

Trimming the Wastelines



How to Save Our Home By Reducing Food Waste

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Issue

Food waste is more than just a household nuisance; it represents a global impact to our economy and natural resources. Our seventh UU principle, respect for the interdependent web of existence of which we are all a part, compels us to address this crisis, one bite at a time.

Global:

- Roughly one-third of all the food produced in the world for human consumption annually is lost or wasted, approximately 1.3 billion tons (2).
- Consumers in industrialized countries waste almost as much food every year (222 million tons) as the entire net food production of sub-Saharan Africa, roughly 230 million tons (2).

National:

- The issue is worse in the U.S., where currently roughly 40% of food produced annually is wasted, over 20 lbs of food per person every month, increasing 50% since the 1970s (1). The average U.S. consumer wastes 10 times as much food as a consumer in Southeast Asia (1).
- U.S. food waste accounts for roughly 133 billion lbs, or 31%, of the overall food supply available to retailers and consumers (4).
- Only 3% of food waste in the U.S. is composted (1).



Causes

- In developing nations, the biggest losses of food occur at the first stages of the food supply chain: Lack of cultivation, harvesting, and preserving technology, adequate transportation, and storage infrastructure (6, 7).
- In industrialized nations, the biggest losses occur at the final stages of the food supply chain with the consumer in households, restaurants, and food service establishments (6, 7).

Impacts

Economic:

- Globally, food waste represents the equivalent of roughly \$1 trillion (U.S. dollars) lost annually (5).
- U.S. food waste represents the equivalent of \$165 billion lost annually (1).
- The average American family of four loses roughly \$1,350 - \$2,275 annually in wasted food (1).



Environmental:

- Food waste emits roughly 3.3 billion tons of CO₂-equivalent in methane Greenhouse Gases (GHGs) into the atmosphere annually. If food waste were a country, it would be the world's 3rd largest emitter of GHGs, surpassed only by the U.S. and China (2).
- Globally, the total volume of water used each year to produce food that is lost or wasted, roughly 250 km³, is equivalent to three times the annual flow of Russia's Volga River, or three times the volume of Lake Geneva (2).

- Roughly 28% percent of the world's agricultural area, 1.4 billion hectares (almost the size of Mongolia), is used annually to produce lost or wasted food (3).
- Growing, harvesting, and transporting food in the U.S. uses 10% of the total U.S. energy budget, 50% of lower continental U.S. land, and 80% of freshwater consumed (1). The 40% of food wasted in the U.S. annually represents 21% of national water use, 19% of cropland use (an area larger than New Mexico), 18% of fertilizer use, and 37 million cars-worth of GHG emissions used in production & transportation (4).
- Food waste is the largest category of U.S. landfill content, roughly 22% (4).

Social:

- Globally, humans produce 4600 calories/person/day, yet only 2000-2800 calories are available for consumption (1).
- There's currently a 70% gap between the crop calories produced today and those needed to feed a projected population of more than 9.5 billion people in 2050 (5).
- In spite of U.S. food waste, roughly 41 million Americans (1 in 8) lack consistent access to adequate and nutritious food (1).

Solutions

Global & National:

- Globally, cutting the total amount of food waste in half would contribute the equivalent of 25% of today's global food production to the total food supply (1).
- In the U.S., reducing food waste by just 15% would provide enough food for more than 25 million Americans annually (4).

Personal:

- Shop Smarter: Plan meals for the week, shop with lists, buy from bulk bins, and avoid impulse buying and marketing tricks. Buy imperfect produce (i.e. blemished, bruised, or oddly shaped) to support more complete use.
- Store Smarter: Separate certain foods (e.g. bananas, avocados, apples, cantaloupes) that produce more ethylene gas, which causes other foods to ripen faster. Pickling, drying, canning, freezing, and curing will help preserve food and save money.
- Eat Smarter: Learn to cook with produce skins, pits, and other parts typically discarded (e.g. use in smoothies). Serve smaller portions, save leftovers, and freeze unused ingredients. Pack your lunches, and avoid restaurants with buffets and "free" bread.
- Understand Expiration Dates: "Best by", "Sell by", and "use by" dates are not federally regulated and don't indicate safety deadlines. They are only the food manufacturer's estimated dates of peak quality.
- Practice Composting: Home composting can potentially divert up to 150 kg of food waste per household per year from landfills (2).



Sources

1) Natural Resources Defense Council:

- <https://www.nrdc.org/sites/default/files/wasted-2017-report.pdf>
- <https://www.nrdc.org/issues/food-waste>

2) United Nations Environmental Program:

- <https://www.unenvironment.org/regions/north-america/regional-initiatives/minimizing-food-waste>
- <https://www.unenvironment.org/news-and-stories/press-release/food-waste-harms-climate-water-land-and-biodiversity-new-fao-report>

- 3) United Nations Food and Agriculture Organization (UN FAO):
 - <http://www.fao.org/food-loss-and-food-waste/en/>
 - <http://www.fao.org/news/story/en/item/196402/icode/>
- 4) United States Department of Agriculture:
 - <https://www.usda.gov/foodlossandwaste>
 - <https://www.usda.gov/oce/foodwaste/faqs.htm>
- 5) World Resources Institute: <http://www.wri.org/publication/reducing-food-loss-and-waste>
- 6) Barilla Center for Food & Nutrition: <https://www.barillacfn.com/en/publications/food-waste-causes-impacts-and-proposals/>
- 7) Save Food Cut Waste: <http://www.savefoodcutwaste.com/food-waste/>

More Info

- <https://www.epa.gov/recycle/reducing-wasted-food-home>
- <https://www.lovefoodhatewaste.com/>
- <http://theglobalfool.com/category/food-waste/>
- <https://www.healthline.com/nutrition/reduce-food-waste>