

FACTSHEET

Waste Wise Cities Tool in Koidu, Sierra Leone



- Step 1: Preparation**
- Step 2: Household MSW Generation and Composition**
- Step 3: Non-Household MSW Generation**
- Step 4: MSW Received by Recovery Facilities and Control Level of Recovery Facilities**
- Step 5: MSW Received by Disposal Facilities and Control Level of Disposals Facilities**
- Step 6: Waste Composition at Disposal Facilities**
- Step 7: Calculating Food Waste, Recycling, Plastic Leakage, Greenhouse Gas Emissions and Air Pollution**

In the rapidly urbanizing world, the crisis in waste management and plastic pollution is a reflection of current unsustainable lifestyles.

The availability of fact-based data on municipal solid waste can guide evidence-based planning and lead to increasingly effective and efficient solid waste collection systems, enhanced local resource recovery and controlled waste disposal, thereby improving the quality of life for urban residents.

UN-Habitat's Waste Wise Cities Tool (WaCT) assesses the parameters for Sustainable Development Goal indicator 11.6.1 - the proportion of municipal solid waste collected and managed in controlled facilities out of total municipal solid waste generated, by the city. It consists of seven steps and provides the necessary data to support evidence-based decision making by city managers.

Together we can achieve a sustainable future.

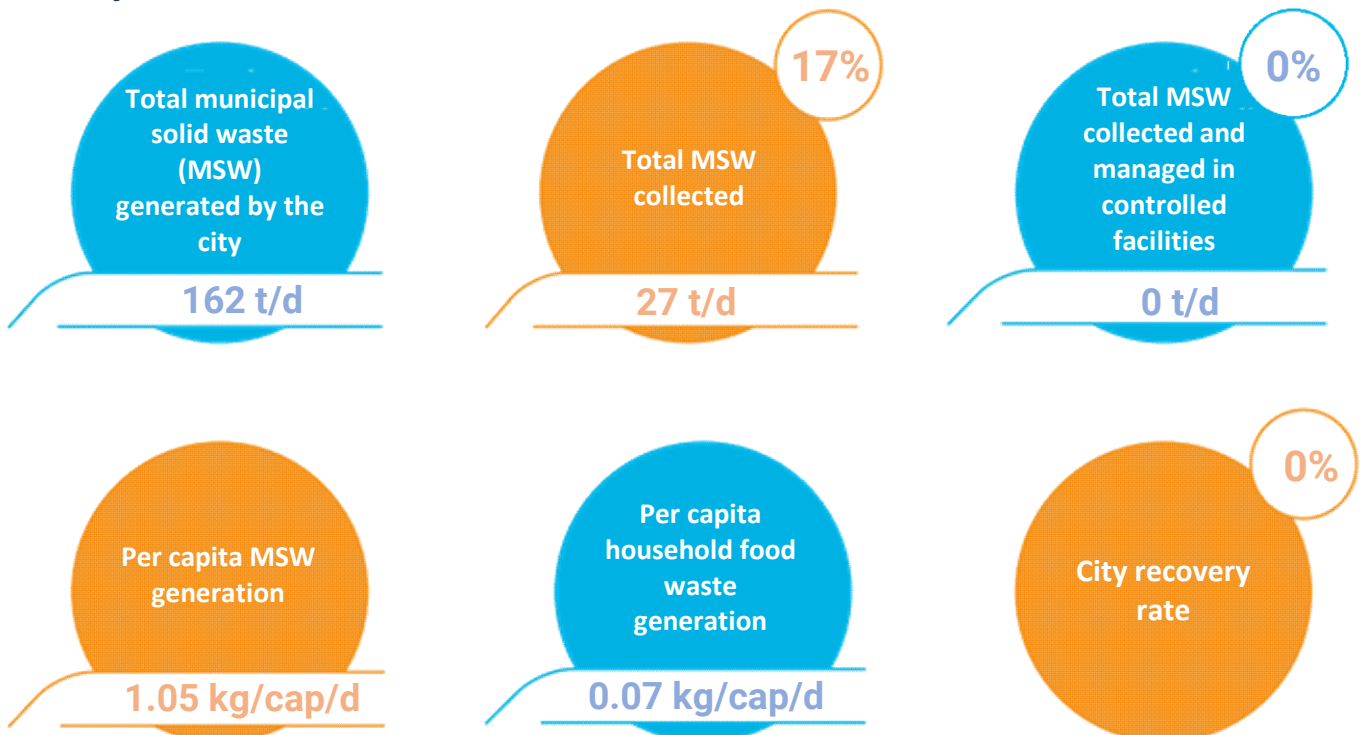
Have a look at the Waste Wise Cities website, learn about the WaCT and how its application created impact on the ground in other cities.

City **Koidu**
Country **Sierra Leone**

Population **154,908 (2022)**

Year of WaCT survey **2022**

Key Waste Data



Household and non-household waste generation



| | Average household waste generation (kg/capita/day) | Total population | Total MSW generated by households (t/day) |
|---------------|--|------------------|---|
| Higher income | 0.69 | 20,138 | 14 |
| Middle income | 0.77 | 74,356 | 58 |
| Lower income | 0.69 | 60,414 | 42 |
| TOTAL | 0.73 | 154,908 | 113 |

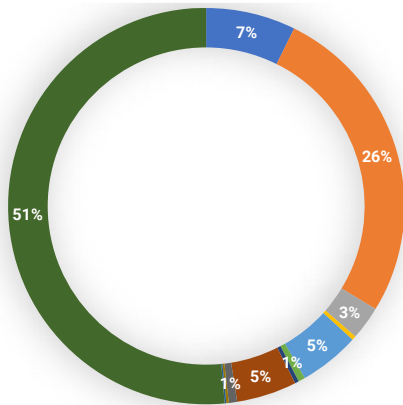


Total MSW generated from non-household sources (t/day)
 calculated using proxy of 30% of total MSW

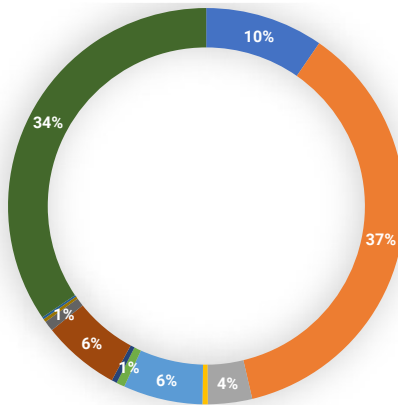
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Composition of waste at the households and at the disposal site

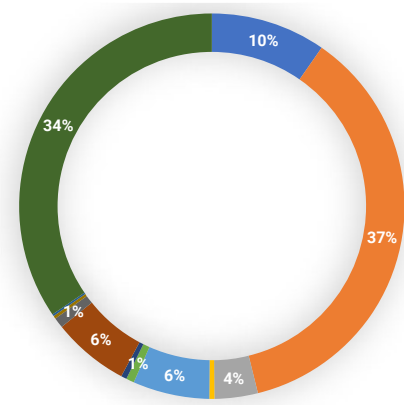
Household waste composition
higher income areas



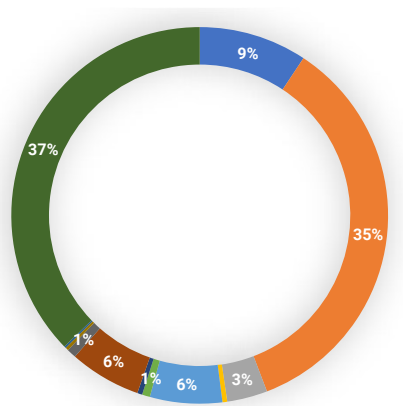
Household waste composition
middle income areas



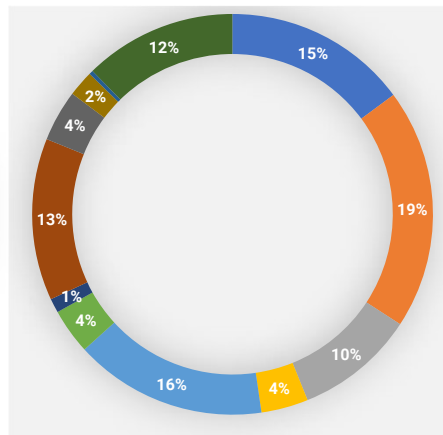
Household waste composition
lower income areas



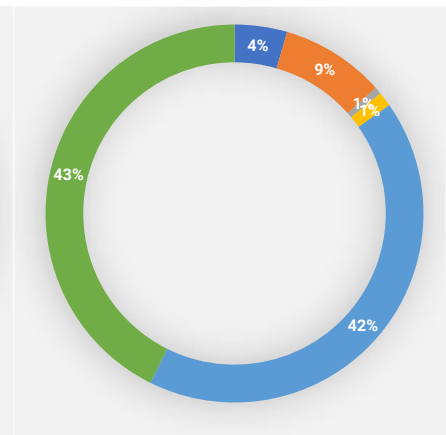
Average household waste
composition



Waste composition at disposal site



Overall MSW composition
Using WaCT -> WFD calculation

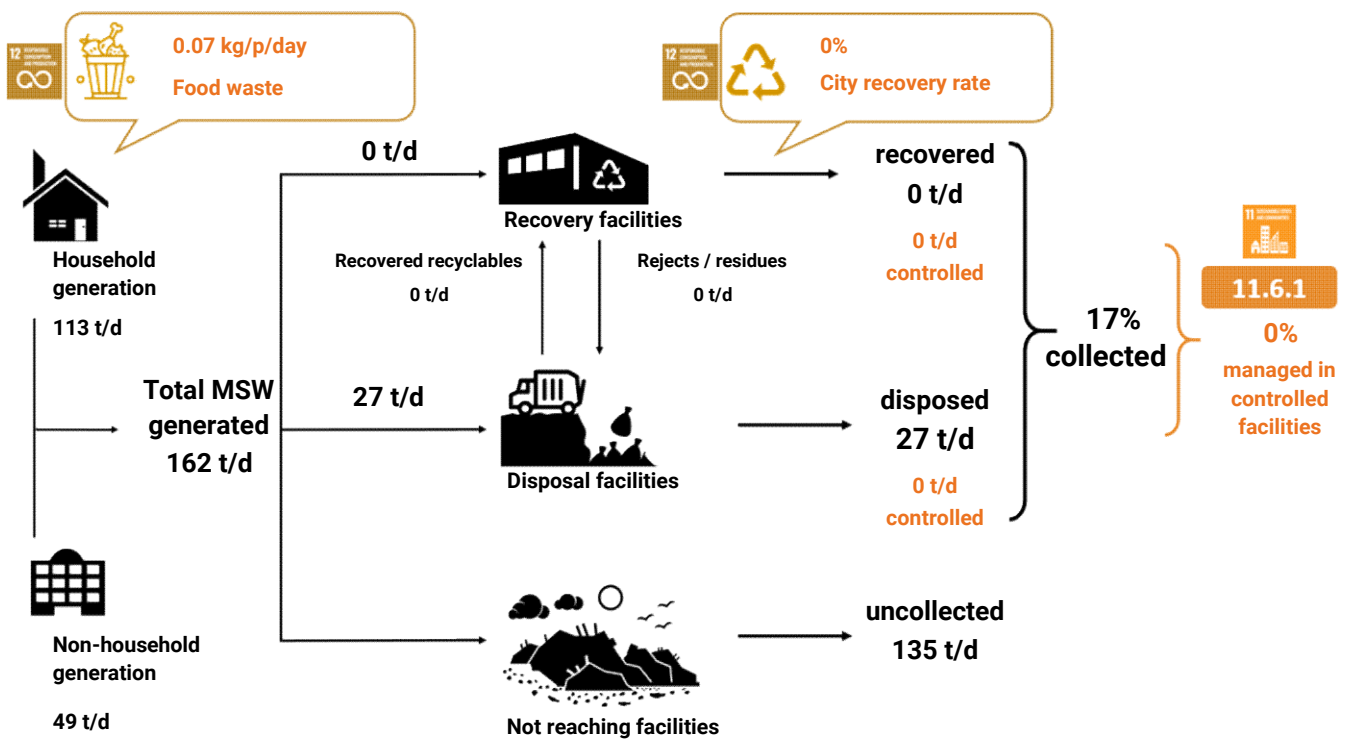


- Kitchen/canteen
- Garden/park
- Paper/cardboard
- Plastic film
- Plastics dense
- Metals
- Glass
- Textiles/shoes
- Wood (processed)
- Special wastes
- Composite products
- Other

Potential recyclables from households

| Types | Recyclable waste generation from households (t/day) |
|---------------------|---|
| Food waste | 11 |
| Plastics dense | 7 |
| Plastic film | 0 |
| Paper and cardboard | 4 |
| Glass | 0 |
| Metal | 1 |
| Total | 23 |

WaCT Flow Chart



For more info and if interested in WaCT application contact the Waste Wise Cities Team at

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