

# **ACTION PLAN**



## **WASTE COLLECTION AND DISPOSAL**

### **VIHIGA MUNICIPAL BOARD**

**MAY**

**2019**

## INTRODUCTION

### Introduction

This action plan for waste collection and disposal was prepared with a view to ameliorating the current undesired state of waste management.

## ENVIRONMENTAL SCAN

### SWOT Analysis

**Table 1: SWOT Analysis**

<p><b>Strengths</b></p> <p>Strong support from County Government Strong commitment by Municipal Board Political goodwill Young members of secretariat committed to provide service No informal settlements (slums &amp; squatter settlements)</p> <p>The urban centres are relatively small and therefore easy to manage waste generated there</p>	<p><b>Opportunities</b></p> <p>Opportunity to generate energy from Municipal waste Support from development partners e.g World Bank (KUSP) Municipal waste is a resource and source of income Opportunity for employment for the youth (private sector involvement)</p>
<p><b>Weaknesses</b></p> <p>Lack of appropriate equipment (loading equipment, lorries etc) Multi-nuclei form of human settlements (several urban scattered within Municipality) Negative attitude among residents regarding municipal waste (its role of Municipal Board/County Government) Solid waste not viewed as a resource Lack of environmental education among residents (poor handling of waste) Inadequate primary collection centres) Inadequate landfill area Lack of sufficient funds for waste management Lack of by-laws on waste disposal by residents Lean secretariat (Municipal Board relatively new) Local people against establishment of</p>	<p><b>Threats</b></p> <p>Financial support from development partners not guaranteed County Governments depend on funds National Government. The funds are not only inadequate but characterized by delays. this leads to poor service delivery at county level.</p>

sanitary landfills in their areas  
 Lack of technical capacity for waste recycling  
 Poor accessibility especially in residential areas due to very narrow paths  
 Municipal Board relatively new and therefore not well established with functional departments

**Methods of Municipal Waste Management in order of desirability**

The figure below shows desired methods of managing Municipal waste. Avoidance (most cost-effective) is the most desired method while unmanaged waste (existence of waste everywhere) is the least desired.

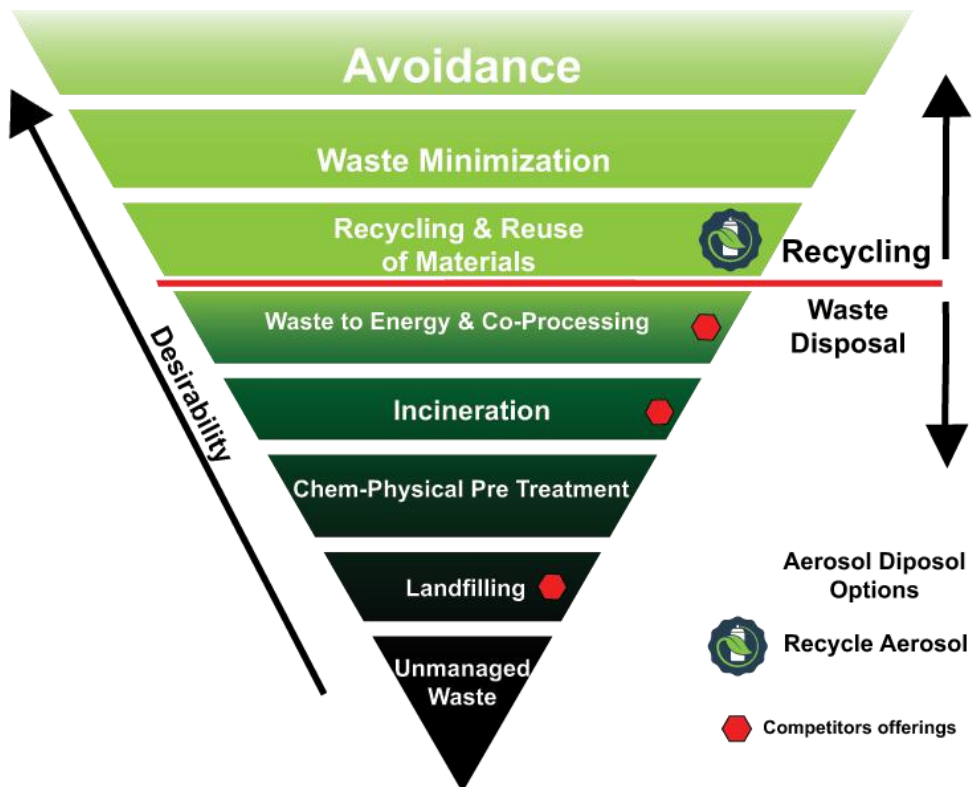


Figure 1: Methods of solid waste management in order of desirability

## Proposed Plan of Action

The Vihiga municipal board has identified the following key areas in its effort to implement the waste collection and disposal plan in liaison with the County Government and other development partners.

1. Waste management
2. Storm water drainage

**Table 2: Action Plan**

Strategic issue	Strategic Objectives	Action plan
Solid waste management	To effectively conserve and manage environmental resources	<ul style="list-style-type: none"><li>• Installation of collection bins</li><li>• Identification of transfer stations and collection points</li><li>• Purchase of land for the construction of a disposal site</li><li>• Purchase of a compacting truck</li><li>• Purchase of skip loader truck</li></ul>
Liquid waste management	To effectively conserve and manage environmental resources	<ul style="list-style-type: none"><li>• Construction of sludge ponds</li><li>• Construction of a wetland</li><li>• Construction of community septic tanks</li><li>• Purchase of vacuum trucks and handcarts</li><li>• Purchase of exhauster truck</li></ul>

## Development needs, Priorities and Strategies

*Table 3: Development needs, priorities and strategies*

<b>Development needs</b>	<b>Priorities</b>	<b>Strategies</b>
Protection of water sources, forests and other natural resources	<p>Protect water sources especially spring.</p> <p>Promote rain water harvesting</p> <p>Re-afforestation in the affected areas</p> <p>Practice agroforestry (in-farms)</p> <p>Resettlement of the people living in forests and hill tops</p>	<p>Enforcement of existing laws or enacting new ones at county level- county climate change policy</p> <p>Charge small levy on water usage especially from the spring.</p> <p>County Government to come up with policy on protecting water sources and natural resources.</p>
Improved water supply and management	<p>Increase water coverage</p> <p>Activation of community water users association</p>	<p>Partnership with donors and private firms to provide water</p> <p>Enforce law on water management</p>
Waste management	<p>Awareness creation.</p> <p>Establish a dump sites.</p> <p>Recycling plant</p> <p>Establish sewer system in major towns</p> <p>Establishment of garbage disposable system</p>	<p>Enact legislations</p> <p>Promote PPPs in waste management in urban centers</p>

<b>Project</b>	<b>Description of activities</b>	<b>Estimate cost</b>	<b>Source of funds</b>	<b>Time frame</b>
Installation of collection bins	Identify locations to set up garbage collection bins  Purchase garbage collection bins	50 M	KUSP CGV	3 Years
Identification of transfer stations and collection points	Identify and set up collection and transfer stations	10 M	KUSP CGV	3 Years
Purchase of land for the construction of a disposal site	Purchase of land	45 M	KUSP CGV	3 Years
Purchase of a compacting truck	Purchase of truck	10 M	KUSP CGV	3 Years
Purchase of exhauster truck	Purchase of truck	10 M	KUSP CGV	3 Years
Construction of sludge ponds	Construction	25 M	KUSP CGV	3 Years
Construction of a wetland	Identify land  Purchase of land  Construction of wetland	30 M	KUSP CGV	3 Years
Construction of community septic tanks	Construction	20 M	KUSP CGV	3 Years

Purchase of vacuum trucks and handcarts	Purchase of handcarts	5 M	KUSP CGV	3 Years
Purchase of exhauster truck	Purchase of truck	10 M	KUSP CGV	3 Years

**Proposed Projects Table**

#### ***4: Proposed Projects***



The action plan is estimated to cost **Kes 215,000,000.00** to fully implement. The municipal Board will in collaboration with other stakeholders raise funds to ensure that this plan is attained.