MODEL FOR STUDENT ENGAGEMENT IN INTERNATIONAL DEVELOPMENT

Trellis Fund connects local groups to graduate students

Mall, grassroots organizations in developing countries are well connected with local farmers, but can find it difficult to access research expertise to find solutions to local agricultural problems. Conversely, graduate students with technical agriculture expertise lack outlets to apply their research skills and support projects that could have lasting effects on the livelihoods of smallholder farmers. Connecting knowledgeable graduate students with local organizations is a powerful way to transfer knowledge and technical assistance to local farmers — and is the idea behind the Trellis Fund, a model created by the Horticulture Innovation Lab and UC Davis graduate students. The Trellis Fund model can be easily adapted by other institutions and universities, with scaling as needed.

How the Trellis Fund works

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.

First, organizations in developing countries compete for small Trellis Fund grants for horticulture projects, specifying the type of expert support they seek in a U.S. graduate student. After projects are selected for funding, the Trellis Fund management team matches the organization to a graduate student "Trellis fellow" with related expertise, who will work remotely on the project and also travel briefly to support the organization's work in the project country.



As a UC Davis graduate student, Carrie Teiken worked with the Uganda Environmental Education Foundation on a Trellis Fund project focused on providing information about pest and disease prevention in vegetables for rural farmers.

Benefits

- Trellis Fund projects support smallholder farmers with new solutions and technical expertise on topics from soil health to postharvest processing.
- Small grants can have a big impact when they are used by local organizations who are already well-connected to farmers and the agricultural problems that they are confronting.
- Organizations can build off each activity and receive multiple Trellis Fund grants and graduate student fellows over time.
- Student alumni have continued into careers in domestic agricultural research, agricultural extension, and international agricultural development.

Basic costs

Each Trellis Fund project costs approximately \$8,000 per organization-student pairing, in addition to staffing costs. Costs include:

- \$4,000 grant for the organization
- \$300 fellowship award for the student upon completion
- Approximately \$3,500 for student's airfare and lodging (travel costs can vary)
- Trellis is managed by 1-2 graduate students employed through the university, each working 10-20 hours per week
- Additional support provided by existing staff members related to financial management, travel planning and communications outreach

FEED THE FUTURE INNOVATION LAB FOR HORTICULTURE



HORTICULTURE INNOVATION LAB



Suggested timeline for implementing a Trellis Fund program

RFP development: Allow 1-2 weeks for revisions. Feel free to use the existing Trellis RFP as a template and adjust it according to your needs.

Recruit organizations: 2 months.

Review organization applications: 2-3 months. Design review rubric, recruit reviewers (a combination of grad students and faculty experts works well), distribute proposals and scoring instructions to reviewers. Consider two rounds of reviews, with a smaller committee discussing and selecting.

Interview and notify organizations: 2-3 weeks. Conduct interviews with selected organizations as a final vetting process. Send out acceptance and rejection emails. Provide reviewer comments if organizations request them.

Issue contracts for organizations and revise proposals as necessary: Contracting can take several months. Include reporting requirements with contracts and request any needed revisions from organizations. Provide the organizations with half funding up front, and release the second half when they turn in their mid-term progress report.

Recruit students: 3 months. Create a communications outreach plan at all eligible universities. Recruitment could include in-person info sessions and webinars featuring Trellis student alumni, promotional videos, social media posts, email blasts to different departments, etc.

Select graduate students: 1 month. Students can apply for multiple projects and external reviewers should score each student based on a review rubric. The Horticulture Innovation Lab management team ultimately chooses which student is the best fit for each project, while the organization can weigh in if they wish.

Notify students: 2-3 weeks. Provide comments from reviewers to students who request them. Give students time to decide if they want to accept their Trellis project and consult with the organization to match alternate students if necessary. Introduce student and organizational partners via email. Once confirmed, projects (including lead organizations and students) can be announced via an announcement or blog post.

Trellis Fund seminar: 3-4 months of planning, with 10-12 weeks of classes. Students participate in a 2-hour weekly learning session (in-person or virtual for remote participants), with topics based on project needs. Consider inviting organization representatives to join. Trellis trainings have included monitoring and evaluation; design of surveys, workshop, and extension materials; storytelling and branding; gender and social inclusion; and careers in agricultural development. Students may receive academic credit. We recommend conducting a pre/post survey to assess knowledge gain and "flipping the classroom" by pre-recording lectures and using class time to actively workshop materials and problem-solve together.

Trellis Fund projects: Project activities, including communication among Trellis management, the organizations and student fellows and networking between current and former projects, are expected to take place over the course of 6-12 months, beginning after projects are confirmed and students are matched, around the same time as the seminar.

Student travel and project support: Students provide at least 100 hours of remote consulting work for their partner organization and then travel for in-person work for a few weeks. A mutually convenient time for travel should be planned with the organization (post-seminar), considering seasonality, academic commitments, and project needs. Travel in the middle of the project period allows for sufficient preparation and post-travel follow-up. Students submit monthly work reports, a post-trip report and interview, a final report, and any extension materials they created.

Organization reporting: Organizations commit to submitting a Monitoring and Evaluation Plan (created in collaboration with the student), a mid-term check-in (either video interview or written report), a final report, and submission of any project-related extension materials.

Monitoring and evaluation: Analyze reports, compile and present a semi-annual and annual report to the Horticulture Innovation Lab management team for this round of Trellis Fund projects. Use lessons learned to improve the program in real time and for the future.

For more information:

Learn more about the Trellis Fund at https://horticulture.ucdavis.edu/trellis. For additional questions about starting your own version of the Trellis Fund model, please contact trellisfund@ucdavis.edu.