

New study helps reduce food loss and waste, boost food security and sustainability

July 20 2021, by Li Yuan



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Food loss and waste (FLW) has become a worldwide concern in recent years and is widely identified as a key barrier to food security, human health, and environmental sustainability.

However, monitoring and benchmarking FLW reduction is often constrained by lack of reliable and consistent FLW data.

A research team led by Prof. Cheng Shengkui from the Institute of Geographic Sciences and Natural Resources Research of the Chinese Academy of Sciences and Prof. Liu Gang from University of Southern Denmark addressed the knowledge and data gap of the scales and patterns of FLW for major agrifood commodities from farm to fork in China.

The study was published in *Nature Food* on July 15.

Based on a large-scale field survey over six years between 2013 and 2018 along the agrifood chain, households, and restaurants, as well as literature data, the researchers systematically mapped the production and consumption with FLW of major agrifood products and quantified relevant resource and environmental footprints associated with FLW along the [food](#) supply chain.

They found that the largest amount of FLW was found at the postharvest handling and storage stage (45%), and the consumption stage also contributed to the total FLW with a share of 17%. The land, water, carbon, nitrogen and phosphorus footprints associated with total FLW are found to be similar to those of a medium-sized country.

This work provides a first estimate of the patterns and magnitudes of FLW along China's food supply chain. It highlights the importance of better primary data to inform FLW reduction actions and ensure [food security](#) and sustainability.

More information: Li Xue et al, China's food loss and waste embodies increasing environmental impacts, *Nature Food* (2021). [DOI: 10.1038/s43016-021-00317-6](https://doi.org/10.1038/s43016-021-00317-6)

Provided by Chinese Academy of Sciences

Citation: New study helps reduce food loss and waste, boost food security and sustainability (2021, July 20) retrieved 15 May 2024 from <https://phys.org/news/2021-07-food-loss-boost-sustainability.html>

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