

Brief Summary

Global Grant 2125543

Adapting Family-based Agriculture to Climate Change Through Youth Leadership, in Rabinal Guatemala, V2

Host Club and Sponsor: Guatemala del Este, Michael Bostelman, District 4250

International Club and Sponsor: Rotary Oakland, Peter Sherris, District 5170

Participating Organization and Director: Voces y Manos, Michael Bakal

Experience and Reliability

Rotary Oakland has worked with Guatemala del Este on one prior global grant. They have carried out all required functions in a prompt and reliable manner. Michael Bostelman personally funded \$5,000.

Rotary Oakland has acted as international sponsor of three global grants yearly for several years and contributed to others. Peter Sherris has acted as international sponsor on six, has advised on many others and is a past president.

Rotary Oakland has funded and supported Voces y Manos for a decade. We have helped Michael at various points to help make Voces more sustainable and impactful. Two years ago we worked with Voces to create a global grant and Voces is successfully managing it and has collaborated on an interim report to RF that has been accepted.

Description of Proposed Project

This project is a follow-on to the successful implementation of GG 1984528 which was proposed to Rotary as year one of a three year program, the remaining two years to be funded by additional global grant(s).

The goal is to help farmers and their households in Rabinal, Baja Verapaz, Guatemala improve their economic, nutritional and future welfare by building capacity in sustainable agriculture techniques to better adapt to climate change's profound impact on farm productivity and net income.

The mechanism for achieving this goal is the training and support of local young people from Rabinal, ages 18-25 as sustainable agriculture technicians in their own communities. These technicians were chosen in the first year of the grant through a competitive application process and will continue to carry out work in the follow-on year. Applicants were selected based on their relevant prior experience working on community-based sustainable agriculture projects, commitment to sustainable development, and fluency in the local Mayan language. The year 1 team consisted of two technicians and an intern. One of the two technicians and the intern were graduates of Voces y Manos' robust three-year leadership program.

In addition to hiring and training the technicians in the first six months, the project achieved the following of its goals: 1) Developed, trained staff to perform and implemented a baseline survey in 228 families in 7 communities; 2) Conducted poultry management workshops and vaccinated 7,800 chickens;

3) Delivered 28,000 coffee plants and 18 points of coffee seeds, and began capacity building workshops in coffee cultivation; 4) Conducted 18 distinct trainings with 442 participants; As the second half of the first year began, technicians were 5) providing technical assistance in soil conservation; 6) delivering additional coffee plant seedlings; and 7) preparing a cattle vaccination program.

In years 2-3, the intern will be promoted to a technician, and a new intern will be hired from Voces y Manos' latest cohort of Vocesy Manos graduates. Thus, the team will consist of three technicians and an intern who work under the supervision of Voces y Manos' Agricultural Director to carry out training for 250 beneficiary families of the project in seven communities. Training will focus on implementing sustainable agricultural practices that improve productivity, income, nutrition, and increase climate resilience. Practices include adoption of soil and water conservation techniques, diversification of land parcels, reforestation, and use of organic fertilizer to restore degraded soil and improve crop yields. These agroecological practices have been scientifically proven to enhance climate resilience by substantially improving the water retention capacity of soil. They are also culturally appropriate to the local community, and therefore more likely to be sustained than exogenous practices.

To improve household income, a primary strategy will be the introduction of locally appropriate commercial crops which are resistant to the drying effects of climate change, as well as vaccination of poultry and larger livestock to ensure their survival. Growing a diversity of fruits, vegetables, and commercial crops with local demand—as documented in the community assessment—can contribute to improved economic well-being and nutrition. Skills and strategies learned will allow participants and local community leaders with whom we work to continue practicing sustainable agriculture methods, increasing their resilience to climate change, and thereby improving families' economic conditions.

Community needs assessment

A community assessment was conducted per Rotary grant requirements. This included focus group discussions with a variety of stakeholders (community leaders, Community Council members, farmers, women) in each community, as well as a quantitative market analysis in the Rabinal marketplace that looked at the supply and demand for products being introduced by the project. Qualitative and quantitative data was analyzed and synthesized to identify the specific situational needs.

The community needs assessment is being updated with qualitative and quantitative data collected in the Rabinal community in early-mid 2021. Quantitative data comes from a household baseline assessment conducted between January and April 2021 with 228 households, and six focus groups are currently being analyzed with an age- and gender diverse sample of residents from each of the communities participating in the project.

Quantitative and qualitative data collection identified the following needs:

- Limited economic and nutritional returns from farming due to drought-induced crop failures.
- Low quality/low-fertility soil from over-farming
- Soil erosion from unsustainable farming practices
- Malnutrition of families due to low income and low-diversity food intake
- Limited access to water for agricultural purposes due to climate change
- Lack of access to high quality farming inputs, such as fertilizer and seeds

- Vulnerability to famine as a result of climate change and limited government capacity
- Loss of traditional cultural practices due to globalization
- Loss of interest in farm work among young people due to economic needs and forced migration

Sustainability

To increase buy-in, legitimacy, and ownership of the work prior to its commencement, VyM worked to gain approval from local community councils in each of the seven participating communities. The agricultural technicians will continue to work with these councils, women's groups, and youth groups to sustain core activities. Voces y Manos has been working in partnership with these communities for a decade and has developed an extremely high level of trust with communities. Unlike the vast majority of foreign sponsored projects, technicians are fluent in the local Maya-Achí language and some even live in the beneficiary communities. This further cements the trusting relationships that are essential to Voces y Manos' work. Community members were involved in the initial project planning process and the community needs assessment, and continue to be consulted on an ongoing basis.

This project benefits from being part of a growing ecosystem of local organizations in the Rabinal area working on agro-ecology. A close partner is the *campesino* (farmer) coffee cooperative organized in the community of Xesiguán, one of seven participating communities. Voces y Manos trained farmers work collaboratively with the cooperative through technical assistance workshops. Cooperation between the two entities is holistic and integrated: the improved soil and technical assistance workshops help support the practices of Xesiguán farmers, and the farmers' cooperative then subsequently assists Voces y Manos' farmers to bring commercial crops (like coffee) to market.

| GG 1125542 DETAILED BUDGET (2 YEARS) | | | | | |
|--------------------------------------|------|------------------|----------|-------------------|------------------------------------|
| CATEGORIES | UNIT | COST (Quetzales) | QUANTITY | TOTAL COST | NOTES |
| LABOR | | | | | |
| Project Director/Agronomist | Unit | 5,000.00 | 24 | 120,000.00 | Full salary is 7800 |
| Project Administrator (Finance, | Unit | 1900 | 24 | 45,600 | Full salary is 3800 |
| Technician Stipend | Unit | Q 3,500.00 | 24 | 84,000.00 | |
| Technician Stipend | Unit | Q 3,500.00 | 24 | 84,000.00 | |
| Technician Stipend | Unit | Q 3,500.00 | 24 | 84,000.00 | Addnl tech from year 1, was intern |
| Employment benefits | Unit | Q 57,938.48 | 1 | 57,938.48 | Health ins, vacation time, etc. |
| intern | | | | | Voces y Mano will cover |
| Pension/social security paymen | Unit | Q 1,587.18 | 24 | 38,092.32 | Required by law |
| Sub-Total | | | | 513,630.80 | |
| Equipment and office-related | | | | | |
| Computer | | | | | |
| Laptop | Unit | Q 6,500.00 | 1 | 6,500.00 | |
| Other technology | | | | | |
| Projector | Unit | | | | Already possess |
| Audiovisual | | | | | |
| Printer | Unit | Q 1,800.00 | 1 | 1,800.00 | |
| Office-related | | | | | |
| Desk & Chair | Unit | Q 1,605.00 | 1 | 1,605.00 | For new technician |
| Cabinets | Unit | | | | already possess |
| Blackboard | Unit | | | | already possess |
| Fan | Unit | Q 550.00 | 1 | 550 | |
| Sub-Total | | | | 10,455.00 | |
| Computer maintenance | | | | | |
| Antivirus software | Unit | Q 1,400.00 | 1 | Q 1,400.00 | |
| Sub-Total | | | | 1,400.00 | |
| ADMINISTRATIVE EXPENSES | | | | | |

| | | | | | |
|---|--------|-------------|----|-------------------|---|
| Office & Teaching materials | Unit | Q 100.00 | 24 | 2,400.00 | |
| Printer toner | Unit | Q 600.00 | 5 | 3,000.00 | |
| Rotary Banner for publicity | Unit | Q 600.00 | 2 | 1,200.00 | Standard for project work in Guatemala. |
| Shipping | Unit | Q 150.00 | 10 | 1,500.00 | Delivery of materials from Guatemala City |
| Communications | | | | | funded by VyM separately |
| Total | | | | 8,100.00 | |
| Vehicles | | | | | |
| Motorcycle | Unit | Q 35,000.00 | 2 | 70,000.00 | Motorcycle travel essential, stop pairing for safety, invest for sustainability, eliminate personal expenses. |
| Maintenance labor | Unit | Q 350.00 | 12 | 4,200.00 | |
| Parts for motorcycle maintenar | Unit | Q 600.00 | 5 | 3,000.00 | |
| Sub-Total | | | | 77,200.00 | |
| GENERAL EXPENSES (Supply and materials) | | | | | |
| Agricultural Materials | Unit | Q 90,000.00 | 1 | Q 90,000.00 | Seedlings, seeds, community garden related, tools, etc. |
| Animal Husbandry | Unit | Q 40,000.00 | 1 | Q 40,000.00 | Vaccinations and related, coop enclosure wire, etc. |
| Natural resource Management | Unit | Q 30,000.00 | 1 | Q 30,000.00 | Seeds and seedlings, cookstoves, tools, etc. |
| Soil Conservation | Unit | Q 50,000.00 | 1 | Q 50,000.00 | Organic composting, tools for barrier formation, seeds and seedlings |
| Other educational activities | Unit | Q 10,000.00 | 1 | Q 10,000.00 | Fees for technical assistance, nutrition materials |
| Water and sanitation programr | Unit | Q 40,000.00 | 1 | Q 40,000.00 | Tubing, water tanks, greywater systems |
| Sub-Total | | | | 260,000.00 | |
| TRANSPORT (Paying Drivers when large vehicle needed) | | | | | |
| Transport of materials for progr | Events | Q 300.00 | 15 | Q 4,500.00 | Transport of equipment (tubes, wire, tanks, etc.) and seedlings |
| Community assemblies | Events | Q 3,000.00 | 3 | Q 9,000.00 | Transport of community members to annual focus group meetings |

| | | | | | |
|---|--------|------------|-----|-------------|--|
| Trainings/workshops of agricult | Events | Q 2,000.00 | 2 | Q 4,000.00 | For annual training of Technicians |
| Sub-Total | | | | 17,500.00 | |
| TRANSPORT (Fuel & Gas) | | | | | |
| Technical assistance events | Unit | Q 250.00 | 108 | Q 27,000.00 | Transport of Technicians to communities |
| Technical team meetings | Events | Q 1,000.00 | 2 | Q 2,000.00 | annual team strategic planning retreat |
| Delivery of quarterly reports to | Events | Q 400.00 | 9 | Q 3,600.00 | Four times per year and an additional annual visit. |
| Sub-Total | | | | 32,600.00 | |
| FOOD | | | | | |
| Trainings, workshops, talks and demonstration pract | | Q 800.00 | 6 | Q 4,800.00 | |
| Community assemblies (Promoters) | | Q 800.00 | 4 | Q 3,200.00 | |
| Technical team (Training) | | Q 500.00 | 6 | Q 3,000.00 | |
| Institutional meetings | | Q 300.00 | 8 | Q 2,400.00 | |
| Delivery of quarterly reports to Guatemala City | | Q 300.00 | 9 | Q 2,700.00 | Four times per year and an additional annual visit. |
| Sub-Total | | | | 16,100.00 | |
| LODGING | | | | | |
| Community promoters | | Q 90.00 | 50 | Q 4,500.00 | |
| Technical team | | Q 100.00 | 30 | Q 3,000.00 | Travel for multi-day workshops and data collection |
| Sub-Total | | | | 7,500.00 | |
| COVID-19 | | | | | |
| Purchase of health & safety sup | Unit | Q 2,200.00 | 2 | Q 4,400.00 | |
| Sub-Total | | | | 4,400.00 | |
| MONITORING AND EVALUATION | | | | | |
| Midline data collection | Events | Q 300.00 | 3 | Q 900.00 | Tablet depreciation and/or replacement, focus group expenses |
| Other | | | | Q - | |
| Sub-Total | | | | 900 | |
| FINANCIAL SUMMARY | | | | | |
| Total costs of the project in quetzales | | | | 949,785.80 | |

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|---|--|--|--------------|--|
| Total project costs in dollars (7.58Q=1USD) | | | \$125,301.56 | |
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