

ADDIS ABABA CLEANSING MANAGEMENT AGENCY

Addis Ababa's MWM achievements in Awareness Raising Activities and WaCT Survey Result presented to [Third Assembly of African Clean Cities Platform](#)

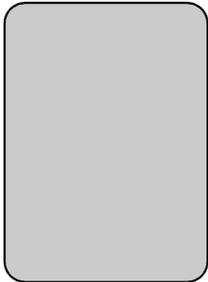
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Addis Ababa

Background: Addis Ababa in at A glance



Cleansing Management Agency



Rapid population and economic growth in Addis Ababa City coupled with discernible changes in lifestyles and consumption patterns of its residents and visitors, *the amount of waste generated increases in kind and amount.*

In the City collection, transportation and disposal at open landfill were those methods practiced for more than 50 years.



The Cleansing Management Agency was established with the objective to reduce, reuse, sort, collect, transport, recycle, treat and properly dispose the solid wastes generated by all sources in the city in an environmentally sound, socially acceptable and aesthetically attractive using the most economically available means and appropriate technologies.

The agency extends its structure to the local woreda/district level to attain the intended objectives

Overview on the Physical Composition of Waste Generated in the City

From generated household waste:

- ❑ 74.29% biodegradable organic
- ❑ 17.41% Recyclable
- ❑ The remaining 8.27% Potentially hazardous waste



GES (2020)



There are several issues in waste management in Addis Ababa?

- ❑ No scientific waste collection mechanism available.
- ❑ Solid waste is either thrown on the streets or burnt in open/for cooking.
- ❑ Drains are clogged with solid waste.
- ❑ Lack of efficient collection mechanism still drives a behavioural tendency to dump garbage at any place.
- ❑ There is no awareness among the residents about the ill-effects of burning dry waste.
- ❑ Awareness:
 - Training of waste unit employees and collection staff.
 - Door-to-door awareness to all the residents
 - Awareness sessions in schools
- ❑ Infrastructure:
 - Setting up composting infrastructure
 - Setting up solid waste center
 - Supply of recyclables to recycling units

**Agency's practices/efforts/
achievements in awareness raising to
improve WSWMS and the WaCT survey
Result**

?

Why awareness creation& public participation:

- The officials gave due attention for the improvement of waste management
- The waste management issues has got better media coverage
- Sectoral integration in the city to improve waste management in the city enhanced
- Residents started waste sorting/segregation at source
- The community produces compost at local level to support their livelihood
- Community participation in clean up campaign
- The residents started contributing to support the wm of the city in cash/in kind
- Participation of stakeholders increased/improved
- Different Schools in the city started to give attention for awareness creation and clean up campaign participation physically, through school clubs as well as using school minimedias even in the form of outreach

Overall practices/efforts in awareness raising& public participation to improve municipal waste management

The awareness Raising & participation on SWM through:

- Households door to door awareness created
- Training given at city & subcity level for different participants
- Households participated in Cleanup campaign Frequently, i.e. on monthly in 2012 E.C, twice per month in 2013 E.C, and weekly basis in 2014 E.C with incremental due to attention from higher officials
- Different educational exhibitions, experience sharing, trips/visits made to WM facilities/reuse& recycling centers/products Exhibition, visits, experience sharing, took place
- Different medias participated to give coverage for awareness creation & there was dissemination of messages on MWMS in addition, Press release, social media, Radio, Televisions, print medias, and public screen medias was used

Continued.....



Door to door



Community conversation



Awareness for students



Awareness through mobilization

Higher Officials on Clean up campaign



Community Clean up campaign



Schools current clean up practices



Schools Education visits for waste recycling products and plastic recycling centers



Staffs visit of Paper Recycling Company



AA City Mayor Visiting the open dumpsite & W2E Facility



School Advocacy for Improved MSWM in Addis Ababa

Another effort in awareness Creation is School Advocacy for Improved Municipal Solid Waste Management, Addis Ababa

- ❑ In addition, Addis Ababa Cleansing Management Agency began to employ alternative approach being with partners through different techniques and projects
- ❑ to increase resources efficiency in the city,
- ❑ to promote the 5Rs, Rethink, Reduce, Reuse, Recycle and Refuse the use of single-use items,
- ❑ Under the Waste Wise Cities Challenge, and supported by the Urban Pathway project, sponsored by the International Climate Initiative, ACMA will implement an awareness campaign for selected primary school environmental protection clubs.

Objective

- To implement awareness raising program on solid waste management at selected school environmental protection clubs. Specifically,

Outcome

- Awareness raised among selected primary school environmental protection clubs

Output

- Organized trainings and sensitization activities organized in selected schools

So far the following progresses reported:

1. Kick of meeting
2. Training of Trainers
3. Educational visit to plastic recycling facility

1. Kick of meeting



The project in the presence of high officials from the city government, students, school leaders, focal persons from UN-Habitat HQ and Vienna city, supporter city to Addis Ababa within the Waste Wise Cities Challenge

- ... Mr. Sadik (Deputy G/Manager, Addis Ababa Cleansing Management Agency,
- ... Ms Haregewoin Bekele (Country Manager, UN Habitat),
- ... Ms. Francesca Calisesi (Associate Officer, Solid Waste Management, Urban Basic Services Section) and
- ... Ms. Herrmann Nicola Gabriela (Focal person, Vienna city) have delivered the opening remarks.

MWM in Vienna - How to use education and awareness tools for a more climate friendly WMS (presented by Herrmann Nicola Gabriela):

- ... the ***experience of the Vienna city*** and highlighted the main tasks of MA 48, which are the collection of residual waste and recyclables and the treatment and disposal of waste and its residues.
- ... MA 48 is also in ***charge of keeping the streets of Vienna clean as well as for the winter service.***
use of different ***media to spread information, a new campaign every spring,*** and combined effort: like organizing every year the city a “spring clean, is ideal in the Vienna case to spread awareness.
- ... Focusing on schools through establishing call centers and waste consulting is a great way to reach the young demography.
- ... teaching kids how to collect and separate waste correctly at a young age and holding a festival of waste once a year every September was beneficial to reach out to the vast majority.

Project bjectives, planned activities and responsibilities of partners (by Takele Desisa)

Training on 5Rs of waste management (by Zebad Alemayehu)

Discussion on SWM in schools and the role of environmental clubs, and with participants:



2. Training of Trainers

The ToT training:

- ❑ Was held in **the 4th of June , 2022** in the presence of the cleansing management agency, UN-habitat and trainers from selected Addis Ababa 30 primary schools
- ❑ The workshop built a team for environmental awareness and sensitize students on challenges and solutions of swm Project objectives, planned activities and responsibilities of partners as well as on the waste management hierarchy
- ✓ the Basics of Solid Waste Management and Types of Composting and Understanding the Process
- ✓ The advocacy tool
- ❑ Finally, the roles& responsibilities of educational institutions as well as students were briefly presented to the participants



3. Educational visit to plastic recycling facility

- ❑ a half day educational visit to EKT plastic recycling facility as part of implementing an awareness raising activities in 30 primary school.
- ❑ Students and school leaders learnt about the plastic recycling processing steps: *sorting, categorizing, washing, shredding, identification and separation of plastics, extruding and compounding done by machines at the recycling facility where plastic wastes are transformed into a usable and valuable product.*



WaCT Exercise and Results

Data collection for SDG 11.6.1 in Addis Ababa

- From mid April to May 2020 from preparation to finish of data collection
- waste generation from household and other premises
- waste amount collected
- Control level of treatment and disposal facilities



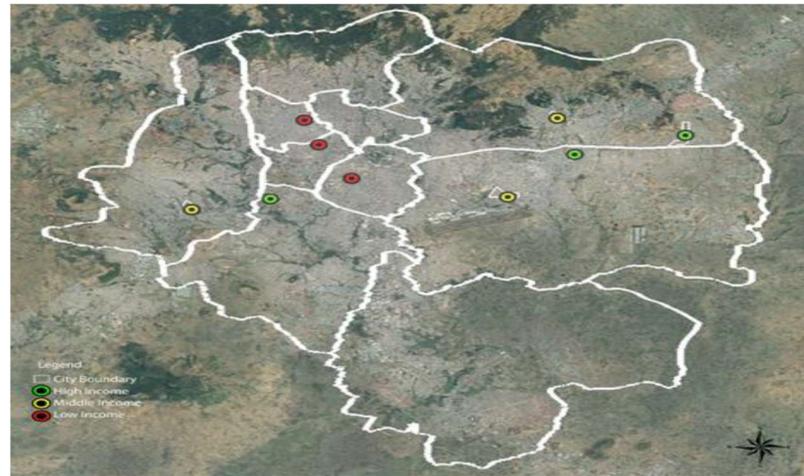
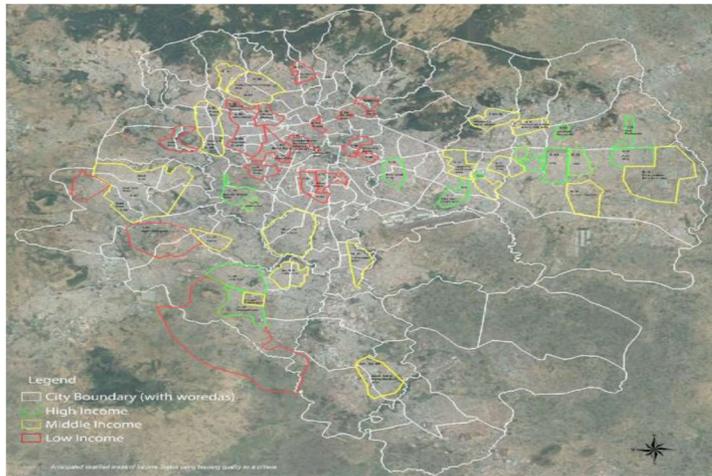


Table 1. List selected neighborhoods with corresponding sub-city/Woreda

SES stratum	Sub-city	Woreda	Approximate local area name
High	Yeka	13	Ayat 2
	Bole	08	Ayer mended/CMC
	N.S. Lafto	03	Sarbet Gabriel
Middle	Yeka	09	Kotebe Kidanemhret
	Bole	13	Gerji Apartment *
	Kolfe	04	Ayertena school
Low	Kirkos	11	Cherkos
	Lideta	05	Geja Sefer
	Addis Ketema	07	Addis Ketema

Household MSW Generation Survey



Annex 3: Recording sheet for waste composition analysis

Survey Area:	Composition analysis 1 (kg)	Composition analysis 2 (kg)	Composition analysis 3 (kg)	Sum (kg)	Average (kg)
1. Kitchen/ canteen waste	3.1	16.9 kg	6.1 kg		
2. Garden/ park waste	1.9 kg	0.6 kg	5 kg		
3. Paper & cardboard	3.2 kg	3.2 kg	4.1 kg		
4. Plastics - film	1.3 kg	1.4 kg	0.6 kg		
5. Plastics - dense	0.2 kg	0.6 kg	1 kg		
6. Metals	0.5 kg	1.6 kg	0.6 kg		
7. Glass	0.5 kg	0.0	0.4 kg		
8. Textiles & shoes	0.2 kg	0.0	0.7 kg		
9. Wood (processed)	0.2 kg	0.4 kg	0.3 kg		
10. Special wastes	0.2 kg	0.5 kg	3.5 kg		
11. Composite products	2.2 kg	2 kg			
12. Other				85.8 kg	
Total	47.15 kg	62.1 kg			

Density = $\frac{6.75}{40} = 0.17$ Density = $\frac{38}{40} = 0.95$

Annex 2: Recording sheet for household waste sampling

Survey Area:	HH 1	HH 2	HH 3	HH 4	HH 5	HH 6	HH 7	HH 8	HH 9	HH 10
Number of residents										
Weight of bag (in kg)										
Day 2, Date:	2.2 kg	6.7 kg	5.1 kg	1.6 kg	2.4 kg	3.5	1.1 kg	3.3 kg	1.2 kg	2.2 kg
Day 3, Date:	4.3 kg	2 kg	2.2 kg	0.7 kg	2.7	1.6	2.5	1.8	0.9	1.9 kg
Day 4, Date:	3.6 kg	9.2 kg	2.7 kg	3 kg	2 kg	3.2 kg	1.2 kg	2.4 kg	0.2 kg	2.3 kg
Day 5, Date:	3.1 kg	6.4 kg	0.2 kg	0.9 kg	5.5 kg	1.2 kg	1.3 kg	2 kg	1 kg	2.5 kg
Day 6, Date:	2.1 kg	9.8 kg	1 kg	5.6 kg	1.1 kg	2.2 kg	1.5 kg	2.3 kg	0.9 kg	3.1 kg
Day 7, Date:	3.6 kg	5.3 kg	1.2 kg	1.6 kg	3.2 kg	4.3 kg	1.9 kg	5.1 kg	0.9 kg	4.1 kg
Day 8, Date:	3 kg	4.4 kg	1.8 kg	0.5 kg	10.3 kg	2.2 kg	1.6 kg	2.4 kg	1.2 kg	2.2 kg

Household Waste Generation Survey Results



	Average household waste generation (kg/capita/day)	Total population	Total MSW generated by households (t/day)
High income	0.60	460,224	276
Middle income	0.29	2,368,236	676
Low income	0.26	1,965,540	508
TOTAL	0.30	4,794,000	1,460



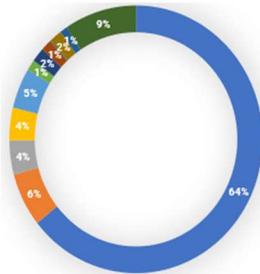
Total MSW generated from non-household sources (t/day) **626**
 calculated using proxy of 30 % of total MSW

Potential recyclables from households

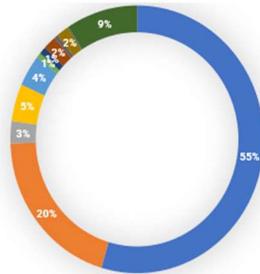


Types	Recyclable waste generation from households (t/day)
Food waste	798
Plastic film	61
Plastic dense	59
Paper and cardboard	48
Glass	16
Metal	13
Total	1,023

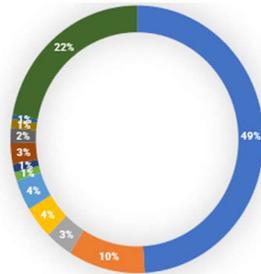
Household waste composition higher income areas



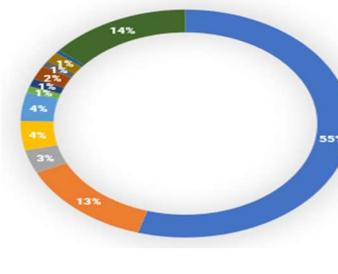
Household waste composition middle income areas



Household waste composition lower income areas



Average household waste composition



Plot Area

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



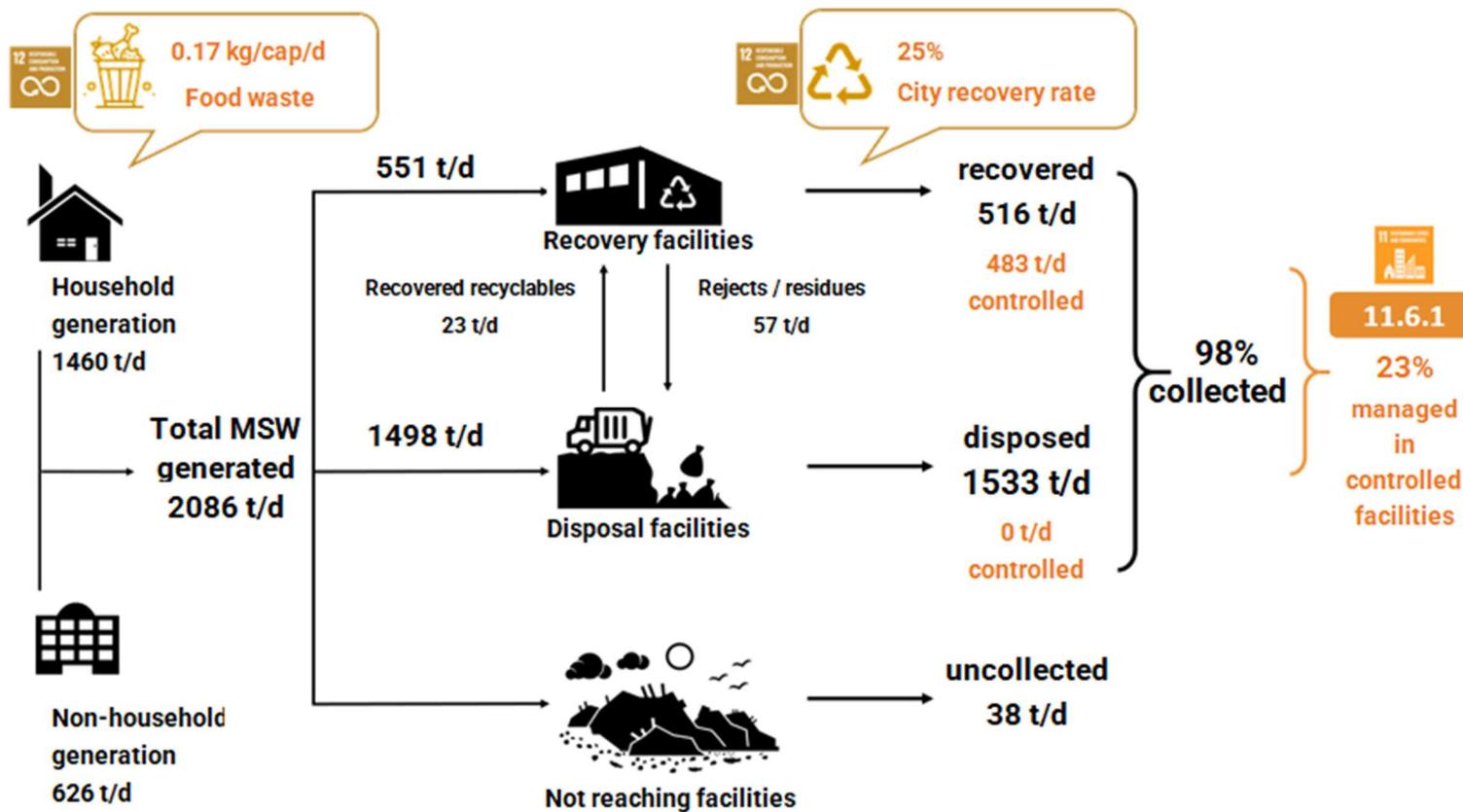
MSW Collected And Managed in controlled Facilities:

- Visit both recovery and disposal facilities
- Record amount of waste received by the facilities through interviews
- Interview middlemen and recyclers about the approximate amount of MSW recovered from dumpsite
- Judge the operation control level according to ladder of the level of control

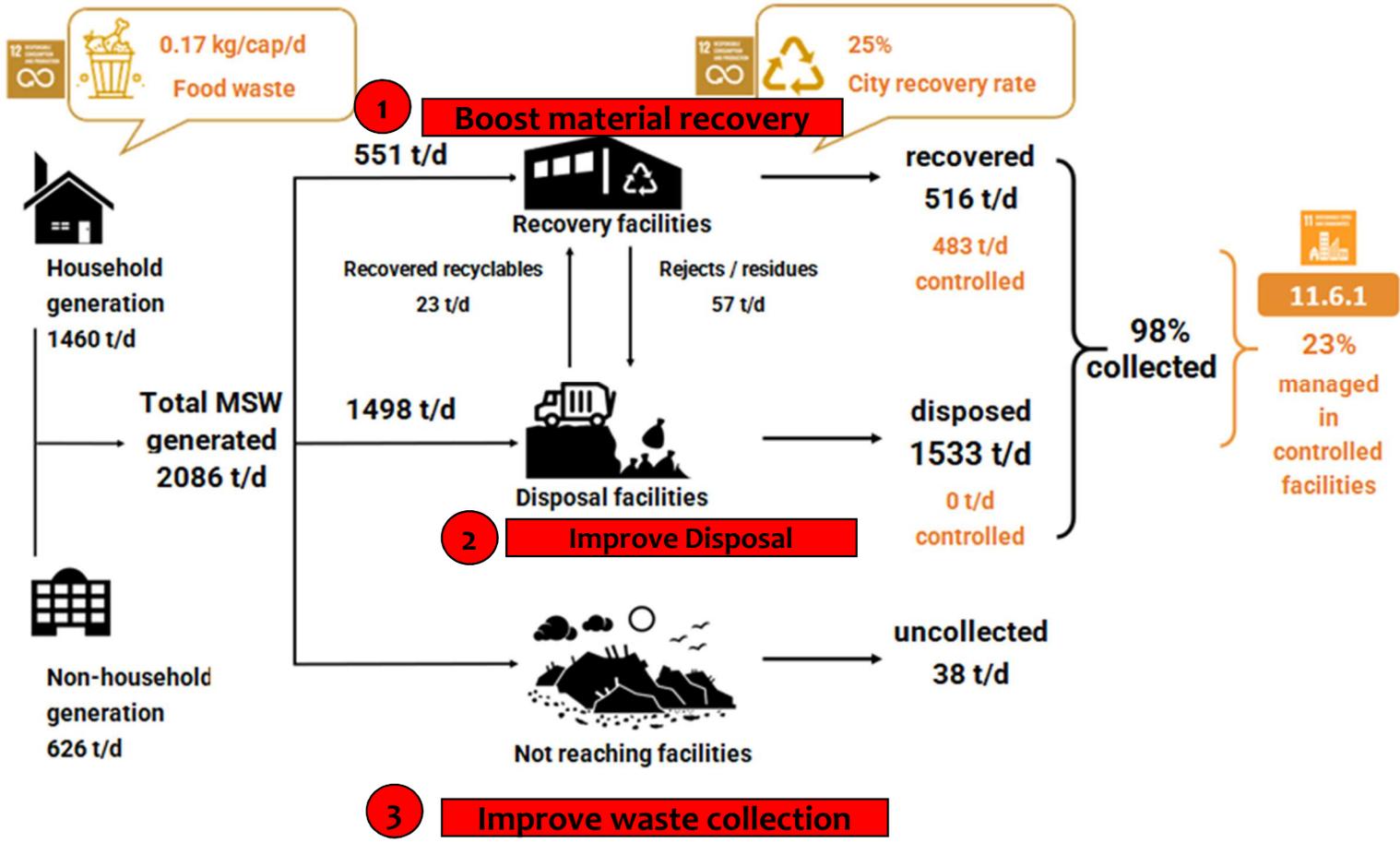
MSW Characterization Survey at Repi/K open dumpsite



Municipal Solid Waste Flow in Addis Ababa



Municipal Solid Waste Intervention Areas



Thank you!

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