Food Wastage

Main Syllabus: GS II – Issues relating to poverty and hunger, GS III - Environmental pollution and degradation.

Why is in News?

The United Nations Environment Programme's Food Waste Index Report (FWIR) 2024 revealed that 1.05 billion tonnes of food was wasted globally in 2022, with India ranking among the top contributors.

What is the status of food waste at global level and in India?

- **Food wastage** - As defined by FWIR 2024, It includes edible and inedible parts discarded from the food supply chain, from manufacturing and retail to restaurants and households.
- This differs from food loss, which occurs earlier in the supply chain due to issues such as poor storage, transport and handling.

Food Waste Index Report 2024 is published by United Nations Environment Programme (UNEP) and WRAP (Waste and Resources Action Programme).

- **Global level** - The United Nations Environment Programme's Food Waste Index Report (FWIR) 2024 reveals that in 2022, the world wasted 1.05 billion tonnes of food, equating to nearly 20% of all food available to consumers.
- **India's Food Waste** - India's is the second highest food-wasting nations, second only to China.
- 78 million tonnes annually, while 20 crore Indians go to bed hungry.
- **Per capita waste** – The per capita household food waste in India (55 kilograms annually) is lower than in some other countries such as the United States (73 kg).

What are the causes of food waste?

- **Inefficiency in food supply chain** - Food waste in supply chains often results from inefficiencies that span across production, storage, transportation, and distribution.
- **Household waste** - Approximately 61% of global food waste occurs at the household level.
- Household waste is driven by

    - Over-purchasing - Buying more groceries than needed.
    - Improper meal planning - Not planning meals ahead of time and then having ingredients go bad.
    - Limited storage - Small refrigerators or lack of cool, dry pantries
- **Cultural habits** - Excess food preparation during events , festivals, celebrations.
- **Overstocking** - Stores often stock excessive amounts to meet customer expectations, resulting in unsold items going to waste.
- **Limited food storage facilities** - In rural and urban areas, retail markets struggle with poor refrigeration and product short shelf life.
- **Overproduction** - Farmers often produce more food than can be sold, leading to surplus that is discarded.

What are the impacts of food waste?

- **Economic loss** - Monetary value of the waste amounts to about $1 trillion .
- The environmental cost of food waste is immense.
- **Resource wastage** - Food production is resource-intensive, requiring huge amounts of land, water and energy.
- When food is wasted, so are these precious resources.
- **Waste generation** - In India, food waste accounts for 10%-12% of total municipal waste.
- **Green House Emission** – The UN Climate Change (2024) reports that food loss and waste generate 8%-10% of annual greenhouse gas emissions globally.

  Methane is a potent greenhouse gas produced when organic matter decomposes without oxygen.

- If food waste was in the form of a country, it would be the third-largest emitter of greenhouse gases after China and the U.S.
- **Increase in carbon foot print** - Household-level activities, including food waste, excessive energy consumption and improper waste disposal (not recycling or composting), significantly increase the carbon footprint.
- **Climate change** – High carbon foot print and GHG emissions dirves climate change which further intensifies food insecurity in India.
- **Social injustice** - Widespread wastage prevents food from reaching those who need it most and further increasing hunger level.
- **Hindering SDG progress** – Food waste affects attaining SDG 2 (Zero Hunger) and SDG 12.3 (reduce food waste at retail and consumer levels).

What can be done to reduce food waste?

- Food waste are need to be reduced to reduce its carbon footprint and ensure food security.
- A collaborative effort from governments, businesses, and individuals is essential for a sustainable, hunger-free future.
- **At Household Level**

    - Smart Meal Planning: Stick to shopping lists.
    - Efficient Storage: Use airtight containers and proper refrigeration.
    - Creative Leftover Usage: Reuse food (e.g., make soups from vegetables).
    - Composting: Convert kitchen scraps into organic manure.
    - Donating Surplus Food: Contribute to food banks and charities.

- **At Systemic Level:**
    - Infrastructure Development: Investment in cold storage and transport.
    - Business Initiatives: Redistribution of unsold food.
    - Education & Awareness: Educational institutions can raise awareness about responsible consumption.
- **Government Policies:**
    - Subsidizing food redistribution networks (apps linking surplus food with needy people).
    - Encouraging farmers to adopt better storage and refrigeration.
    - Expanding initiatives like “Save Food Share Food”.

Reference

The Hindu | Colossal wastage that is food for thought

To watch the video explanation, Click here

