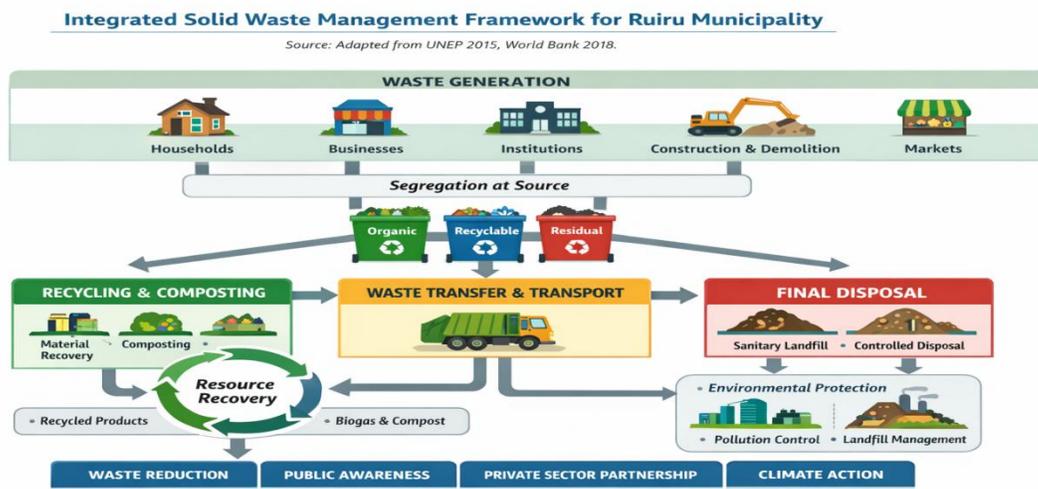
7. Integrated Solid Waste Management Framework

7.1 Integrated Solid Waste Management Approach

Ruiru Municipality shall adopt an Integrated Solid Waste Management (ISWM) approach that addresses the entire waste management chain, from generation to final disposal. This approach emphasizes waste prevention, minimization, reuse, recycling, resource recovery, and environmentally sound disposal as core priorities.

The ISWM framework will guide planning, investment, and operational decisions to ensure that solid waste management is efficient, sustainable, and protective of public health, water sources, and the environment. By adopting ISWM, Ruiru Municipality seeks to transform waste from a liability into a resource, promote circular economy practices, and encourage private sector participation in sustainable waste solutions.

Figure 7.1: Integrated Solid Waste Management Framework for Ruiru Municipality



Source: Adapted from the Integrated Solid Waste Management frameworks in United Nations Environment Programme (2015) and World Bank (2018).

The ISWM approach in Ruiru Municipality will prioritize:

- ◆ Waste prevention and reduction at the source
- ◆ Segregation and recycling of waste streams
- ◆ Recovery of organic waste for composting or biogas production
- ◆ Safe, controlled, and environmentally compliant final disposal

7.2 Waste Streams and Sources

The municipal solid waste system shall recognize and manage different **waste streams**, reflecting Ruiru Municipality's diverse socio-economic and land-use characteristics. Key waste streams include:

- ◆ Household and domestic waste
- ◆ Commercial and market waste
- ◆ Institutional waste (schools, hospitals, offices)
- ◆ Non-hazardous industrial waste
- ◆ Construction and demolition waste, including soil and debris
- ◆ Special and bulky waste

Hazardous waste, including medical, chemical, and electronic waste, shall be managed separately in compliance with national laws and regulations (EMCA, Cap 387; Sustainable Waste Management Act 2022) and shall not be mixed with municipal solid waste streams.

7.3 Waste Generation, Handling, and Segregation at Source

Ruiru Municipality shall promote and progressively enforce segregation at source to improve efficiency in collection, recycling, and treatment. All waste generators residents, businesses, institutions, and construction sites shall separate waste into organic, recyclable, and residual streams in line with national and county guidelines.

The Municipality will establish standards for on-site handling, storage, and containment to minimize public health risks, prevent environmental pollution, and reduce illegal dumping along streets, drainage channels, and waterways such as Ruiru River. Public awareness and education campaigns will complement enforcement to improve compliance.

7.4 Waste Collection Systems

Ruiru Municipality shall establish efficient, reliable, and equitable waste collection services across all areas. Collection systems will accommodate segregated waste streams and may include:

Door-to-door collection in high-density residential and commercial areas

Communal collection points in peri-urban and agricultural zones

Scheduled commercial and institutional collection services

Service coverage shall be monitored to ensure no areas are underserved, and private sector contractors will be integrated into municipal service delivery to enhance efficiency and coverage.

7.5 Waste Transfer And Transportation

Ruiru Municipality shall develop efficient waste transfer and transportation systems to reduce operational costs, improve service reliability, and minimize environmental and public health impacts. Key measures include:

- ◆ Use of appropriate vehicles and equipment for segregated waste streams
- ◆ Optimized routing and scheduling to reduce fuel consumption and emissions
- ◆ Establishment of transfer stations where necessary to consolidate waste before treatment or final disposal

7.6 Waste Processing, Recycling, and Resource Recovery

Waste processing and resource recovery are central to the ISWM framework. The Municipality shall:

- ◆ Promote composting of organic waste from households, markets, and institutions
- ◆ Support recycling enterprises and material recovery facilities for plastics, paper, metals, and glass
- ◆ Facilitate private sector participation, including partnerships with companies in recycling and waste-to-resource initiatives
- ◆ Encourage innovative solutions such as anaerobic digestion, bioenergy production, and eco-friendly construction materials derived from waste

These interventions aim to reduce the volume of waste sent to landfills, create economic opportunities, and foster a circular economy.

7.7 Waste Treatment And Final Disposal

Final disposal shall be carried out in an environmentally sound manner in compliance with national standards (EMCA, Cap 387; Sustainable Waste Management Act 2022). Key measures include:

- ◆ Progressive reduction of open dumping, particularly in peri-urban and agricultural areas
- ◆ Development and maintenance of sanitary landfills with leachate and gas management
- ◆ Consideration of treatment technologies such as composting, incineration, and engineered landfills
- ◆ Monitoring and mitigation of environmental impacts, including water and soil contamination

7.8 Integration with Climate and Environmental Management

All solid waste management interventions in Ruiru Municipality shall be designed to:

- Minimize greenhouse gas emissions and other pollutants

- Promote climate change mitigation through organic waste recovery and energy generation
- Enhance resilience to climate-related risks, such as flooding and stormwater contamination
- Protect natural resources, including rivers, wetlands, and soil fertility

By integrating climate and environmental considerations, Ruiru Municipality aims to safeguard ecosystems, improve public health, and support sustainable urban and peri-urban development.

8. Policy Measures and Strategies

8.1 Policy Measures and Strategies for Solid Waste Management

This chapter outlines the policy measures and strategic actions that Ruiru Municipality shall adopt to achieve sustainable and integrated solid waste management. The measures address the full waste management value chain from waste reduction and segregation at source to collection, recycling, treatment, and final disposal while promoting environmental protection, public health, and circular economy principles.

8.2 Waste Reduction and Minimization

Ruiru Municipality shall promote policies and programs aimed at reducing waste generation at the source. This includes encouraging responsible consumption patterns, reducing unnecessary packaging, and promoting reuse of materials. Public education campaigns shall be implemented to raise awareness among households, businesses, and institutions on waste minimization practices. The municipality shall also encourage businesses to adopt sustainable production and packaging practices and support initiatives that reduce single-use materials.

8.3 Waste Segregation at Source

Segregation of waste at the point of generation shall be progressively implemented and enforced across the municipality. Households, institutions, and businesses shall be required to separate waste into defined categories such as organic waste, recyclables, and residual waste. The municipality shall develop guidelines on waste segregation, provide public awareness programs, and support the provision of appropriate containers and infrastructure to facilitate effective source separation.

8.4 Improvement of Waste Collection Services

Ruiru Municipality shall strengthen waste collection systems to ensure efficient and reliable services across all areas of the municipality. This shall include expansion of collection coverage, adoption of scheduled collection systems, and introduction of systems that

support segregated waste streams. Partnerships with licensed private waste service providers shall be promoted to improve service efficiency and coverage.

8.5 Waste Transfer and Transportation

Efficient waste transfer and transportation systems shall be developed to improve operational efficiency and reduce environmental impacts. The municipality shall promote the use of appropriate waste collection vehicles, optimize collection routes, and consider the establishment of transfer stations where necessary to facilitate consolidation and efficient transport of waste to treatment or disposal facilities.

8.6 Recycling and Resource Recovery

Ruiru Municipality shall promote recycling and resource recovery as key components of sustainable solid waste management. The municipality shall support the establishment and operation of recycling enterprises, material recovery facilities, and composting initiatives for organic waste. Partnerships with private sector actors and community organizations shall be encouraged to enhance recycling activities and create economic opportunities within the waste value chain.

8.7 Management of Organic Waste

Given the high proportion of biodegradable waste generated within the municipality, Ruiru Municipality shall promote composting and other organic waste recovery initiatives. Markets, institutions, and households shall be encouraged to adopt composting practices, while the municipality shall facilitate the establishment of centralized composting facilities where feasible. Organic waste recovery shall also support agricultural activities within the municipality.

8.8 Management of Construction and Demolition Waste

Rapid development within Ruiru Municipality has resulted in increasing volumes of construction and demolition waste. The municipality shall develop guidelines and enforcement mechanisms to regulate the handling, transportation, and disposal of construction waste. Developers and contractors shall be required to ensure proper disposal of soil, rubble, and other construction materials to prevent illegal dumping and environmental pollution, particularly in sensitive areas such as rivers and drainage systems.

8.9 Environmentally Sound Disposal

Ruiru Municipality shall promote environmentally sound waste treatment and final disposal practices in accordance with national environmental standards. The municipality shall progressively reduce reliance on open dumping and promote controlled disposal methods, including sanitary landfills and other appropriate waste treatment technologies. Monitoring systems shall be established to ensure that disposal facilities comply with environmental regulations.

8.10 Institutional Strengthening and Governance

Effective solid waste management requires strong institutional capacity and coordination among stakeholders. Ruiru Municipality shall strengthen its technical, administrative, and regulatory capacity to manage waste services effectively. This includes improving planning, monitoring, and enforcement mechanisms, as well as strengthening coordination with county and national agencies responsible for environmental management.

8.11 Public Awareness and Community Participation

Public participation and community engagement are critical for sustainable waste management. The municipality shall implement continuous public education and awareness programs aimed at promoting responsible waste management practices. Community-based organizations, schools, and local groups shall be encouraged to participate in waste reduction, recycling, and environmental conservation initiatives.

8.12 Financing and Cost Recovery

Ruiru Municipality shall promote sustainable financing mechanisms to support the delivery of solid waste management services. This may include user fees, service charges, public-private partnerships, and other innovative financing approaches. The municipality shall also promote the polluter pays principle, ensuring that waste generators contribute to the cost of managing the waste they produce.

8.13 Monitoring, Evaluation, and Continuous Improvement

The municipality shall establish systems for monitoring and evaluating the performance of solid waste management programs. Data collection, performance indicators, and periodic reviews shall guide decision-making and ensure continuous improvement of services. The municipality shall also collaborate with stakeholders to identify emerging challenges and opportunities in waste management.

9. Institutional and Governance Framework

This chapter outlines the institutional arrangements and governance structures that shall guide the implementation, coordination, and oversight of solid waste management within Ruiru Municipality. Effective governance is critical to ensuring accountability, regulatory

compliance, and coordinated action among the various actors involved in the waste management system.

9.1 Overall Institutional Responsibility

The overall responsibility for solid waste management within Ruiru Municipality shall rest with the Ruiru Municipal Board, under the policy oversight of the County Government of Kiambu, in accordance with relevant national and county legislation.

The Municipal Board shall provide strategic direction, policy implementation oversight, and coordination of solid waste management services within the municipality. This responsibility shall be exercised in alignment with the provisions of the Urban Areas and Cities Act, the Sustainable Waste Management Act, and other applicable environmental laws and regulations.

9.2 Roles of the Municipality

Ruiru Municipality shall serve as the primary implementing authority for solid waste management within its jurisdiction. The municipality shall be responsible for:

- Planning, coordination, and oversight of municipal solid waste management services
- Development and enforcement of municipal by-laws, operational standards, and service guidelines
- Provision of waste collection, transportation, and disposal services either directly or through contracted service providers
- Identification and establishment of waste collection points, transfer facilities, and treatment infrastructure
- Licensing, supervision, and monitoring of waste service providers operating within the municipality
- Promotion of waste segregation at source and resource recovery initiatives
- Public awareness, environmental education, and community engagement programs
- Collection and management of waste management data for planning, monitoring, and reporting purposes
- Enforcement of regulations to address illegal dumping, littering, and environmentally harmful waste disposal practices

The municipality shall also collaborate with county and national agencies to ensure that waste management activities meet environmental and public health standards.

9.3 Role of County Government Departments

Relevant departments of the County Government of Kiambu shall provide policy guidance, regulatory oversight, and technical support to Ruiru Municipality in the implementation of this Policy.

Key responsibilities of county departments shall include:

- Development of county-level waste management strategies, policies, and regulations
- Provision of technical support for infrastructure development and service improvement
- Environmental monitoring and compliance enforcement in collaboration with regulatory agencies
- Coordination of waste management planning across municipalities within the county
- Mobilization of financial and technical resources for improved waste management systems

County departments shall also ensure alignment between municipal waste management activities and broader county development plans, including the County Integrated Development Plan (CIDP).

9.4 Private Sector Participation

Private sector entities shall play an important role in the provision of waste management services within Ruiru Municipality. The municipality shall promote private sector participation in areas such as:

- Waste collection and transportation services
- Recycling and material recovery activities
- Organic waste processing and composting
- Operation of waste treatment and disposal facilities
- Development of innovative waste-to-resource solutions

Engagement with private sector operators shall be conducted through transparent and competitive processes, including service contracts, public-private partnerships, and licensing arrangements. All private operators shall comply with municipal regulations and environmental standards set by the National Environment Management Authority.

9.5 Informal Sector Integration

Informal waste collectors and recyclers play an important role in waste recovery and recycling within Ruiru Municipality. The municipality shall recognize and progressively integrate these actors into the formal waste management system.

This integration may include:

- Registration and organization of informal waste collectors
- Capacity building and training on safe waste handling practices
- Provision of designated sorting and recycling spaces
- Support for formation of cooperatives or self-help groups
- Promotion of occupational health and safety standards

Integrating the informal sector will help improve recycling rates, create employment opportunities, and enhance efficiency in resource recovery.

9.6 Community and Civil Society Participation

Communities, community-based organizations, and civil society groups shall play a key role in promoting responsible waste management practices. Their participation shall include:

- Supporting waste reduction and segregation initiatives at household and community levels
- Participating in public awareness campaigns and environmental education programs
- Reporting illegal dumping and other environmental violations
- Participating in consultative forums related to waste management planning and service delivery

Community participation will strengthen public ownership of waste management programs and contribute to improved environmental stewardship.

9.7 Intergovernmental and Stakeholder Coordination

Effective solid waste management requires coordination among multiple stakeholders. Ruiru Municipality shall establish mechanisms to facilitate collaboration between:

- Municipal departments
- County government agencies
- National regulatory institutions such as the National Environment Management Authority
- Development partners and research institutions
- Private sector waste service providers
- Community and civil society organizations

Regular stakeholder consultations, technical working groups, and inter-agency coordination meetings shall be used to improve communication, share information, and avoid duplication of roles.

9.8 Accountability and Transparency

The municipality shall promote accountability and transparency in the management of solid waste services. This shall include:

- Establishing clear reporting and monitoring mechanisms for waste management activities
- Public disclosure of service performance indicators and operational data
- Stakeholder engagement in planning and oversight processes
- Transparent procurement and contracting procedures for waste service providers

These measures will enhance public confidence and ensure that waste management services are delivered efficiently and responsibly.

9.9 Occupational Health and Safety

Ruiru Municipality shall ensure that all individuals involved in solid waste management operate under safe and healthy working conditions. This includes municipal workers, private service providers, and informal waste collectors.

Key measures shall include:

- Enforcement of occupational health and safety standards
- Provision and use of appropriate personal protective equipment (PPE)
- Training on safe waste handling, transportation, and processing practices
- Implementation of emergency response procedures for waste-related hazards

These measures will help reduce occupational risks and protect workers who play a critical role in maintaining environmental sanitation within the municipality.

10. Financing and Economic Instruments

10.1 Financing of Solid Waste Management

Financing of solid waste management services in Ruiru Municipality shall be derived from a combination of municipal and county budgetary allocations, own-source revenue, user fees, and other legally permissible funding sources. The Municipality shall seek to ensure that financing mechanisms support efficient, reliable, and sustainable service delivery. Key financing instruments applicable to the Municipality are summarised in the table provided below.

Table 10.1: Financing Instruments for Solid Waste Management

Financing Instrument	Description	Potential Use	Applicability to Ruiru Municipality
Own Source Revenue	Revenue generated by the Municipality through business permits, licenses, development approvals, and environmental compliance fees.	Supporting routine waste management operations, supervision of services, enforcement activities, and maintenance of municipal equipment.	High

User Fees and Service Charges	Fees paid by households, commercial establishments, institutions, and residential developments for waste collection and disposal services.	Cost recovery for waste collection, transportation, and management of communal waste facilities.	High
County Government Allocations	Budgetary support provided by the County Government of Kiambu to support municipal service delivery and infrastructure development.	Procurement of waste collection vehicles, establishment of transfer stations, development of waste management infrastructure, and institutional strengthening.	Medium
Public-Private Partnerships (PPPs)	Collaborative arrangements between the municipality and private sector actors to deliver waste management services or infrastructure.	Recycling facilities, composting plants, material recovery facilities, clean up campaigns, and improved waste collection services.	Medium
Grants and Donor Support	Financial or technical assistance from development partners, environmental programs, and international organizations.	Capacity building, pilot projects, climate-related waste management initiatives, and innovation in recycling and circular economy practices.	Medium
Extended Producer Responsibility (EPR) Contributions	Contributions from producers and importers of packaging and products in accordance with national EPR regulations.	Financing recycling systems, waste recovery programs, and support for plastic and packaging waste management.	Emerging

Polluter Pays Mechanisms	Charges or penalties imposed on entities that improperly dispose of waste or cause environmental pollution.	Enforcement actions, environmental restoration, and discouraging illegal dumping of waste such as construction debris and soil.	High
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10.2 Cost Recovery and User Fees

The Municipality shall promote appropriate cost recovery mechanisms for solid waste management services, including user fees and service charges, in a manner that is equitable, transparent, and affordable. Fee structures shall take into account different waste generators, service levels, and socio-economic conditions.

10.3 Economic Incentives and Disincentives

Economic instruments may be applied to encourage waste reduction, segregation, recycling, and compliance with waste management requirements. These may include incentives for recycling and composting initiatives, as well as penalties for illegal dumping, littering, and non-compliance with waste management regulations.

10.4 Private Sector Investment and Partnerships

The Municipality shall encourage private sector investment in solid waste management through public-private partnerships, service contracts, and other collaborative arrangements aimed at improving efficiency, innovation, and access to financing.

10.5 Resource Mobilization and External Support

The Municipality may seek external financial and technical support from development partners, financial institutions, and other sources to supplement local resources and support infrastructure development, capacity building, and innovation in solid waste management.

11. Public Participation, Education and Communication

11.1 Public Participation

Effective solid waste management in Ruiru Municipality requires active participation, awareness, and cooperation from residents, institutions, businesses, and other stakeholders. This chapter outlines the mechanisms through which the municipality shall promote public

participation, strengthen environmental education, and improve communication related to waste management services.

11.2 Public Awareness and Education

Sustained public awareness and education programmes shall be implemented to promote responsible waste management practices throughout the municipality. These programmes shall focus on:

- Waste reduction and responsible consumption
- Segregation of waste at source into organic, recyclable, and residual streams
- Proper handling and storage of household and commercial waste
- Environmental and public health risks associated with poor waste management
- Opportunities for recycling, composting, and resource recovery

The Municipality shall collaborate with schools, community organizations, religious institutions, and environmental groups to promote environmental education and behavioural change. Public campaigns, clean-up initiatives, and school-based environmental programmes shall be encouraged to cultivate a culture of environmental responsibility within the municipality.

11.3 Communication and Information Sharing

The Municipality shall establish clear and accessible communication channels to ensure that residents and stakeholders receive timely information regarding waste management services, regulations, and municipal initiatives.

Communication mechanisms may include public notices, municipal websites, social media platforms, community forums, and local media outlets. Information disseminated may include waste collection schedules, designated waste disposal sites, guidelines on waste segregation, and updates on waste management programs.

The Municipality shall also establish feedback mechanisms, including complaint reporting systems and community engagement platforms, to enable residents and businesses to report service gaps, illegal dumping, or environmental concerns.

12. Land Use Planning and Infrastructure Integration

Solid waste management considerations shall be integrated into land use planning, urban development, and infrastructure planning within Ruiru Municipality to ensure that adequate waste management services and facilities are provided as the municipality grows.

Municipal and county planning processes shall provide for appropriate land allocation for waste management infrastructure, including collection points, transfer stations, recycling centres, composting facilities, and environmentally sound disposal sites. Waste management

planning shall also be integrated into residential, commercial, and institutional developments to ensure adequate space for waste storage and collection systems.

Developers and property owners shall be required to incorporate waste management considerations into building design and site planning, including provision for waste storage areas, segregation facilities, and access for waste collection services. Integrating waste management into urban planning will help prevent illegal dumping, reduce environmental pollution, and improve overall sanitation within the municipality.

13. Research, Innovation and Capacity Building

The Municipality shall promote research, innovation, and institutional capacity development to strengthen the effectiveness and sustainability of solid waste management systems. Continuous improvement of waste management practices shall be supported through the adoption of appropriate technologies, improved data management systems, and evidence-based decision-making.

The Municipality shall collaborate with academic institutions, research organizations, development partners, and private sector actors to explore innovative approaches to waste reduction, recycling, composting, and resource recovery. Emphasis shall be placed on solutions that are technically appropriate, environmentally sustainable, and economically viable within the local context.

Capacity building initiatives shall be implemented to strengthen the technical and managerial skills of municipal staff, waste service providers, and community stakeholders. Training programs shall focus on waste management planning, environmental monitoring, occupational health and safety, and modern waste processing technologies.

14. Monitoring, Evaluation, Accountability and Review

The Municipality shall establish mechanisms for monitoring and evaluating the implementation of this Policy, including performance indicators, reporting systems, and periodic reviews. The Policy shall be reviewed periodically to ensure continued relevance, effectiveness, and alignment with emerging needs and legal requirements.

Indicator	Description	Frequency	Responsible Entity
Waste Collection Coverage	Proportion of households, businesses, and institutions within the municipality receiving regular and reliable waste collection services.	Annual	Ruiru Municipality

Waste Segregation at Source	Level of compliance among households, institutions, and businesses in separating waste into organic, recyclable, and residual streams at the point of generation.	Annual	Ruiru Municipality
Recycling and Resource Recovery Rate	Percentage of total municipal solid waste diverted from final disposal through recycling, composting, and other resource recovery initiatives.	Annual	Ruiru Municipality
Illegal Dumping Incidents	Number of reported cases of illegal dumping or improper waste disposal and the proportion that are investigated and addressed by the municipality.	Annual	Ruiru Municipality
Public Awareness and Education Activities	Number of public education campaigns, environmental awareness programs, and community outreach initiatives conducted to promote responsible waste management.	Annual	Ruiru Municipality
Occupational Health and Safety Compliance	Level of compliance with occupational health and safety standards among municipal waste workers, contractors, and other actors involved in waste management activities.	Annual	Ruiru Municipality

Waste Collection Efficiency	Proportion of scheduled waste collection routes completed on time and according to service standards.	Annual	Ruiru Municipality
Stakeholder Participation in Waste Management Programs	Level of participation by community groups, institutions, and private sector actors in waste management initiatives and consultations.	Annual	Ruiru Municipality
Reduction in Waste Sent to Disposal Sites	Changes in the volume of waste transported to final disposal facilities as a result of waste reduction and recycling efforts.	Annual	Ruiru Municipality

These indicators will guide the monitoring and evaluation of solid waste management performance in Ruiru Municipality, supporting evidence-based decision-making, accountability, and continuous improvement of municipal waste management services.

15. Policy Implementation Framework

Implementation of this Policy shall be undertaken through development of action plans, strategies, and programmes aligned with the County Integrated Development Plan, municipal development plans, and available resources. Implementation shall be phased and subject to continuous performance assessment.

16: DEFINITIONS AND INTERPRETATION

16.1 Definitions

For the purposes of this Policy, unless the context otherwise requires, the following terms shall have the meanings assigned to them below:

“Biodegradable Waste”

Waste materials that can be broken down naturally by microorganisms into simpler organic substances. Examples include food waste, garden waste, and other organic materials.

“Bulky Waste”

Large household or commercial items that cannot be accommodated in regular waste containers due to their size or weight, such as furniture, mattresses, and large appliances.

“Circular Economy”

An economic system aimed at eliminating waste and promoting the continual use of resources through reuse, repair, recycling, and recovery.

“Collection”

Means the gathering, loading, and removal of solid waste from designated storage points for transportation to treatment, recovery, or disposal facilities.

“County Government”

Means the County Government of Kiambu established under the Constitution of Kenya, 2010.

“Disposal”

Means the final placement of solid waste in an environmentally sound manner, including at an approved landfill or disposal site.

“Extended Producer Responsibility (EPR)”

Means an environmental policy approach in which producers are given significant responsibility for the management of waste arising from products they place on the market, in accordance with applicable national legislation.

“Hazardous Waste”

Means waste that poses substantial or potential threats to public health or the environment due to its chemical, physical, biological, or toxic characteristics, and which is regulated under national legislation.

“Informal Sector”

Means individuals or groups engaged in waste collection, sorting, recycling, or recovery activities outside formal contractual arrangements with the Municipality.

“Integrated Solid Waste Management (ISWM)”

Means a comprehensive approach to solid waste management that considers waste prevention, minimisation, segregation, collection, recycling, treatment, and environmentally sound disposal in a coordinated manner.

“Municipality”

Means Ruiru Municipality as established under the Urban Areas and Cities Act, 2011.

“Municipal Solid Waste”

Means non-hazardous solid waste generated from households, commercial establishments, institutions, markets, and similar sources within the Municipality.

“Private Service Provider”

Means a legally registered entity contracted or licensed to provide solid waste management services within the Municipality.

“Recycling”

Means the processing of waste materials for the purpose of converting them into new products, materials, or substances.

“Resource Recovery”

Means the extraction of useful materials or energy from waste, including recycling and composting.

“Segregation at Source”

Means the separation of waste materials at the point of generation into designated categories such as organic, recyclable, and residual waste.

“Solid Waste”

Means discarded materials that are solid in form and are generated as a result of human activities.

“Solid Waste Management”

Means the collection, storage, transportation, treatment, recovery, and disposal of solid waste in a manner that protects public health and the environment.

“Waste Generator”

Means any person, household, institution, or entity whose activities produce solid waste.

“Waste Management”

The systematic control of the generation, storage, collection, transportation, recycling, treatment, and disposal of waste.

“Waste Minimization”

Measures aimed at reducing the quantity and harmfulness of waste generated through improved production processes, reuse, and sustainable consumption practices.

17. Annexes

Implementation matrix

Policy Implementation Matrix – Ruiru Municipality Solid Waste Management Policy			
Policy Area	Key Actions	Responsible Entity	Timeframe
Waste Reduction & Minimization	Public awareness campaigns; promotion of sustainable consumption practices	Ruiru Municipality; County Departments	Short–Medium Term
Waste Segregation at Source	Development of segregation guidelines; phased enforcement	Ruiru Municipality; Service Providers	Short–Medium Term
Waste Collection & Transportation	Expansion of service coverage; efficiency and routing improvements	Ruiru Municipality; Private Operators	Short–Medium Term
Recycling & Resource Recovery	Support recycling and composting initiatives; partnerships	Ruiru Municipality; Private and Informal Sector	Medium Term
Waste Treatment & Disposal	Improve disposal standards; progressive elimination of open dumping	Ruiru Municipality; County Government	Medium–Long Term
Institutional Strengthening	Capacity building; coordination mechanisms	Ruiru Municipality; County Departments	Short Term
Financing & Cost Recovery	Review user fees; resource mobilization	Ruiru Municipality; County Treasury	Short–Medium Term

Public Awareness & Participation	Community engagement and education programmes	Ruiru Municipality; CSOs	Continuous
Monitoring & Evaluation	Establish indicators; reporting and policy review	Ruiru Municipality	Continuous

Waste classification table

NO	CATEGORY OF WASTE	SOURCE	TYPE OF WASTE
1.	Organic	Market, hotel industry	Food remains, rotten vegetables and fruits
2.	Recyclables	Institutions, Households, Retail and wholesale outlets,	glass, plastics, metal, rubber, wood
3.	Non-Recyclables	Petrol Stations, Construction sites, Commercial premises	Rubber, E – waste
4.	Hazardous waste	Medical facilities, Industries	paints, used batteries, used oil, solvents, cleaning agents, pesticides, medical waste

REFERENCES

- Government of Kenya. (1999). *Environmental management and co-ordination act (EMCA)*. Nairobi, Kenya: Government Printer.
- Government of Kenya. (2006). *Environmental management and coordination (waste management) regulations*. Nairobi, Kenya: Government Printer.
- Government of Kenya. (2010). *The Constitution of Kenya*. Nairobi, Kenya: Government Printer.
- Government of Kenya. (2011). *Urban areas and cities act*. Nairobi, Kenya: Government Printer.
- Government of Kenya. (2012). *County governments act*. Nairobi, Kenya: Government Printer.
- Government of Kenya. (2022). *Sustainable waste management act*. Nairobi, Kenya: Government Printer.
- International Solid Waste Association. (2013). *Globalisation and waste management: Phase 2 – ISWM framework*. Vienna, Austria: ISWA.
- Kiambu County Government. (2023). *Kiambu county integrated development plan (CIDP) 2023–2027*. Kiambu, Kenya: County Government of Kiambu.
- Ministry of Environment and Forestry. (2021). *National sustainable waste management policy*. Nairobi, Kenya: Government of Kenya.
- United Nations Environment Programme. (2015). *Global waste management outlook*. Nairobi, Kenya: UNEP.
- World Bank. (2018). *What a waste 2.0: A global snapshot of solid waste management to 2050*. Washington, DC: World Bank.
- Kenya National Bureau of Statistics. (Various years). *Population and urbanisation data*. Nairobi, Kenya: KNBS.
- Kiambu County Government. (Various years). *Relevant county spatial, sectoral, and environmental plans*. Kiambu, Kenya: County Government of Kiambu.