

THE ARIZONA REPUBLIC

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On April 22, thousands of people around the world will participate in events to celebrate Earth Day, demonstrating their commitment to protect the environment. In downtown Phoenix, multiple organizations are hosting an Earth Day Community Picnic at Civic Space Park. Changes in our everyday activities, including reducing pesticide use in our gardens or committing to eat more locally-sourced foods, can make a big difference.

Although agriculture is often blamed for water scarcity and rising greenhouse gas emissions, farming is also emerging as a solution to global problems. Sustainable farming practices can help mitigate climate change, improve soil fertility, and preserve biodiversity—not only on Earth Day, but every day.

Through our research for Worldwatch Institute's *Nourishing the Planet* project (www.NourishingthePlanet.org), we traveled to 25 countries across sub-Saharan Africa, highlighting innovations that offer effective models that can be scaled up and replicated beyond Africa.

On Earth Day, *Nourishing the Planet* offers three recommendations that showcase agriculture's untapped potential to address some of our most urgent environmental challenges, also included in our [State of the World 2011: Nourishing the Planet](#) report.

Reducing food waste. Roughly 40 percent of the world's food spoils before it reaches people's plates—much of which ends up in landfills, where it emits methane, a greenhouse gas that is more potent than carbon dioxide.

In Phoenix, [Waste Not](#) collects 6,000 pounds of surplus, perishable food from grocery stores, restaurants and other places, delivering the food to agencies, like daycare centers and retirement homes. And Waste Not alone collects [2 million pounds](#) of excess food each year.

While even more food gets wasted, almost 25 percent of Arizonan children are food insecure, or do not have enough to eat—the 3rd highest rate in the country.

And in developing countries, 15 to 20 percent of food is lost each year, decreasing farmers' incomes and increasing malnutrition. But there are regionally appropriate storage and preservation techniques that are helping farmers protect their harvests.

In Pakistan, farmers saved 70 percent of their harvest by switching from jute bags and containers constructed with mud to more durable metal containers. And, in West Africa, farmers have saved around 100,000 fruits by using solar dryers to dry mangoes, papaya, and other fruit.

Increasing local food biodiversity. The shift from local and indigenous foods to monoculture crops, including maize, wheat, soybeans, and rice, reduces biodiversity, threatens local economies, and undermines the community's cultural identity.

In Arizona, five Slow Food local chapters work to celebrate local and traditional foods like prickly pear, mesquite, chilies, and saguaro fruit. [Slow Food Phoenix](#) hosts farm tours and supports a school garden program at Desert Marigold School.

And in Senegal, women farmers are switching back to traditional varieties of fruit, including karkadè, pain de singe, tamarindo, and ditakh that they process in to value-added products, such as juices and jam.

Feeding our cities. Urban populations are expanding at an unprecedented rate. The U.N. estimates that more than 70 percent of the global population will live in cities by 2050, increasing food insecurity for urban residents. In Phoenix, Vancouver, and Nairobi, communities are turning to urban agriculture as a solution that is not only helping to boost food self-sufficiency, but also helping to raise incomes, empower women, and improve urban environments.

In the heart of Tucson, the Tucson Village Farm, which [broke ground on a vacant lot](#) last year, connects families and young students with their food and community. And in Maricopa County, among the fastest growing counties in the United States, Greg Peterson opens up his backyard garden, called the [Urban Farm](#), to offer tours and classes.

And community supported agriculture (CSA) programs in Cape Town, South Africa, are helping to raise incomes and provide produce for school meals.

By focusing on agriculture to not only alleviate hunger and malnutrition, but also to achieve our environmental goals, we can make everyday Earth Day.

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