A FOOD SYSTEMS’ APPROACH TO FOOD LOSS AND WASTE

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Open Forum on Resilience in Agriculture
December 2019
Presentation outline

• OECD method: evidence and policy
• Understanding Food Loss and Waste
• Policy rationale for reducing Food Loss and Waste
• Data issues
• Food systems’ approach
OECD work on food waste

• Mandated by Ministers:
  – 2010 and 2016 Agriculture Ministers.

• Exploratory – 4 angles
  – Data: capture existing food waste data.
  – Scenario analysis: impacts on world markets and trade of food waste reduction.
  – Policy instruments: stocktake and case studies.
  – Sectoral: food processing and retail.
### A supply chain approach

<table>
<thead>
<tr>
<th>Production</th>
<th>Handling and Storage</th>
<th>Processing and Packaging</th>
<th>Distribution and Market</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td></td>
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<tr>
<td>On farm, during or immediately after harvesting on the farm</td>
<td>After produce leaves the farm for handling, storage, and transport</td>
<td>During industrial or domestic processing and/or packaging</td>
<td>During distribution to markets, including losses at wholesale and retail markets</td>
<td>Losses in the final consumption location (home and out of home eating)</td>
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<tr>
<td><strong>Includes</strong></td>
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<tr>
<td>Fruits bruised during picking or threshing</td>
<td>Edible food eaten by pests</td>
<td>Milk spilled during pasteurization and processing</td>
<td>Edible produce sorted out due to quality</td>
<td>Edible products sorted out due to quality</td>
</tr>
<tr>
<td>Crops sorted out post-harvest for not meeting quality standards</td>
<td>Edible produce degraded by fungus or disease</td>
<td>Edible fruit or grains sorted out as not suitable for processing</td>
<td>Edible products expired before being purchased</td>
<td>Food purchased but not eaten</td>
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<tr>
<td>Crops left behind in fields due to poor mechanical harvesting or sharp drops in prices</td>
<td>Livestock death during transport to slaughter or not accepted for slaughter</td>
<td>Livestock trimming during slaughtering and industrial processing</td>
<td>Edible products spilled or damaged in market</td>
<td>Food cooked but not eaten</td>
</tr>
</tbody>
</table>

*Source: Based on Lipinski et al., 2013.*
The Food use hierarchy

Most preferred

Food

Source waste reduction and prevention

Food recovery

Animal feed

Industrial uses

Disposal

Least preferred
Policy rationale for reducing food waste

Focus has evolved through time. From Waste flow management:
• minimize waste management needs
• optimize end-of-life treatment
To Food safety:
• optimize food availability
And Sustainability:
• optimize resource use
Commitments

• SDG 12.3: “By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.”

• OECD and G20 Agriculture Ministers

• G20 initiatives
  – G20-MACS Initiative on Food Loss and Waste
  – G20 Technical platform on the measurement and reduction of Food Loss and Waste
“What is measured gets managed”

**Waste flow management:**
waste is measured at the point of entry of the waste treatment cycle

**Food safety**-availability:
waste is measured when food leaves the food chain

**Sustainability:**
Estimated based on resource equivalents
Data gaps and comparability issues

- No standard definition of loss or waste
- Multiple categories:
  - commodities
  - stages of the supply chain
  - location
- No reporting standards
A food systems’ approach

- Food loss and waste <> prevention cost
- Better resource use and lower emissions
- Pricing inputs (incl. natural resources) <> farm incomes
- Paying for public goods
- Farm incomes <> value chains
- Income generation and food security

Food security & nutrition

Resource use & climate change

Livelihoods and rural development
Further readings from the OECD library

- **Bio-economy and the sustainability of the agriculture and food system: Opportunities and policy challenges**
- 4th (2013) and 8th (2016) Food Chain Analysis Network: meetings
- **Food waste along the food chain**
- **Market and trade impacts of food loss and waste reduction**
- **Preventing food waste - case studies of Japan and the United Kingdom**
- **Food losses and food waste in China**
For more information

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