How fruit and vegetable research can impact poverty in Central America

Collaborating across borders to strengthen horticultural value chains

The Horticulture Innovation Lab has collaborated with more than 200 organizations on research projects that improve the horticultural value chain for smallholder farmers around the world — including in Guatemala and Honduras.

Our project teams include partners from U.S. universities and from organizations in developing countries, as part of the U.S. government’s global hunger and food security initiative called Feed the Future.

In the program’s first 5 years, these global projects improved how more than 14,000 farmers grow, process or sell horticultural crops — through adoption of new practices or technologies.

Promoting drip irrigation and climate resilience in Guatemala

The Horticulture Innovation Lab team leads the “MásRiego” project as a buy-in from USAID/Guatemala, scaling out drip equipment and conservation agriculture practices in the Western Highlands.

Empowering women through horticulture in Honduras

Janelle Larson of The Pennsylvania State University, leads this Women in Agriculture Network project that is improving ways horticultural value chains support equity for women and marginalized populations.

Managing nematodes and soil health in Guatemala

Brent Sipes of the University of Hawai’i at Mānoa leads a project on integrated pest management and soil health for managing nematodes for the needs of smallholder potato farmers.

Expanding tomato grafting in Honduras and Guatemala

James Nienhuis of the University of Wisconsin-Madison, leads this “Plántulas de Esperança” project focused on vegetable grafting for entrepreneurship, which spins off from previous work that evaluated varieties and produced disease resistant seed.

Horticulture Innovation Lab Regional Center at Zamorano

Hosted and led by a team at the Panamerican Agricultural School, Zamorano, this regional center serves as a hub for horticulture-related activities in Central America, particularly in Honduras and Guatemala. The center is also known as El Centro Regional de Innovación para las Hortalizas y Frutas en Zamorano.

The center brings together key regional players to improve livelihoods of smallholder farmers, with innovative technologies that offer solutions for local horticultural needs. The center also builds capacity for fruit and vegetable research and development with regional partners and Zamorano.

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