

A Case Study on Developing Successful International Research and Extension Collaborations Through Seed Grants

Margarita Velandia, Professor; **Carlos Trejo-Pech**, Assistant Professor

Department of Agricultural and Resource Economics

Christopher T. Stripling, Associate Professor

Department of Agricultural Leadership, Education and Communications

Roselia Servín-Juárez

Colegio de Postgraduados, Campus Cordoba

Benigno Rodríguez-Padrón, *Universidad Autónoma Chapingo, Centro Regional Universitario Oriente*

José Jaime Arana-Coronado

Colegio de Postgraduados, Campus Montecillo

The University of Tennessee Institute of Agriculture's (UTIA) Smith Center for International Sustainable Agriculture (Smith International Center) offers internal seed grants to faculty in the Herbert College of Agriculture and the College of Veterinary Medicine to help them develop teaching, research and Extension programs and collaborations with institutions all over the world. The goal of this seed grant program is for teams of UTIA faculty to develop partnerships that may result in funded projects, publications and long-term collaborations with intended impacts in the U.S. and other countries (Smith International Center, 2019). This seed grant program requires interdisciplinary teams of UTIA faculty to collaborate across multiple elements of the tripartite land-grant mission of teaching, research and Extension. The call for faculty seed grant proposals takes place annual-

ly during the spring semester, and the program has been operational since 2016. Grants are reviewed and awarded on a competitive basis. Once funds are awarded, the projects should be implemented over 18 months, beginning in May of each year.

In this publication, we describe how UTIA faculty, in collaboration with faculty from two Mexican universities, designed and implemented a project funded through a Smith International Center seed grant awarded in 2018. We specifically describe how these funds helped develop relationships with Mexican partners. The purpose of this publication is to provide an example of how seed grant opportunities offered by the Smith International Center can be used by UTIA faculty to strengthen international collaborations.



The picture on the left is of Christopher Stripling, Margarita Velandia and Benigno Rodríguez-Padrón, during the visit to the Huatusco coffee region in Veracruz, Mexico, in January 2019. The picture on the right is of Christopher Stripling, José Arana-Coronado, Roselia Servín-Juárez, Margarita Velandia and Carlos Trejo-Pech, during the Mexican partners visit to UTIA in August 2019.

The seed grant: “International Research and Extension Experience with Cooperatives in Developing Countries: The Case of Certified Coffee Cooperatives in Mexico.”

The UTIA team consists of faculty from the Departments of Agricultural and Resource Economics (Carlos Trejo-Pech, principal investigator [PI]; and Margarita Velandia) and Agricultural Leadership, Education and Communications (Christopher Stripling). The seed grant proposal submitted by the team focused on supporting the development of certified coffee production through cooperatives in an economically vulnerable region in the state of Veracruz, Mexico. Specifically, the team wanted to use this funding to further investigate strategies that can help increase or maintain grower engagement with cooperatives and promote the long-term sustainability of cooperatives as a means for certified coffee farmers to access high-value export markets.

Some of the UTIA team members (Trejo-Pech and Velandia) have previous experience working with faculty in Mexico and developed a peer-reviewed journal publication (Arana-Coronado et al., 2019) focused on identifying the factors

influencing coffee grower engagement with cooperatives. This preliminary work helped to better understand the importance of cooperatives in the Mexican coffee supply chain and also identify some challenges to the long-term sustainability of these organizations. To further explore these challenges and identify factors that strengthen coffee cooperatives, additional funding was necessary. These research needs motivated the submission of a seed grant to the Smith International Center.

Planning the Proposal

The UTIA project team started planning for the seed grant proposal at the beginning of 2018, approximately two months before the call for applications was announced. The team first identified potential collaborators in Mexican institutions and invited them to collaborate in the proposal. Colegio de Postgraduados (COLPOS) and Universidad Autónoma Chapingo (UACH) are two leading agricultural-oriented universities in Mexico. COLPOS focuses on graduate

education in agricultural sciences, and UACH offers agricultural education — from high school through doctoral degree programs — in agricultural-related disciplines. Both institutions have historically served, and continue to serve, coffee farmers through research and Extension faculty based in COLPOS Campus Cordoba in Amatlan de los Reyes, Veracruz, and UACH Centro Regional Universitario Oriente (CRUO) regional center in Huatusco, Veracruz. José Jaime Coronado-Arana from the COLPOS, Campus Montecillo, State of Mexico; Roselia Servín-Juárez from the COLPOS, Campus Cordoba in Veracruz; and Benigno Rodríguez-Padrón from the UACH, CRUO in Huatusco, Veracruz, accepted the invitation to collaborate on this project.

The next step was defining how potential funding offered by the Smith International Center could be used to implement the project. Given that these seed grants offer limited funding (up to \$8,000/project), it was important to define how the funding could be used to generate the greatest impact. The principal investigator of the project scheduled a meeting with our Mexican partners to discuss how the research proposal might best satisfy Mexican partners' needs and the needs of potential stakeholders (i.e., coffee growers and leaders of coffee cooperatives).

The project team decided the most productive use of the funds was for the UTIA team to visit the coffee area under study (Veracruz, Mexico; see **Figure 1**) to conduct personal interviews with coffee growers, the leaders of coffee cooperatives in Mexico, and faculty with expertise in coffee production and marketing from Mexican institutions in this region. We decided it was also important to designate some of the funds to collecting primary data from coffee growers



Figure 1. The state of Veracruz, Mexico.

by Mexican partners, after completion of the UTIA faculty visit to Veracruz, Mexico.

We were also interested in exchanging knowledge with Mexican Extension personnel regarding best practices for transferring information to interested stakeholders. Therefore, we scheduled informal interviews with faculty with Extension appointments in COLPOS, Campus Cordoba in Veracruz, Mexico, and UACH, CRUO in Huatusco, Veracruz, Mexico.

Furthermore, we thought it was important for the Mexican partners to visit UTIA after the trip to Mexico, to strengthen the relationship with these faculty and also to discuss results from interviews, potential publications, and potential collaborations and funding opportunities.

Project Implementation

Five cooperatives in the state of Veracruz were identified by Roselia Servín-Juárez and Benigno Rodríguez-Padrón to conduct interviews and listening sessions. Our Mexican partners also identified producers with whom we were going to conduct interviews. Interview and listening session protocols were jointly designed by UTIA faculty and faculty from COLPOS, Campus Cordoba, and UACH, CRUO. Protocols were de-



Christopher Stripling and Margarita Velandia interviewing a coffee cooperative leader Esteban Escamilla-Prado, a specialist in organic coffee production.



Christopher Stripling, Roselia Servín-Juárez and Margarita Velandia talking to Victorino Morales-Ramos, a faculty specialist in coffee quality from the COLPOS, Campus Cordoba.

veloped in English and translated into Spanish. We decided it was important to obtain approval from the University of Tennessee Institutional Review Board (IRB) before traveling to Mexico, to guarantee our ability to use data collected from interviews and listening sessions in future publications. Interview and listening session protocols were approved by the University of Tennessee IRB office before traveling to Mexico.

Faculty from COLPOS, Campus Cordoba, and UACH, CRUO, determined the best dates to conduct interviews and listening sessions based on their availability and the availability of growers and cooperative leaders during the coffee harvesting season. Although not necessary, it was helpful to have at least one UTIA faculty fluent in Spanish to facilitate communication among

UTIA faculty, Mexican partners and stakeholders.

In January 2019, UTIA faculty visited COLPOS, Campus Cordoba in Amatlan de los Reyes, Veracruz, and UACH in Huatusco, Veracruz. UTIA faculty had the opportunity to exchange information about mechanisms and strategies used by UTIA faculty and faculty from these institutions to transfer information to target clientele and stakeholders. We evaluated best practices to transfer information, given limited resources to conduct Extension activities.

While in Mexico, Christopher Stripling, Margarita Velandia, Roselia Servín-Juárez and Benigno Rodríguez-Padrón collected primary data from



Margarita Velandia interviewing a coffee grower.



Roselia Servín-Juárez, Christopher Stripling and Margarita Velandia during a listening session with coffee growers and leaders from a coffee cooperative.

coffee cooperative leaders and coffee growers in the Veracruz region through personal interviews and listening sessions. Given time and resource constraints (UTIA faculty trip lasted five days), only a few interviews were completed during the visit.

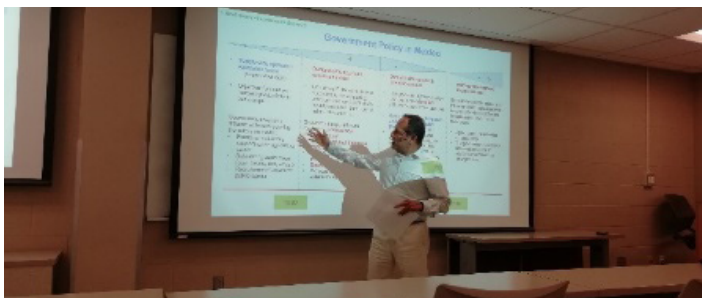
Hearing directly from coffee growers, leaders, researchers, cooperative administrators, processors and commercialization intermediaries helped the team expand research efforts in the area of coffee cooperatives in Mexico. Additionally, primary data collected during this trip helped the team to refine a survey instrument that was later used by Roselia Servín-Juárez and Benigno Rodríguez-Padrón to conduct a survey of coffee producers in two regions in the state of Veracruz.

Benigno Rodríguez-Padrón and Roselia Servín-Juárez continued the collection of primary data of coffee growers in the Veracruz region between January and July 2019, using the previously mentioned survey instrument. The Smith International Center seed grant funding supported some of the survey data collection through travel funds for students collecting data, but the majority of the survey data collection was funded through Mexican partners' funds administered by COLPOS and UACH. A total of 195 farmer surveys were completed.

The external collaborators (Arana-Coronado, Servín-Juárez and Rodríguez-Padrón) visited UTIA in August 2019. Their visit allowed us to discuss preliminary analyses of data collected in Mexico, refine research questions, plan for additional data collection efforts, and discuss potential publications. During their visit, the faculty from Mexico participated as presenters in the Smith International Center's Fall 2019 Seminar Series entitled "Extension in Mexico: Serving Coffee Producers. History, Current Activities and Challenges, and Future Opportunities."

Output and Future Plans

The seed grant allowed faculty members to strengthen international partnerships with Mexican faculty. Currently, Carlos Trejo-Pech, PI of the seed grant, is hosting Roselia Servín-Juárez as a visiting scholar until August 2020. Her visit was funded through a competitive program supported by COLPOS and the Consejo Nacional de Ciencia y Tecnología (CONACYT) of Mexico to help faculty on sabbatical leave strengthen research collaborations outside of Mexico. Roselia Servín-Juárez's visit was the result of the collaboration that the seed grant funded via the Smith International Center. In June 2020, Roselia Servín-Juárez will be presenting results from a research manuscript, analyzing a subset of the coffee survey data at the 30th International Food and Agribusiness Management Association Meeting in Rotterdam, Netherlands.



José Arana-Coronado presenting at the UTIA seminar.



José Arana-Coronado, Roselia Servin-Juárez and Benigno Rodríguez-Padrón visiting the University of Tennessee.

Currently, there are two journal manuscripts under development that are using the coffee survey data that was partially funded by the seed grant.

Finally, the project team is exploring opportunities to continue the work they started using seed grant funds. Staff from the Smith International Center have helped the team search for funding opportunities. A preproposal was developed, with the help of Carlos Trejo-Pech and Margarita Velandia, and submitted by Roselia Servín-Juárez to a Partnership for Enhanced Engagement in Research (PEER) grant program, funded through the United States Agency for International Development (USAID) and other U.S. government agencies.

Recommendations for Submission and Implementation of Seed Grants

Faculty interested in submitting a proposal to the Smith International Center's Faculty Seed Grant program should:

- Identify and communicate with potential international partners at least two months before submitting the proposal.
- Involve international partners in the development of the proposal.
- When possible, involve a UTIA faculty member familiar with the culture and language of the country focus of the proposal in the development and implementation of the proposal.
- If primary data collection is one of the proposed activities, make sure you communicate with the University of Tennessee IRB office a few months before the data collection takes place. Even if you propose collecting

primary data through informal interviews, the ability to use this data in future publications and grant proposals may be conditional to IRB approval.

- When possible, dedicate a percentage of your budget to allow international partners to visit UT. A follow-up visit with international partners may help solidify the relationship with them and help the development of publications and grant proposals.

Smith International Center Seed Grants Information

For additional information about seed grant opportunities offered through the UTIA Smith International Center for International Sustainable Agriculture, and to see other examples of projects funded through these seed grant opportunities, visit ag.tennessee.edu/international/Pages/SeedGrants.aspx. You can also contact the Smith International Center team for additional information ag.tennessee.edu/international/Pages/who-we-are.aspx.

References

University of Tennessee Institute of Agriculture (UTIA) Smith Center for International Sustainable Agriculture. 2019. "Faculty Seed Grants for International Programs." Available online at <https://bit.ly/2TaMIEh>.

Arana-Coronado, J.J., C. Trejo-Pech, M. Velandia, and J. Peralta-Jiménez. 2019. "Factors Influencing Organic and Fair Trade Coffee Growers Level of Engagement with Cooperatives: The Case of Coffee Farmers in Mexico." *Journal of International Food & Agribusiness Marketing* 31(1): 22-51.



AG.TENNESSEE.EDU