

Title: Systemic Drivers of Food Loss and Waste in the United States

Objective: Identify unique systemic drivers of food loss and waste in the United States and recommend strategies to address these unique drivers.

Background:

Sustainable Development Goal 12.3 calls for a halving of food waste at retail and consumer level, and a reduction of food loss, from the farm up to and excluding the retail sector, by 2030. FAO estimates that 14% of food production is lost up to and excluding the retail sector, and UNEP's Food Waste Index Report 2021 finds that 17% of food available at retail and consumer level is wasted. This occurs while hunger is rising, increasing by about 46 million since 2020 to 828 million in 2021, while three billion people are unable to afford a healthy diet. Food loss and waste results in more than \$1 trillion/year in economic losses, depressing farmer incomes and squeezing family budgets. This food that is not eaten consumes a quarter of the world's freshwater use by agriculture, is grown on a farmland area greater than the size of China and generates 8-10% of global greenhouse gas emissions.

UNEP, as custodian of SDG 12.3 indicator the Food Waste Index and mandated by UNEA Resolution 4/2, is working with governments and stakeholders to halve food waste and reduce food loss, supporting research and strategic interventions in high-impact areas.

In 2015, the United States set the *National Food Loss and Waste Reduction Goal* to halve food loss and waste by 2030, in line with the United Nations *Sustainable Development Goal Target 12.3*; however, the United States, together with UNEP, would like to accelerate progress, which has not yet been significant. Currently data suggests that the U.S. wastes more food and more food per person than most other countries. In addition, the average environmental impact of each unit of U.S. food waste is greater than that of many other countries, as the U.S. wastes more food downstream and more animal products than the global average.

This project will examine food loss and waste along the entire food supply chain, from farm to consumer, and identify drivers of food waste unique to the United States, relative to other high-income countries. For the purposes of this project, we define the word unique to mean both a quality only seen in the United States and a quality seen to a substantially lesser or greater degree in the United States than in other high-income countries.

Analysis should be limited to countries designated as "high income" by the World Bank and to prevention (rather than recycling) of food waste. Care should be taken not to duplicate existing work in the peer-reviewed literature or by organizations such as ReFED, World Resource Institute, Harvard Food Law and Policy Clinic, or Natural Resources Defense Council.

Activities:

Selected applicants will address the following research questions:

- (1) In what areas is the United States unique among high-income countries with regard to its food supply, food system, or food policies in ways that may drive food waste? Factors may include things like food supply per capita, food trade balance, time-to-market for food products, agricultural policy, and food industry structure.

(2) What are feasible strategies to reduce U.S. food waste in light of these findings? What may the U.S. need to do differently than other high-income countries to meet the goal of halving food loss and waste by 2030?

Deliverable: Report summarizing project methodology and findings.

Timeline: Within one year of award.

Responsible Officer: Clementine O'Connor, UNEP