

Beyond Band-Aids for hunger

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It's been 25 years since a well-meaning music producer threw together a bunch of megastars to record the humanitarian torch song "Do They Know it's Christmas." Bob Geldof's Band-Aid raised millions of dollars and immeasurable awareness with the compelling chorus of "feed the world," but global interest in those hungry people has plummeted in the last two decades, if the barometer is international investment in agriculture. Agriculture's share of global development aid has dropped from 7 percent to 4 percent since the song debuted, even though most of the world's poor and hungry people depend on agriculture for their livelihoods.

The famine-stricken Ethiopia that inspired the song in the 1980s remains hobbled by food shortages. Some 23 million people in the Horn of Africa are at risk for starvation, according to the World Food Program, which delivers food aid around the world. The global recession and a recent spike in food prices aren't helping, either. The United Nations reported recently that the number of hungry people worldwide has crested 1 billion.

The sheer number of hungry people isn't the only reason we must raise our standards for success. Because agriculture makes up such a large percentage of the planet's surface, and intimately touches our rivers, air and other natural resources, the world can't tolerate some of the unintended — and counterproductive — consequences of how we farm and produce food. And farmers everywhere, especially in sub-Saharan Africa, need crop varieties and whole new approaches to farming that help them deal with drought, extreme heat and increasingly erratic weather.

Our collective understanding of how to "cure" hunger has matured enough to recognize that solutions lie not only in shipping food aid, but also in a new approach to agriculture that nourishes people and the planet.

There is no shortage of innovative ideas on the African continent.

We have four recommendations for farmers, agribusiness, politicians and other agricultural decision-makers:

— Move beyond seeds.

The vast majority of global investment in agriculture is aimed at seeds. But we've neglected the environment in which the seeds grow: the soil, trees, livestock, the farm and the food processors, roads and other pieces of the food system that gets the crop to market and onto tables.

In sub-Saharan Africa, the region of the world where the greatest percentage of people are hungry, just 4 percent of the farmland is irrigated (in Asia, 70 percent of farmland is irrigated). In parts of Kenya, Tanzania and Mali, the hundreds of thousands of farmers using inexpensive, locally made water pumps have seen incomes double and triple because they can grow a greater range of crops over a greater share of the year and are protected from losing entire crops to drought.

— Cut the slack in the system.

Instead of focusing on increasing production, make better use of what we already produce. It turns out that a shocking 30 percent to 50 percent of the harvest in poorer nations spoils or is contaminated by pests or mold before it reaches the dinner table.

Simple fixes can go a long way. In Nairobi, Margaret Njeri Ndimu has started selling goat milk in plastic bags sealed with candle wax. She learned this simple process through a training program provided by the Mazingira Institute; the bags make it easier to manage and sell her milk, allowing her customers to purchase small quantities of the perishable milk in portable containers. Similar practices can be used by other urban milk producers in cities all over the world.

— Go local (and regional).

Just as important as the techniques that farmers use is to what extent the farmers and farm communities control the techniques. Locavores in the United States and Europe argue the benefits of a decentralized food system. Solutions for hunger are rooted in harnessing local crop diversity, building up locally owned infrastructure and developing regional markets.

In Kampala, Uganda, Project Disc is working with Slow Food chapters to catalogue and revive neglected indigenous foods and foodways that can help inject diversity into diets and farmers' fields. At the World Vegetable Center in Tanzania, researchers are working with farmers to breed vegetable varieties that don't need fertilizers and pesticides, use less water, are locally appropriate and raise farmer income. Babel Isack, a Tanzanian tomato farmer, advises staff at the center about tomato varieties that best suit his needs, including those that depend less on chemical sprays and have a longer shelf life.

— Position farms on the front line of climate change.

Agriculture is the human endeavor that will be most affected by climate change. But agriculture, livestock grazing and forestry — responsible for nearly one-third of global greenhouse gas emissions — is the only near-term option for large-scale greenhouse sequestration. A combination of farming with perennial crops and grasses, cutting nitrogen fertilizer use and managing manure better, reducing erosion and enriching soils with organic matter could offset one-quarter of global greenhouse gas emissions.

According to Dr. Frank Place of the World Agroforestry Centre in Kenya, several million farmers in sub-Saharan Africa are using leguminous trees and shrubs that are grown along with

or before or after crops. This technique can improve soil, double or triple the yields of the subsequent crop and eliminate the need for artificial fertilizers.

All of these measures hold untapped potential for boosting global food production, strengthening rural communities, rebuilding ecosystems and reducing poverty and hunger. And in contrast to “Band-Aid” shipments of food, the lasting solutions will involve farmers and food communities working together to feed themselves.

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