

Food Waste baseline measurement SDG 12.3.1b Capacity Building ESCWA UNEP Workshop





# Curbing food loss and waste can help deliver multiple SDGs...

**SDG 15 Life on Land:** Reducing food loss and waste reduces the need to convert more natural ecosystems into cropland or grazing pastures.

SDG 14 Life under Water: Reducing food losses at sea means reducing bycatch. Wasted food uses significant amounts of fertilizers, which contribute to eutrophication caused by agricultural run-off.

SDG 13 Climate Action: Reducing food loss and waste reduces the amount of greenhouse gas emissions associated with clearing land, growing, processing, and disposing of food that is not eaten.

SDG 12 Sustainable Consumption and

**Production:** Meeting the food loss and waste reduction target would improve the sustainability of food consumption and production.

SDG 1 No Poverty / SDG 2 Zero Hunger:

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Reducing losses means that farmers have more food available for market and to feed themselves. **SDG 2 Zero Hunger:** Improved storage and handling facilities help smooth seasonal shortfalls and preserve nutritional quality, thereby stabilizing food supplies.

SDG 3 Good Health: Reducing quality losses means that food retains more nutritional value. Some food loss reduction practices, such as drying crops on tarps, can reduce the risk of contamination from aflatoxins.

SDG 3 Good Health/SDG 4 Quality Education/ SDG 5 Gender Equality: Reducing food waste could reduce unnecessary household spending on food and free up money for health, education, and other household benefits.

**SDG 6 Clean Water and Sanitation:** Better utilizing food already grown reduces pressure on freshwater consumption by agriculture and increases efficiency of water use.

SDG 8 Decent Work and Economic Growth:

Farmer income and prosperity can be increased when they reduce on-farm losses and thereby sell more food.

#### SDG 11 Sustainable Cities and Communities:

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Reducing food waste in landfills can reduce landfill disposal fees for households and local authorities. It also can enable cities to meet waste, sustainability, and hunger goals.

Source: WRI, 2019

### ...And raise ambition in NDC revisions



Article 4.2 "Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions."

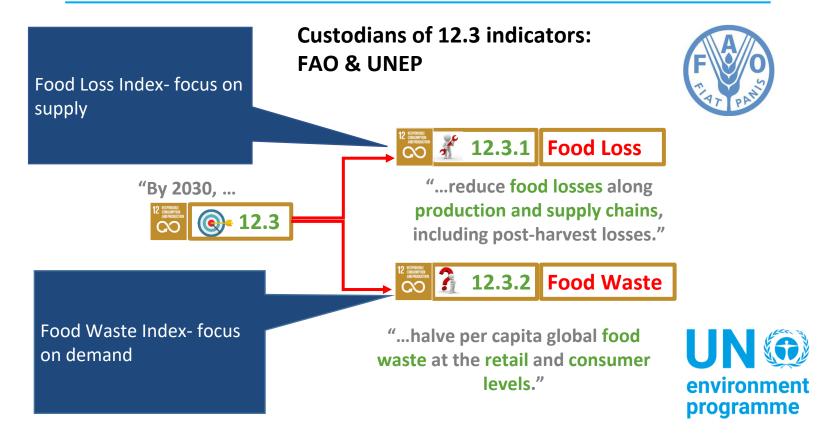
### **Food Loss and Waste in Climate Strategies**



Generating 4.4 Gt CO2e (8% of GHG), food loss and waste has an important role to play in national and business climate strategies.

UNEP's report with WWF, Enhancing NDCs for Food Systems, provides recommendations on how to raise climate ambition in NDC revisions with FLW indicators, policies and interventions.

### **Tracking Progress on SDG 12.3**





## 17% of all food available at consumer levels is wasted

- 931 million tonnes of food sold to households, retailers, restaurants and other food services wasted in 2019
- Study finds food waste is a global, not just developed world, problem
- 690 million people affected by hunger in 2019 - expected to rise sharply with COVID-19 - and three billion people unable to afford a healthy diet: Consumers need help to reduce food waste at home.
- Food Waste Index report helps countries track progress on UN Sustainable Development Goal 12.3 to halve food waste by 2030

### Food Waste Index approach

### **LEVEL 1**

- Modelling and extrapolation
- Provides approximate estimate
- Not suitable for tracking purposes

### LEVEL 2

- Direct measurement of food waste
- Sufficiently accurate for tracking

### LEVEL 3

- Additional information and disaggregation
- Supports development of food waste prevention strategy

### **Level 1 Data coverage**

lneomo group	Number of countries with measured data			
Income group	Household	Food service	Retail	
High-income	28	18	20	
Upper middle-income	12	3	2	
Lower middle-income	10	2	1	
Low-income	2	0	0	
Total	52	23	23	



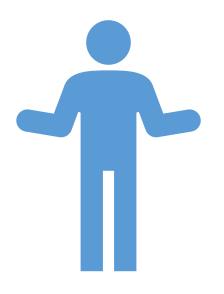
152 food waste data points were identified in 54 countries.

## **Level 1 Modelling & extrapolation**

Contan	Global food waste, 2019			
Sector	Average (kg / capita / year)	Total (million tons)		
Household	74	569		
Food service	32	244		
Retail	15	118		
Total	121	931		



### Household food waste = 74 kg / person / year





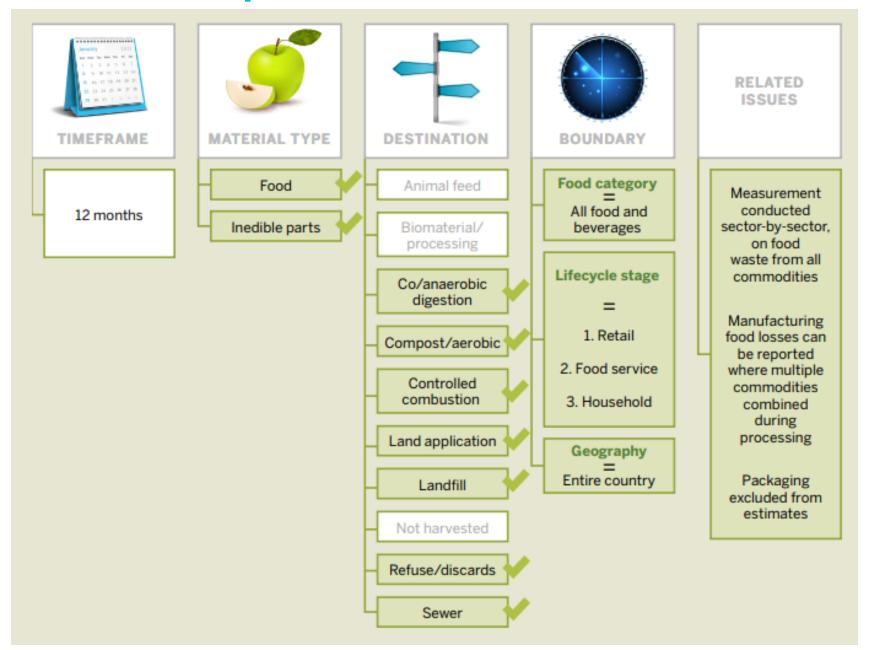


# Household food waste, 2019, by World Bank country income group

Income group	Average, kg / capita / year
High-income	79
Upper middle-income	76
Lower middle-income	91
Low-income	Insufficient data



### Level 2 Scope



# Level 2 Appropriate methods of measurement by sector

Sector	Methods of measurement					
Manufacturing (if included)		d- waste streams ste in which food	Volumetric	Mass balance		
Retail	Direct measurement				Counting/ scanning	
Food service	(for food- only waste streams)					Diaries (for material going down sewer, home composted or fed to animals)
Household						

### **How to Report on SDG 12.3**

SDG 12.3 food waste data will be collected using the United Nations Statistics Division (UNSD) / UNEP Questionnaire on Environment Statistics (Waste Section).

- Questionnaire sent out every two years to National Statistical Offices and Ministries of Environment, which will nominate a single food waste focal point in the country to coordinate data collection and reporting.
- Data will be made publicly available in SDG Global Database and in UNEP's Food Waste Index Report, which will be published at regular intervals up to 2030.
- The next questionnaire will be sent to Member States in September 2022, and results will be reported to the SDG Global Database by February 2023.
- Countries do not need to conduct new measurements every two years, or to measure every sector simultaneously. Measuring each sector at least once every four years is recommended.

### **Regional Food Waste Working Groups**

Regional Food Waste Working Groups have been constituted in Africa, Asia Pacific, Latin America and West Asia.

They seek to address data gap in middle- and low-income countries and catalyze action, supporting Member States in:

- Developing Food Waste Baselines (Household, Food Service, Retail)
- Using Food Waste Index approach for SDG 12.3 Reporting in 2022
- Designing National Food Waste Prevention Strategies
- Leveraging international finance to deliver strategies

They are facilitated via quarterly online workshops hosted by UNEP and WRAP, and promote South-South Collaboration on measurement challenges and policy approaches.

### **Composition of the Working Groups**

Africa	Asia Pacific	Latin America & the Caribbean		West Asia
Mauritius	China	Argentina		Bahrain
Nigeria	Philippines	Brazil		Jordan
South Africa	Indonesia TBC	Chile		Palestine
Uganda	India TBC	Colombia		Qatar
Algeria TBC	Japan	Costa Rica		Saudi Arabia
Ghana	Malaysia	Mexico		UAE
	South Korea TBC	Uruguay		
	Thailand TBC	Dominican Republic		



## Food Loss & Waste Action Area

### A Global Initiative to halve food loss and waste by 2030

At least 50 countries to prioritize food loss and waste reduction from farm to fork, setting national targets aligned with SDG 12.3, measure baselines and report progress, develop national strategies and act via policies and practices to halve food loss and waste by 2030.

#### How will it work?

The Global Initiative will work with countries to identify most appropriate approaches to fit their circumstances, using proven interventions such as: measurement and diagnostics, on-farm and near-farm food loss reduction technologies and investments, public private partnerships across the supply chain, accessing finance, circular economy policies, and consumer behaviour change.

**How to get involved:** Contact UNEP, FAO, WRI, World Bank or other organizing institutions.



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Clementine O'Connor @cxoconnor clementine.oconnor @un.org https://www.unep.org/resources/report/unep-food-waste-index-report-2021

### **Annex: Country Food Loss Index**



- Focuses on 10 commodities in 5 main groups
- Measures <u>Food Loss</u>
   <u>Percentages</u> (FLP) and not total losses
- 3. Monitors changes in the Food Loss Percentage over time
- 4. Based on <u>nationally</u>
  <u>representative</u> loss percentages
  along the 10 selected supply
  chains

#### **Required components:**

- i) Selecting the **Basket of Commodities**
- ii) Choosing the **Base Year**
- iii) Compiling the Weights
- iv) <u>Collecting data</u> and estimating food losses percentages at national level for each commodity over time