



A FOOD SYSTEMS' APPROACH TO FOOD LOSS AND WASTE

Morvarid Bagherzadeh
OECD - Trade and Agriculture Directorate

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

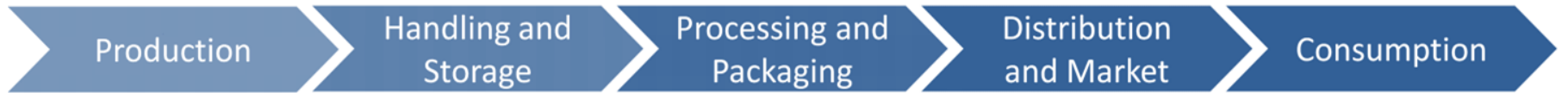


OECD work on food waste

- Mandated by Ministers:
 - 2010 and 2016 Agriculture Ministers.
 - 2011 OECD Green Growth Strategy.
- 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

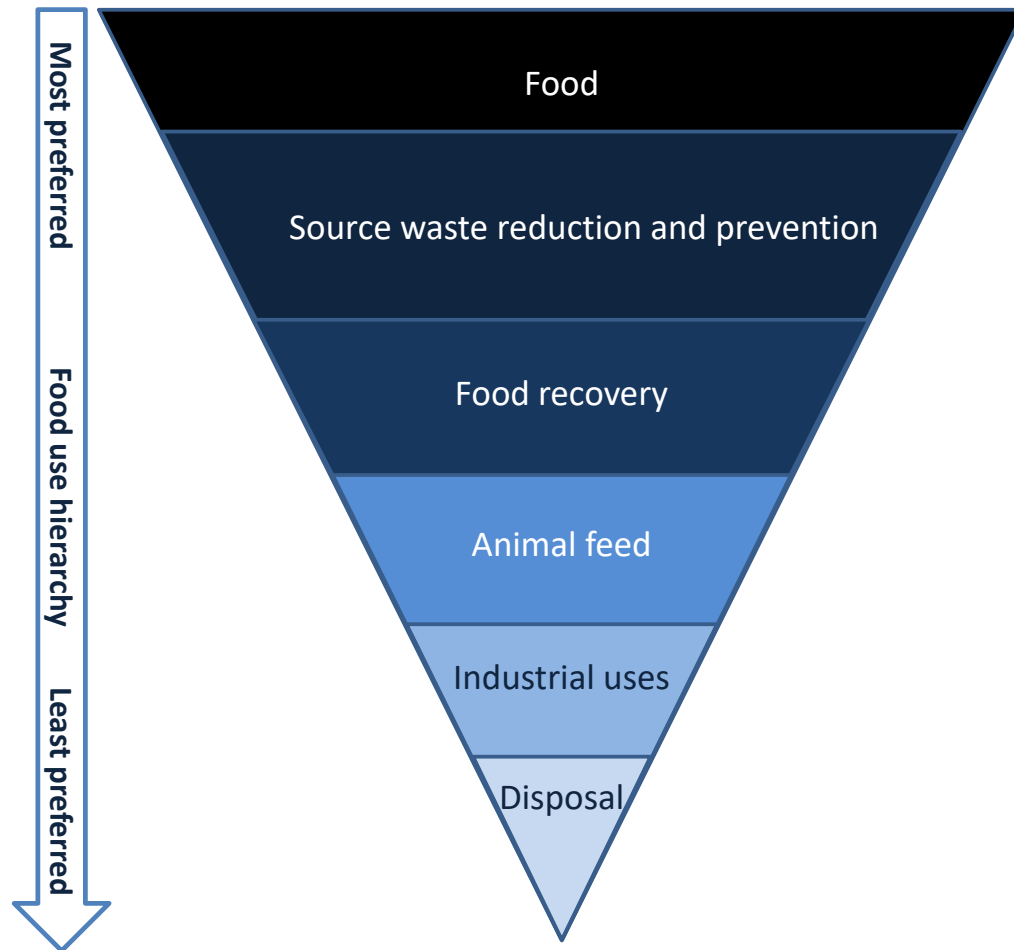


Definition				
On farm, during or immediately after harvesting on the farm	After produce leaves the farm for handling, storage, and transport	During industrial or domestic processing and/or packaging	During distribution to markets, including losses at wholesale and retail markets	Losses in the final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

Source: Based on Lipinski et al., 2013.



The Food use hierarchy





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



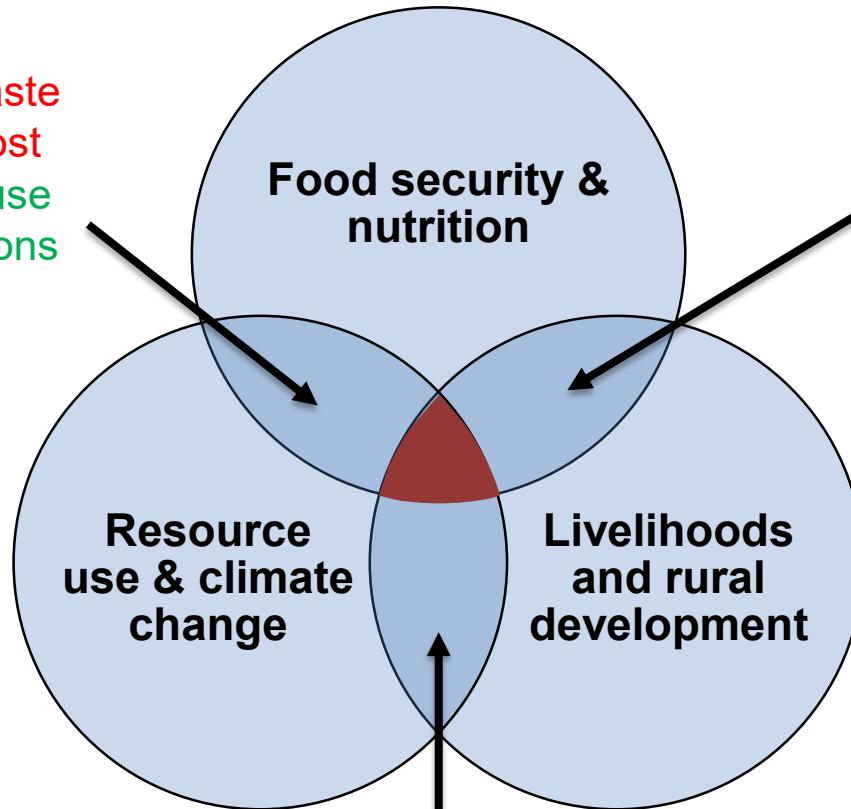
Data gaps and comparability issues

- 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



farm incomes <> value
chains
Income generation
and food security

Pricing inputs (incl. natural resources) <> farm
incomes
Paying for public goods



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

morvarid.bagherzadeh@oecd.org

- Visit our website: www.oecd.org/agriculture
- Contact us: tad.contact@oecd.org
- Follow us on Twitter: **@OECDagriculture**