Tool 7.2.1 - Summary - Waste Audit

A waste audit is a thorough assessment of the amounts and composition of waste. It is typically applied to households and non-household waste generators, such as commercial, institutional, and public spaces. It consists of several days of sampling and measuring waste from randomly selected waste generators.

Description

A waste audit consists of at least eight consecutive days of measurements, during which waste is collected, sorted, and weighed to determine the amounts and composition of waste generated per person and per day. To capture seasonal variations in waste amount and composition, the study could be repeated in different seasons. Additionally, waste audits can be conducted regularly to capture any changes. Reliable waste audit results are crucial for planning and designing effective waste management service delivery. This guide is based on the Waste Wise Cities Tool - Steps 2 and 3 (UN-Habitat, 2021) and includes both household and non-household waste audits, which can be performed either in parallel or in sequence, depending on available human resources.

Steps for a waste audit:

Refer and follow the guidance in the complete guide: Tool 7.2.2 - Guide - Waste Audit

1. Plan and prepare the study (5 days)

- a. Adapt the audit process to your needs and available resources
- b. Inform and engage local authorities and key stakeholders
- c. Locate an adequate site for weighing, sorting and doing the composition study
- d. Train the audit team
- e. Plan for materials, equipment and transport
- f. Prepare official information and informed consent letter
- g. Determine random sampling points
- h. Validate the schedule and confirm dates

2. Conduct the study (9 days)

- a. Enrol the randomly selected waste generators (households and/or non-households)
- b. Prepare the site for the weighing and characterisation process
- c. Collect waste bags and hand in new waste bags according to schedule
- d. Ensure bags are tagged appropriately
- e. Weigh each waste bag and report its weight each day
- f. Characterise the waste of each day

3. Analyse and process the data and report the results (1 -2 days)

*If both household and non-household waste generators are audited, then either the study time is longer, or the audit team is much larger to perform the audits in parallel.

Resources

Tool 7.2.2 – Guide – Waste Audit

Tool 7.2.4 – Training Template

Tool 7.2.5 – Instructions Template

Tool 7.2.3 – Reporting Sheet

Additional resources

UN-Habitat, 2021. Waste Wise Cities Tool (Step 2). PDF

Wasteaid, 2017. Making Waste Work: A Toolkit - How to measure your waste. PDF

Eawag – Sandec, 2018. Municipal Solid Waste Management online course: Conducting a Waste Generation and Characterization Study. MOOC video.