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# Developing a Global Food Loss and Waste Measurement Protocol

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Craig Hanson, Steward, World Resources Report

Photo: WRAP

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Working Paper

Installment 2 of "Creating a Sustainable Food Future"

## REDUCING FOOD LOSS AND WASTE

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### SUMMARY

The Food and Agriculture Organization of the United Nations (FAO) estimates that 30 percent of all food produced in the world was lost or wasted in 2009. This estimate is based on weight. When converted into calories, global food loss and waste amounts to approximately 24 percent of all food produced. Essentially, one out of every four food calories intended for people is not ultimately consumed by them.

Food loss and waste have many negative economic and environmental impacts. Economically, they represent a wasted investment that can reduce farmers' incomes and increase consumers' expenses. Environmentally, food loss and waste inflict a host of impacts, including unnecessary greenhouse gas emissions and inefficient use of water and land, which in turn can lead to diminished natural ecosystems and the services they provide.

"Food loss and waste" refers to the edible parts of plants and animals that are produced or harvested for human consumption but that are not ultimately consumed by people. In particular, "food loss" refers to food that spills, spoils, incurs an abnormal reduction in quality such as bruising or wilting, or otherwise gets lost before it reaches the consumer. Food loss is the unintended result of an agricultural process or technical limitation in storage, infrastructure, packaging, or marketing. "Food waste" refers to food that is of good quality and fit for human consumption but that does not get consumed because it is discarded—either before or after it spoils. Food waste is the result of negligence or a conscious decision to throw food away.

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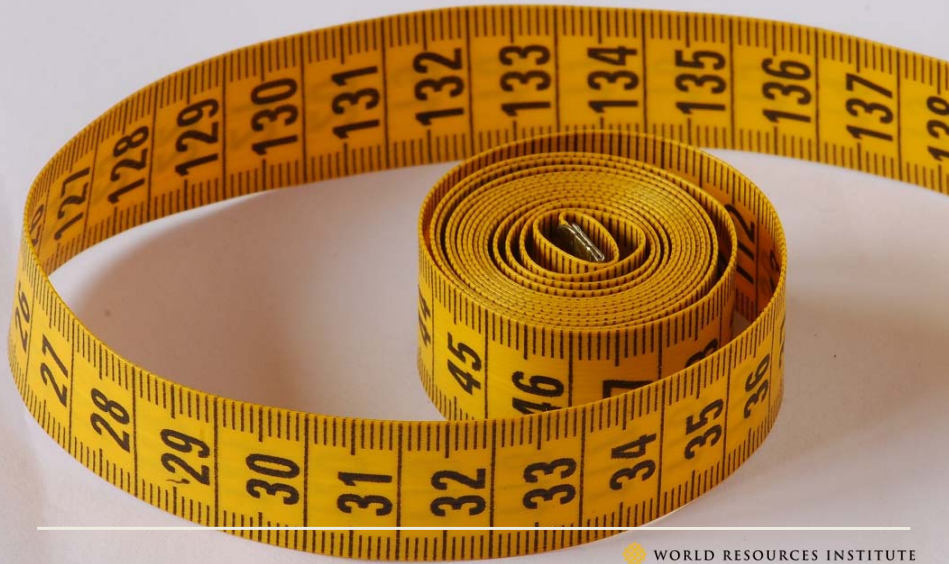
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**Recommendation 1:  
Develop a global “food loss and waste protocol”**



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**Challenges**

- Definitions
- Data
- Diverse methods

**3D**

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## Global food loss and waste protocol

- What definitions
- Scope
- Unit(s)
- Data and methods
- How to evaluate trade-offs
- How accurate
- Reporting



## Benefits of a global protocol

### What it answers

How much is being lost and wasted?

Where is it happening?

What methods should be used?

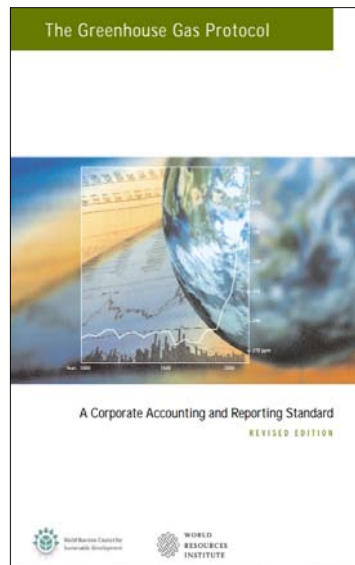
### What it enables

- Quantifies to understand impact
- Helps set baselines, set targets, measure performance, report, and benchmark

- Identifies where occurring and who to engage
- Helps with reduction strategies

- Provides confidence and consistency
- Prevents “reinventing the wheel”
- Accelerates transfer of best practice

## A precedent



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## Some guiding principles

- Use multi-stakeholder process
- Build on existing initiatives
- Keep scope broad
- Meet user needs
- Avoid letting the “perfect become enemy of the good”
- Seek continuous improvement



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## Collaborative partners



World Business Council for  
Sustainable Development



Working together for  
a world without waste

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## Draft timeline

Activities	2013		2014				2015			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Scope										
Announce protocol process										
Recruit additional participants										
Convene experts and stakeholders										
Develop first draft protocol						X				
Conduct stakeholder workshops and peer review										
Pilot test										
Revise draft protocol										
Publish protocol version 1.0									X	
Conduct outreach										→

Q&A



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