

Are they *really* living better? A program evaluation of community engaged research.

Project narrative

Purpose and objectives. The purpose of this grant application is to request funding to support a research collaboration between a K-State research team and a non-governmental organization (*Vivamos Mejor*, [“**We Live Better**”]) in Guatemala to conduct a follow-up program evaluation of their innovative multi-pronged health improvement project: *Proyecto Salud Nutricional Comunitario* (Community Nutritional Health Project). The purpose of this proposal is to provide funding for the K-State educational research and extension team to develop a follow-up evaluation, train *Vivamos Mejor* staff in how to carry out the follow up assessment data collection, help with initial data collection, use generated data to statistically analyze the impact of the program on participant health, assess if participants met program objectives, and offer suggestions for future improvements.

Background. *Vivamos Mejor* is a non-governmental organization headquartered and operating community engagement programs in the department of Solola, in the Highlands area of Guatemala. The mission and vision of *Vivamos Mejor* is to improve the quality of life in the Guatemalan Highlands through promoting sustainable development and facilitating community self-determination. The majority population of indigenous Maya living in this area are more likely to be stunted, obese, and have poor dietary diversity compared to urban and non-indigenous peers. If these conditions are present in mothers, they place infants and children at higher risk of the same. In an effort to not only improve health and nutritional status, *Vivamos Mejor* is addressing these complex needs through a comprehensive educational program (Community Nutritional Health Project) that aims to increase dietary diversity through nutrition and sustainable agricultural education; seed-sharing and revival of traditional agricultural practices to reconnect indigenous women with their heritage; and education on home food safety and hygiene practices. Now as their efforts draw to a close, they have requested help from K-State to assess the results of the project so that they can continue to expand the project to other communities. They need to know if their innovative approach improved capacity and health in their participants.

Needs Assessment. The Department of Food Nutrition Dietetics and Health identified the potential need for assistance during a visit for our Guatemala Education Abroad Program in April 2018. The organization did not have the expertise and funding to hire outside program evaluators for their follow up assessment of their Community Nutritional Health Project. Moreover, this project is the future of *Vivamos Mejor*. Given the importance of this project to their future, it is important that they have an outside assessment of the program impact. This will ensure that potential bias is minimized and that they have a true understanding of the results. There is an existing relationship between *Vivamos Mejor* and Kansas State University due to our Guatemalan Education Abroad Program housed in the Department of Food Nutrition Dietetics and Health. We felt that assisting in their follow up evaluation would provide the benefit of content expertise to their program while at the same time providing a research opportunity for Kansas State University didactic and extension faculty and students.

Collaborative partners.

- *Principle Investigator:* Haijun Kang, PhD, Associate Professor, College of Education. Expertise areas: Program planning and evaluation, educational technology, multicultural adult learning and development.
- *Co-Principle Investigator:* Kathleen Hoss-Cruz MPH, RDN, Instructor, Department of Food, Nutrition, Dietetics, & Health. Expertise areas: quantitative research, maternal and infant nutrition, Spanish, nutrition education.

- *Collaborator:* Sandy Proctor, PhD, MS, RDN, Assistant Professor, Department of Food, Nutrition, Dietetics, & Health and Extension Specialist, Kansas State University Research & Extension. Expertise areas: maternal and child health, international research, nutrition education, qualitative research.
- *Collaborator:* Linda Yarrow, PhD, MS, RDN, Assistant Professor, Department of Food, Nutrition, Dietetics, & Health and Director of the Guatemalan Education Abroad Program. Expertise areas: nutrition education, international education abroad, program coordination.
- *Collaborator:* Bryan Reyna and Eduardo Secaira Juarez, MD, Directors, Community Nutritional Health Project, Vivamos Mejor. Expertise areas: agricultural and nutrition education in the local setting.
- *Collaborator:* Guillermo Gonzales, Program Coordinator, Guatemala Education Abroad Program, and Development Officer, SHARE Guatemala. Contribution: on-the-ground support and coordination of stay for researcher; cultural liaison and interpreter.

Engaged activities. The activities of this grant will include creation of the quantitative methodology of the follow-up study of the Community Nutritional Health Project including surveys and anthropometric assessment procedures, training *Vivamos Mejor* staff on quantitative procedures, initiating early data collection, data analysis, and compiling a report of the results for *Vivamos Mejor*.

- Dr. Haijun Kang will provide oversight to the project, will provide guidance on program training and evaluation including assessment development, delivery, analysis, and reporting.
- Kathleen Hoss-Cruz will be responsible for:
 - adapting baseline surveys to the follow up study and ensuring anthropometric methodology is sound;
 - traveling to Panajachel, Guatemala to personally train *Vivamos Mejor* staff in the methodology;
 - working with *Vivamos Mejor* staff on initial data collection to test and observe procedures
 - performing the data analysis, compiling results, and sharing them with *Vivamos Mejor*.
- Dr. Sandy Proctor will provide consultation on assessments involving nutrition knowledge, nutrition education, anthropometry, and recommendations for program improvement.
- Dr. Linda Yarrow and Guillermo Gonzales will provide coordination and support for research travel and engagement with non-governmental organizations. Mr. Gonzales coordinates communication and agreements between Kansas State University and *Vivamos Mejor*.
- Students from K-State, as part of their own life-changing Guatemalan Education Abroad experience, will help collect follow-up data.
- *Vivamos Mejor* staff will collect data on the impact of their Community Nutritional Health Project since they are best equipped to work with the local population and already have relationships established with participant communities.

Timeline and benchmarks

- July 2019: methodology creation, training, data collection begins.
 - *Benchmark:* Methodology is finalized: surveys written and validated, anthropometric measurement procedures established
 - *Benchmark:* Vivamos Mejor staff is trained and data collection begins: staff are trained on how to carry out surveys and anthropometric measurements to ensure a valid follow-up study; Kathleen Hoss-Cruz facilitates early data collection
- Fall 2019: data collection; finalization
 - *Benchmark:* Vivamos Mejor staff engage in and complete data collection through the fall of 2019
 - *Benchmark:* University educational research team and Vivamos Mejor staff in-person meeting to finalize data collection

- December 2019/January 2020: data analysis, results report
 - *Benchmark*: Data analyzed, compiled, recommendations made, and shared with Vivamos Mejor

Impact

- **K-State Level**
 - This project will contribute K-State 2025 through a multi-disciplinary research endeavor in an international setting
 - This project will enhance the brand of the university and increase K-State's visibility internationally
 - Exploration of the development of an international cross-disciplinary educational research and extension team
 - K-State students will benefit through involvement with research in an international setting and exposure to a community-engaged nutrition education program
 - The program can be adapted and tested in other areas of Guatemala and in other low-and-middle income countries by collaborations with similar missions
- **Partner level:**
 - *Vivamos Mejor* will receive a valid and reliable quantitative methodology and an unbiased, critical assessment of their program
 - The success of this program will help them continue to receive funding and to expand their reach beyond the participants of the original study
- **National/International Level:**
 - This program will generate new knowledge within the global health and nutrition fields of community-engaged, multi-pronged nutrition and health education efforts and their impact on participants.

Assessing and publishing the results of this program will provide a blueprint for other community-engaged education and research programs in similar settings.

Funding. The estimated cost of the project is \$8,346.00. Estimated matching funds are \$2,000 leaving a remainder of \$6436.00 requested in this grant application.