Kiambu County is adjacent to the northern border of Nairobi County and has a population of 1,623,282. The county is 40% rural and 60% urban owing to Nairobi’s consistent growth northwards. Its capital is Kiambu and its largest town is Thika. SWM service is provided by both the county and the private sector. There are two disposal sites: one is in Kiambu and another one in Thika. The county is preparing an ordinance for municipal solid waste management.


*** Oanda.com

### Current SWM Situation

<table>
<thead>
<tr>
<th>Item</th>
<th>Outline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional System</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Legal system</strong></td>
<td>● The county is preparing an ordinance for municipal solid waste management.</td>
</tr>
</tbody>
</table>
| **Policy/Plan** | ● A solid waste management policy is under preparation.  
● Five-year Strategic Plan. |
| **Implementation system** | ● The county provides solid waste services such as sweeping, collection and final disposal directly.  
● Number of staff: six in administration, 16 in operations, and 450 others.  
● The private sector also participates in solid waste services such as collection and recycling.  
● Youth groups collect waste from households, sort manually for recycling, and transport it to the dump site.  
● The county works with the Wangari Mathaai Institute for Peace and Environment for research activities, with the Ministry of Health for medical waste, and with the National Environmental Management Authority, Ministry of Environment, for the preparation of regulations. |
| **Technical System** | |
| **Waste generation amount & characteristics** | ● Waste generation amount is estimated at 900 tons/day.  
● Waste generation rate is estimated at between 0.53 and 0.65 kg/person/day.  
● Waste characteristics are unknown. |
| **Storage and discharge/Collection and transportation/Road sweeping** | ● Sweeping is carried out in the city centre, public areas, and residential area.  
● Waste amount collected is around 680 tons/day.  
● 75% of the total population has access to the collection service.  
● The collection service is provided three times a week in the city centre and once a week in the residential area.  
● The service uses 40 collection trucks with a capacity of seven tons each.  
● There are ten trucks with a loading capacity of five tons each.  
● Only 50% of the trucks are functional due to lack of manpower for repairing. |
| **Intermediate treatment/Recycling** | ● The county does not have any recycling facility.  
● Private companies operate material recycling facilities.  
● A private company operates a pyrolysis plant for generating oil.  
● There are small plastic recycling activities. |
| **Final disposal** | ● There are two disposal sites, one in Kiambu and the other in Thika. The former has an area of five acres and is operated between 6:00 am and 6:00 pm. The latter has an area of 100 acres and is operated between 6:00 am and 6:00 pm.  
● Two other disposal sites are temporarily closed. |
The informal sector collects recyclable materials. Approximately 1,500 waste pickers are working in the streets and 400 are at the disposal site. Communities are informed about collection day and time. No separate collection is applied. Community action days: meetings for public awareness raising, organisation of clean-up activities with residents, students, etc.

JICA provides cooperation in capacity development of solid waste management, e.g. training in Japan. UN-Habitat project using the Fukuoka Method. Japan provided heavy equipment and compactor trucks.

Raise public awareness.
Establish a transfer station.
Waste separation.
Material recycling and composting.
Waste reduction, 3Rs.

Annual budget for SWM:
- Environmental education: KES 300,000.
- Segregation of waste at source: KES 5,000,000.
- Environmental training: KES 2,500,000.
- Waste management facilities: KES 30,000,000.
- Environmental management policies: KES 12,000,000.
- Transport and infrastructure: KES 30,000,000.
- Decommissioning and rehabilitation of dumpsite: KES 30,000,000.
- Organic waste hub: KES 6,000,000.
- Thika Kang’oki upgrading: KES 10,000,000.
Households are not charged for the waste collection service, but other wastes are charged as follows:
- Commercial waste: 3,000 KES/ton.
- Hazardous waste: 25,000 KES/ton.
There is a tipping fee at the disposal site of 100 KES/ton for household waste, and 1,500 KES/ton for industrial waste.

Environmental and social considerations
- The informal sector collects recyclable materials. Approximately 1,500 waste pickers are working in the streets and 400 are at the disposal site.
- Communities are informed about collection day and time. No separate collection is applied.
- Community action days: meetings for public awareness raising, organisation of clean-up activities with residents, students, etc.

Donor support
- JICA provides cooperation in capacity development of solid waste management, e.g. training in Japan.
- UN-Habitat project using the Fukuoka Method.
- Japan provided heavy equipment and compactor trucks.

Areas for improvement (in order of priority)
- Raise public awareness.
- Establish a transfer station.
- Waste separation.
- Material recycling and composting.
- Waste reduction, 3Rs.

### Waste Amount at Each Stage of Waste Flow*

<table>
<thead>
<tr>
<th>Waste flow</th>
<th>Amount ** (ton/day)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste generation</td>
<td>900</td>
<td>Waste generated at houses, offices, shops, restaurants, etc.</td>
</tr>
<tr>
<td>Discharge to collection</td>
<td>N/A</td>
<td>Waste discharged for collection services.</td>
</tr>
<tr>
<td>Self disposal</td>
<td>N/A</td>
<td>Disposal at generation sources, such as burning and burying.</td>
</tr>
<tr>
<td>Recycling at source</td>
<td>N/A</td>
<td>Reuse of materials, composting, sold to recyclers.</td>
</tr>
<tr>
<td>Collection and transport</td>
<td>680</td>
<td>Waste amount collected and transported.</td>
</tr>
<tr>
<td>Clandestine dumping</td>
<td>N/A</td>
<td>Waste illegally disposed of in unknown location.</td>
</tr>
<tr>
<td>Treatment</td>
<td>N/A</td>
<td>Material recycling, composting, incineration, etc.</td>
</tr>
<tr>
<td>Recycling/Reduction</td>
<td>N/A</td>
<td>Recycled and/or reduced waste amount by material recycling, composting, incineration, etc.</td>
</tr>
<tr>
<td>Residue</td>
<td>N/A</td>
<td>Residue from treatment facilities.</td>
</tr>
<tr>
<td>Final disposal site</td>
<td>N/A</td>
<td>Waste amount brought into disposal sites.</td>
</tr>
<tr>
<td>Recycling</td>
<td>N/A</td>
<td>Recycled at disposal sites.</td>
</tr>
<tr>
<td>Final disposal</td>
<td>N/A</td>
<td>Waste amount finally disposed of at disposal sites.</td>
</tr>
</tbody>
</table>

* Based on the waste flow chart on page.
** Figures include estimated value.

### Location of Waste Management Facility and Related Photographs:

Cleaning and public awareness raising activities