Waste management has been one of the pressing issues in Nairobi, the capital city of Kenya. UN-Habitat’s survey with the Waste Wise Cities Tool, supported by the African Clean Cities Platform, was well received considering that the Nairobi City County Government had been relying on a study done with the Japan International Cooperation Agency back in 2010.

With the national census conducted in 2019, the UN-Habitat survey was timely to update the City’s waste management database. The newly established Nairobi Metropolitan Services is now developing a Solid Waste Management Action Plan 2020-2022 based on these results.

Patricia Akinyi K’Omudho
Environment Information Officer;
Nairobi Metropolitan Services

Waste Wise Cities Tool in Nairobi City County, KENYA

City: Nairobi City County
Country: KENYA
Year of WaCT Survey: 2019

Key Waste Data

- **Total municipal solid waste (MSW) generated by the city**: 3085 t/d
- **Total MSW collected**: 2013 t/d
- **Total MSW collected and managed in controlled facilities**: 452 t/d
- **Per capita MSW generation**: 0.70 kg/cp/d
- **Per capita household food waste generation**: 0.25 kg/cap/d
- **City Recovery Rate**: 15%
### Household and non-household waste generation

<table>
<thead>
<tr>
<th></th>
<th>Average household waste generation (kg/capita/day)</th>
<th>Total population</th>
<th>Total MSW generated by households (t/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income</td>
<td>0.43</td>
<td>574,697</td>
<td>245</td>
</tr>
<tr>
<td>Middle income</td>
<td>0.71</td>
<td>1,542,493</td>
<td>1,101</td>
</tr>
<tr>
<td>Low income</td>
<td>0.36</td>
<td>2,279,882</td>
<td>813</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0.49</strong></td>
<td><strong>4,397,072</strong></td>
<td><strong>2,160</strong></td>
</tr>
</tbody>
</table>

Total MSW generated from non-household sources (t/day): **926** calculated using proxy of 30% of total MSW

### Composition of waste at the households and at the disposal site

#### Household waste composition
- **Higher income areas**
  - 51% Paper / cardboard
  - 11% Special wastes
  - 10% Glass
  - 6% Composite products
  - 5% Metals
  - 4% Textiles / shoes
  - 3% Plastics dense
  - 3% Kitchen / canteen
  - 1% Other

- **Middle income areas**
  - 49% Paper / cardboard
  - 11% Special wastes
  - 10% Glass
  - 8% Composite products
  - 7% Metals
  - 4% Textiles / shoes
  - 4% Plastics dense
  - 3% Kitchen / canteen
  - 2% Other

- **Lower income areas**
  - 55% Paper / cardboard
  - 11% Special wastes
  - 11% Glass
  - 10% Composite products
  - 9% Metals
  - 8% Textiles / shoes
  - 6% Plastics dense
  - 4% Kitchen / canteen
  - 3% Other

#### Average household waste composition
- 51% Paper / cardboard
- 10% Special wastes
- 6% Glass
- 5% Composite products
- 4% Metals
- 4% Textiles / shoes
- 3% Plastics dense
- 3% Kitchen / canteen
- 1% Other

#### Waste composition at disposal site
- 55% Paper / cardboard
- 11% Special wastes
- 11% Glass
- 10% Composite products
- 9% Metals
- 8% Textiles / shoes
- 6% Plastics dense
- 4% Kitchen / canteen
- 3% Other
Potential recyclables from households

<table>
<thead>
<tr>
<th>Types</th>
<th>Recyclable waste generation from households (t/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food waste</td>
<td>1111</td>
</tr>
<tr>
<td>Plastic film</td>
<td>83</td>
</tr>
<tr>
<td>Plastic dense</td>
<td>125</td>
</tr>
<tr>
<td>Paper and cardboard</td>
<td>207</td>
</tr>
<tr>
<td>Glass</td>
<td>106</td>
</tr>
<tr>
<td>Metal</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>1,739</td>
</tr>
</tbody>
</table>

WaCT Flow Chart

For more info and if interested in WaCT application contact the Waste Wise Cities Team at WasteWiseCities@un.org