



Goal 12: Responsible Consumption and Production



SDG 12: Responsible Consumption and Production

Indicator 12.3.1 (a) Food loss index and (b) food waste index

Description of the indicator:

Sub-indicator 12.3.1.a - Food loss Indicator

The Food Loss Indicator focuses on food losses that occur from production to retail level (not including the latter). It measures changes in percentage losses for a basket of 10 commodities by country compared to a base period. The Food Loss Indicator will contribute to measuring progress towards SDG target 12.3.

Sub-indicator 12.3.1.b - Food waste Indicator

There is a proposal to measure food waste, including retail and consumption levels under development. The United Nations environment is taking the lead on this sub-indicator.

It has an unacceptably high proportion of food along the supply chain even before it reaches the consumer.

Reducing food loss and waste is critical to improving the food security situation of vulnerable groups and reducing the environmental impact of food production activities. Achieving this goal can contribute to many dimensions of the 2030 Agenda, such as ending food insecurity and hunger, improving sustainable water management, tackling climate change, and improving the sustainability of marine and terrestrial ecosystems.

Although available data are limited, it is estimated that global food loss due to pre-retail production is about 14 per cent globally. These estimates vary by region, ranging from 20.7 per cent in Central and South Asia to 8.9 and 5.8 per cent in Oceania, Australia, and New Zealand, respectively. Estimates also vary between commodity groups and different stages of the food supply chain. It is important for countries to identify priority commodities and subsequent stages in which high levels of loss occur, in order to implement the targeted intervention. Significant reduction in food loss can be achieved by identifying critical loss points and taking appropriate measures to combat them. To this end, urgent efforts are needed to collect data so that countries can develop targeted and evidence-based interventions.

It includes five groups of food:

- Cereals and legumes
- Fruits and vegetables
- Main crops and root crops
- Animal products
- Fish products

Sources of data: : The General Food Security Authority

Unit of measurement: Percentage %

Level of disaggregation: National

Method of calculation: Calculation of sub-indicator 12.3.1.a - Food loss Indicator
SDG 12.3.1 for one country, called the Food Loss Indicator (FLI)

$$FLI_{it} = \frac{FLP_{it}}{FLP_{i0}} = \frac{\sum_j l_{ijt} \times q_{ij0} \times p_{j0}}{\sum_j l_{ij0} \times q_{ij0} \times p_{j0}} \times 100$$

where:

FLP_{it} is the average rate of food loss to the state in the current year,

FLP_{i0} is the average percentage of food loss of the state in the base year,

i = state,

j = commodity,

t = year, 0 is the base year

l_{ijt} is the percentage of loss of the good (estimated or observable) j in country i in year t ,

q_{ij0} is the quantities of production of commodity J in country I during the base period, and p_{j0} is the average international price of commodity J (in international dollar terms) during the base period.

For FLI and FLP indices, weights represent the value of production at international dollar prices. The weight is fixed in the reference year.

For *FLI* and *FLP* indices, weights are calculated based on the value of production at world dollar prices. The weight is determined in the reference year.

Commodity Coverage

The indicator covers five food groups and two commodities within each group:

1. Cereals and legumes
2. Fruits and vegetables
3. Roots, tubers and oil crops
4. Animal products
5. Fish and fish products.

Last updated: 2024

Note: The data available to date are the results of the baseline study of the Food loss and waste Index in Saudi Arabia for 2019

Percentage of food loss and waste in Saudi Arabia

Name of the crop	Total loss percentage%	Total waste percentage%
Wheat (flour, bread)	5	25
Rice	3	31
Watermelon	32	9
Zucchini	26	15
Cucumber	26	17
Carrots	16	15
Tomatoes	23	17
Onion	9	18
Potatoes	28	14
Mango	17	9
Orange	15	14
Dates	16	6
Sheep meat	7	8
Camel meat	15	20
Poultry	13	16
Fish	19	15
Unclassified meat	24	19
Other fruit	23	18
Other	28	17

Indicator 12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement..

Description of the indicator: The indicator refers to the number of Parties, i.e. countries that have ratified, accepted, approved or reached the following multilateral environmental conventions:

1. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention);
2. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention);
3. Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention);
4. Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol);
5. Minamata Convention on Mercury (Minamata Convention)

which provided information to the secretariats of each of the multilateral environmental conventions, as required by each of the conventions.

Sources of data: Ministry of Environment, Water and Agriculture

Unit of measurement: Convention and Protocol

Level of disaggregation: National

Method of calculation:

According to the following methodology, reports will be submitted in 2017 for 2010-2014, in 2020 for 2015-2019, in 2025 for 2020-2024, and in 2030 for 2025-2029. Reporting parameters include:

Country points depend on the amount of information sent to the Convention Secretariat, calculated as follows (and communicated by the secretariats).

Basel Convention

- designation of the contact and one or more competent authorities (single point);
- Submit annual national reports during the reporting period (one point per report).

Rotterdam Convention

- Designation of designated national authority(s) and official point of contact (single point);
- Submit import responses during the reporting period (0.2 points per import answer)

Stockholm Convention

- Designation of the Stockholm Convention official contact point and national focal point (1 point)
- Submission of the national implementation plan (1 point)
- Submission of the revised national implementation plan(s) addressing the amendments adopted by the Conference of the Parties within the reporting period (1 point per revised and updated plan)

Montreal Protocol

- Compliance with annual reporting requirements for production and consumption of controlled substances under Article 7 of the Montreal Protocol (1.5 points per report)
- Submission of information on Licensing systems under (Article 4B of) the Montreal Protocol (5 points)

Minamata Convention

- Designation of a national focal point (Article 17) (5 points)
- Submission of national report (Article 21) (15 points)

By completing the table below, countries can calculate their country points for each convention and the overall transfer rate:

#	Convention	Maxi-mum Points (MP)	Points per year (p(t))*					Country Score per Convention (CS)
			1st year	2nd year	3rd year	4th year	5th year	
A	Basel Convention							$CS_A = \frac{p(t1) + p(t2) + p(t3) + p(t4) + p(t5)}{MP_A}$
B	Rotterdam Convention							...
C	Stockholm Convention							...
D	Montreal Protocol							...
E	Minamata Convention							$CS_E = \frac{p(t1) + p(t2) + p(t3) + p(t4) + p(t5)}{MP_E}$

* Points provided once (e.g. for a designation of a national focal point) are cumulative with the first year.

$$\text{Transmission Rate} = \frac{(CS_A + CS_B + CS_C + CS_D + CS_E)}{\text{No. of Conventions}} \times 100$$

The final indicator will be a number expressed as percent, where 100% is the maximum degree of compliance with the reporting obligations of the MEAs to which a Country is a Party, and 0% the least degree of compliance with those obligations.

Last updated: 2024

Conventions	Answer		Number of reports issued
	Yes	No	
Has the Kingdom signed the Basel Convention with 188 parties?	Yes	-	9 Reports
Has the Kingdom signed the Rotterdam Convention with 164 parties?	-	No	-
Has the Kingdom signed the Stockholm Convention with 184 parties?	Yes	-	-
Has the Kingdom signed the Montreal Convention?	-	No	-
Has the Kingdom signed the Minamata Convention with 133 parties?	Accessions signify consent to a treat that a state did not previously signed		
Did the Kingdom sign Paris (climate change)	Yes	-	-

Indicator 12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment.

<p>Description of the indicator: The indicator includes hazardous waste generated and hazardous by type (including e-waste as a sub-indicator), and the proportion of hazardous waste treated. Hazardous waste is waste that has properties that can harm human health or the environment and is regulated in accordance with the law. Hazardous waste generated: refers to the amount of hazardous waste generated in the country during the reporting year, prior to any activity such as collection, export, use or treatment (including recycling or export), regardless of the destination of such waste. Hazardous waste generated by type, including e-waste, decomposes hazardous waste generated by the main type of waste. Municipal waste: includes solid waste from homes, commerce, small businesses, office buildings and institutions (schools, hospitals, government buildings). It also includes large-scale waste (such as old furniture and mattresses), waste from parks and public spaces such as trees and grass, and waste from street cleaning services (e.g. container content, street cleaning waste), even if not managed as raw materials. E-waste: includes e-waste or waste associated with all elements of electrical and electronic equipment (EEE) and its parts that have been disposed of by their owners as waste, whether or not they are used. Treated hazardous waste includes hazardous waste treated during the reporting year for each type of treatment (recycling, incineration with or without energy recovery, landfill or otherwise), including imported waste excluding imports.</p>	
<p>Sources of data: Ministry of Environment, Water and Agriculture</p>	
<p>Unit of measurement: Percentage %</p>	
<p>Level of disaggregation: National</p>	
<p>Method of calculation:</p> $\text{Percentage of hazardous waste treated} = \frac{\text{Hazardous waste treated during the reported year}}{\text{Amount of hazardous waste generated}} \times 100$	
<p>Last updated: 2024</p>	

Indicator	2024
The percentage of hazardous industrial waste that is properly treated	92.80%



Indicator 12.6.1 Companies publishing sustainability reports.**Description of the indicator:****Sustainability Reports:**

For the purposes of this indicator, “sustainability reports” will not be limited to standalone sustainability reports produced by companies but will be considered as “sustainability information reports” and expanded to include other forms of sustainability information reports, such as publishing sustainability information as part of a company’s annual reports or providing sustainability information to the national government. This is to ensure that the indicator focuses on tracking the dissemination of sustainability information, and not on the practice of publishing independent sustainability reports. It also ensures that the interpretation of the indicator is in line with the wording of Target 12.6 which refers to promoting “the integration of sustainability information into the corporate annual reporting cycle”.

Company:

While many companies report at the group level, many of their impacts will be local, and some subsidiaries or franchises produce separate sustainability reports. As a practice to be encouraged, and useful to monitor, it is therefore proposed that both the group level and the subsidiary/franchise be counted separately, as separate entities. Thus, the term “company” can be applied to the parent, franchise or subsidiary, depending on its reporting practices.

Concepts:

It is proposed to encourage companies to publish information that meets the “minimum requirements” for disclosure, to be counted in the indicator. Thus, a core set of economic, environmental, social and governance disclosures for sustainability information is defined. In identifying these disclosure elements, the sponsors have attempted to align with the disclosures that appear in the current relevant reporting frameworks, including the reports of the International Integrated Reporting Board, the Global Reporting Initiative standard, and the Sustainability Accounting Standards Board (see Appendix I for a comparison of the different sustainability disclosures contained in each).

It also tries to align with UNCTAD’s core corporate reporting indicators on contributing to the SDGs. UNCTAD has prepared guidance on key indicators for reporting entities on contribution to the SDGs to support entities in providing information under indicator 12.6.1 and governments in assessing the contribution of the private sector to the SDGs. The guidance reflects the agreed conclusions of the thirty-fourth session of the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR), which in 2017 requested UNCTAD to develop the guidance document. UNCTAD’s guidance includes detailed definitions and sources of Data for key indicators in company accounts to assist entities in reporting.

The purpose is not to create a new reporting standard or framework, but rather to ensure that the minimum reporting recommendations of indicator 12.6.1 are aligned with the existing global frameworks currently used by companies, so that they can continue to use these frameworks.

While setting a minimum reporting threshold enables companies to disclose meaningful information about all aspects of sustainability to be counted in the indicator, it can be seen as a message that the minimum is sufficient and that companies do not need to exceed it.

Therefore, it is proposed that the methodology incorporates an advanced level, with another set of disclosure elements, which would provide further impetus for examining and reporting on sustainability practices and company impacts. These include: 1) stakeholder involvement, 2) assessing impacts beyond the company’s boundaries and along the supply chain; 3) supplier and consumer engagement on sustainability issues; 4) procurement and supply practices; and 5) environmental performance information in the form of density values that must be monitored over time, such as energy, water or material consumption per unit of production or per unit of profit.

Having different levels will also allow information to be collected about the degree of reporting by different companies, including whether the same companies produce more ambitious reports, and go further in their sustainability practices over time, such as by engaging suppliers. This will allow companies that have started reporting on sustainability to offer an incentive, by including them in the number of indicators, to work towards more ambitious reporting and show their progress over time.

Sources of data Source: Ministry of Economy and Planning**Unit of measurement:** Number**Level of disaggregation:** National

Method of calculation:

Companies will mostly be counted towards the indicator by acknowledging the publication of sustainability information covering the sustainability disclosures documented in the table below.

Last updated: 2024

Note: The available data on the index does not cover different sectors.

Indicator	Year				
	2020	2021	2022	2023	2024
Total no. of companies publishing sustainability reports	49	110	114	175	236

Indicator 12.8.1 Extent to which (i) Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment.

Description of the indicator: Indicator 4.7.1/12.8.1/13.3.1 measures the extent to which countries integrate Global Citizenship Education (GCED) and Education for Sustainable Development (ESD) into their education systems. This is an indicator of the characteristics of different aspects of education systems: education policies, curriculum, teacher training, and student assessment as reported by government officials, ideally after consultation with other government ministries, national human rights institutes, the education sector and civil society organizations. It measures what you intend Governments and not what is implemented practically in schools and classrooms. For each of the four components of the indicator (policies, curriculum, teacher education, and student assessment), a number of criteria are measured, which are then combined to give a score of one between zero and one for each component. (See the Methodology section for full details.)

Sources of data: Ministry of Education

Unit of measurement: Indicator (between 0.000 and 1.000)

Level of disaggregation: National

Method of calculation: The information collected with the questionnaire is used to monitor the implementation by UNESCO Member States of the 1974 Recommendation on Education for International Understanding, Cooperation and Peace and Education on Human Rights and Fundamental Freedoms to build the Global Indicator. For each of the four components of the indicator (policies, curricula, teacher education, and student assessment), a number of criteria are measured, which are then combined to give a score of one between zero and one for each component. Only information on primary and secondary education is used to calculate the indicator.

Last updated: 2020

Note: Data on national education policies and student assessment are available..

Extent to which (i) global citizenship education and (ii) education for sustainable developments are mainstreamed	2020
National Education Policy	0.75
Student Assessment	1.00

Indicator 12.b.1: Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability

Description of the indicator: The indicator "Implementation of standard accounting tools for monitoring economic and environmental aspects of tourism sustainability" relates to the degree of implementation in countries of the Tourism Satellite Account and the System of Environmental and Economic Accounts tables that are by far the most relevant and feasible for monitoring sustainability in tourism. These tables are:

- Tourism Sub-Account Table 1 on Inbound Tourism Expenditure
- Tourism sub-account table 2 on domestic tourism expenditure
- Tourism Sub-Account Table 3 on Tourism Expenditure
- Tourism sub-account table 4 on domestic tourism consumption
- Tourism Sub-Account Table 5 on Production Accounts for Tourism Industries
- Tourism Sub-Account Table 6 on domestic outbound supply and domestic tourism consumption
- Tourism Sub-Account Table 7 on employment in tourism industries
- Table of water flows in the System of Environmental and Economic Accounts.
- Table of energy flows in the System of Environmental and Economic Accounts
- Table of global greenhouse gas emissions
- Table of solid waste in the System of Environmental and Economic Accounts

Sources of data: Ministry of Tourism

Unit of measurement: Number

Level of disaggregation: National

Method of calculation:

Implementation of standard accounting tools to monitor economic and environmental aspects of tourism sustainability = The total number of tables produced by countries from the tables specified above.

Last updated: 2023

Number of Tables for the development of standardized accounting tools to monitor the economic and environmental aspects of tourism sustainability

Item	2019	2020	2021	2022	2023
Tourism Sub-Account Table 1 on Inbound Tourism Expenditure	1	1	1	1	1
Tourism Subaccount Table 2 on Domestic Tourism Expenditure	1	1	1	1	1
Tourism Sub-Account Table 3 on Outbound Tourism Expenditure	1	1	1	1	1
Tourism Sub-Account Table 4 on Domestic Tourism Consumption	1	1	1	1	1
Tourism Sub-Account Table 5 on Production Accounts for Tourism Industries	1	1	1	1	1
Tourism Sub-Account Table 6 on Domestic Supply and Domestic Tourism Consumption	1	1	1	1	1
Tourism Sub-Account Table 7 on Employment in Tourism Industries	1	1	1	1	1
Environmental Accounting System Tables					
Table of water flows in the System of Environmental and Economic Accounts	0	0	1	1	1
Table of energy flows in the System of Environmental and Economic Accounts	0	0	1	1	1
Table of global greenhouse gas emissions	0	0	0	0	0
Table of solid waste in the system of environmental and economic accounts	0	0	0	0	0
Total	7	7	9	9	9