# The Role of Food Loss and Waste in Sustainable Food Systems

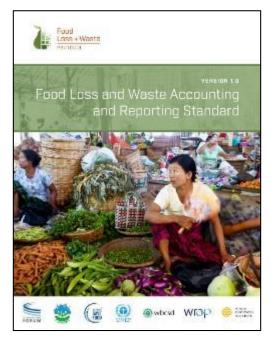
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July 20, 2023

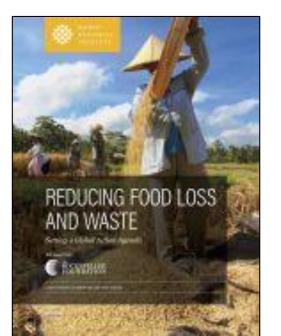


#### **ABOUT WORLD RESOURCES INSTITUTE**

WRI is a leader on food systems and food loss and waste:

- Secretariat of Food Loss & Waste Protocol (FLW Protocol)
  - A multi-stakeholder partnership that developed the global Food Loss and Waste Accounting and Reporting Standard
  - The "FLW Standard" provides guidance on what to measure and how to measure and provides a consistent and transparent way to account for and report on the amount of food loss and waste
- Secretariat of Champions 12.3
  - A coalition of executives from the public and private sectors dedicated to inspiring ambition, mobilizing action, and accelerating progress toward achieving Sustainable Development Goal Target 12.3 (halving food loss and waste by 2030).
  - Catalyst for 10x20x30
- Author of leading FLW publications
  - Reducing Food Loss and Waste: Setting a Global Action Agenda
  - Reducing Food Loss and Waste: Ten Interventions to Scale Impact
  - Annual reports on global progress toward SDG Target 12.3





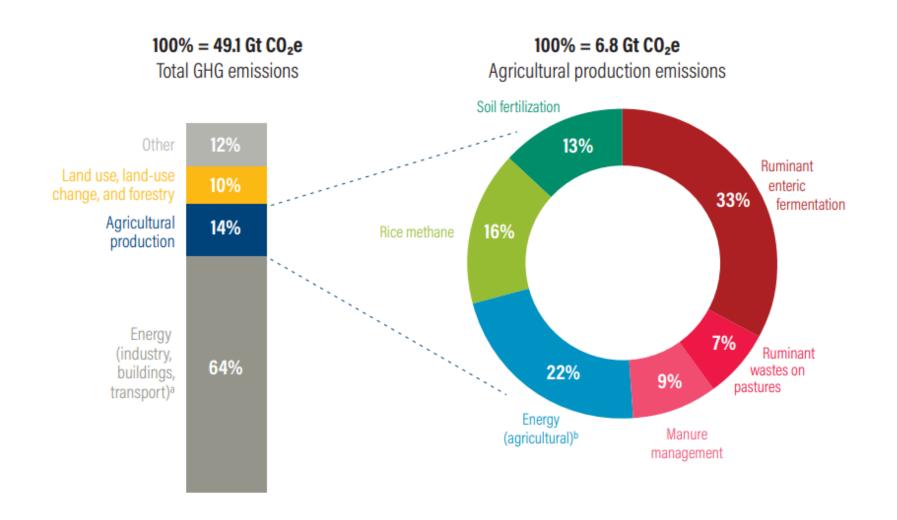
### FOOD LOSS AND WASTE IS EVEN MORE SIGNIFICANT THAN PREVIOUSLY THOUGHT

- Recent data suggests that food loss and waste is an even larger concern than previously thought
  - For many years, the most commonly cited global estimate came from a landmark FAO publication, which found 1/3 of food is lost or wasted globally
  - More recent research from WWF and Tesco finds that globally, 1.2 billion more tonnes of food are being lost or wasted throughout the food supply chain than previously reported

#### THE IMPLICATIONS ARE SIGNIFICANT

- Previous estimate of food lost or wasted globally: 33%
  - Updated estimate: 40%
- Previous associated greenhouse gas emissions: **8% of global emissions** 
  - Updated estimate: 10%
- We also have a new understanding of where the food loss and waste is occurring
  - Previous conception was that food loss (closer to the farm) happens in less wealthy economies, while food waste (closer to the consumer) happens in wealthy economies
  - UNEP Food Waste Index found that food waste is significant in all economies

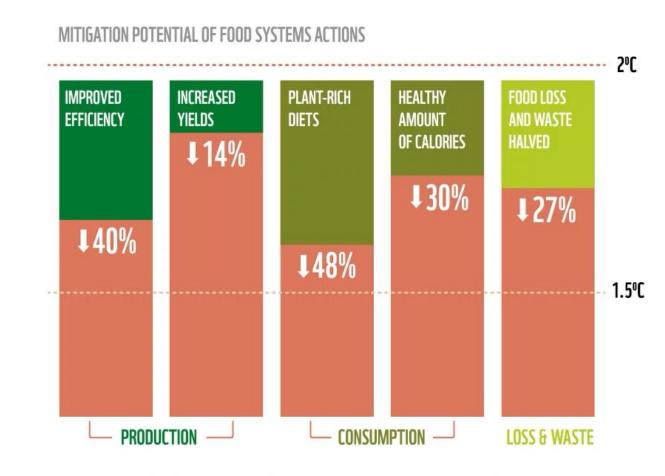
### FOOD SYSTEMS ARE RESPONSIBLE FOR NEARLY ¼ OF GLOBAL GHG EMISSIONS



Source: WRI 2019

### FOOD SYSTEMS AS A WHOLE PLAY A SIGNIFICANT ROLE IN ADDRESSING CLIMATE CHANGE

- Food systems must be addressed as a whole in order to address climate change
- Just focusing on one solution (such as efficiency or yields) is not enough
- However, food loss and waste reduction has historically been overlooked as a climate mitigation solution



Source: WWF

#### **AWARENESS IS GROWING**

How food waste is huge contributor to climate change

Food waste is contributing to climate change. What's being done about it?

Commission tables proposal for 30% cut in EU food waste by 2030



### **SDG TARGET 12.3**

#### **BY 2030**

**HALVE** per capita global food waste at the retail and consumer levels & **REDUCE** food losses along production and supply chains (including post-harvest losses)

### A MAJOR OPPORTUNITY TO STRENGTHEN THE LINK BETWEEN CLIMATE AND FLW: NDCs AND CLIMATE ACTION PLANS

- The Paris Agreement requires all economies to prepare a description of the post-2020 domestic GHG mitigation members they intend to take
- NDCs are submitted every five years (2020, 2025, 2030, etc.) to the UNFCCC secretariat and can be adjusted at any time in order to enhance ambition
- Despite food loss and waste having a significant contribution to climate, relatively few NDCs mention food loss and waste (but the number is increasing!)

### FOOD LOSS AND WASTE IN EXISTING NDCs waste in INDCs

- 36 NDCs now consider post-harvest loss (compared to 21 previously)
- 19 NDCs now consider both food loss and food waste (compared to two previously)

### Economies mentioning both food loss *and* food waste in the NDCs or Climate Action Plans:

Belize; Cambodia; Canada; China; Dominica; Gambia; Guinea-Bissau; Liberia;

Malawi; Namibia; Mozambique; Rwanda; Sierra Leone; South Sudan; Sri Lanka;

Uganda; United Kingdom; United Arab Emirates; Vanuatu

## FOOD LOSS AND WASTE IN EXISTING NDCs/CLIMATE ACTION PLANS (EXAMPLES)

- Canada references phasing out food waste to landfill, to reduce methane emissions
- Chile plans to develop a Circular Economy Roadmap and an Organic Waste Strategy
- China references the "empty plate" campaign to reduce consumer food waste and promote a low-carbon lifestyle
- Viet Nam discusses the construction of new waste treatment facilities to produce compost, rather than having material go to landfill

#### INTEGRATING FOOD LOSS AND WASTE IN CLIMATE ACTION PLANS

#### **SUGGESTED GOOD PRACTICES**

- General statements identifying mitigation and adaptation opportunities associated with FLW, and general actions (reduced losses, reduced waste, increased recycling)
- Identify specific actions needed to support that aim
  - E.g. food waste recycling in Dominica needs "public awareness and extension program ... curbside pickup of organic waste ... material recovery facilities"
- Support with supplementary documents and strategies in your economy
  - E.g. French Energy and Climate Plan (NECP) includes a law introducing mandatory food waste assessments for all food service operators
- Set specific targets or indicators
  - E.g. in Vanuatu, one indicator in agriculture targets is "Total number of people receiving training in food storage and preservation per year"
  - Make direct reference to SDG target 12.3
  - Methane reduction for short term targets