



COUNTY GOVERNMENT OF MOMBASA

**THE PARTNERSHIP-PROJECT BETWEEN:
REGION VÄSTERNORRLAND AND MOMBASA COUNTY
GOVERNMENT**



STATE OF PLAY REPORT

SEPTEMBER, 2019

1. ABOUT MOMBASA COUNTY

Mombasa County occupies a land area of approximately 229.9 square kilometres and 65 square kilometres of water mass, being part of the Indian Ocean. It is one of the 47 county governments under the devolved system that became operational after the 2013 general elections. It receives average precipitation of 1,040 mm during the long rain season and 240mm during the short rain season. It enjoys an average relative humidity of 80 percent and average temperature of 26^oc. The county is cosmopolitan with an estimated resident population of 1.3 million persons (projections based on 2009 National Census), translating to a density of 4,288 persons per square Kilometre. It has a human development index of 0.55 with 35% of its population living below the poverty line. It is an industrial city, a port city and a major gateway to the East and Central Africa region.

2. COUNTY CONTEXT ON SOLID WASTE MANAGEMENT

The overall solid waste management involving collection, transportation and disposal is a function devolved to the county governments and remains one of the major challenges faced by the local governments. This function is assigned to the department of environment, waste management and energy in the county government of Mombasa. The department has a directorate of solid waste management whose responsibility is to deal with solid waste collection, transportation and disposal. Oversight on waste management is the role of the county assembly committee in charge of environment, waste management and energy. The Environment Management and Coordination Act of 1999 as revised in 2016, mandates the County Governor to constitute and gazette the county environment committee, a multifaceted entity, for planning and reporting on environment issues including solid waste management.

2.1 Waste Generation

The most common forms of solid waste generated in the county is the organic waste which is mainly generated at household level, hotels and restaurants and agricultural produce/food markets. Whereas there are no conclusive studies on the total tonnage of solid waste generated in the county, The National Environment Management Authority (NEMA) estimates that 2,200 tons of solid waste is generated per day from domestic/household, streets and commercial entities.

2.2 Waste composition

The solid waste stream is dominated by organic waste (68%), inorganic recyclables (23%) and non-recyclable waste (9%). The density of the waste is estimated to be 947kg/m³ with a moisture content of approximately 41 percent. The calorific value of the waste is estimated at 7,000kj/kg (1,672kcal/kg). Inorganic recyclables include plastics, paper, cardboards and metal, while the non-recyclables mostly include sand and building rubbles.

2.3 Waste collection

The primary solid waste collection is done by both the county government and private players including youth groups and Community Based Organizations. Bulk collection is management by the county government through the Department of Environment. Approximately 52 percent of the waste generated is formally collected whereas the remaining 48 percent is commonly burnt, buried or illegally dumped in the ocean, open spaces and abandoned buildings. The cost of private collection is covered by user-fees where households pay between US\$2 to US\$20 per month.

2.4 Solid waste transportation

Solid waste transportation is one of the main challenges facing players in waste management sector in the county. The county government uses normal open tipping trucks while private collectors either use canter type of vehicles or worst still handcarts. The department estimates that there are approximately 1,200 players in the waste collection and transportation, over 90 percent of them use handcarts to collect and transport waste.

2.5 Waste Treatment and disposal

There is limited investment in solid waste recycling and recovery systems in the county. Almost all the waste is sent to the final disposal sites. Waste disposal is done through open dumping at two designated dumping sites. However, there are other undesignated and illegal dumpsites in different parts of the county. The main and oldest dumpsite at Kibarani was closed in August 2017, after which Mwakirunge Dumpsite became the main disposal site. Located approximately 25km from the central business district and 12.9 km from Moi International Airport and on a flight path, its use has not been well supported.

Solid waste generated in the rural parts of the county is disposed within the households mainly through disposal in pits or open burning. Most of biodegradable waste such as agricultural or human food waste is reused as food for farm animals or composted to produce manure for agricultural production. Non-biodegradable waste such as containers are reused for other household uses such as storage.

2.6 Funding for solid waste management

The usual annual budgetary allocation provides the only resources utilized by the department of environment for waste management. The finance bill requires that generators of waste pay for waste management services as determined by the category of waste generation capacity. However, there is no support infrastructure to levy the waste generators. The difficult part has always been identifying the appropriate billing platform. As such, waste management is funded by the exchequer.

3. CHALLENGES IN SOLID WASTE MANAGEMENT

The sector experiences the following challenges that ought to be addressed if residents of Mombasa County are to be guaranteed a clean and healthy environment.

1. People's attitude towards proper waste handling and failure to take individual responsibility has contributed to poor practices such as littering, illegal dumping and open burning.
2. Low public and stakeholder involvement in waste management activities. The general public strongly views waste management as the function of government.
3. Vandalism of waste management installations and machinery. The most affected installation has been the public bins and information posters.
4. Limited resources; the process of waste collection and transportation is very expensive and heavily mechanized. The county has challenges of raising sufficient

resources to mechanize waste collection and transportation and at the same time meet other obligations.

5. Irregular collection and low coverage of collection services. Inadequate transportation trucks and low budgetary allocation for operations has led to irregular scheduling of waste collection and low coverage.
6. Lack of appropriate waste disposal infrastructure; the designated dumpsites requires a perimeter wall and solid waste management equipment such as shovel, bulldozers and landfill compactors. The county does not have this infrastructure owing to the current practice of open dumping.
7. Poor status of waste management machinery; the county is lean on waste collection machinery that do not operate optimally due to frequent breakdown.
8. Inadequate technical capacity to manage waste. The department has a dire shortage of staff with the necessary technical skills in waste management and operations of standard waste management equipment and machinery.

4. IMPLICATIONS OF THE CURRENT SYSTEM

The current status of waste management has come into sharp criticism by environmentalists, public health practitioners, business community and the population at large. The open dumping at designated dumpsites as well as poor handling of waste at collection points has been linked to serious epidemics such as cholera, Chikungunya, environmental degradation associated with leachate from collection points, and air pollution. Consequently, smell from poorly managed collection points near residences and business premises has had implications on overall hygiene of the environment. Attempts to close the collection points and direct waste handlers to dispose at designated dumpsites has pushed the waste further into areas that are difficult to access.

Disposal sites are blamed for interfering with the ecological balance of Tudor creek that supports marine life. Streamlining waste collection through licensing has a danger of pushing more than 90 percent of waste collectors who use means of transport that are not licensable out of livelihoods thereby aggregating the problem of unemployment, drug abuse and crime..

5. LEGAL FRAMEWORK FOR WASTE MANAGEMENT

5.1 National Legislation

The Environment Management and Coordination Act of 1999 as revised in 2016 provides the basic legislation for management of the environment including waste. It provides that every person in Kenya is entitled to a clean and healthy environment and has a duty to safeguard and enhance the same. The National Strategy for Solid Waste Management has set a target of achieving 80% waste recovery by the year 2030, mainly through recycling, composting and investment in waste to energy. Consequently there have been national directives to influence sustainable consumption, two key among them being the ban on production, distribution and use of flat and carrier plastic bags in 2017 and Extended Producer Responsibility on plastic

bottles in 2019. The extended producer responsibility requires that manufacturers develop a take-back system for the plastics used in packaging their products for the market.

5.2 County Legislation

The County is working on a number of legislative documents to strength sustainable consumption and overall waste management. The documents are The Mombasa County Solid waste management Policy, and the Mombasa county solid waste management bill. The two documents are currently being subjected to public participation before they are tabled at the cabinet and county assembly for ratification. The overriding goal of the policy is to minimize waste generation and promote re-use, recovery and recycling of waste materials and sustainable waste disposal.

Both the policy and the bill are designed for:

- a) Delivering a waste management system that is effective, equitable, responsive and sustainable under the prevailing conditions
- b) Provision of public services (e.g. waste collection, transport, treatment and disposal) suited to the needs of and affordable for local users
- c) Protection of public and occupational health and the environment
- d) Contributing to sustainable use of natural resources, e.g. through materials recovery and recycling, soil improvement, energy generation
- e) Contributing to economic development, including through fostering resource efficient production and developing waste recovery and recycling operations
- f) Providing employment and enterprise development opportunities
- g) Deploying technologies appropriate to prevailing conditions
- h) Building the capacities of those forming part of the waste management system
- i) Encouraging and inviting research and development into technologies and governance approaches for sustainable resource and waste management

The county is equally designing an integrated waste management strategy 2019-2023 with strategic interventions in waste reduction, efficient collection and transportation systems, waste diversion and inculcation of responsible public behaviour in consumption and management generated waste.

6. OPERATIONAL WORK

The county of Mombasa has a total workforce of approximately 4,000 workers spread in ten functional departments, the executive office and the county assembly. This workforce constitutes the target for this project whose knowledge and understanding of the SDGs relating to sustainable consumption and waste management will be developed. A good percentage of the workforce can be access through web-based platform but more importantly, through mobile application platforms.

6.1 Sub-target: Increase the knowledge within the designated areas

Educating target group

The department of environment has established a county environment committee drawing chief administrative officers from key departments who have been inducted on environmental issues and particularly on waste management. Awareness activities will be undertaken to

increase the knowledge of all the staff within the county on sustainable consumption and management of solid waste including waste generated in the workplaces. A section of staff for related departments have also been education on climate change issues and streamlining the same in their respective development plans. A forum will organized to share the contents of the drafted policy and bill on waste management.

Study visits

Visits have been carried out where staff have been taken on a tour of environmentally sensitive areas in the county particularly dumpsites, illegal disposal places and informal settlements. Staff from the department of environment, and public health have benefited from organized trips to other counties in Kenya who put in place better measures for sustainable consumption and waste management. In the financial year 2019/2020, peer-to-peer learning exchange visits have been planned for county staff between Mombasa and eThekweni Municipality in South Africa.

Public Dialogue

In the last financial year two meetings were organized to engage women and the youth in a dialogue revolving around responsible consumption and waste management. The dialogue involved county staff, local university representatives, representative of national government in related ministry and authority, women leaders, and youths. Plans are underway to have such dialogue to happen every year.

Transparency and public participation

The public participation act 2018 provide for public engagement in the development of legislative documents as well as formulation and implementation of any programmes or projects that affect a common citizen. County Integrated Development Plans, Annual Development Plans and associated budgets are usually subjected to public participation. The policy and bill that the department of environment has drafted is currently being subjected to public participation.

6.2 Sub-target: Find methods of education within the designated areas

County Newsletter

The county has a quarterly newsletter that informs county personnel and citizen at large on activities undertaken by functional departments. The newsletter can be utilized to inform staff on sustainable consumption practices and responsible waste management.

Count Website

Although not very interactive at this stage, the county has a website that can be harnessed as a method for educating staff and the public on sustainable consumption and waste management.

Mobile Phone Application platforms

Each department in the county has an interactive WhatsApp and Facebook platform that has been powerful in information dissemination. This method can therefore be equally useful in propagating targeted sustainability information.

6.3 Sub-target: Improve cooperation and knowledge within designated areas

The department of environment is working with other stakeholders, both internal and external to the county, in the areas of waste management, energy and climate change adaptation and mitigation. The following cooperation activities are currently in place;

County Government of Mombasa vs UN Habitat on waste wise cities. The county has signed to the waste wise cities campaign that brings together partners for innovative solid waste management approaches. Through this cooperation, a study was commissioned to establish the total municipal waste generated and its characterization. The findings would be used in designing appropriate waste collection systems for Mombasa.

County Government of Mombasa vs eThekweni Municipality in South Africa on Miji Bora Project: This is a peer-to-peer learning exchange programme between Mombasa and Durban Cities aimed at institutionally repositioning the cities as Smart and sustainable in the face of global environmental change. The following prototypes are envisaged; eco-foot print mapping, water and sewerage distribution tracking system, solid waste operations tracking system, stakeholder engagement platform and other governance platforms.

County Government of Mombasa vs Kenya Alliance of Resident Associations on solid waste management policy and legislation. This cooperation will help the department of environment enact relevant policies and legislation on environment issues. The immediate expected outcome will be the solid waste management policy and Bill.

County Government of Mombasa vs Community Cooker Foundation on localised waste to energy solutions. The cooperation will result in the development of a community cooker that would convert solid waste to energy for communal cooking.

7. UPCOMING ACTIVITIES

A delegation of three staff from the County Government of Mombasa and an elected leader are set to visit Region Västernorrland. The visit will provide an opportunity for the county staff to learn from the achievements of Region Västernorrland in sustainable development and specifically in sustainable consumption and waste management.

8. Project organization and contact information

The following individuals will represent the County Government of Mombasa in the activities related to this project.

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