

# MAIZE STORAGE • TOOLS THAT EMPOWER COMMUNITIES

## Post-harvest losses aggravate hunger.

Farmers in developing countries lose 15-50% of what they produce after harvest, often due to a lack of access to appropriate tools and storage facilities.

**Until the issue of post-harvest losses are addressed, innovations like improved seeds and fertilizer will have a limited impact on hunger.**



CTI is undertaking a program near Iringa, Tanzania to help maize farmers better utilize their crops after harvest, when they must dry, store, and sell their grain.

We are joining our partners at the Institute of Agriculture at Tumaini University and their Companion Village Project who have been helping farmers increase maize yields with improved seed varieties and farming techniques. The program's success has led to substantial yield increases, but, **storage losses due to insects and rodents have been rising—and farmers are requesting help with addressing these problems.**

**CTI will prevent post-harvest losses** by helping farmers acquire cost-effective drying and storing techniques. We will identify efficient tools and effective storage with input from the maize growers.

**We will provide economic opportunities** by introducing farmers to tools that add value to their crops and dramatically increase the efficiency of post-harvest processing. CTI's hand-operated grinders can help farmers produce flour, or other ground products, which can be sold in the marketplace.

## MAIZE STORAGE & PROCESSING TOOLS

There are many different types of storage and processing tools designed for smallholder maize farmers, some of which are pictured below. What makes an appropriate technology can vary widely among different communities, so it's essential to involve locals in the decision making process when determining the best approach.



In many developing countries, women & girls often shell maize by hand or by beating it with sticks, an extremely inefficient and wasteful practice.



With more efficient tools, like CTI's maize sheller, women can shell maize faster (with less waste). Local artisans can earn money selling shellers.



To store maize safely away from insects and rodents, silos can be fabricated by artisans with readily available materials. There are many potential storage designs, depending on the community's needs and resources.



CTI's grinders make maize flour with significantly less time and effort than the traditional mortar and pestle. Families who sell flour instead of grain can in the market can get a much higher price for their product.



**Farmers in Guatemala were losing half of their crops** in 1996, when CTI began helping maize producers protect their harvest from mold, insects and rodents.

**CTI trained local artisans to build cribs and silos** for drying and storing maize. Guatemalan women purchased the silos with micro-loans and reported feeling "empowered" after being able to easily repay the loans with their surplus harvest.

**1,800 families in 26 communities saved over 1 million pounds of maize** after the introduction of drying cribs and silos.

For 30 years, Compatible Technology International (CTI) has been creating practical food and water tools for the developing world.