Definitions

Guidance for countries to measure food waste

Level 1

- Modelling-based
- Provides approximate scale of issue

Level 2

- Measurement of key quantities
- Suitable for tracking

Level 3

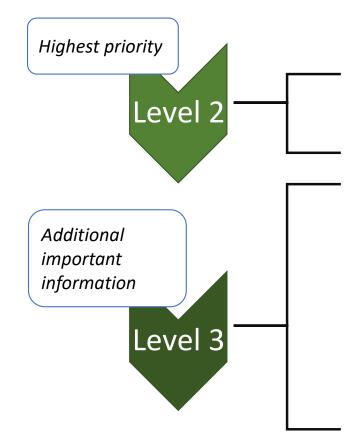
- Measurement of additional quantities
- Supports tailored food-waste strategies



Data questionnaire / 3 levels

Level 1

- Calculated by UNEP and reported in Food Waste Index based on modelling from literature
- Not accurate for tracking



Tabl	e F1: Food Waste Generation and Mana	gement
Line	Category	Unit
1	Total food waste generated (=2+3+4)	tonnes
2	Amounts generated by: 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
6	Amounts generated by: 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
10	Amounts going to: Codigestion / anaerobic digestion	tonnes
11	Composting / aerobic process	tonnes
12	of which: by households	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

Definitions: food

- Food waste: food and associated inedible parts removed from the human food supply chain in Retail, Food Service and Household sector
- **Food:** any substance whether processed, semi-processed or raw that is intended for human consumption. "Food" includes drink, and any substance that has been used in the manufacture, preparation or treatment of food. Includes both:
 - 'Edible parts': i.e. parts intended for human consumption, and
 - 'Inedible parts': components associated with a food that are not intended to be consumed by humans, e.g. bones, rinds, pits/stones



Disaggregating food waste

- Edible / inedible parts
- Types of food wasted
- Stage of meal (ingredients, cooking preparation, leftovers etc.)
- Wasted by which demographics / consumer groups



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Can be reported under SDG 12.3.1(b) but is not mandatory

Is not reported through SDG 12.3.1(b) but the information is useful for planning strategies to reduce waste



Total (fresh) mass is the main interest





Why inedible parts are included?

Distinction between 'edible' and 'inedible' not always clear cut: depends on preferences, culture and processing

'Upcycling' of food allows re-integration of 'inedible' parts into human supply chain

Practically, measurement involves measuring *all* food waste first, *then* disaggregating into edible & inedible parts

Sectors included

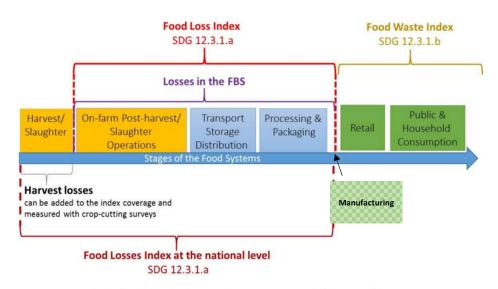


Figure 1. Boundaries of the food supply chain in the operational definition of the GFLI

- Retail
- Food Service
- Households
- Optional inclusion of manufacturing not covered in Food Loss Index



https://unstats.un.org/sdqs/metadata/files/Metadata-12-03-01A.pdf



Definitions: household

- Any type of dwelling not covered by other sectors
 - E.g. does *not* include hotels, healthcare facilities, or catered student accommodation
- Can be one person or multiple people in a household
- Household typically purchases and prepares their own food



Definitions: food service

Food waste index:

 'food waste generated in settings where food is consumed in substantial quantities outside of the home'

Restaurants, cafés, bars	Staff catering and other canteens/caf eterias	Accommoda- tion	Education	Healthcare	Sports & events	Security (military and prisons)	Markets / street food
ISIC (REV 4.), 56 and 49-11; 49-21; 50-11; 50-21; 51-10; 52-23	ISIC, 56	ISIC, 55-10; 55-90	ISIC, 85	ISIC, 86; 87	ISIC, 56	ISIC, 84-22; 84-23	ISIC, 56



Definitions: food service

Food waste index:

• 'for practical purposes, measurement can focus on where the majority of meals are eaten within a country'

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55-90

Markets / street food

ISIC, 56



Defining food waste in food service

Three main stages where food waste can arise



Inventory

Stocked food (pre-prepared or unprepared) disposed without being served



Preparation

Food removed during preparation

Photo by Toa Heftiba on Unsplash



Consumer

Food leftover by consumers in plates/bowls/cups/disposable containers



Photo by Bilge Şeyma Kütükoğlu from Pexels

Definitions: retail

Food Waste Index:







- ISIC 47-11: Retail sale in non-specialised stores with food, beverages or tobacco predominating
- ISIC 47-2: Retail sale of food, beverages and tobacco in specialised stores
- ISIC 47-81: Retail sale via stalls and markets of food, beverages and tobacco products



... in other words

ISIC	Examples		
47-11	Supermarket, convenience store		
47-2	Greengrocers, butchers, bakers	Sells food to consumers	Food Waste Index
47-81	Outdoor markets, street vendors		
46-30	Food wholesalers, catering suppliers	Sells food to other businesses	Additional data helpful to collect - FLI











Note on wholesale

- Approaches to measurement likely to be the same as for retail
- Key differences relate to where waste is reported (UNEP Food Waste Index vs FAO Food Loss Index)
- How important it is likely to depend on national context: how is the retail sector structured?





Does your country collect statistics about households and business types?

Could data from that be used to identify subsectors?

