

SDG 12.3.1b on Food Waste Index Guidance and updates

Therese El Gemayel
Training on Food Waste Indicator

Paris, France
28 November 2023

1

Agenda 2030 for Sustainable Development

to which the indicator corresponds

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Goal 12: Ensure sustainable consumption and production patterns

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

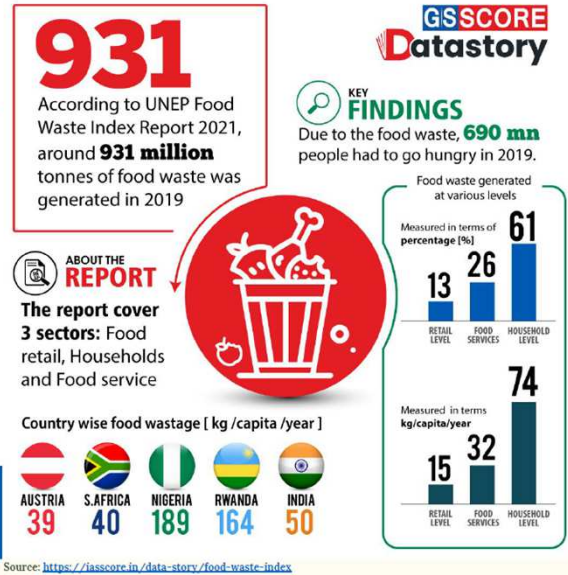
Indicator 12.3.1b: Food waste index

2 Indicator 12.3.1b Food waste index

2

Why is this indicator important?

- To decrease the economic and environmental burdens of loss and waste, while maintaining food and feed safety, in addition to decreasing food insecurity.
- Food waste is a waste of resources, time and money.
- It complements 12.3.1 (a) Food loss index which is under the custodianship of FAO.
- Reducing food loss and waste is everyone's responsibility. Exactly what needs to be done varies around the world, and achieving SDG 12.3 will require big acts by big players, as well as millions of acts by everyone from farmers to consumers.



3 Indicator 12.3.1b Food waste index



3

Why is this indicator important?



- Aims to keep products, materials and resources as long as possible in the economy
- Circular economy leads to:
 - Reduction in material extraction and consumption
 - Reduction in waste generation and management
 - Reduction in emissions
- Develop policies promoting circular economy
 - Improve efficiency
 - Reduce material use, waste and emissions
 - Promote recycling
 - Changing processes
- Decoupling economic growth

4 Indicator 12.3.1b Food waste index



4

Methodology

Sources



[Global Chemicals and Waste Indicator Review Document](#) (UNEP, 2021)



[Food Waste Index Report](#) (UNEP, 2021)



[Metadata repository for 12.3.1](#)

5 Indicator 12.3.1b Food waste index



5

Methodology - continued

Indicator Levels

LEVEL I INDICATORS

Food waste estimates for each sector

Existing data and extrapolation to other countries.

LEVEL II INDICATORS

Food waste generation tracked at a national level

Direct measurement of food waste in retail, food service and households. Sufficiently accurate for tracking.

LEVEL III INDICATORS

Additional information and disaggregation of food waste data

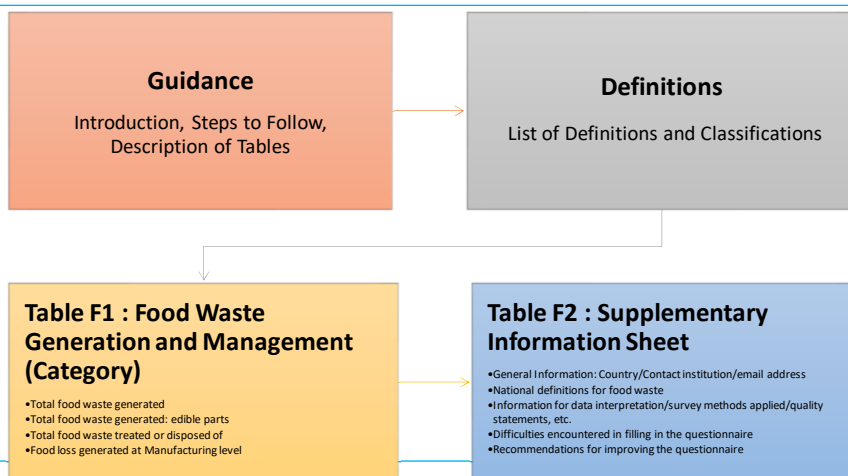
Additional information to inform policy and other interventions. This includes disaggregated data by destination, edible/inedible parts, and also captures manufacturing food loss not covered by the Food Loss Index (e.g. where more than one commodity is combined to produce complex food products).

6 Indicator 12.3.1b Food waste index



6

Methodology - Questionnaire Contents



7 Indicator 12.3.1b Food waste index



7

Methodology - Questionnaire details

Table F1: Food Waste Generation and Management

| Line | Category | Unit | 2005 | F |
|------------------------------|---|--------|------|---|
| 1 | Total food waste generated (=2+3+4) | tonnes | | |
| <i>Amounts generated by:</i> | | | | |
| 2 | Retail trade, except of motor vehicles and motorcycles (ISIC 47) | tonnes | | |
| 3 | Food Service (ISIC 49-52, 55, 56, 84, 85) | tonnes | | |
| 4 | Households | tonnes | | |
| 5 | Total food waste generated: edible parts (=6+7+8) | tonnes | | |
| <i>Amounts generated by:</i> | | | | |
| 6 | Retail trade, except of motor vehicles and motorcycles (ISIC 47) | tonnes | | |
| 7 | Food Service (ISIC 49-52, 55, 56, 84, 85) | tonnes | | |
| 8 | Households | tonnes | | |
| 9 | Total food waste treated or disposed of (=10+11+13+14+15+16) | tonnes | | |
| <i>Amounts going to:</i> | | | | |
| 10 | Codigestion / anaerobic digestion | tonnes | | |
| 11 | Composting / aerobic process | tonnes | | |
| 12 | <i>of which: by households</i> | tonnes | | |
| 13 | Incineration / Combustion | tonnes | | |
| 14 | Landfilling | tonnes | | |
| 15 | Sewer | tonnes | | |
| 16 | Other, please specify in the footnote | tonnes | | |
| 17 | Food loss generated at Manufacturing level | tonnes | | |

Food waste generated

Edible food waste generated

Food waste treatment

Food lost in manufacturing



8

Pilot data collection - 2023

| Region | Country | Status |
|--------------|--------------------|------------------------|
| LAC | Mexico | submitted data |
| Africa | Mauritius | submitted data |
| Asia Pacific | Japan | submitted data |
| West Asia | Palestine | submitted data |
| LAC | Argentina | submitted data |
| LAC | Ecuador | submitted data |
| USA | USA | submitted data |
| Africa | Nigeria | submitted other data |
| LAC | Costa Rica | submitted other data |
| Africa | Ghana | data not yet available |
| West Asia | UAE | data not yet available |
| West Asia | KSA | data not yet available |
| Asia Pacific | Malaysia | data not yet available |
| LAC | Brazil | data not yet available |
| Africa | South Africa | don't have data |
| West Asia | Bahrain | don't have data |
| West Asia | Lebanon | don't have data |
| LAC | Dominican Republic | don't have data |
| LAC | Chile | don't have data |
| LAC | Colombia | don't have data |
| LAC | Uruguay | don't have data |
| Africa | Uganda | no response |
| Asia Pacific | China | no response |
| Asia Pacific | Thailand | no response |
| West Asia | Jordan | no response |
| West Asia | Oman | no response |
| West Asia | Qatar | no response |
| LAC | Paraguay | no response |

- **Submitted data (7):** Countries submitted data according to the questionnaire.
- **Submitted other data (2):** Countries submitted other data/information different from the content of the questionnaire.
- **Data not yet available (5):** Countries replied that their data not yet available.
- **Don't have data (7):** Countries replied that they do not have data.
- **No response (7):** Countries did not respond to the data collection invitation nor to the follow-up emails.

9 Indicator 12.3.1b Food waste index



9

Country feedback and recommendations

- **Additional instructions to view linked materials in questionnaire:** ISIC classification, respondent didn't understand how to read the linked materials.
- **Listing land application under "food waste treated or disposed of":** Should all SDG 12.3 destinations be listed there?
- **Data collection from top companies** by size and then average across the entire industry.
- **Embed a pop-up window in all cells** to be filled with instructions and validators to speed up information filling
- **Home composting:** respondent was confused as to why there is a specific data request for this category

10 Indicator 12.3.1b Food waste index



10

Limitations

Variations in waste over time can have a significant impact on estimated quantities of waste when short studies (e.g. a week) are used to represent a longer time period (a year).

11 **Indicator 12.3.1b** Food waste index



11

Access the indicator and resources

SDG Indicators Database

<https://unstats.un.org/sdgs/dataportal/database>

World Environment Situation Room

[Data, Information and Knowledge on the Environment](#)

National Scorecard

[Assists UN Country Teams and national stakeholders in their Common Country Analysis \(CCA\) and the SDG Voluntary National Reviews \(VNR\)](#)

12 **Indicator 12.3.1b** Food waste index



12

Thank you!



SDG and Environment Statistics Unit, Early Warning and Assessment Division:

Ekaterina Poleshchuk: ekaterina.poleshchuk@un.org

Moriken Camara: moriken.camara@un.org

Dany Ghafari: dany.ghafari@un.org

Food waste focal point, Economy Division:

Clementine O'Connor clementine.oconnor@un.org

United Nations Avenue, Gigiri
PO Box 30552 – 00100 GPO Nairobi, Kenya

www.unep.org