



## Perspective: Food Loss & Waste

**For Prelims:** International Day of Awareness of Food Loss and Waste (IDAFLW), United Nations Environment Programme (UNEP).

**For Mains:** Food Loss & Waste: Current Scenario, Reasons, Initiatives Taken.

### Why in News?

Since 2019, the **International Day of Awareness of Food Loss and Waste (IDAFLW)** has been observed on **29 September 2022** with the theme '**Stop Food Loss and Waste! For People and Planet.**' This day assumes huge importance due to the rising **food insecurity** across the globe.

### Food Loss & Waste: What's the Current Scenario?

- According to the **United Nations Environment Programme (UNEP)**, an estimated 14% of the world's food is lost between harvest and retail. Moreover, an estimated 17% is wasted in retail and at the consumption level.
  - Food that is lost and wasted **accounts for 38% of total energy usage in the global food system.**
- This food loss and waste account for 8 -10% of the total global **Greenhouse Gases (GHGs)** - contributing to an unstable climate and extreme weather events such as **droughts** and **flooding.**
  - These changes negatively impact crop yields, reduce the nutritional quality of crops, cause supply chain disruptions and threaten food security and nutrition.
- The **2030 Agenda for Sustainable Development** - specifically Sustainable Development Goal (SDG) 12, target 12.3 - **calls for halving per capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains.**
- According to the **State of Food Security and Nutrition in the World report (SOFI) 2022**, the number of people affected by hunger globally rose to as many as 828 million in 2021, **an increase of about 46 million since 2020 and 150 million since 2019.**
  - Overall, an estimated **3.1 billion people worldwide do not have access to a healthy diet.**

### What are the Reasons Behind Food Loss and Waste?

- **Lack of Efficient Management Framework:** Lack of strict management framework for food security. For instance, **Public Distribution System** faces challenges like leakages and diversion of food-grains, inclusion/exclusion errors, fake and bogus ration cards, and weak grievance redressal and social audit mechanism.
- **Faults in Procurement:** Farmers have diverted land from producing coarse grains to the production of rice and wheat due to a minimum support price.
  - Further, there is a tremendous wastage of around Rs.50,000 crore annually by both improper accounting and inadequate storage facilities
- **Climate Change:** The **monsoon** accounts for around 70% of India's annual rainfall and irrigates

60% of its net sown area. Changing precipitation patterns and the growing frequency and intensity of extreme weather events such as [heatwaves](#), and floods are already reducing agricultural productivity in India, posing a serious threat to food security.

- To increase domestic availability amid low [Kharif Crop](#) productivity this year (2022), the [Government of India has banned the export of broken rice](#).
- **Supply Chain Disruption Due to Unstable Global Order:** At a time when the [Covid-19 Pandemic](#) had already impacted food supply around the world in 2020, [Russia-Ukraine War in 2022](#) has disrupted the global supply chain and resulted in food scarcity and food inflation.
  - Russia and Ukraine represent 27% of the world market for wheat, 26 countries, mainly in Africa, West Asia and Asia, depend on Russia and Ukraine for more than 50% of their wheat imports.

## Why is it Important to Reduce Food Loss and Waste?

- **Prevent Wastage of Food Resources:** Food loss and waste undermine the sustainability of the food systems. When food is lost or wasted, all the resources that were used to produce this food - including water, land, energy, labour and capital are wasted as well.
- **Prevent Adverse Socio-Environmental Effects:** In addition, the disposal of food loss and waste in landfills, leads to greenhouse gas emissions, contributing to [climate change](#).
  - Food loss and waste can also negatively impact food security and food availability and contribute to increasing the cost of food.
- **Ensure Better Planetary Future:** With eight years left to reach the target, the urgency for scaling up action to reduce food loss and waste cannot be overemphasized. Reducing food loss and waste presents an opportunity for immediate climate benefits while improving the overall sustainability of our food systems - a necessary transformation to ensure better planetary and nutritional outcomes for current and future generations.

## What are the Initiatives Taken by India in this Regard?

- **Constitutional Provision:** Though the Indian Constitution does not have any explicit provision regarding the right to food, the fundamental right to life enshrined in [Article 21 of the Constitution](#) can be interpreted to include the right to live with human dignity, which may include the right to food and other basic necessities.
- **Buffer Stock:** [Food Corporation of India \(FCI\)](#) has the prime responsibility of procuring the food grains at [minimum support price \(MSP\)](#) and stored in its warehouses at different locations and from there it is supplied to the state governments in terms of requirement.
- **Public Distribution System (PDS):** Over the years, the PDS has become an important part of the Government's policy for the management of the food economy in the country. PDS is supplemental in nature and is not intended to make available the entire requirement of any of the commodity.
  - Under the PDS, presently the commodities namely wheat, rice, sugar and kerosene are being allocated to the States/UTs for distribution.
  - Some States/UTs also distribute additional items of mass consumption through the PDS outlets such as pulses, edible oils, iodized salt, spices, etc.
- **National Food Security Act, 2013 (NFSA):** It marks a paradigm shift in the approach to food security from welfare to rights-based approach.
  - [NFSA](#) covers 75% of the rural population and 50% of the urban population under:
    - [Antyodaya Anna Yojana:](#) It constitutes the poorest-of-the-poor, are entitled to receive 35 kg of foodgrains per household per month.
    - [Priority Households \(PHH\):](#) Households covered under PHH category are entitled to receive 5 kg of foodgrains per person per month.
  - The eldest woman of the household of age 18 years or above is mandated to be the head of the household for the purpose of issuing ration cards.
  - In addition, the act lays down special provisions for children between the ages of 6 months and 14 years old, which allows them to receive a nutritious meal for free through a widespread network of [Integrated Child Development Services \(ICDS\)](#) centres, known as Anganwadi Centres.

MINISTRY/ DEPARTMENT/AGENCIES	SCHEMES	COMPONENTS
Ministry of Agriculture and Farmers Welfare, Department of Agriculture, Cooperation, & Farmers Welfare (DAC&FW) <ul style="list-style-type: none"> <li>■ National Cooperative Development Corporation (NCDC)</li> <li>■ Directorate of Marketing and Inspection (DMI)</li> <li>■ Small Farmers' Agri-Business Consortium (SFAC)</li> </ul>	<ul style="list-style-type: none"> <li>■ Mission for Integrated Development of Horticulture (MIDH)</li> <li>■ National Horticulture Mission (NHM)</li> <li>■ National Horticulture Board (NHB)</li> <li>■ Horticulture Mission for North East &amp; Himalayan States (HMNEH)</li> </ul>	<ul style="list-style-type: none"> <li>■ Post-harvest management (especially cold chain), processing, and marketing of horticulture produce</li> <li>■ Storage infrastructure</li> </ul>
Ministry of Food Processing Industries (MoFPI)	<ul style="list-style-type: none"> <li>■ Central Sector Scheme Pradhan Mantri Kisan Sampada (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters)</li> </ul>	<ul style="list-style-type: none"> <li>■ Mega food parks</li> <li>■ Integrated cold chain and value addition infrastructure</li> <li>■ Food safety and quality assurance infrastructure</li> <li>■ Infrastructure for agro-processing clusters</li> </ul>
Ministry of Consumer Affairs, Department of Food and Public Distribution <ul style="list-style-type: none"> <li>■ Indian Grain Storage Management &amp; Research Institute (IGMRI)</li> <li>■ Central Warehousing Corporation (CWC)</li> <li>■ Warehousing Development and Regulatory Authority (WDRA)</li> <li>■ Food Corporation of India (FCI)</li> <li>■ State Government agencies</li> </ul>	<ul style="list-style-type: none"> <li>■ Private Entrepreneurs Godown (PEG) Scheme</li> <li>■ Scheme for construction of modern steel silos</li> <li>■ Central Sector Scheme (erstwhile Plan Scheme)</li> </ul>	<ul style="list-style-type: none"> <li>■ Construction of godowns</li> <li>■ Modernizing storage infrastructure</li> <li>■ Negotiable Warehouse Receipt (NWR)</li> </ul>
Ministry of Commerce and Industries, Department of Commerce <ul style="list-style-type: none"> <li>■ Agricultural and Processed Food Products Export Development Authority (APEDA)</li> </ul>		Financial assistance to exporters for establishment of post-harvest infrastructure integrated pack house, purchase of insulated, reefer transport/mobile pre-cooling units, etc.

## What can be the Way Forward?

- **New Approaches:** The food systems cannot be resilient if they are not sustainable, hence the need to focus on the adoption of integrated approaches designed to reduce food loss and waste.
  - Actions are required globally and locally to maximise the use of the food that is produced.
- **Need for Technologies:** The introduction of technologies, innovative solutions (including **e-commerce platforms** for marketing, retractable mobile food processing systems), new ways of working and good practices to manage food quality and reduce food loss and waste are key to implementing this transformative change.
- **Ensuring Transparency in Food Stock Holdings:** Using IT to improve **communication channels** with farmers can help them to get a better deal for their produce while improving storage houses with the latest technology is equally important to deal with natural disasters.
  - Further, foodgrain banks can be deployed at block/village level, from which people may get subsidised food grains against food coupons (that can be provided to **Aadhar** linked beneficiaries).

## UPSC Civil Services Examination Previous Year's Question (PYQs)

### Prelims

**Q. With reference to the provisions made under the National Food Security Act, 2013, consider the following statements: (2018)**

1. The families coming under the category of 'below poverty line (BPL)' only are eligible to receive subsidised food grains.

2. The eldest woman in a household, of age 18 years or above, shall be the head of the household for the purpose of issuance of a ration card.
3. Pregnant women and lactating mothers are entitled to a 'take-home ration' of 1600 calories per day during pregnancy and for six months thereafter.

**Which of the statements given above is/are correct?**

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 3 only

**Ans: (b)**

### **Mains**

**Q.** What are the salient features of the National Food Security Act, 2013? How has the Food Security Bill helped in eliminating hunger and malnutrition in India? **(2021)**

PDF Reference URL: <https://www.drishtias.com/printpdf/perspective-food-loss-waste>

