Horticulture Innovation Lab: Trellis Fund

Engaging U.S. graduate students in international development

The Trellis Fund connects organizations in developing countries with U.S. graduate students who have agricultural expertise, generating benefits for both the students and the in-country institutions. Together, they collaborate on short-term projects to address horticultural challenges faced by local farmers.

How it works:

Organizations in developing countries are invited to propose a horticultural project for a \$4,000 grant and specify the type of expert support they seek in a U.S. graduate student. Trellis projects may address issues of horticultural production, pest management, soil fertility, water management, postharvest practices, value addition, nutrition, and marketing.



UH Mānoa graduate student Brad Reil, right, talks with farmers in Uganda about fruit fly management, on a Trellis Fund project led by the National Forestry Resources Research Institute (NaFORRI).

The Trellis Fund matches the organization to a graduate student with related expertise. Graduate students from the Horticulture Innovation Lab's partner institutions are invited to participate:

- University of California, Davis
- North Carolina State University
- University of Florida
- University of Hawai'i at Mānoa

Selected graduate students work remotely with the organization as consultants on projects for a minimum of 100 hours. Students travel for approximately 2 weeks of in-country work, to gain a better understanding of local situations and execute parts of the project. Travel expenses are covered, and students receive a \$300 fellowship upon completion.

Achievements:

Since 2011, the Horticulture Innovation Lab has completed five rounds of Trellis Fund projects. Results from the first 55 completed projects include:

- 8,512 farmer participants (66% women)
- 230 demonstration plots
- 265 training and extension meetings



In Nepal, Rachel Suits of NC State works with a local graduate student on a field trial with the Ecological Services Centre.



Nick Reitz of UC Davis prepares mangos in a solar dryer, as part of a Trellis Fund project led by Methodist University College Ghana.

http://horticulture.ucdavis.edu























2018 Trellis Fund Projects

Ghana:

- Promoting organic agriculture among vegetable and fruit farmers
 - Kumasi Institute of Tropical Agriculture (KITA) Claire Friedrichsen, University of Florida
- Biochar comparisons for depleted, sandy soils
 Tip Top Foods, Ltd.
 Saroop Sandhu, University of Florida
- Enhancing vegetable productivity through transplanting and irrigation
 University of Cape Coast (UCC)
 Prosanta Dash, University of Florida
- Training in value addition of mangoes
 Methodist University College Ghana (MUCG)
 Sidrah Rafique, University of Florida

Ethiopia:

Sweet potato leaves for family nutrition
 Send a Cow Ethiopia (SACE)
 Lauren Howe, UC Davis

Tanzania:

 Promotion of mulching in vegetable production HORTI Tengeru
 Russell Galanti, University of Hawai'i at Mānoa

Rwanda:

- Extending good agricultural practices for horticulture University of Rwanda Kshitij Khatri, University of Florida
- Training smallholder farmers on tropical fruit production and seedlings
 SYBASH, Ltd.
 Sanju Kunwar, University of Florida

Uganda:

- Promoting mango and orange value addition
 Teso Women Development Enterprise, Ltd.
 Claire Adkison, UC Davis
- Improving postharvest handling and irrigation for mushroom and tomato farmers
 Environmental Conservation and Agricultural
 Enhancement Uganda (Eco-Agric Uganda)
 Krishna Bhattarai, University of Florida
- Value addition training of fruit and vegetable farmers
 Ndibwami Integrated Rescue project (NIRP)
 Ranjeet Singh Randhawa, University of Florida
 Raminder Kaur, University of Florida
- Fruit farming for income and nutrition
 Uganda Rural Information and Communication
 Technology (URICT-Uganda)
 Karla Huerta, UC Davis
- Enhancing shelf-life of fruits and vegetables for offseason supply
 Mwino Group
 Annabelle Yu, UC Davis

Nepal:

- Soil and plant health schools for smallholder farmers
 Center for Agricultural Research and Development
 (CARD-Nepal)
 Stewart Wilson, UC Davis
- Kiwi agribusiness training
 Aythos, Inc.
 Bhim Chaulagain, University of Florida