



Saving Food Saves Lives



Spilled tomatoes lie alongside a wholesale vegetable market north of New Delhi, India. Trucking produce to market is a race against time and spillage results in lost food and income. ©AP Images

A person in a low-income country sees a sack of grain fall off a truck bumping along an unpaved road. The sack splits and its contents spill over the ground.

A farmer has to store his sweet potato harvest in a dilapidated warehouse until the produce can be shipped to a regional market. Some potatoes spoil because rain

seeps into the leaking wooden building.

Both of these examples illustrate the challenges of moving food from farms to consumers.

Demand for Food Grows

By 2050 the world's population is expected to increase to 9 billion people. That year, demand for food will be 60 percent greater than in 2012, according to the United

Nations Food and Agriculture Organization (FAO). But growing more food will not be enough to meet the increasing demand in developing countries for staples like millet and rice, and for the meat and processed foods wanted by the increasing numbers of middle-income consumers.

What needs to be done is to reduce the amount of food lost in transit from farms to markets.

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The High Cost of Lost Food

Post-harvest loss is food lost in any step along the production line from the time of harvest to drying, storage, processing, packaging, transporting and marketing. The State Department says that roughly one-third of the food produced in the world is lost. Common causes are mold, rodent or insect infestations; or exposure to rain, drought or extreme temperatures. Food is lost because of a lack of adequate vehicles, roads and ports; or because farmers can't get the credit they need to purchase proper storage equipment.

Post-harvest loss affects a country's food security (i.e., food affordability, availability and quality), as well as its levels of malnutrition and poverty, according to the ADM Institute for the Prevention of Postharvest Loss at the University of Illinois. The institute estimates that food valued at more than \$14 billion a year is lost — enough to meet the minimum annual



In Mali, drought has turned this man's wheat crop into a lost harvest. ©AP Images

Maize plants grow in a wet farm field. Soggy planting seasons keep farmers out of the fields and, in some cases, wash away seeds. ©AP Images



food requirements of at least 48 million people. Yet, according to the institute, only 5 percent of agricultural research spending goes to study post-harvest loss. Unacceptably high losses due to poor handling and lack of appropriate infrastructure have reduced the potential economic benefits of higher yields, particularly for smallholder producers, most of whom are women, according to the FAO.

Food loss also contributes to higher food prices because part of the global food supply has been removed from the market. In addition, food loss contributes to environmental degradation and climate change as valuable water, land, labor, fertilizer and fuel are used to produce, process and transport more food to compensate for lost food.

United States Steps in

Post-harvest food loss received a surge of attention in the 1970s and 1980s, but awareness of the issue faded over time. With a renewed global focus on agriculture following food price hikes in 2008, interest in food loss prevention has re-emerged, according to the World Bank.

Feed the Future is the U.S. government's global hunger and food security initiative, launched in 2009. Through Feed the Future, the United States supports countries that develop their agricultural sectors to generate opportunities for economic growth, trade and reductions in poverty and hunger.



Through the U.S. Agency for International Development, Land O'Lakes helps dairy farmers in Mozambique learn to safely handle and store milk until it reaches consumers. USAID

The United States also partners with members of the private sector, academia, international research centers, farmers and civil society to develop economically viable solutions to post-harvest food loss and to change consumers' perceptions of lost and wasted



A woman dries a maize crop affected by flooding in Assam state, India. The flooding led to wide-scale food loss. ©AP Images



Much of Kenya's wheat has been devastated by the deadly Ug99 stem rust fungus. Ug99 has reached the Mideast, endangering wheat crops worldwide. With climate change, the rust disease is a threat to global wheat supplies. ©AP Images



A Cambodian worker prepares rice sacks in Norm Srim's rice mill at Prek Ho of Kandal province, south of Phnom Penh, Cambodia. Cambodian's Prime Minister Hun Sen announced that by 2015, his country will become one of the world's major rice exporters. ©AP Images

food. It is important to develop technologies and techniques to reduce food loss that are appropriate to local communities' needs, which widely vary based on crop, soil condition, water availability and climate.

Feed the Future applauds companies that have invested in value-added post-harvest food solutions such as closed-top, refrigerated trucks to transport harvests to market; package liners; cold-storage units; and solar dryers. It

partners with businesses and universities that develop modern storage and processing equipment.

Saving more food will improve food security for hundreds of millions of people around the world, raise the incomes of millions of smallholder farmers and represent a giant step toward preserving the globe's natural resources.

These food processing workers learn to clean and package produce, preventing food loss. Their training was supported by the U.S. Agency for International Development. ©AP Images

