SDG Indicators 12.4.2 & 12.5.1 Methodologies and Pilot Results

Chemicals and Waste Statistics in the 2030 Agenda:

A Joint Programme for Methodology Development and Capacity Building for the Follow-up and Review of Waste SDGs

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Background:
Why measuring waste is essential

Today, **54% of the world's population lives in urban areas**, and this is expected to increase to 70% by 2050, adding another 2.5 billion people to the world's cities. **This will result in a rapid increase in urban solid waste generation**.

However, **many countries and cities do not yet have the capacity to properly collect, transport, treat, and dispose of waste**, which can lead to:

- Spread of disease
- Flooding from blocked drainage
- Environmental pollution
- Emission of Greenhouse Gases
- Undesirable sights and odours

Background:
Why measuring waste is essential

Collecting environmental statistics on chemicals and waste is critical to identify and quantify these issues, design interventions, improve management practices, and inform decision-making and policies.

Capacity-building is urgently needed in this area as **many countries do not presently collect statistics on waste**.

The **African Clean Cities Platform comes at a key time** for sustainable development

The Sustainable Development Goals (SDG)

Adopted by the United Nations General Assembly in 2015

17 goals with 169 targets and 250+ indicators covering the **social and environmental dimensions** of sustainable development

Indicators were entrusted to "**Custodian Agencies**" for the development development of methodologies and data collection

SDG Custodian Agencies

UN Environment is the custodian agency for **26 SDG indicators**

Many are still 'Tier III', meaning they have **no internationally-agreed, conceptually clear methodologies** for how the data should be collected

Establishing methodologies for these Tier III indicators is the first **priority**

UN Environment is the custodian agency for **26** of the SDG indicators

93 of the 244 SDG indicators are directly related to the environment

Partnership to develop the methodologies

Established in 2017 to share expertise and coordinate work

Joint Expert Group Meeting held in January 2018

Joint resource mobilization

SDG indicators directly related to waste

 Indicator 6.3.1: Wastewater management

 Indicator 11.6.1:   Municipal solid waste

 Indicator 12.3.1:   Food loss and waste

 Indicator 12.4.2:Hazardous waste

 Indicator 12.5.1:Recycling rate

SDG indicators directly related to waste

Indicator 6.3.1: Wastewater management

Indicator 11.6.1:   Municipal solid waste

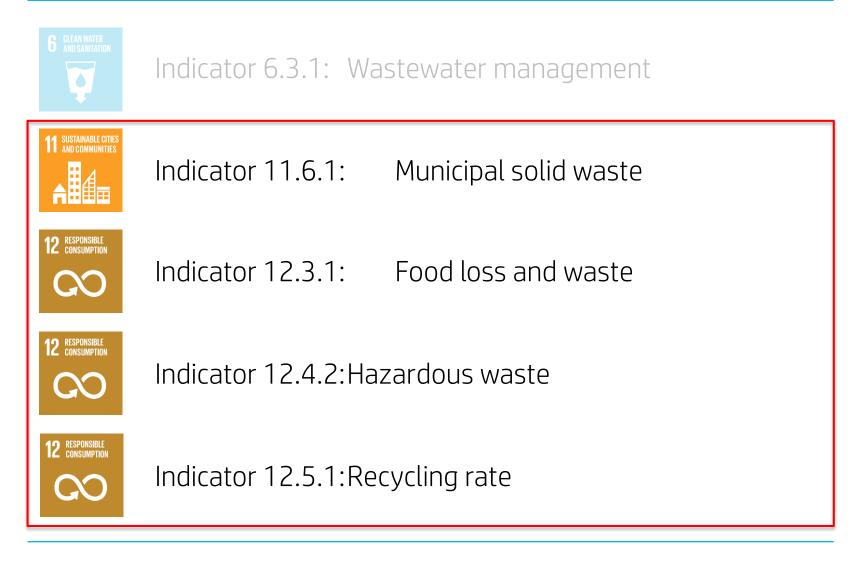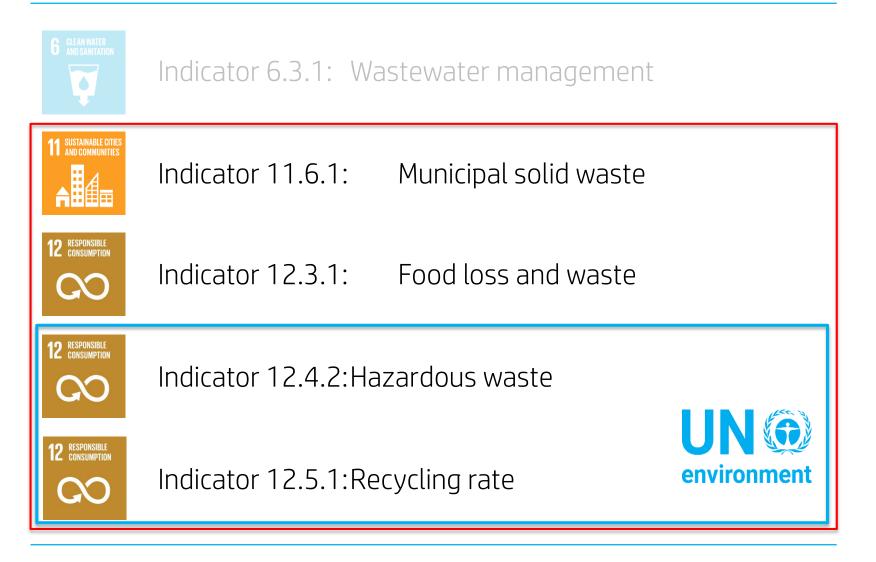Indicator 12.3.1:   Food loss and waste

Indicator 12.4.2:Hazardous waste

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SDG indicators directly related to waste

Indicator 6.3.1: Wastewater management

Indicator 11.6.1: Municipal solid waste

Indicator 12.3.1: Food loss and waste

Indicator 12.4.2: Hazardous waste

Indicator 12.5.1: Recycling rate

UN environment

SDGs on chemicals and waste management under other agencies' custodianship

Target 11.6
By 2030, **reduce the adverse per capita environmental impact of cities**, including by paying special attention to air quality and municipal and other waste management.

Indicator 11.6.1: Proportion of **municipal solid waste** collected and managed in controlled facilities with regards to the total waste generated by the city

Target 12.3
By 2030, **halve per capita global food waste** at the retail and consumer level, and **reduce food losses** along production and supply chains including post-harvest losses

Indicator 12.3.1: Global food loss and waste indexes

SDGs on chemicals and waste management under UN Environment custodianship

Goal 12: Ensure sustainable consumption and production patterns

Target 12.5
By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

Indicator 12.5.1: National recycling rate, tons of material recycled

Target 12.4
By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

Indicator 12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, per type.

Methodology Development:
12.4.2 Hazardous Waste

Indicator 12.4.2

Hazardous waste generated per capita and proportion of hazardous waste treated, per type

$$Hazardous\ waste\ generated\ per\ capita = \frac{Quantity\ of\ hazardous\ waste\ generated\ per\ annum}{Population}$$

$$Proportion\ of\ hazardous\ waste\ treated = \frac{Quantity\ of\ hazardous\ waste\ treated,\ per\ type\ of\ treatment^{*}}{Quantity\ of\ hazardous\ waste\ generated}$$

*Disaggregated by treatment type: recycling (1), incineration with (2) and without (3) energy recovery, landfilling (4), and other (5).

Key issues:
12.4.2 Hazardous Waste

Indicator 12.4.2

Hazardous waste generated per capita and proportion of hazardous waste treated, per type

- Data on hazardous waste generation often comes from the Basel Convention, but only 57% of parties report

- Hazardous waste can be expensive to treat, creating incentive for illegal and unreported dumping

- Financial or technical capacity for treatment of hazardous waste is often lacking, requiring exportation

- Hazardous waste can be a politically sensitive issue

Methodology Development: 12.5.1 Recycling Rate

Indicator 12.5.1
National recycling rate, tons of material recycled

$$National\ recycling\ rate = \frac{Quantity\ of\ material\ recycled\ +\ quantity\ exported\ for\ recycling}{Total\ waste\ generated}$$

Key issues:

- **End-of-waste status**: at what stage in the recovery process does waste stop being waste, and becomes a resource?
    - Can be difficult to define
    - Essential to avoid double-counting
    - Material- and process-specific

- Data on generation often collected at municipal level, but recycling rate aims to be national

E-waste component

Waste Electric and Electronic Equipment (WEEE), also known
as e-waste, is a **rapidly growing waste stream** of particular interest and concern as it **contains both potentially hazardous and potentially valuable materials**

The **United Nations University**'s Sustainable Cycles Programme (UNU-VIE SCYCLE) is partnering with UN Environment to design and propose **a dedicated SDG sub-indicator on e-waste**

Pilot Testing of Draft Methodologies

May 2018
Bosnia and Herzegovina

July 2018
Costa Rica

August 2018
Mauritius

September to December 2018
3+ more countries in African region

Pilot Testing: Bosnia and Herzegovina

8 – 11 May 2018
Sarajevo, Bosnia and Herzegovina

1) Bilateral meetings with key Government Agencies and Ministries to collect information

2) Workshop with policy-makers (20 participants) to seek feedback on draft methodologies and highlight issues

3) Workshop with field staff (50 participants) to assess feasibility of draft methodologies and ensure understanding

4) Revision of methodologies based on feedback received

Key Lessons from Bosnia

- Intragovernmental communication gaps (between Agencies, Ministries) are a major challenge

- Human and financial resources are lacking to fully monitor and report on waste SDG indicators

- Data from national censuses play a critical role in waste statistics, including the agricultural census

- Compositional analyses of waste serve an essential purpose to multiple indicators

- Proxy indicators may need to be developed

- Language barrier is a key consideration

Capacity Development Component

Pilot testing workshops have two important objectives:

a)   pilot test the draft SDG methodologies

b)   capacity development of national staff to increase understanding of data collection needs, calculation methods, and reporting requirements for SDG indocators

This is done through dedicated Question & Answer periods, bilateral discussions, breakout groups, and follow-up consultations over email and in-person

Data Assessment Tool under development

Excel model designed to collect key country
data on waste statistics in one organized location

Allows the rapid identification of data gaps

Creates a comprehensive summary of the state of
waste statistics in the target country

Currently used for preliminary assessment of the
state of chemicals and waste statistics in a country

A final version will be made available for any
country to download and perform self-assessments

Key Outputs for Pilot Countries

- Preliminary assessment of the state of waste statistics in the country at the start of the project

- 1-2 national workshops on waste SDG indicators, with the dual objectives of pilot testing methodologies and increasing capacity for SDG monitoring and reporting

- A National Chemicals and Waste Data Report, produced with fresh data collected over the course of the project, to map existing data streams, highlight gaps, and offer policy recommendations to decision-makers

The Road to the Agenda 2030

2019
Q1: Second Joint Expert Group Meeting on Waste SDGs
↳ Report on pilot testing results and agree on final methodologies

Q2: Submit final methodologies to Inter-Agency Expert Group (IAEG-SDGs) for review and reclassification
↳ Seek an upgrade from Tier III to Tier II

2020
A global baseline is set for these indicators

2020–2030
Data is collected by a growing number of Member States

In summary

UN Environment is the custodian agency to 2 SDG indicators on waste, which both lack internationally-agreed and conceptually clear data collection methodologies

These methodologies are now under development and pilot testing is under way

A roadmap exists towards Tier upgrading, baseline setting, and regular data collection to meet the Agenda 2030

The African Clean Cities Platform is a key ally

Thank you.

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