

Sustainable Food systems and Food security



About

The **Sustainable Development Goals Policy Briefs** highlight a hotspot of environmental concern. The evidence provided builds on scientific data and information hosted on the online platform Environment Live and is complemented by stories from around the world. Readers are invited to explore the numerous clickable links throughout the Brief.

Food loss and waste occurs along the entire food chain. Food loss is the decrease in quantity or quality of food, while food waste refers to discarding or non-food use of food set for human consumption. Unsustainable farming, storage and distribution processes, lack of consumer awareness coupled with environmental factors such as climate change and natural disasters continue to escalate the challenges on food security. Food loss and waste represents a significant inefficiency in the world's current food system and taking action to reduce it can conserve the environment, decrease greenhouse gas emissions and promote efficient land and water use.



UN Environment is the Custodian Agency for several key indicators related to waste: Goal 12: "Ensure sustainable consumption and production patterns."

- 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale [↗](#)
- 2.4.1 Proportion of agricultural area under productive and sustainable agriculture [↗](#)
- 11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities [↗](#)
- 12.3.1 Global food loss and waste index [↗](#)
- 12.5.1 National recycling rate, tons of material recycled. [↗](#)
- 12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies [↗](#)

FAO is the custodian Agency for 12.3.1.a (food loss). UN Environment is the Custodian Agency for 12.3.1.b (food waste).

Enhancing food security through sustainable food systems

To feed the world's population in 2050, agricultural production will likely need to increase by 50%, while the environmental impact of food production will need to decrease by two thirds. [↗](#)



Join the **Think.Eat.Save. Reduce Your Foodprint** campaign in support of the SAVE FOOD Initiative to reduce food loss and waste. [↗](#)



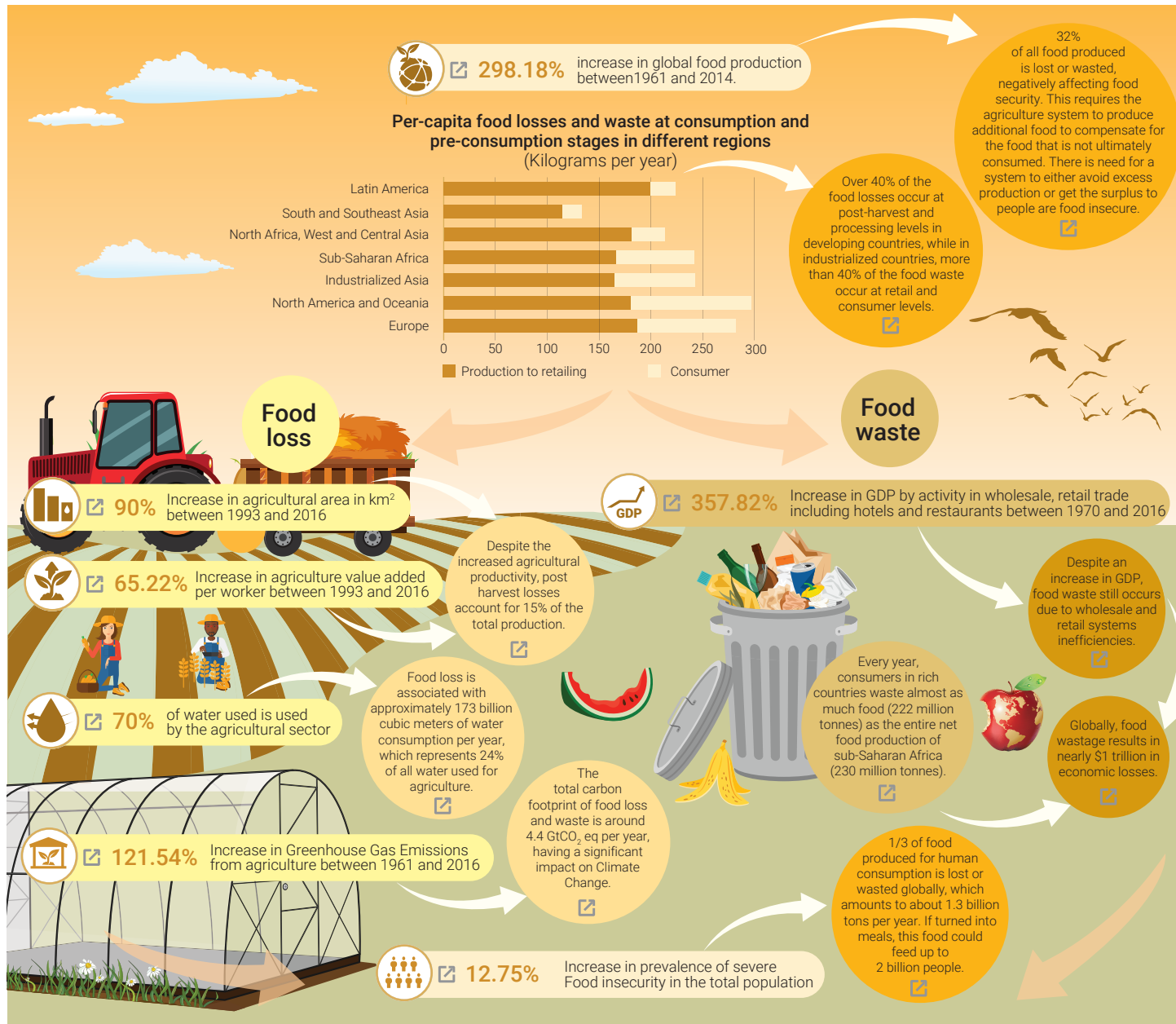
Reducing food loss and waste is embedded in the broader concept of promoting sustainable food systems and food security which is related to the following Sustainable Development Goals: [↗](#)



Food loss and waste data collected by coherent methods can help to refine policies towards a more resource-efficient, profitable and sustainable food system.



Facts and figures



Action

Towards solutions ...

- 100+** Members -public and private, big and small - from all regions of the world to the **Save Food: Global Initiative on Food Loss and Waste Reduction**. Creating collaboration, sharing problems, solutions and resources on food loss and waste reduction.
- 7** Expert institutions that are part of the **Steering Committee of The Food Loss & Waste Protocol**, which has developed the global Food Loss and Waste Accounting and Reporting Standard, so that companies, governments, cities and others are better informed about food loss and waste and motivated to curb this inefficiency.

... for achieving the SUSTAINABLE DEVELOPMENT GOALS



Initiatives on the ground

Denmark's consumer awareness campaign

'Stop Wasting Food' in Denmark gives guidance to consumers on how to avoid wasting food by shopping according to daily needs of households, and promotes better household planning and shopping patterns in order to encourage a movement away from impulsive to rational food shopping and consumption patterns.

United Kingdom's Surplus food to people not waste.

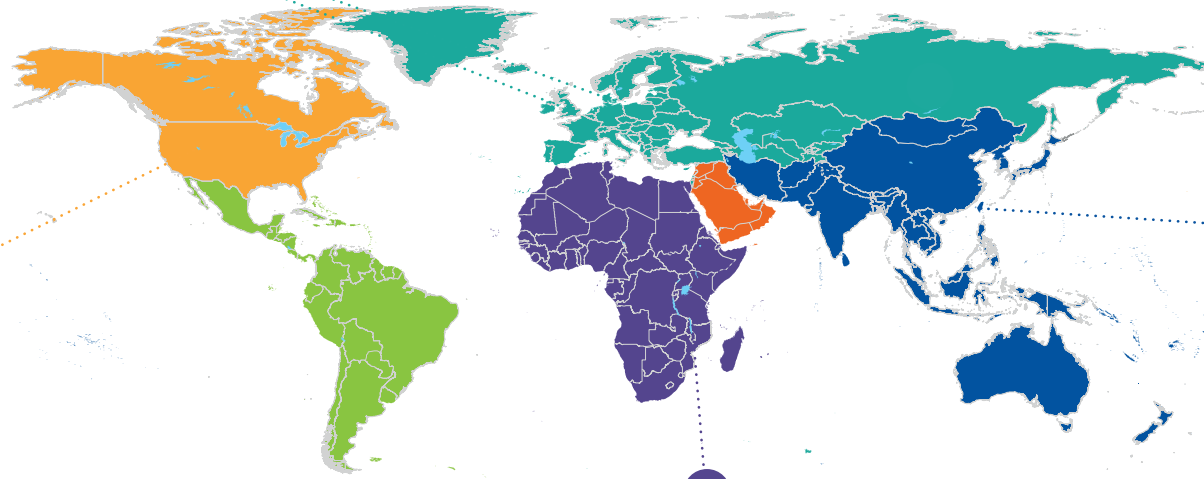
UK-based NGO WRAP is working with food businesses, redistribution organisations and governments to identify ways of increasing surplus food to people. This is through the provision of new evidence, guidance and tools and a dedicated Redistribution Working Group under the Courtauld Commitment 2025. This is developing strategies for long term, high impact solutions. Redistribution in the UK increased by 50% between 2015 and 2017, to the equivalent of 100 million meals, worth £130 million.

The Food Recovery and Reuse Plan in Taiwan

Taiwan has successfully implemented zero-waste policies, experiencing economic growth, while controlling waste generation. Its Environmental Protection Administration (EPA) began promoting source separation and recycling of food waste in 2001; by 2009, 319 municipalities were benefiting from food waste recycling systems. Through the Food Waste Recovery and Reuse Plan, which includes awareness-raising campaigns, promotion and incentives for composting facilities, the food waste recycled daily is tantamount to the volume of waste processed. This shows that sound commitment and cooperation among public and private authorities and citizens is an effective means to achieve food waste reduction and high recycling rates.

United States Environmental Protection Agency launch the U.S. EPA Excess Food Opportunities Map

The U.S. EPA Excess Food Opportunities Map which displays the locations of more than 500,000 potential excess food generators supports nationwide diversion of excess food from landfills. The interactive map identifies and displays facility-specific information about potential generators and recipients of excess food in the industrial, commercial and institutional sectors and also provides estimates of excess food by generator type. The map also displays the locations of communities with source separated organics programs, as well as more than 4,000 potential recipients of excess food. The map will help you learn about potential sources of excess food in your region and potential non-landfill recipients, such as composting and anaerobic digestion facilities.



The role of Women in reducing Food Loss and Waste, the case of Tanzania

Women in both developing and developed countries have an important role to play in reducing food loss and waste, since women interact with food at each stage of the value chain from farm to fork. Close to the farm, women comprise 41% of the agricultural workforce worldwide and make up the majority of agricultural workers in South Asia and Sub-Saharan Africa. Close to the fork, surveys in a wide range of countries show that women are responsible for 85-90 percent of the time spent on household food preparation. Therefore, targeting women in food loss and food waste reduction campaigns could result in greater reductions than pursuing an unfocused campaign. One such gender-targeted initiative in Tanzania focused on providing female farmers with greater access to markets and supplied participants with access to solar drying technology that allowed for surplus fruits—that might otherwise be lost—to be dried and preserved.