

GS SCORE

An Institute for Civil Services

**GIST OF IMPORTANT
REPORT**

**FOOD WASTE
INDEX 2021**

By: UNEP

**For Civil Services Examination
www.iasscore.in**

GS SCORE

An Institute for Civil Services

OUR CLASSROOM & ONLINE COURSES

GS FOUNDATION

- ☑ 1 Year IAS Foundation
- ☑ 3 & 2 Year IAS Foundation
- ☑ GS Mains Foundation

OPTIONAL FOUNDATION

- ☑ Political Science
- ☑ History
- ☑ Geography
- ☑ Public Administration
- ☑ Anthropology

MAINS COURSES

- ☑ GS Mains Advance
- ☑ Applied GS
- ☑ Ethics Integrity & Aptitude
- ☑ Essay Writing
- ☑ GS Paper 2
- ☑ GS Paper 3

TEST SERIES

- ☑ Prelims Test Series
- ☑ GS Mains Test Series
- ☑ Essay Test Series
- ☑ Ethics Test Series
- ☑ Optional Test Series
 - Political Science
 - Geography
 - History
 - Public Administration
 - Anthropology

Visit:  www.iasscore.in

UNEP FOOD WASTE INDEX REPORT 2021

INTRODUCTION

- **Aim:** This report sheds new light on the **magnitude of food waste**, and on the prevalence of household food waste **on all continents**, irrespective of country income levels.
- **Food and Agriculture Organization (FAO):** It estimates that 690 million people were hungry in 2019, a number that is expected to rise sharply during and post-COVID-19.
- **The three sectors covered by the Food Waste Index are:**
 - Food retail
 - Households
 - Food service

Major Highlights of the report

- **Food waste:** The report estimated that around 931 million tonnes of food waste was generated in 2019.
 - **Waste at household, food service and retail** amounted to **61, 26 and 13 percent** respectively.
 - The **global average food waste** by households, food services and retail are **74, 32 and 15 kilogram/capita/year** respectively.
- **A global problem:** Food waste was a global problem and not that of just the developed world. The data, though scarce, revealed that food waste was substantial, regardless of income level.
- **Data only for high income countries:** Data on all three areas of food waste, namely household, food service and retail was available only for high income countries.
 - The index was prepared by using data from **54 countries** and then extrapolated to the remaining countries.
 - The food waste in households, food services and retail in high income countries is 79, 26 and 13 kb/capita/year respectively.
 - The household waste for **Upper middle-income countries** is 79 kg/capita/year.
 - The household waste for Lower middle-income countries is 91 kg/capita/year.
- **Comparison of countries:** Some countries like **Austria and South Africa** produce very low amounts of household waste at 39 kg / capita / year and 40 kg / capita / year respectively.

KEY FINDINGS



This report estimates that around 931 million tonnes of food waste was generated in 2019, 61 per cent of which came from households, 26 per cent from food service and 13 per cent from retail. This suggests that 17 per cent of total global food production may be wasted (11 per cent in households, 5 per cent in food service and 2 per cent in retail)'.



Household per capita food waste generation is found to be broadly similar across country income groups, suggesting that action on food waste is equally relevant in high, upper-middle and lower-middle income countries. This diverges from earlier narratives concentrating consumer food waste in developed countries, and food production, storage and transportation losses in developing countries.



Previous estimates of consumer food waste significantly underestimated its scale. While data doesn't permit a robust comparison across time, food waste at consumer level (household and food service) appears to be more than twice the previous FAO estimate (Gustavsson et al., 2011).



There is insufficient data on the edible fraction of food waste to allow comparative analysis across country income groups, but even if inedible parts (bones, pits, eggshells, etc.) predominate in lower-income countries, there is sufficient total food waste in these areas for circular approaches or other food waste diversion strategies to be important

- On the other hand, countries like **Nigeria and Rwanda** are producing waste at 189 kg / capita / year and 164 kg / capita / year respectively.
- **For India**, the household food waste in kg / capita / year was 50.
- **Its impact:** By throwing away **17 per cent of food available** at retail, food service and consumer level, the impacts of food systems on climate, nature and pollution are generated needlessly.
- The report has revealed that 17 per cent of all food available at consumer levels was wasted in 2019 which means that some **690 million people had to go hungry**.

The Food Waste Index Measurement Approach

The Food Waste Index has a three-level methodology, increasing in accuracy and usefulness of data, but also increasing in the resources required to undertake them:

- **Level 1** uses modelling to estimate food waste, **for Member States** that have not yet undertaken their own measurement.
 - **It involves extrapolating data from other countries** to estimate food waste in each sector for a given country.
 - **The estimates for these countries are approximate:** they are sufficient to provide insight into the scale of the problem and to make a case for action, but inadequate to track changes in food waste over time.

- **They are intended as a short-term support** while governments develop capacity for national measurement.
- **Level 2** is the recommended approach. It involves measurement of food waste in countries.
 - The nature of the measurement will **vary according to sector and circumstances**.
 - It will be either undertaken by **national governments or derived from other national studies** undertaken in line with the framework described below.
 - **It generates primary data** on actual food waste generation and fulfils the requirement for tracking food waste at a national level, in line with the SDG 12.3 target.
- **Level 3** provides additional **information to inform policy** and other interventions designed to reduce food waste generation.
 - This includes the **disaggregation of data by destination, edible/inedible parts, gender; reporting of manufacturing food waste not covered by the Food Loss Index** and additional destinations such as sewer, home composting and animal feed.

LEVEL 1	LEVEL 2	LEVEL 3
<ul style="list-style-type: none"> ◦ Modeling and extrapolation ◦ Provides approximate estimate ◦ Not suitable for tracking purposes 	<ul style="list-style-type: none"> ◦ Direct measurement of food waste ◦ Sufficiently accurate for tracking 	<ul style="list-style-type: none"> ◦ Additional information and disaggregation ◦ Supports development of food waste prevention strategy

Sustainable Development Goal 12.3 (SDG 12.3)

- It captures a **commitment to halve food waste at the retail and consumer level** and to reduce food loss across supply chains.
- This Food Waste Index Report aims to **advance progress on SDG 12.3 in two ways**:
 - ▶ **Firstly**, it presents the most comprehensive food waste data collection, analysis and modelling to date, generating a new estimate of global food waste.
 - ▶ **Country-level food waste estimates have been calculated**, and while confidence intervals for estimates vary by region and by sector, they offer new insight into the scale of the problem and into the substantial prevention potential in low-, middle- and high-income countries.
- **Secondly**, this report publishes a methodology for countries to measure food waste, at household, food service and retail level, in order to track national progress towards 2030 and to report on SDG 12.3.
 - ▶ **Countries using this methodology will generate strong evidence to guide a national strategy** on food waste prevention, food waste estimates that are sufficiently sensitive to pick up changes in food waste over two- or four-year intervals, and that enables meaningful comparisons among countries globally.

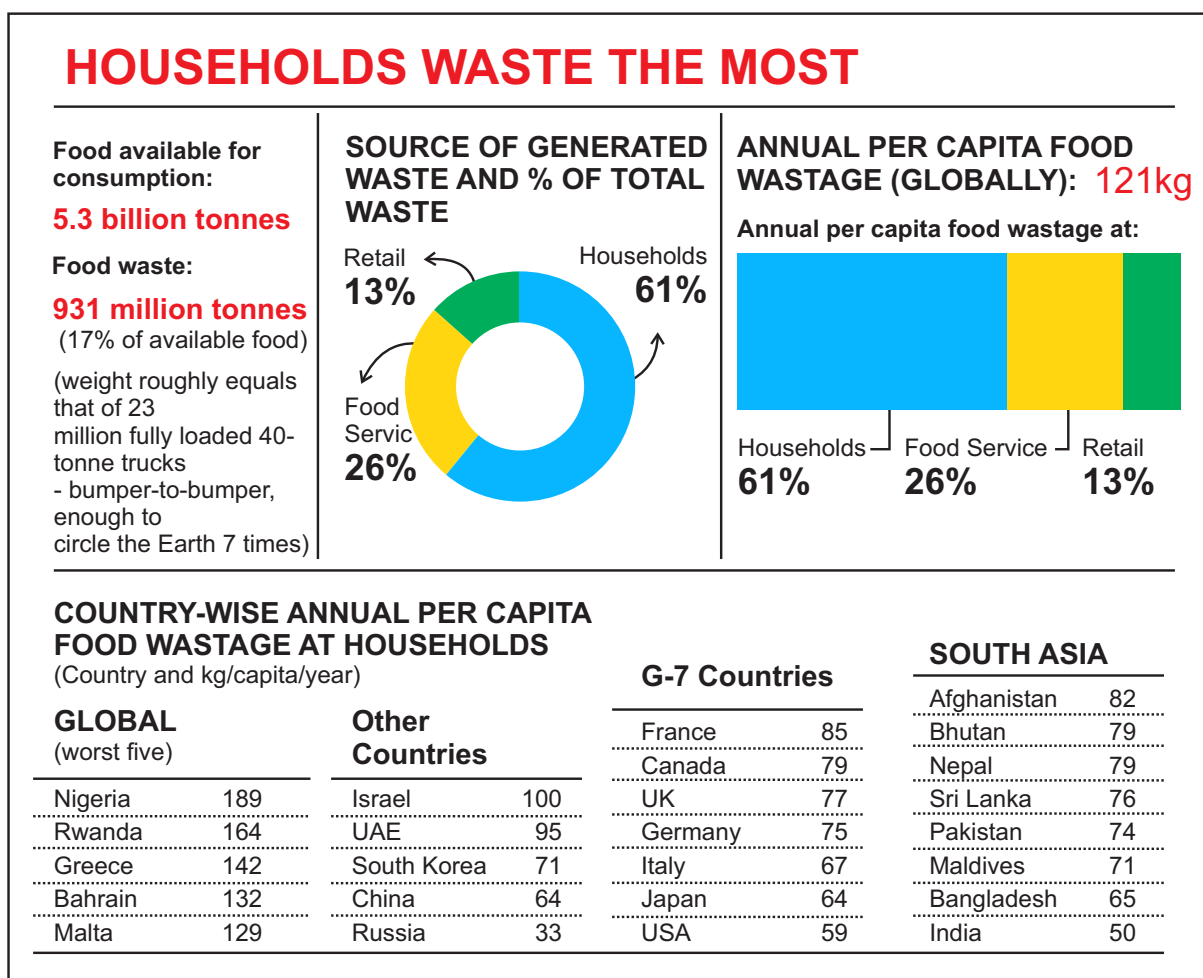
Food Loss Index

- In complement to the Food Loss Index, developed by the Food and Agriculture Organization of the United Nations (FAO), the Food Waste Index covers the later stages of food's journey food waste occurring at household, food service and retail level.

Issues/ Challenges

- **SDG 12 Target 3 would be missed**: If we do not increase the investment significantly in tackling food wastes in the home globally, we will definitely not achieve the SDG 12.3.

- **Environmental Impact:** Around 8-10 per cent of global greenhouse gas emissions are associated with food that is not consumed.
- **Social Impact:** Wasting food also raises social questions, particularly given the current global financial crisis, rising food prices and international food shortages.
- **Economic Impact:** Food loss and waste causes about \$940 billion per year in economic losses.
- **Non-inclusion in Nationally Determined Contributions (NDCs):** As of now, none of the Nationally Determined Contributions (NDCs) to the Paris Agreement mention food waste.
- **Lack of proper data:** Global estimates of food waste have relied on extrapolation of data from a small number of countries, often using old data.
 - Most countries do not have robust data on food waste.
- **Highest burden:** As environmental impacts accrue across the life cycle of food products, food waste at the consumer level presents the highest burden.
- **Limited parameters:** This estimation is based on only three studies, all of which had a sample size or length that was either small or unclear.



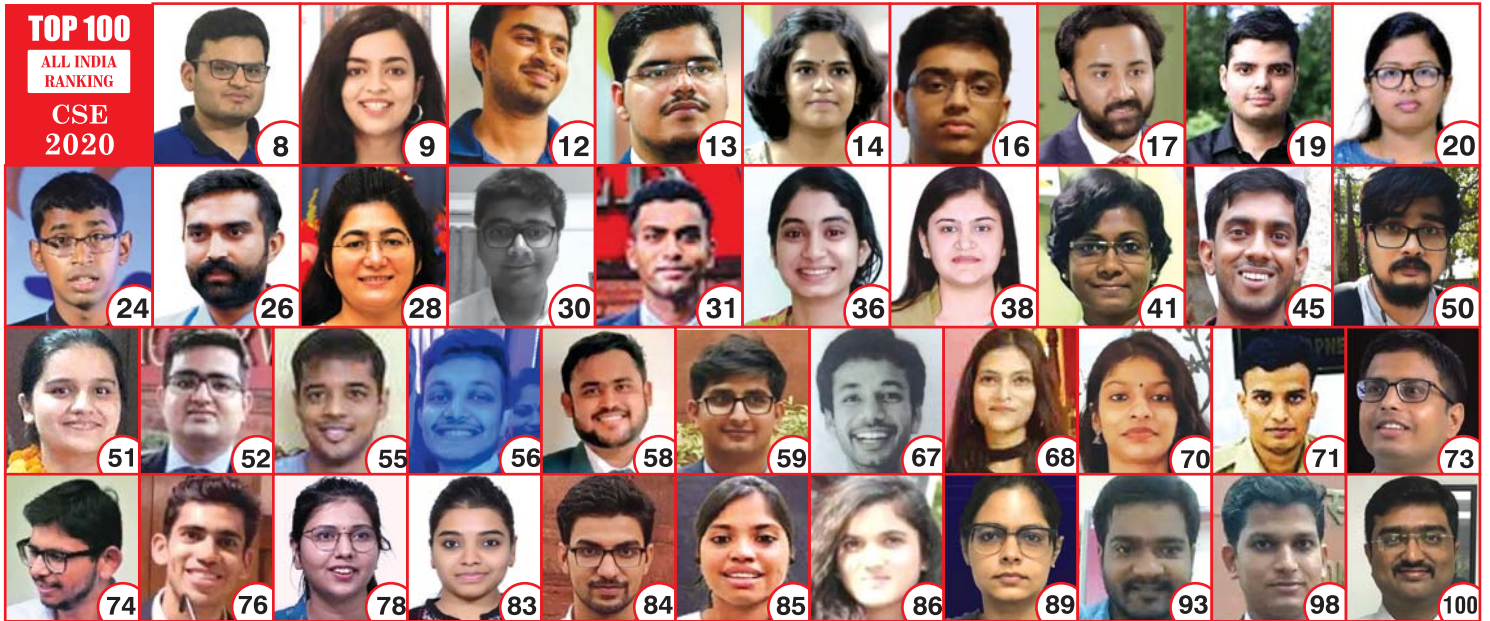
Suggestions to solve the problem

- **Inclusion of food systems in NDC's:** Countries can raise climate ambition by including food systems in their NDCs.
- **Community Awareness:** The governments, civil societies and businesses have to sync with each other and generate community awareness regarding importance of reducing food wastage.

- **Innovative ideas:** The UN Food Systems Summit will provide an opportunity to launch bold new actions to tackle food waste globally.
- **Saving money:** Food waste reductions can save money for farmers, companies, and households.
- **Need to work on SDG targets:** SDG target 12.3 aims at halving per-capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains.

Various Definitions

- **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.
- **Food loss**
 - ▶ Food losses are all the crop and livestock human-edible commodity quantities that, directly or indirectly, completely exit the post-harvest supply chain by being discarded and do not re-enter in any other utilization.
 - ▶ Losses that occur during storage, transport and processing, also of imported quantities, are therefore all included.
 - ▶ Losses include the commodity as a whole with its non-edible parts.
- **Food surplus**
 - ▶ For the purposes of the Food Waste Index, food surplus refers to food that is redistributed for consumption by people, used for animal feed or used for bio-based materials / biochemical processing.
- **Food waste**
 - ▶ It is defined as food and associated inedible parts removed from the human food supply chain in the various sectors such as manufacturing of food products, retail; food service; and households.
- **Municipal solid waste (MSW)**
 - ▶ It includes waste originating from households, commerce and trade, small businesses, office buildings and institutions (schools, hospitals, government buildings).
 - ▶ It also includes bulky waste and waste from selected municipal services, for example waste from park and garden maintenance, waste from street cleaning services if managed as waste.



SUCCESS IS A PRACTICE WE DO!

