



Food and Agriculture  
Organization of the  
United Nations

# THE STATE OF FOOD AND AGRICULTURE



## Moving forward on food loss and waste reduction

The need to reduce food loss and waste is firmly embedded in the 2030 Agenda for Sustainable Development. Food loss and waste reduction is considered important for improving food security and nutrition, promoting environmental sustainability and lowering production costs. However, efforts to reduce food loss and waste will only be effective if informed by a solid understanding of the problem.

This report provides new estimates of the percentage of the world's food lost from production up to the retail level and finds a vast diversity in existing estimates of losses. Identifying and understanding where considerable potential exists for reducing food losses is crucial to deciding on appropriate measures. The report provides some guiding principles for interventions based on the objectives being pursued through food loss and waste reductions.

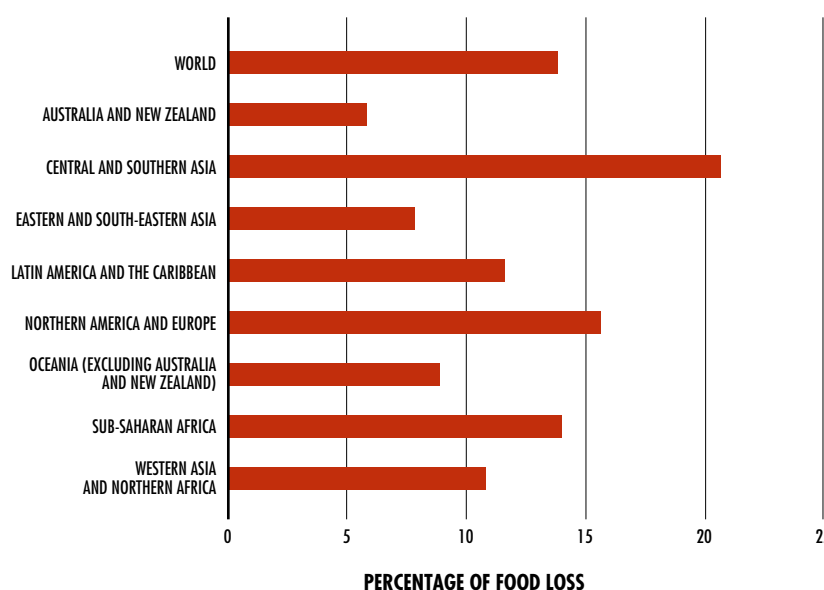
### MEASURING FOOD LOSS AND WASTE PRECEDES TAKING ACTION

The notion of food being lost or wasted is deceptively simple, but in practice there is no commonly agreed definition of food loss and

waste. FAO has worked towards the harmonization of these concepts. Efforts are underway by FAO and UN Environment to measure progress towards SDG Target 12.3 – calling for halving per capita global food waste at the

retail and consumer levels and reducing food loss along production and supply chains (including post-harvest losses) by 2030 – through two separate indices: the Food Loss Index (FLI) and the Food Waste Index. This report releases FAO's

FOOD LOSS FROM POST-HARVEST TO DISTRIBUTION IN 2016, PERCENTAGES GLOBALLY AND BY REGION



NOTE: Percentage of food loss refers to the physical quantity lost for different commodities divided by the amount produced. An economic weight is used to aggregate percentages at regional or commodity group levels, so that higher-value commodities carry more weight in loss estimation than lower-value ones.  
SOURCE: FAO, 2019

first estimates for the FLI, which indicates that globally – in terms of economic value – around 14 percent of food produced is lost from post-harvest up to, but not including, the retail level.

Evidence presented in this report shows that losses and waste tend to be higher for some commodity groups, although they can occur at all stages of the supply chain to different degrees. The vast range in terms of loss and waste percentages within commodities, supply chain stages and countries suggests there is considerable potential for reduction where percentages are higher. It also shows that identifying critical loss points in specific supply chains is crucial in taking appropriate measures.

#### **RATIONALE FOR PUBLIC-SECTOR INTERVENTION**

This report emphasizes that if SDG Target 12.3 is to be met, both private and public interventions will play an important role. While producers and consumers can ameliorate the problem, public intervention is justified where reducing food loss and waste provides net economic benefits to society, or improves food security and nutrition and environmental sustainability.

Governments can intervene in different ways. They can convince private actors of the business case for food loss and waste reduction, or influence it through various actions or policies.

#### **TAILORING PUBLIC INVESTMENTS TO POLICYMAKER OBJECTIVES**

Based on an in-depth consideration of potential objectives of reductions, the report provides guiding

## **KEY MESSAGES OF SOFA 2019**

- 1** Reducing food loss and waste is an important target of the Sustainable Development Goals (SDGs), as well as a means to achieve other SDG targets, in particular relating to food security, nutrition and environmental sustainability.
- 2** Globally, around 14 percent of food produced is lost from the post-harvest stage up to, but excluding, the retail stage.
- 3** It is essential to address the causes of food loss and waste. This will require information on where food loss and waste occurs in the food supply chain and the determinants behind it.
- 4** The largest improvements in food security are likely to occur by reducing food losses in the early stages of the supply chain, especially on-farm, in countries with high levels of food insecurity.
- 5** To be environmentally effective, interventions to reduce food loss and waste need to consider where food loss and waste has the greatest impact on the environment – both in terms of food products and the stage of the food supply chain.

principles for interventions. Clarity about the objective(s) being pursued is essential for identifying appropriate policies and entry points. A focus on food security will tend to favour interventions early in the supply chain, not least at the farm stage, where positive food security impacts will be felt throughout the supply chain. To reach environmental objectives, reductions need to take place downstream in the supply chain relative to where the environmental impact occurs. Finally, geographic location matters when pursuing food security or environmental objectives, the only exception being reducing GHG emissions, which has the same impact on climate change wherever it occurs.

Countries will have different objectives to guide their choices. Low-income countries will likely focus on improving food security and nutrition, in addition to the sustainable management of land and water resources. This calls for interventions early in the supply chain, where both impacts and losses tend to be largest. High-income countries with low levels of food insecurity will likely focus on reducing GHG emissions. This will call for interventions later in the supply chain, in particular retail and consumption, where loss or waste levels are also expected to be higher. These considerations help target resources effectively to reach the desired objectives. ■



*The State of Food and Agriculture*, FAO's major annual flagship report, aims at bringing to a wider audience balanced science-based assessments of important issues in the field of food and agriculture.

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