Our planet currently produces enough food to feed the entire global population, yet 1.2 billion people are hungry or under-nourished. Meanwhile, one-third of all food produced is never consumed, and an astounding one-quarter of fresh water used in agriculture goes to producing food that is never eaten.

As the world’s population grows toward nine billion by 2050, placing ever greater demands on our available resources, businesses, and communities can no longer afford these inefficiencies. Each pound of food produced that goes uneaten is a wasted opportunity to improve the health of people, the environment, and economies.

While the food security debate to date has largely focused on how to boost productivity using fewer resources on the same area of land, solving the problem of food loss on the front end of the supply chain is just as vital. It’s also easier to accomplish.

1.3 BILLION TONS
1.3 billion tons of food is wasted or lost each year. This represents 340 pounds of food lost or wasted for every person on the planet.

1.6 BILLION PEOPLE
Perfectly consumable food that either spoils or gets thrown away could feed 1.6 billion more people each year.

$1 TRILLION DOLLARS
The retail value of lost and wasted food costs the global economy more than the combined 2015 profits of the Fortune 500.

Sources: FAO | Rockefeller Foundation
Solving post-harvest loss focuses on the supply chain — from the field to the market. It starts with how and when farmers in the regions experiencing the greatest loss — especially smallholder farmers — plant, harvest, and store their crops, and continues along the chain to consider the transportation, handling, processing, packaging, and marketing required to improve the amount of food that reaches consumers. An efficient, productive food system with minimized loss is well within reach. Solving post-harvest loss can help ensure people are fed and that smallholder farmers move beyond subsistence incomes. The answers are evident, but they require investment, infrastructure, policy, technology, and dedicated champions: committed collaborators across the public, private, and social sectors.

LOSS & WASTE ARE DIFFERENT

2/3 Post-Harvest Loss
Loss occurs at the front of the food chain—when food rots in fields, or is lost as a result of poor transportation networks, or spoils in markets that lack proper storage and preservation equipment and practices.

1/3 Consumer Waste
Waste occurs toward the back end of the food chain, where consumers buy too much and throw away excess food.

POST-HARVEST LOSS IMPACT

PEOPLE
Reducing post-harvest loss strengthens livelihoods for farmers and families who depend on agriculture for their income. It can also ensure more food gets to more people.

PLANET
The environmental cost of producing food that is largely lost or wasted is staggering. Greenhouse gases are generated, fresh water and arable farmland is wasted, and soils are degraded.

PROFIT
The economic development and global competitiveness of agriculture-dependent nations—and the livelihoods of farmers—suffer when crops and food exports don’t make it to market.

If unsustainable food production trends continue, the world will require a 70% increase in agricultural yields by 2050.

With the global population expected to reach 9 billion by 2050, reducing inefficiencies associated with post-harvest loss will be critical to feeding the population of the future.

Cutting food loss achieves a triple bottom line: it enhances incomes for farmers and their families; it cuts out inefficiencies and diversifies the supply chains for businesses; and it saves precious natural resources, reducing harm to our environment.

A Systems Approach

- Help farmers access technologies and solutions to curb preventable crop loss.
- Fix broken links in the chain from farms to markets.
- Engage global businesses to account for the food lost and wasted in their supply chains, beyond their own factories.
- Invest in financing models and technology innovations that drive mutual economic growth.