
Slide 1: Module 5: Monitoring, Evaluation, and Continuous Improvement

Slide 2: Session 3: Identification of sources of food waste, including pre-consumer and post-consumer waste

Slide 3: Introduction

Food waste is broadly categorized into 'pre-consumer waste' and 'post-consumer waste'. Pre-consumer waste includes food discarded before reaching consumers, occurring at various stages of the supply chain such as production, transportation, processing, and retail. Post-consumer waste, by contrast, refers to food discarded after reaching consumers, such as at homes, restaurants, or institutions. This session delves into the sources of food waste within these two categories.

Slide 4: Pre-consumer Food Waste (Part 1)

The pre-consumer food waste identifies the following areas:

- Agricultural production
- Processing and manufacturing
- Transportation & Distribution
- Retail & Food services

Slide 5: Pre-consumer Food Waste (Part 2)

Agricultural production

- Harvesting Losses: Edible crops left unharvested due to market fluctuations, cosmetic standards, or poor harvesting techniques.
- Damage During Harvest: Produce bruised or damaged during mechanical or manual harvesting.
- Pest Infestation or Disease: Crops rendered unsellable due to pests or pathogens.

Processing and manufacturing:

Post-harvest Handling: Inadequate storage, handling, or transportation leads to spoilage and deterioration due to poor temperature control, rough handling, or improper packaging.

- Trimming and Peeling: Discarding parts of food during processing, like vegetable skins or meat trimmings.
- Overproduction or Mislabeling: Excess inventory or incorrectly labeled products that fail to meet quality standards.
- Spoilage: Food spoiled during storage or transit.

Slide 6: Pre-consumer Food Waste (Part 2)

Transportation & Distribution

- Damage in Transit: Food spoiled or damaged during transportation.
- Storage Issues: Food wasted due to improper temperature or humidity control.
- Rejected Deliveries: Items refused by retailers for reasons like late delivery or aesthetic imperfections.

Retail & Food services

- Overstocking: Excess perishable goods that expire before sale.
- Expired or Damaged Goods: Products discarded due to expiration dates or packaging



damage.

- Display Loss: Food wasted during preparation for visual display, such as cut fruits.

Slide 7: Post-consumer Food Waste (Part 1)

The post-consumer food waste identifies the following areas:

- Household waste
- Hospitality & Food services
- Institutional settings
- Community & Social Events

Slide 8: Post-consumer Food Waste (Part 2)

Household waste

- Plate Waste: Uneaten leftovers discarded from meals.
- Food Spoilage: Food thrown away due to spoilage in refrigerators or pantries.
- Over-Purchasing: Excessive buying that leads to unused food.
- Improper Storage: Food wasted due to inadequate storage practices.

Hospitality & Food services

- Overproduction: Surplus food prepared but not consumed.
- Uneaten Portions: Leftover food on customer plates or buffet lines.
- Menu Design: Large portion sizes that customers cannot finish.

Slide 9: Post-consumer Food Waste (Part 2)

Institutional settings

- Over-Preparation: Food prepared in excess of what is needed.
- Dietary Restrictions: Food wasted due to mismatched offerings and consumer preferences.
- Event Waste: Unused food from catered events or conferences.

Community & Social Events

- Cultural Norms: Food prepared in excess for celebrations or events.
- Leftover Discards: Food not consumed during events and subsequently thrown away.

Slide 10: Pre-consumer & Post-consumer Food Waste (part 1)

In Europe, the implementation of measures to identify and monitor both pre-consumer and post-consumer food waste varies across countries, influenced by national policies, industry practices, and consumer awareness.

The EU has set ambitious goals for post-consumer waste, aiming for a 30% per capita reduction in food waste from retail, restaurants, food services, and households by 2030. These measures encourage consumers to adopt sustainable practices and minimise waste.

Slide 11: Pre-consumer & Post-consumer Food Waste (part 2)

Understanding the sources of food waste is crucial for implementing effective reduction strategies:

- on farms, improved harvesting techniques and flexible market standards help reduce losses, while efficient supply chain management, including cold storage and AI-driven inventory, prevents spoilage in transport and retail;



- consumer education on expiration labels, meal planning, and food storage minimizes household waste, while food redistribution programs connect surplus food with those in need;
- restaurants can cut waste through smaller portions and pricing incentives, and households can reduce over-purchasing through meal planning and creative leftovers use;
- A combination of technology, policy, and behavioral change is essential to tackling food waste at every stage of the supply chain.

Slide 12: Pre-consumer & Post-consumer Food Waste (part 3)

ADDRESSING FOOD WASTE IN EUROPE: the Environmental Impact:

Food waste accelerates environmental degradation by depleting natural resources such as water, energy, and land. It contributes to climate change through methane emissions from decomposing food in landfills, a greenhouse gas far more potent than CO₂. Additionally, food waste leads to deforestation, biodiversity loss, and soil depletion, increasing pressure on ecosystems.

Slide 13: Pre-consumer & Post-consumer Food Waste (part 4)

ADDRESSING FOOD WASTE IN EUROPE: the Economic Impact:

The financial losses from food waste exceed \$1 trillion globally, affecting farmers, businesses, and consumers. Wasted food represents lost investments in production, labour, and transportation, while businesses face higher costs due to inefficiencies. Reducing food waste can improve profitability, lower disposal costs, and create a more resilient food system.

Slide 14: Pre-consumer & Post-consumer Food Waste (part 5)

ADDRESSING FOOD WASTE IN EUROPE: the Social Impact:

While millions of tons of food are discarded each year, nearly 800 million people suffer from hunger. Reducing food waste can improve food security by redistributing surplus food to those in need. The ethical implications of food waste highlight the need for better consumer habits and supply chain efficiency to ensure equitable access to food resources.

Slide 15: Thank you

