ORGANIZATION AND PROJECT NAME: Community Agroecology Network (CAN) Youth Leadership and Education for Food Sovereignty and Sustainable Agriculture – Phase 2

SUMMARY: Alleviate food insecurity and strengthen local food systems – working with partners VIDA AC (Veracruz, Mexico) and UCA San Ramon (San Ramon, Nicaragua)

IMPLEMENTATION PERIOD: 2011-2016 (two project phases)

SOURCE DOCUMENT: Year 5-Annual Report: March 1, 2015-February 28, 2016

COMMENTS: << COMMENTS >>

I. GLOBAL INDICATORS

Target	Metric	Number Reached to Date if applicable)	Comments
Number of people engaged	Number of total direct participants/beneficiaries in the funded program	1597 people 234 households (252 families) (139 HH Veracruz, 95 HH San Ramon)	Defined as: Number of direct participants/ beneficiaries
Number of people who have advanced in target livelihood factors	Number of total direct participants/beneficiaries who meet at least one of the IMPACT conditions (ensure that the sum reported is total unique individuals)	1597 people 234 households	Defined as: Number of coffee households who have adopted new Good Agricultural Practices promoted by the project
Number of indirect beneficiaries	Number of indirect participants or indirect beneficiaries of the funded program (with definition)	1225 people 256 households (269 families) (167 HH Veracruz, 89 HH San Ramon)	Defined as: -Community members/households benefitting from increased food availability through purchase or informal trade; -Family members of school garden children; -Cooperative and community members benefitting from seedbanks and CADAs
Leveraged Funding	Amount of non-Keurig funding leveraged to implement program activities (in US$)	$307,761.12 (Phases 1&2 combined)	-CAN's AgroEco® Coffee Program Special Funds for Women's Unpaid Labor and Sustainable Agriculture 2013-2015: **$12,761.12** -Individual Donor Matching Grant Campaign for International Youth Network Training Activities

			2011-2015: **$96,000** -Other project counterpart contributions: 2011-2015: **$81,000** (Phase 1) and **118,000** (Phase 2)

II. FOCUS AREA INDICATORS: WHOLE-FARM PLANNING AND PRODUCTION

Livelihood Factors	Type	Indicators of Achieving Advancement	Reached to Date (if applicable)	Comment
Access to agronomic assistance and/or training	OUTPUT	Number of coffee producers who have received agronomic assistance and/or training as a result of the program (M/W)	Total: 625 Men: 93 Women: 245 Youth and children: 287	GAPS Promoted: • Soil fertility (use of biofertilizers, effective microorganisms, compost) • Agroecological production • Mineral foliar applications • Climate change impacts
Adoption of Good Agricultural Practices (GAPs)	IMPACT	Number of coffee households who have adopted new Good Agricultural Practices promoted by the project (list of eligible GAPs defined by project/sector leaders based on local context)	234 households 1597 people **BASIS OF IMPACT INDICATOR ABOVE**	San Ramon: 95 HH (95*100%) Veracruz: 136 HH (136*100%)
Average Yield/Ha	OPTIONAL	Percent of farmers who report at least a 20% yield improvement		Average household coffee yields have dropped from 18.2QQ in 2011 to 10.2QQ in 2014 (San Ramon) and 8.7QQ in 2012 to 8.6QQ in 2014 (Veracruz) Roya impact 65% (SR) and 55% (V)
Training on income diversification	OUTPUT	Number of coffee producers that have received training on income diversification (M/W)	Total: 327 Men: 93 Women: 234	Families trained on home gardens (234 families), chicken and egg production for protein (156 families), fruit tree diversification (234 families). selling/trading at farmers markets and CADAs (76

				women)
Adoption of diversified income sourced	IMPACT	Number of households that have incorporated at least one new source of income	200 households 1,400 people (~7pp/HH average in program area)	San Ramon: 61HH Veracruz: 139HH *San Ramon: 79% of households have diversified income from farmers markets, rural enterprises, or informal sale, a dramatic increase from the 2011 rate of 2%.* *Veracruz: 100% of households have diversified income from vegetable or fruit sales, rural value added enterprises, up dramatically from 0% in 2011 (see below).* New Income Types: • Home gardens (consumption and sale at farmers markets) (234HH- of which 200 sell produce) • Chicken and egg production (140 HH) • Fruit trees (6,475 fruit trees planted among 234HH) • Dehydrated fruit/marmalades, natural medicines, women's coffee brand (FEMCAFE), honey, coffee (89HH)
Average new income or savings per year (by household)	OPTIONAL	Income resulting directly from the economic activity supported by the project and additional to the individual's or household's income prior to the project	USD$108.21 (Veracruz); USD$33.76 (San Ramon)	San Ramon: $33.76 (C$941) per year Veracruz: $108.21 (M$1853) per year
Access to food security and/or nutrition training	OUTPUT	Number of people who have received training on food security or nutrition as a result of the program (M/W)	Total: 625 Men: 93 Women: 245 Youth and children: 287	287 children and youth are learning about nutrition and food security in school gardens • School gardens • Home gardens

				• Seed saving, selection and storage • Food storage and distribution centers (CADAs) • Nutrition and food preparation • Food conservation and preservation
Improved food security	IMPACT	Number of households who have reported a decrease in food insecurity from baseline (as measured by the Household Hunger Scale)	# households: 133 76 in San Ramon 57 in Veracruz	MAHFP improved in San Ramon to 9.7 months in 2015 from 7.37 months in 2011. MAHFP maintained in Veracruz from 10 in 2012 to 10 in 2015.
Percent change in little, moderate, and severe hunger	OPTIONAL	Percent of participants reporting a change in hunger levels based on baseline	56.4%	
Improved nutrition and/or home food production	IMPACT	Number of households who have reported improved dietary diversity from baseline (as measured by the Household Dietary Diversity Score)	208 households 1,456 people (~7pp/hh average in program area)	San Ramon: 95HH (100%) Veracruz: 113HH (81.3%) *SR: 82% of families consuming more than 6 food groups per day, a significant gain from the 2011 rate of 12% of families* *V: 100% families consuming more than 6 food groups daily in 2015.* Dietary diversity score has fluctuated from 2011 to 2014, with a reduction in 2014 due to severe drought and impact of roya. SR: Avg # FG 3.68 (baseline) 7.46 (2015) VC: Avg # FG 9.8 (baseline) 8.5 (2015)

III. FOCUS AREA INDICATORS: WATER STEWARDSHIP AND CLIMATE RESILIENCE

Livelihood Factors	Type	Indicators of Achieving Advancement	Reached to Date (if applicable)	Comment
Access to improved water services	IMPACT	Number of households with access to improved water services for individual consumption	88 households	Levels of Service: Irrigation systems installed: 35 SR, 15 VC Water catchment systems installed: 46 VC, 9 SR Household water filters installed: 44 VC, 40 SR
Access to training on Water. Sanitation, and Hygiene (WASH) (M/W)	OUTPUT	Number of people trained in WASH practices as a result of the program (M/W)	Total: 84 Men: 0 Women: 84	Practices promoted: • Household water treatment (84 filters)
Improved household water and hygiene practices	IMPACT	Number of households who have adopted new WASH practices as a result of the program (list of eligible practices defined by project/sector leaders based on local context)	84 households	84 households implementing household water filtration treatment
Use of improved wet-milling technology	OPTIONAL	Number of mills that have completed upgrades in water efficiency systems; volume of coffee cherry processed by upgraded wet mills; volume of water that is saved	# mills N/A	
Access to agronomic assistance promoting water or climate smart techniques (M/W)	OUTPUT	Number of coffee producers who have received agronomic assistance and/or training related to climate and/or water smart agriculture (M/W)	Total: 625 Men: 93 Women: 245 Youth and children: 287	GAPs promoted: • 50 irrigation systems • 47 rainwater catchment systems
Adoption of climate or water-smart agricultural practices	IMPACT	Number of households that have adopted new water- or climate-smart GAPs (list of eligible GAPs defined by project/sector leaders based on local	234 households	GAPs promoted: • drip irrigation • water harvesting • mulching and cover cropping

		context)		• Soil fertility improvement (use of biofertilizers, effective microorganisms, compost)
Improvements in water and land stewardship	OPTIONAL (BALANCE)	Number of hectares of land under new water- or climate- smart management practices; change in volume of water flow (liters of water/year), if available	# ha N/A	
Improvements in water quality of community water source as a result of water stewardship activities	OPTIONAL (Connect)	Number of people who benefit from water stewardship or capacity building activities related to their primary drinking source	N/A	

IV. FOCUS AREA INDICATORS: STRONG RURAL ORGANIZATIONS

Livelihood Factors	Type	Indicators of Achieving Advancement	Reached to Date (if applicable)	Comment
Use of improved services offered by target organization	IMPACT	Number of households using new services offered by target organizations	333 households	194 HH in San Ramon including indirect beneficiaries utilizing CADAs and seedbanks (this is projected to increase to 290 in 2016 as CADAs expand grain storage capacities). 129 HH in Veracruz
Improvements in organizational diagnostic score	OPTIONAL	Number of producers actively affiliated with target organization (from baseline)	N/A	

V. OTHER KEY INDICATORS THE PROJECT IS TRACKING (not to exceed 3 additional metrics)

59	Indicators of Achieving Advancement	Reached to Date	Comments
Youth Leadership	Number of Youth Leaders developed by the project	22 youth leaders (14 San Ramon, 8 Veracruz)	Six youth leaders and 2 project managers from Veracruz and San Ramon participated in the 5th Annual International Youth Exchange for Food Security & Sovereignty; 20 additional youth leaders and 4 project leaders including leaders from PRODECOOP and CIIASDENIC in Nicaragua, and another CAN partner in Mexico, participated in two thematic exchanges in 2015 focused on Cooperativism, group facilitation and conflict management; women-led rural enterprises; and water catchment and greywater recycling for climate change resilience.
Community-based management capacity	Number of local commissions formed, trained, and operating to manage established food security and agroecology strategy infrastructures	12 commissions operating	7 seedbank/CADA commissions operating in SR 5 local food sovereignty committees operating in Veracruz
Women´s economic empowerment	Women economically empowered through women-led rural enterprises promoted by the project.	109 (59 in Veracruz, 55 in San Ramon)	Does not include informal trade or sale of produce, which we have not yet quantified.

Phase 2 Year 3-Annual Report: March 1, 2014-February 29, 2015

Project: Youth Leadership & Education for Sustainable Agriculture and Food Sovereignty Phase 2

Organization: Community Agroecology Network (CAN) in collaboration with our partners UCA San Ramon and VIDA AC

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I. Executive Summary

The Youth Leadership and Education for Sustainable Agriculture and Food Sovereignty Project (Youth Leadership & Food Sovereignty for short) was launched in 2011 as a collaborative initiative of Community Agroecology Network (CAN), the Union of Cooperatives San Ramon (UCA San Ramon) and Vinculación y Desarrollo Agroecológico en el Café (VIDA AC). The project aims to build climate change resiliency, alleviate food insecurity and seasonal hunger, and strengthen livelihoods among 234 coffee farming families, and build sustainable local food systems in 12 coffee-growing communities in Nicaragua and Mexico through education and the empowerment of local youth leaders in these communities. The first phase of the project focused on the design of a participatory monitoring and evaluation system, implementation of a comprehensive baseline study of food insecurity in the communities, the consolidation of the project's youth- and women- centered methodology, capacity building in agroecological food production, the establishment of homegardens, and reforestation with fruit, wood, and fuel trees. The second phase built upon these foundations and incorporated lessons learned from the first phase, by strengthening the focus on women's income generation, youth capacity building and leadership training, nutrition education, water access for consumption and irrigation during the dry season, soil health, access to quality seed, and access to basic foods during the thin months. CAN's integrated approach has increased food security, expanded GAPs within coffee production, strengthened local food systems and built the capacities of youth, women, and organizations, with the ultimate goal of creating a viable future in coffee production for the next generation of coffee farmers.

The beginning of Phase 2 in 2013 coincided with the crisis of la roya, which was followed in 2014 by a two-year drought that severely impacted food production in the Northern Nicaragua. These compounding shocks clarified our understanding of the positive mitigating effects of the strategies we were promoting, and crystalized our vision of this project towards climate change resiliency and sustainable livelihoods. Food security and sovereignty align with this vision by sharing a focus on the empowerment of families and communities to ensure availability and access to food at all times of year in any year. Similarly, the lens of climate change resiliency allows us to look at the entire panorama of factors affecting food security – from climate to political structures to the quality of the soil. The project took a holistic approach to improving household climate change resiliency, food security, and livelihoods, seeking to promote personal empowerment of women and youth as change agents in their families and communities alongside increased access to and availability of basic and more diverse foods, income diversification for women and youth, nutrition education, improved water access for consumption and food production, and agroecological farming practices. Major outcomes of the project over three years include:

- increased access to diverse and nutritious foods as well as additional income for 234 families through homegardens and fruit tree diversification;
- increased access to protein and income through the establishment of 156 chicken coops;
- improved nutrition awareness through education and the production of a 2 cookbooks;
- increased access to basic foods for 194 families through the establishment of 7 food storage and distribution centers (CADAs) in San Ramon that have distributed 4914lb of corn and beans to 194 families during the severe 2015 thin months (with 15,000lb projected for distribution in 2016);
- established 12 seedbanks that store and distribute heirloom and locally adapted varieties

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of corn and beans to over 333 families to replant;
- increased access to clean water for household consumption and cooking through the installation of 84 home water filters;
- increased access to income for 130 women and youth through 46 farmers markets, 7 women-run rural enterprises, and a thriving network of community-level informal trade and exchange;
- promoted 9 different soil fertility and plant nutrition techniques;
- and finally established and facilitated a vigorous international network of rural youth, women, and men actively exchanging knowledge online, in person, and through the publication of a learning curriculum based on five years of youth-centered knowledge production and exchange around food security & sovereignty and agroecology.

Long-term sustainability is a central focus of this project. In Nicaragua, well-established first and second level cooperatives have integrated food security into their organizational strategic plans independent of the project. The 7 cooperative-level seedbank committees and committed cooperative youth promoters ensure the continued functioning of the gardens, seedbanks, markets, and CADAs, as well as the vibrant culture of local and healthy food that has emerged with the project. In Veracruz, 4 community-level food sovereignty committees are overseeing the maintenance of physical investments like chicken coops, as well as running the seedbanks. Youth leaders will continue working with families to improve their food production, consumption, and trading practices. Most Significant Change interviews clearly indicate that families will continue practicing what they have learned – their new knowledge has transformed their lives.

The impacts of this project are both significant and revealing of the structural pressures that families are facing and what they need to continue to work to overcome those pressures. Dietary diversity has increased in both Veracruz and San Ramon as a result of production diversification, nutrition education, and income diversification strategies. Household income has risen and 89 women and 41 youth have diversified income from strategies promoted by the project. Months of adequate provisioning in San Ramon have shown a drastic improvement at 9.7 months in 2015 from 7.37 months in 2011. In Veracruz, the months of adequate provisioning has essentially held steady at 10 months since 2011, with some negative fluctuation in 2014 when the la roya crisis emerged in the region.

CAN and its partners have reflected on our achievements and impacts, and we are convinced of the importance of the strategies we have been promoting over the last 5 years. We have learned together what works and what is still missing to achieve sustainable coffee livelihoods in the midst of climate change. Ecological shocks like drought and flooding will continue to impact coffee growing regions, and farmers must strengthen their strategies for water access and crop resiliency. Coffee prices will continue to be cyclical and farmers will continue to suffer these fluctuations in price, and farmers must continue to look for ways to make their livelihoods more diverse and resilient to price fluctuations. Soil fertility – long neglected by smallholder coffee farmers – needs to be strengthened so that coffee and food crops can withstand drought and infestations. Water will continue to be an issue for coffee farming families, and solutions that sustainably ensure access to water for irrigation and household consumption will be critical. Finally, this project was directed at women as primary beneficiaries, promoting their empowerment as household food producers and providers, earners, and community leaders. This work should continue to more fully enfranchise women as coffee farmers – this means

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improving their access to land ownership, their membership in and leadership of local cooperative organizations, and the support of their families in sharing the additional burden of cooperative leadership.

II. Introduction

Global and Specific Objectives

The Global Objective of the project is to promote climate change resiliency, alleviate food insecurity and seasonal hunger, and strengthen livelihoods among a total of 234 coffee farming families, and build sustainable local food systems in 12 communities in Nicaragua and Mexico through education and the empowerment of community youth and women leaders. This will be achieved through the following specific objectives:

1. *Intercultural Exchange of Youth Leaders for Capacity Building*
   - To train youth in each partner community to work as teams to promote and implement a sustainable food systems education program.
   - Maximize capacity building and available educational resources in food sovereignty by building the network of youth promoter teams within the CAN network and linking it to other communities executing similar projects and to related international food-centered movements and organizations.

2. *Building Community-based Sustainable Food Production and Consumption Cultures*
   - Develop and implement effective educational programs aimed at children, youth, and adults that utilize school gardens, community gardens, and home gardens as spaces of learning and practice.
   - Create a positive community perception of agricultural livelihoods and local food cultures in the local community, especially among youth and children.

3. *Promoting Local and Sustainable Practices at the Farm Level*
   - To support participating farming families in the implementation of locally appropriate and sustainable production practices on their farms.
   - To continue improving perceptions of rural livelihoods and local food cultures by involving schoolchildren and youth in tree-planting activities and garden-based educational activities.

4. *Monitoring & Evaluation of Project Activities, Outcomes, and Impacts*
   - Develop and implement an efficient participatory monitoring & evaluation (M&E) system in both regions of Mexico and Nicaragua that can effectively measure project progress, outcomes, and impacts with participation of men, women, and youth beneficiaries of the project, provide feedback into project strategies and implementation, and meet KGM M&E guidelines and requirements.

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- Disseminate the results and lessons learned from this project within and outside of our international network.

Phase 2 Year 3 Project Objectives are:

Consolidate community-based project structures for long-term sustainability and evaluate 5 years of collaboration

- Creation of cooperative-level commissions in San Ramon to govern the maintenance and usage of project materials and equipment over time.
- Strengthening of promoter capacity to accompany women gardeners
- Consolidation of seedbank committees and CADA committees to ensure self-management, with continuing assistance from VIDA and the UCA San Ramon when needed after the project ends.
- Hold a 3-day workshop involving project staff from CAN, VIDA, and the UCA San Ramon to reflect on lessons learned and the working relationship between the organizations, as well as define future directions in the collaborations.

Perform Final M&E Cycle:

- Finalize analysis on 2014 data collection, integrating 2015 data, to include in final project impact and evaluation report to be shared with project beneficiaries in December 2015.
- Collect data on key indicators with Tablet-based data interface.

Continue strengthening income generation and diversification strategies:

- Continue monthly farmers markets in San Ramon, and work with the municipal government to identify new local market opportunities for women to sell their excess produce.
- Organize monthly community-level trade markets (trueque) in 4 communities in Veracruz to provide an alternative for women to trade products for those they do not grow.
- Continue strengthening and devising long-term sustainability strategies for 4 women-led rural enterprises.
- Continue training women participants on value added products from the garden, coffee shade trees, and patio.

Continue strengthening production diversification, garden sustainability and soil fertility enrichment knowledge and practices:

- Continue strengthening household vegetable seed saving capacities and increase variety of seeds species being saved through seed exchanges.
- Expand trainings in the 8 cooperatives in San Ramon on agroecological fertilizer making (biopasto, effective microorganisms, mineral foliar applications), and expand household-community- and cooperative infrastructure for making the applications with the goal of 129 families in Veracruz and 110 families in San Ramon having access to the fertilizers and the capacity to make them.
- Distribute additional tanks, bottles, and backpack sprayers in both Veracruz and San Ramon to facilitate increased production, storage, and application of biofertilizers and mineral foliar preparations among more beneficiary households.

Improve local access and availability of basic foods through diversification, seedbanks, and

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CADAs:

- Strengthen two CADAs in San Ramon by continuing capacity building of cooperative members who run them, helping them to manage the availability of capital at the right moment to purchase grains, and define prices.
- In San Ramon, establish 8 cooperative-level mini-seedbanks for locally-grown *criollo* and *acriollado* vegetable seed and rootstock, to enable exchange of different varieties among the 8 cooperatives.
- Continue agroecological experimentation in basic grains in both locations, and plant experimental parcels of legumes for soil fertility and consumption to judge performance.
- Expand chicken/egg production component of the project to 16 more households in Veracruz and 8 more in San Ramon, and continue capacity building in chicken management.
- Maintain the corn parcels currently in production for the 5 seedbanks in Veracruz and 7 cooperative seedbanks in San Ramon, to harvest the corn in October.

Improve access to water for irrigation and household

- Install 15 household water catchment systems, 20 water filters, and 2 model composting toilets in 4 communities in Veracruz.
- In San Ramon, expand garden irrigation systems to 8 more household gardens.

Strengthen youth leadership and build pride in local food cultures

- Hold 7-day exchange event between women and youth from VIDA AC with CAN project in Quintana Roo, to exchange knowledge and experiences around food security, agroecology, youth leadership, group facilitation and conflict management, and gender empowerment (not funded by KGM, but by CAN counterpart funds).
- Hold a Food Fair in Veracruz with a focus on promoting the consumption of local foods in the wider community.
- Continue working with children in school gardens to raise awareness of healthy food production and consumption, and work with parents to provide seed for the gardens.

III. Background and context

On the policy level, Nicaragua passed a "right to food law" in 2009, based on the FAO framework. Although this project is focused on tangible on-the-ground results, we have understood from the beginning the importance of leveraging relevant agencies and individual actors within this and future Nicaraguan governments, to more effectively address the 27% of the population that is currently food insecure. In Mexico, although a Right to Food Law was passed in 2011, government policies and programs that address food security are mostly subsidy based and do not effectively address the underlying structures that cause food insecurity and seasonal hunger in the first place that, according to our data in the Veracruz region, include lack of access to markets, lack of access to land, and a rapidly changing food production and consumption culture that is shifting even rural families to dependence on nonlocal and packaged foods.

CAN, VIDA AC, and the UCA San Ramon have collaborated since 2010 to strengthen climate

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change resiliency and improve food security & sovereignty and reduce seasonal hunger in 12 communities in Veracruz, Mexico, and San Ramon, Nicaragua. We have made strong impacts in household economies, nutrition and consumption habits, and improved availability of nutritious and diverse foods locally, as well as in household capacity to produce food sustainably. The devastating infestation of la roya in 2012 and 2013 in which between 80% and 100% of farmers we work with reported being impacted by la roya, and between 55% and 65% of coffee areas in the project communities were destroyed, showed how important these efforts were: farmers had diversified household economies and access to food even while their incomes from coffee went down, and this mitigated the impact of the crisis on household nutrition and food security.

The la roya crisis was closely followed by a severe drought that began in 2014 and has persisted for two years in Nicaragua, and Veracruz has also experienced ongoing rain shortages. CAN, its partners, and project participants have responded with innovation that has improved households' and communities' capacities to respond to and preserve their livelihoods in the midst of these and future ecological and economic crises. We have trained farmers in a variety of agroecological soil fertility improvement techniques that they are implementing as they renovate impacted coffee forests, making their coffee less vulnerable to drought and infestation. 12 communities have mobilized to ensure that quality basic grains seeds are always locally available even if families have to eat their stored seed in times of crisis. We have also built a strong cooperative-based network of food storage and distribution centers (CADAs) in San Ramon to ensure local availability of basic foods during the thin months and when drought or flood destroys crops.

IV. Methods

A. Development and implementation of the project M&E System

CAN worked with both partners to develop internal monitoring & evaluation (M&E) systems that fit both contexts. Currently the M&E system consists of biannual monitoring of advances towards annual and project goals, activities, direct investments, and challenges affecting reaching project goals. Annual impact monitoring and evaluation includes tools from the KGM M&E Guide including Most Significant Change (MSC), months of adequate food provisioning (MAFP), dietary diversity and coping strategies index (CSI), as well as other indicators that CAN and its partners have identified as critical indicators of food sovereignty and youth leadership, including: garden and patio plant inventories, capacity and frequency of seed saving and conservation, and frequency of youth leadership in cooperative, government, and other local and international institutions.

Our 2015 monitoring cycle was the second year we utilized tablet-based field data collection by community youth leaders. The experience showed that the previous year's training had been effective, as all youth leaders were able to collect quality data with the tablets this year. Reflection is a key step in each cycle of the PAR process. In December 2015, we conducted a final project evaluation with the staff teams from all three organizations to review in structured workshop the final impact data and cumulative list of outcomes, and reflect together on the successes, challenges, lessons learned, and future directions of the initiative. The results of the final reflection workshop are compiled into a report included as an Appendix to this report, and are being integrated into proposals for continue the work together.

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B. Sample Sizes

Table 1: Summary of Indicators Types, Methodologies, and Sample Sizes

Indicators/Areas of Evaluation	Methodologies utilized	# Cooperatives/ Communities Studied	# of people interviewed
All survey indicators	Individual Interviews	8 in SR 4 in VC	23 in SR 34 in VC
Most Significant Change	Individual Interviews; focus groups	8 in SR 4 in VC	23 in SR 19 in VC
M&E Results Validation Workshops	Workshop/Focus Groups		32 ppl in SR 36 ppl in VC

V. Achievements and Outputs

A. Direct Project Beneficiaries

The target goal stated in the original proposal for direct beneficiaries in San Ramon was 71 families; we are currently working with 113 families in 95 households; the number of families in three of the communities has gone down since last year, when the project involved 124 families in 95 households. Similarly, we are working with less school gardens this year (3 rather than 6), but are working with more children in each school (236). Our total reach is 941 individuals directly benefiting from the project, up from 756 in 2014.

San Ramon Direct Beneficiaries									
Cooperative	**Number of direct beneficiaries**								***TOTAL individuals***
	Households	Families	Women (>19)	Men (>19)	Youth-women (6-18)	Youth-men (6-18)	Children-girls (0-5)	Children-boys (0-5)	
Ramón García	*13*	*17*	*19*	*12*	*5*	*8*	*6*	*3*	***53***
Silvio Mayorga	*11*	*15*	*15*	*9*	*28*	*22*	*49*	*44*	***167***
Amigos de Bonn	*9*	*10*	*13*	*9*	*3*	*2*	*8*	*5*	***40***
Sofío Sánchez	*15*	*22*	*12*	*18*	*15*	*16*	*4*	*9*	***74***
Sixto Sánchez	*9*	*11*	*13*	*10*	*8*	*6*	*6*	*9*	***52***
Danilo González	*12*	*12*	*23*	*13*	*5*	*2*	*52*	*46*	***141***
Denis Gutiérrez	*16*	*16*	*23*	*22*	*2*	*10*	*3*	*2*	***62***
Simón Bolívar	*10*	*10*	*12*	*18*	*7*	*4*	*31*	*44*	***116***
3 school gardens					*136*	*100*			***236***
TOTAL	***95***	***113***	***130***	***111***	***209***	***170***	***159***	***162***	***941***

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In addition to these direct beneficiaries in San Ramon, there are 89 households or 100 families benefitting indirectly from the project. These households benefit by purchasing or trading for eggs or produce grown in direct beneficiaries' gardens, by borrowing or purchasing grain from the CADAs during the thin months, and by borrowing seed from the cooperative-run seedbanks.

Veracruz Direct Beneficiaries									
Community/School	**# Direct Beneficiaries**								***Total Individuals***
	Households	Families	Women (> 19)	Men (>19)	Women Youth (6-18)	Men youth (6-18)	Girl Children (0-5)	Boy children (0-5)	
Piedra Parada	46	46	57	47	22	32	8	12	237
Plan de Ayala	52	52	65	58	45	49	11	6	146
Guzmantla	23	23	23	24	14	15	6	4	86
Ocotitlan	18	18	23	19	12	18	6	7	85
Telebachillerato Ocotitlan	0	0	0	0	19	21	0	0	40
Telebachillerato Piedra Parada	0	0	0	0	8	12	0	0	20
Primaria Piedra Parada	0	0	0	0	8	7	0	0	15
TOTAL	**139**	**139**	**168**	**148**	**128**	**154**	**27**	**31**	**656**

In Veracruz, we are still working directly with 139 families in 139 households, and 75 schoolchildren in 3 schoolgardens. A total of 167 households are benefitting indirectly from the project in Veracruz, primarily from informal trade and purchase of homegarden produce and fruit production, and access to seed in the seedbanks.

B. Summary of Achievements and Outputs

1. **Expansion and strengthening of home garden production diversification in gardens and coffee shade**, with a focus on reproducible species and garden sustainability in the long term: 28 more home gardens were established in San Ramon and 29 in Veracruz, bringing the total number of direct beneficiaries with homegardens to 234, exceeding our total project goal. Capacity building continued with workshops on grafting, seed curing, and drought-resistant vegetable varieties, as well as the strategic diversification of coffee food forests.
2. **Soil fertility improvement measures for food and coffee production**: Capacity building in the elaboration of nine different soil and foliar applications, including compost, worm compost, effective microorganisms, biofertilizers and mineral foliar applications for both food and coffee production areas, were intensified and expanded in both Veracruz and San Ramon, and investments were made in barrels and other equipment to allow more groups to produce the fertilizers and preparations.
3. **Expanding access to water for household use and irrigation**: A total of 38 irrigation systems, 55 water catchment systems, and 84 home water filters have been installed through the project in Phase 2.

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4. **Improving sustainable access to seed**: In San Ramon, 7 additional seedbanks were launched this year with the planting of seed production plots in 7 cooperatives in mid-2015, making a total of 8 seedbanks there and 5 in Veracruz. As of December 2015, 5600lb of corn and bean seed had been produced and stored in the 7 seedbanks in San Ramon, and 545lb of corn and bean seed have been collected in Veracruz through seed production plots. All 12 seedbanks are now storing multiple varieties of heirloom and adapted corn and bean seeds. Additionally, project beneficiaries underwent more training in seed selection, curing, and hygienic storage, and all 12 seedbank committees underwent additional training in seedbank operations and management. In San Ramon, UCSC student Adriana Murguia spent five weeks in six project cooperatives conducting an in-depth study on the most frequent problems associated with ensuring the quality of vegetable seed stored at home, and identifying the best practices for household vegetable seed storage. In Veracruz, two seed exchanges took place in which seasoned project beneficiaries passed on seeds to newer beneficiaries, and seeds for vegetables that are difficult to reproduce were distributed.
5. **CADAs for ensuring the availability of basic foods during the thin months**: A total of 7 CADAs are established and running in conjunction with the 7 seedbanks in San Ramon; the seedbank committees run both the seedbanks and CADAs. A total of 4815lb of corn and beans were distributed in 2015 during the thin months, with almost 15,000lb recuperated and produced by year end, and it is projected that the CADAs will recuperate and produce for redistribution during the 2016 thin months 30,000lb of corn and beans to approximately 194 families in the cooperatives, and an additional 96 families in the communities.
6. **Chickens and egg production for increased protein production**: A total of 46 new household chicken coops were constructed this period, making a total of 156 chicken coops in the project. All 156 families have continued training in hygienic chicken care and the production of nutritious chicken feed.
7. **Alternative markets and women's rural enterprises**: A total of 19 farmers' and trade markets have been put on since the vegetable season began in June (bringing the projct total to 46), and a total of 89 women and 41 youth have diversified their income or accessed different foods by selling or trading at the markets. Women in the Denis Gutierrez Cooperative in San Ramon have invested money in producing coffee seedlings using CAN's AgroEco Fund for the Unpaid Work of Women, with the plan to produce their own coffee to sell, in addition to their vegetables; the project has supported these women (who are project beneficiaries) by training them in soil fertility building techniques. The women's café that purchases produce from women project beneficiaries is now up and running in San Ramon. In Veracruz, 5 different income diversification strategies have been developed and adopted by women and youth project participants, including honey, seed jewelry, roasted coffee, fruit marmalades, and natural medicine products.
8. **School gardens**: 6 school gardens continue to involve 312 children and youth in learning agroecology and healthy dietary habits using locally-valued foods. A water catchment system and storage cistern was also constructed in one school garden in Ramon Garcia Cooperative in San Ramon during a thematic network exchange (funded by counterpart funding) in which staff and youth leaders from Veracruz travelled to San Ramon to teach people there how to build the cisterns.

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9. **Youth leadership consolidation and capacity building**: CAN's Annual International Youth Exchange took place in May of 2015, and included 7 youth leaders and two project leaders from this project, in addition to 10 other youth leaders from Nicaragua and Mexico. The exchange, partially supported by this project, included critical capacity building in themes like information technology and communications skills, facilitation, and seedbanks, as well as exchanges with local youth-oriented organizations working in food justice. This, our 5th exchange, was particularly important, as the youth spent three days consolidating their leadership structure, and identified goals for the year in terms of activities and learning objectives. Following this exchange, CAN worked with the network to collect all of the workshop materials of the network over the last five years into a single training curriculum that is available open-access at www.canunite.org/publications-2/popular-education-materials/. Additionally, CAN organized two different thematic exchanges (one in Nicaragua and one in Mexico, both funded by counterpart funding), in which all project youth leaders participated in at least one exchange.
10. **Consolidation of internal committees to monitor and govern project investments and structures:** 7 seedbank committees were established and trained in San Ramon, and 4 Food Sovereignty committees were established in Veracruz. Both types of committees are meant to be community- or cooperative-based organizational structures to govern project infrastructure and systems developed over the last five years, and ensure the proper maintenance of investments. The seedbank committees have developed their operational documents and are self-managing the first year of seed production, collection, and distribution in the 2015-2016 planting season.
11. **Monitoring & Evaluation**: Youth leaders successfully completed field data collection with the tablet interfaces in 2015, demonstrating their competency levels. A final project evaluation workshop was held in San Ramon in December 2015 and included project staff from all three organizations as well as youth leaders and project participants offering analysis, reflections, and recommendations on the last 5 years of working together.

B. Summary of Selected Cumulative Outputs of the Project 2011-2015

Table 2: summary of Selected Cumulative Outputs 2011-2015

Output	San Ramón	Veracruz
Number of garden irrigation systems installed	35	3
Number of water catchment systems installed	9	46
Number of fruit, wood, and fuel trees planted total	28,403	2995
Number of fruit trees only planted total	5560	1875
Number of homegardens established and producing	95	139
Number of school gardens functioning	3	3
Number of model gardens functioning	0	3
Number of soil fertility and conservation techniques promoted	9	13
Number of food storage and distribution centers (CADAs) established	7	0
Pounds of corn and beans distributed by CADAs in 2015	2415lb beans; 2400lb corn	0
Number of seedbanks established	7	5
Pounds of corn and bean seed distributed for planting in 2015	6600lb	500lb
Number of species of heirloom vegetable seed being saved by	20	18

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households		
Number of home water filters installed and in use	40	44
Number of home chicken coops constructed	62	94
Number of farmers markets 2011-2015	21	25
Number of women- and youth-led rural enterprises established	2	5
Number of women selling in rural enterprises & markets	30	59
Number of youth selling in rural enterprises & markets	10	31
Number of community- or cooperative-based commissions functioning and running FSS strategy infrastructure	7	4
Number of youth leaders participating in project activities	12	8
Development and publication of CAN youth network training curriculum		

C. Activities Performed

The following activities were implemented in March 2015 – February 2016 (Year 5):

Table 3: Summary of Activities in Year 5 in Veracruz

Dates	Place	Type of activity	# activities	Hours for each activity	# participants	Participant type
March and Sept	Ocotitlan and PP Telebachiller.	School garden planning workshops	6	2	89	Students, teachers, project leaders and youth.
March-July	Vida Campesina Training Center	Food Sovereignty Committee trainings	5	5	22	Committees, project leaders and youth
March and Sept	4 communities	Planning meetings with project beneficiaries	8	2	152	Women beneficiaries, Committees, project leaders, youth
March	4 communities	Workshop: Identification of culturally important food plant varieties	4	2	96	Women beneficiaries, project leaders, youth
March	CRUO training center Huatusco	Seeds of Identity Exchange	1	6	80	Seedbank Committees, women and men with experience saving seed, project team
March - May	4 communities	FS Committee Trainings: agroecological milpa, basic grains seeds, water, climate change, food preparation	7	5	44	6 FS committees, 5 youth, 1 project leader
April	4 communities	Workshop: Climate change and water	4	2	129	Women beneficiaries and youth
April	Piedra Parada	Workshops: Food Sovereignty; Biointensive method (for schoolchildren)	4	1	39	Students, teachers, and youth leaders

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April	Plan de Ayala	Clearing of plot for planting of corn seed plot	2	4	46	Women and men beneficiaries, youth leaders
April-May	4 communities	Workshop: From the Garden to the Table: Increasing Dietary Diversity	4	3	111	Women beneficiaries, FS committees, youth leaders, children, project team
April	Piedra Parada schools	Workshop: Worm compost (for schoolchildren)	2	1.5	41	Students, teachers, youth leaders, trainer
April-May	4 communities	Exchange and passing down to new beneficiaries of plants, rootstock, bulbs, seeds, and distribution of seeds that cannot be produced locally	4	1	87	Women beneficiaries and youth leaders
April-May	4 communities	Election of water committees	4	2	96	Beneficiaries, youth leaders, project leaders
May-Oct	Guzmantla, Plan de Ayala, Ocotitlan, PP	Meetings and workshops to monitor chicken production and problems, and train in chicken care	9	3	141	Women beneficiaries, youth, project leaders
May-July	Ocotitlan, Plan de Ayala, Guzmantla	Construction of water catchment systems	3	4	22	Beneficiaries, youth leaders
June-July	Ocotitlan, Plan de Ayala, Guzmantla	Installation of water filters	3	5	24	Beneficiaries, youth leaders
June-July	Plan de Ayala, Piedra Parada	Workshop: Producing mineral foliar applications	2	2	89	Beneficiaries, youth leaders
June-July	Plan de Ayala	Workshops: Producing solid and liquid effective microorganisms	2	2	47	Beneficiaries, youth leaders
July	Piedra Parada	Workshop: Preparation of worm compost tea for foliar application	1	2	42	Beneficiaries, FS committees, youth leaders
July	4 communities	Workshops: Agroecology, Coffee, and a Way of Life	4	2	129	Beneficiaries, FS committees, youth leaders
July-August	Plan de Ayala, PP	Workshop: Grafting	2	2	89	Beneficiaries, FS committees, youth leaders
August	Ocotitlan, Guzmantla	Workshop: Making jewelry from seeds for income diversification	2	3	40	Women beneficiaries, youth leaders
August	Ocotitlan, Plan de Ayala,	Workshop: Semiannual planning and	3	2	87	FS committees, beneficiary families,

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	Guzmantla	evaluation				youth leaders, project leaders
Sept	4 communities	Workshop: Distribution, usage, and maintenance of tanks and backpack sprayers	4	2	141	Beneficiaries, committees, youth leaders, project leaders
Sept	Ocotitlan school garden	School garden Workshops: Seedlings and Garden planting; Food preparation	3	2	42	Students, teacher, youth leaders
Sept	4 communities	CAN network Training/Mexico Exchange with UIMQRoo	1	8 days	58	Beneficiaries, committees, youth leaders, project leaders
Sept	4 communities	Workshop: Training in solidarity savings groups and revolving fund management for investment	4	2	143	Beneficiaries, committees, youth leaders, project leaders
Sept	4 communities	Workshop: Seedbank management: building inventory, inventory management, loaning and recuperating loans, increasing variety	4	2	146	Beneficiaries, committees, youth leaders, project leaders
Oct	4 communities	Installation and training on water filters and wood-saving stoves	4	4	142	Beneficiaries, committees, youth leaders, project leaders
Oct	4 communities	Workshop: Drought-resistant heirloom varieties of vegetables and herbs	4	2	148	Beneficiaries, committees, youth leaders, project leaders
Oct-Nov	4 communities	Workshop: Growing and Eating Root Crops for Dietary Diversification	8	2	148	Beneficiaries, committees, youth leaders, project leaders
Oct	4 communities	Workshops: “El Plato del Buen Comer Using Traditional Foods”, and “My Garden, My Medicine”	8	2	148	Beneficiaries, committees, youth leaders, project leaders
Oct	4 communities	Food Forests: Integrating food crops into coffee forests	4	2	148	Beneficiaries, committees, youth leaders, project leaders
Nov	4 communities	Native beekeeping	4	2	148	Beneficiaries, committees, youth leaders, project leaders
Nov	4 communities	Workshops on Natural Medicine: Identifying	20	2	148	Beneficiaries, committees, youth

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		Plants, Reproducing Plants, Making Medicines				leaders, project leaders
Sept-Jan	4 communities	Exchange markets for exchanging plants, seeds, value-added products	13	3	148	Beneficiaries, committees, youth leaders, project leaders
Sept-Jan	4 communities	Workshops: Identification of products from garden, patio, and farm for value-added transformation (income diversification)	4	2	148	Beneficiaries, committees, youth leaders, project leaders
March-Feb	4 communities	Farmers markets and trade markets	13	4	90	Women beneficiaries, youth leaders
Nov	4 communities	Workshop: Identification of Best Practices for Food Security	4	2	148	Beneficiaries, committees, youth leaders, project leaders
Nov	4 communities	Field data collection	4	4 days	148	Beneficiaries, committees, youth leaders, project leaders
Dec 2015	San Ramon, Nicaragua	Workshop: Final Project Evaluation with CAN	1	2 days	9	Project leaders from VIDA, project leaders from UCA SR, CAN staff
Feb 2016	4 communities	Workshop: Sharing and Evaluation of Final Evaluation Data with Project Participants	4	2	148	Beneficiaries, committees, youth leaders, project leaders
March-Feb	4 communities	Campo visits for technical assistance, verification, and follow up.	41	2-4	8	Youth leaders and project leaders
March-Feb	VIDA	Monthly and other team meetings	16	4	10	Project leaders, youth leaders

Table 4: Summary of Activities in Year 5 in San Ramon

Dates	Place	Type of Activity	# Activities	# hrs each	#participants	Type of participant
June-July	8 cooperatives	Workshop: Biofertilizer production (biofermentos y biopastos)	20	4	93	Women and men beneficiaries, youth leaders, technician
March-Nov	8 cooperatives	Workshops: Production of healthy chicken feed, chicken hygiene and vaccination; and	10	4	53	Women beneficiaries, youth leaders, technician

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		exchanges between producers on chicken management				
March-Sept	3 school gardens	Workshops: Healthy Meals: Using garden produce to cook meals; sustainable garden management planning	7	2	120	Schoolchildren, teachers, youth leaders, technician
May-June	8 cooperatives	Workshops: Design and management of the traditional milpa, and the agroecological milpa	12	4	74	Women beneficiaries, youth leaders, technician
April - August	8 cooperatives	Workshops: Seed saving and curing, and hygienic seed storage	12	3	76	Women beneficiaries, youth leaders, technician
August	8 cooperatives	Workshop: Water Catchment	6	1	65	Women beneficiaries, youth leaders, technician
Sept-Oct	8 cooperatives	Workshops: Pre-planting and planting of second planting of beans	6	2	38	Beneficiaries and youth leaders
Nov	8 cooperatives	Workshop: Organic seed curing ands treatment techniques for beans and corn seed and grains; post-harvest management of basic grains	11	4	65	Beneficiaries and youth leaders
Sept-Nov	7 cooperatives	Workshop: Organization and operations of seedbanks and CADAs	7	4	30	Seedbank/CADA commissions, youth leaders, technician
Nov	8 cooperatives	Workshop: Identification of Best Practices for Food Security, and MSC Stories	2	4	30	Beneficiaries, youth leaders, technician, project coordinator
Oct	Denis Gutierrez Cooperative and Managua	San Ramon Agroecological Coffee Fair	2	4	8	Youth Leaders, technician, and Project Manager
Oct	Ramon Garcia Cooperative	Seedbank/CADA Committee Exchange of Experience	1	4	25	7 seedbank/CADA committees, youth leaders, technician, project coordinator, CAN staff member
Nov	8 cooperatives	Workshop: Agroecological Best Practices	1	4	28	Women beneficiaries, youth leaders, technician, project coordinator
Nov	UCA San Ramon	Workshop: Selection of 3 MSC stories	1	2	10	Youth Leaders, technician, project coordinator
May-Dec	San Ramon	Farmers Markets	6	5	50	Youth leaders, staff, women and men beneficiaries
March-	8 cooperatives	Campo visits for technical	81	2-6	1-9	Technician

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Feb		assistance, verification, and follow up.				
March-Feb	UCA SR	Monthly and other team meetings	19	2-4	9	Project coordinator, technician, youth leaders

VI. Quantitative Impacts

A. Thin Months and Months of Adequate Provisioning

The months of adequate provisioning in San Ramon has held steady from 2014, and overall shows a drastic improvement at 9.7 months in 2015 from 7.37 months in 2011. In Veracruz, the months of adequate provisioning has essentially held steady at 10 months since 2011, with some negative fluctuation in 2014 when the la roya crisis emerged in the region. Some explanations for the slim impact of the project on the length of the thin months include the lack of available land for food production, the higher dependence in the region on purchased food, as well as the lack of access to alternative markets, and the absence of support programs that a social organization (like the second level cooperative in San Ramon) would provide.

San Ramon

Indicator	2011	2012	2013	2014	2015
Months of adequate provisioning	7.37 months	7.3 months	8.12 months	9.76 months	9.7 months
Length of thin months	4.63 months	4.7 months	3.88 months	2.24 months	2.3 months

Veracruz

Indicator	2011	2012	2013	2014	2015
Months of adequate provisioning	No data	10 months	10 months	9 months	10 months
Length of thin months	No data	2 months	2 months	3 months	2 months

B. Dietary Diversity

We are using two different indicators of dietary diversity: dietary diversity score based on an inventory of the *weekly* diet, and the percentage of families consuming over 6 food groups in the *daily diet* (utilizing FAO guidelines for evaluating dietary diversity using 24-hour dietary recalls).

Dietary diversity in San Ramon has improved as a result of the project, with the average baseline score at 6.61 in 2011, and at 7.46 in 2015. The percentage of households consuming more than 6 food groups daily has risen from 12% in 2011 to 82% in 2015, with a positive fluctuation to 100% of households in 2013 as the la roya crisis took hold and more families depended more on their homegardens to feed themselves.

Dietary diversity in Veracruz has greatly improved from the 2012 average score of 6.9 to 8.5 in 2015. The percentage of households consuming more than 6 food groups per day has held steady from the 2011 rate of 100%.

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San Ramon

Indicator	2011	2012	2013	2014	2015
Dietary Diversity Score	-	6.61	7.84	7.06	7.46
% households consuming more than 6 food groups daily	12%	83%	100%	83%	82%

Veracruz

Indicator	2011	2012	2013	2014	2015
Dietary Diversity Score	-	6.9	6.86	7.3	8.5
% households consuming more than 6 food groups daily	-	100%	84%	94%	100%

C. Coping Strategies Index

The coping strategies index (CSI) score improved in both Veracruz and San Ramon from baseline data.

Region	2011	2012	2013	2014	2015
San Ramon	16.83	10.98	17.53	15.08	8.14
Veracruz	No data	20	24.35	9.3	4.4

D. KGM Livelihood Impact Model Required Indicators

Indicator	Veracruz (139 direct beneficiary households)	San Ramon (95 direct beneficiary households)
Percent of participants showing decline in length of thin months	41%	68%
Number of households with reduced household food insecurity as measured by CMI	131	76
Number of households reporting improved dietary diversity from baseline based on HDDS	113	95
Number of households who have adopted GAPs promoted by the project	139	95
Number of households that have incorporated at least one new source of income related to project	139	61
Income resulting directly from the economic activity supported by the project, additional to income prior to project	$108.21	$33.76

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VII. Most Significant Changes

23 stories were collected in San Ramon, and 19 in Veracruz. Each organization and its project participants chose three stories in workshops, to forward to CAN. Out of these, 4 stories were chosen by CAN that represent the different types of project participants. These stories were chosen because they highlight the personal empowerment that young people and women experienced as a result of their participation in the project: women now feel like they are active agents in their own lives and destinies and have the power to improve their families' well being and health; youth promoters feel as if they contribute to their communities and are a closer part of them. All of the stories demonstrate how critical this social and personal empowerment is to the success of any efforts to promote climate change resiliency and sustainable livelihoods.

Project Participant Carolina Díaz García
Cooperativa Denis Gutiérrez Cardoza, La Pita, San Ramón, Nicaragua

The work we do in this project helps us in the first place to have a better nutrition, and to have extra cash because we sell part of the production. For example, the chicken we raise is not only for self-consumption but also for selling, because not everything we produce on our farm is only for eating, there is enough also for selling. This is also the meaning of food security because with the money we get from selling chicken we can buy rice, oil, soap, and other things we need for our families. I feel like I have learned a lot and have love for what I do. So, I'd like to go on farming, have food at home. This is something I learned, a life experience, that the gardens, the farm, the vegetables, the fruits are so important for life, and it does not matter if the project continues, farming is what I will continue doing. Now I eat delicious food based on vegetables, salads; it is very nice to be able to eat well, living in peace, happy. One does not feel weak but with energy, and we don't get sick. To me it was a great feeling to have been selected to be part of this project. I am very grateful to those who decided to give me this opportunity. I encourage other people from my community to join this project, and whenever I can I give them seeds; this is because I think that we all should be getting involved so that all of us have good food sources.

Project Participant Ercilia Martínez
Cooperativa Danilo González, La Reyna, San Ramón, Nicaragua

The support we have had through this project has been so important; before there were times in which it was so difficult for women to go out of our houses to lobby for support, because we dis not have money to travel and did not know how to make money. With this project I learned to be creative and to innovate with my own resources. Now I have money and I am part of the farmers market, selling my vegetables and fruits. Now I have money, I leave behind my laziness, I bring a basket with my farming products and I go out to sell. It is very important that we, women, give value to our work, to feel that we are important and to empower ourselves, not waiting for

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government aid. Now I feel capable of doing things important to me; in the past I was shy, but now I attend workshops where I speak, ask questions, and participate in the exchange programs whenever possible.

Good food is important at home because we need to change our eating habits. Before I only cooked rice and beans, now I make lettuce salad for my kids; to the gallo pinto *I add more onion and tomatoes because now I produce them, I do not have to go out to buy them. My* gallo pinto *is now different, is tastier; everything I cook now is greener, it gives more vitamins to my family. I now cook based on the cookbook [developed through the project] and from the workshops, and I put into practice my learning and my food is delicious, like the cookbook says.*

Community Promoter: Martha Estela Ramos Dávila
Cooperativa Amigos de Bonn, San Ramón, Nicaragua

As a community promoter I feel like a leader because I see how the families are involved and participate in the meetings I organize. They are confident enough to ask questions and to pitch in when the time comes to plant food gardens, and to manage them. This has been a great experience personally, to feel the support from the people of my cooperative. Through visiting families I learned to socialize with them, I learned new crop management techniques, I met people form other cooperatives during workshops and I shared with the families I work with the knowledge I learned, especially agroecological practices. I feel like this project helped me to learn more about myself, to discover that we, young people, can be leaders in our cooperatives. Now, I am a leader of my cooperative and of my family.

Project Participant Cándido Sánchez Sánchez, Plan de Ayala, Veracruz, Mexico

The most significant change I have experienced from the project is that before we had to carry water every day – far. We had to go as far as Cañada Palanca, and if not there, we had to find hard-to-access springs or water veins that come out of the rocks, even farther away. Now with the project, I no longer have to carry water, as I have it at home now [in the cistern], and so we now have water to cook with, to drink, to bath, wash clothes, to give to the animals to drink, all of this has changed, and life is completely different than before.

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VIII. Direct Investments

Table 5: Summary of Direct Investments Y5 in Veracruz

Date	Type of investment	Location(s)	Cost (in US$)
March–Sept	Infrastructure for 5 seedbanks	Plan de Ayala, Ocotitlan, PP	$574.00
June	Materials for 32 chicken coops	Plan de Ayala	$2,916.00
August-Nov	Purchase of materials for 37 water catchment systems in 3 communities	Plan de Ayala, Guzmantla, Ocotitlan	$6,312.00
August-Nov	Installation of 44 household water filters	Plan de Ayala, Guzmantla, Ocotitlan, PP	$3,520.00
March-Nov	Materials and maintenance for 110 existing home gardens	Plan de Ayala, Ocotitlan, Guzmantla, PP	$600.00
March-Nov	Construction and planting of 39 new homegardens	Plan de Ayala, PP, Guzmantla	$1,368.00
April-Nov	Materials for irrigation systems, equipment for fertilizer production, and seeds for gardens	Piedra Parada	$535.00
March-Nov	Installation of 5 eco-efficient stoves and 72 composting toilets	PP, Guzmantla	$3,978.00
Sept-Oct	7 backpack sprayers and 70 tanks for application of liquid mycorrhyzae fertilizer	Plan de Ayala, Ocotitlan, Guzmantla, PP	$1,560.00
Sept 15-Feb 16	Materials for women's microenterprises (crafts, marmalades, honey, natural medicine, fruit)	Plan de Ayala, Ocotitlan, Guzmantal, PP	$2,150.00
TOTAL			**$23,513.00**

Table 6: Summary of Direct Investments Y5 in San Ramon

Date	Type of Investment	Location(s)	Cost (in US$)
June	14 120-liter barrels for mineral foliar spray preparation	San Ramon	$1,000.00
June	14 18-QQ metal silos	San Ramon	$1,000.00
May	Purchase of 320lb of heirloom bean seed; 160lb heirloom corn seed; 350lb of white heirloom corn seed; 120lb of white and yellow heirloom corn seed for the planting of 20mz of grain seed production plots for 3 cooperative seedbanks	Coops Ramon Garcia, Sixto Sanchez, and Silvio Mayorga	$2,500.00
May	Materials for cisterns for water catchment systems	Matagalpa	$4,999.13
June	13 meters of PVC pipe for irrigation	San Ramon	$480.00

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	systems		
Sept	Seed and root stock for new 8 home gardens	San Ramon	$1,500.00
Oct	Equipment and infrastructure for 7 seedbanks (screen, scales, sacks, carts)	San Ramon	$650.00
Oct	Plastic jars for storage of mineral teas/foliar sprays	San Ramon	$150.00
16-Jan	Signs for seedbanks/CADAs, schoolgardens	San Ramon	$150.00
16-Jan	Rocks for making mineral foliar sprays	Jinotega	$1,500.00
Oct	Barrels for mineral foliar spray making	Matagalpa	$382.00
TOTAL			**$14,311.13**

IX. Challenges, Lessons Learned and Next steps

The biggest challenge faced by the project this year was the continuation of drought in San Ramon, and ongoing irregular rains in Veracruz. This created problems for coffee renovation efforts underway as well as regular seasonal food production. Coffee seedlings need irrigation, and in some cooperatives in San Ramon, creeks and springs simply dried up in mid-2015 when the regular rainy season did not arrive. Some families were hand-carrying buckets of kitchen wastewater to water their coffee seedlings. In terms of the impact on food production, the first planting of corn (which is normally done at the beginning of the rainy season in May) was stunted and in some cases, failed; similarly, the second planting of beans (normally in September or October) was delayed. Both of these impacts had the potential to create a food security crisis later in the year because of reduced corn and bean harvests or the failure of planted crops. However, the seedbanks played a critical role in helping to prevent this crisis among many families, by providing seed to replant when the corn crop failed (and no seed was produced).

Although most families in San Ramon are on the path to recuperation from the Roya crisis, the rust hit Veracruz even harder in 2015 than in 2014. This meant that 2015 was an especially hard year for families there, on top of the irregular rains they were already experiencing and the loss of coffee yields the previous year. Farmers in Veracruz have mentioned that their production diversification into vegetables, fruits, and eggs will help them to weather the economic impacts of a much-reduced harvest in 2015-16.

The compounded crises of Roya and drought over the last few years have taught us the importance of incorporating coffee forests into food security strategies, as places of both food production and cash crop generation. Simply investing in diversification away from coffee, while ignoring coffee production itself, only serves to weaken the central pillar of the family livelihood. We have learned that we need to invest in strengthening coffee and food production as one agroecological and economic system by improving soil fertility and integrating food production in many ways into coffee forests themselves. There is a need for a systematization of knowledge around best soil fertility practices, to strengthen the resiliency of coffee forests, food production,

and household livelihoods against increasingly severe ecological shocks associated with climate change. CAN and its coffee smallholder partner organizations are designing a methodology for farmer-led experimentation around different defined combinations of soil fertility, shade management, and food production diversification practices in the coffee forest, with the aim of identifying the most effective combinations of strategies for building climate resiliency.

We have also learned that families are better off when women have access to the means of production, income generation, and can make household decisions. Although we have made great strides in empowering the women we work with through access to knowledge, practices, and resources, women still do not have gender equity when it comes to access to land and to producer organizations like cooperatives. This means that women's empowerment as food producers, providers, and income generators is vulnerable, and that their voices and perspectives are still not taken into account in decisions that directly affect them. CAN is working with its partners to develop strategies to increase women's access to land and participation in cooperative organizations in conjunction with coffee renovation, soil fertility, food forest development strategies.

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X. Financial Report Phase 2 Year 3: March 1, 2015 –February 29, 2016

CAN Youth Leadership & Food Sovereignty Project Phase 2 Year 3	PHASE 2 YEAR 3 EXPENDED	BUDGETED	Counterpart
Income			
Grant Income - KGM	232,452.00	$232,452.00	
Carryforward from Year 2	21,798.34	$21,798.34	
Total Income	**254,250.34**	**254,250.34**	
Expense			
CAN			
Consulting Expenses	$1,000.00	$-	
Education & Training (Youth Exchanges & Trainings)	$13,629.80	$14,000.00	$24,000.00
Project Materials & Equipment (Revolving Fund)	$2,000.00	$2,000.00	
Miscellaneous/unforseen costs	$619.64	$3,400.00	
Monitoring and Evaluation, Diss	$10,095.93	$12,000.00	
Salaries	$49,200.00	$49,200.00	$4,000.00
Travel	$14,328.94	$15,000.00	
Indirect costs	$26,742.00	$26,742.00	
Total CAN	$117,616.31	$122,342.00	$28,000.00
Vera Cruz			
Miscellaneous	$2,000.00	$2,000.00	
Administrative Costs	$2,667.00	$2,667.00	$2,667.00
Monitoring and Evaluation, Diss	$7,925.00	$7,925.00	$6,092.00
Project Materials & Equipment	$14,700.00	$14,700.00	$4,800.00
Education & Training	$4,374.00	$4,375.00	$442.00
Consulting Expense	$3,334.00		
Personnel-Salaries	$17,000.00	$20,333.00	$1,000.00
Total Vera Cruz (#5)	$52,000.00	$52,000.00	$15,001.00
San Ramon			
Miscellaneous/unforseen costs		$2,000.00	
Administrative Costs	$2,280.00	$2,400.00	$2,400.00
Project Materials & Equipment	$17,872.00	$19,450.00	
Monitoring and Evaluation, Diss		$1,000.00	
Education & Training	$10,510.00	$13,980.00	
Personnel-Salaries	$24,648.00	$16,680.00	
Travel	$2,800.00	$2,600.00	$3,600.00
Total San Ramon (#7)	$58,110.00	$58,110.00	$6,000.00
Total Expense	**$227,726.31**	$232,452.00	$49,001.00
Unexpended (See Table: Reallocation of CF Funds)	**$26,524.03**	$21,798.34	

Total spending was only about $5000 under total budgeted amount for Year 3, not including the

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Carry Forward amount from Year 2, which was $21,798.34, making total unexpended funds at the end of Year 3 $26,524.03. CAN proposes to utilize the remaining funds to extend the project activities until June 30, 2016. The following table details the proposed redistribution of remaining project funds:

CAN	Salaries	$3,500
	Travel	$4,313
Veracruz	Salaries	$3,711
	Revolving Fund	$4,000
	Transport/mob costs	$500
UCA San Ramon	Salaries	$6,000
	Revolving Fund	$4,000
	Transport/mob costs	$500
TOTAL PROPOSED REALLOCATION		**$26,524**

XI. Photos

Photo 1: Garden produce in Veracruz, Mexico (June 2015)

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Photo 2: Ocotitlan School Garden Students (Veracruz, June 2015)

Photo 3: Women project beneficiaries in their agroecologically renovated coffee (San Ramon, October 2015)

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XII. Appendices

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Appendix 1: Summaries of all longitudinal impact indicators

SAN RAMON: Desired Outcomes	Redesigned indicators 2013	2011	2012	2013	2014	2015
Desired Outcome 1: Reduce seasonal hunger and increase access and availability of diverse foods year round	80% of households save corn seed	-	83%	-	75%	52%
	80% of households save bean seed	-	54%	-	83%	57%
	200 households have increased access to basic grains during the thin months through CADAs	0	0	30 HH (15%)	30HH(15%)	194HH
	70% of households save at least 6 varieties of vegetable seed at home	0	10%	30%	88%	-
	Average # species of seed saved at household level	-	-	5.13	13.79	-
	3 community seed banks established serving 100 families	0	0	1	2	7 banks
	3 CADAs established serving 200 families	0	0	1	2	7 CADAs
	Months of adequate provisioning	7.37 months	7.3 months	8.12 months	9.76 months	9.7 months
	Length of thin months	4.63 months	4.7 months	3.88 months	2.24 months	2.3 months
	Percent of participants showing decline in length of thin months					68%
	Reduced CMI score	16.83	10.98	17.53	15.08	8.14
	Number of households that have reduced household food insecurity as measured by CMI					76
Desired Outcome 2: Beneficiary households, cooperative and community members prepare and consume diverse and nutritious locally-produced foods.	Weekly dietary diversity score increased to 9 average.	-	6.61	7.84	7.06	7.46
	100% families consuming more than 6 food groups daily	12%	83%	100%	83%	82%
	Number of households reporting a positive change in dietary diversity					95
Desired Outcome 3: Cooperative members produce diverse foods in a	% households produce corn	71%	-	-	79%	78%
	Average amount of corn produced by each household in quintales	10.00	-	-	10.8	10.1

sustainable and stable fashion, increasing access.	% Households produce beans	68%	-	-	79%	83%
	Average amount of beans produced by each household in quintales	4.00	-	-	4.6	7.6
	20,000 wood, fruit, and fuel trees established	14,933 trees	5,890 trees	1870 trees	5560 trees	0
	Average # of wood & fuel tree species per household	-	-	-	8.4	-
	% Households using chemicals total & by area	-	-	-	62.5% Total	12% TOTAL
		-	-	-	4% Garden	0% Garden
		-	-	-	13% Patio	3% Patio
		-	-	-	29% Milpa	12% Milpa
		-	-	-	29% Coffee	3% Coffee
	100% households implementing at least 2 soil conservation practices	-	-	-	92%	83%
	Average # of soil conservation practices used by each household	-	-	-	3.8	3.8
	100% households implementing at least 2 soil fertility practices	50%	67%	-	100%	100%
	Average # of soil fertility practices used by each household	-	-	-	7.3	6.4
	Number of coffee households who have adopted new Good Agricultural Practices promoted by the project					95
	80% of families producing more than 12 species of vegetables, vine crops and cucurbitaceous.	-	20%	63%	71%	48%
	Average # of species of vegetables, vine crops, and cucurbitaceous produced by each family	-	-	13.5	8	12
	% of vegetables grown being consumed by families	-	-	-	67%	-
	80% of families with over 15 species of fruits and fruit trees	30%	-	75%	92%	83%
	Average # of species of fruit & fruit trees produced by each family	-	-	17.75	25	19

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	% of fruits grown & consumed by families	-	-	-	50%	-
	80% of families producing more than 3 species of roots and tubers	20%	20%	50%	58%	61%
	Average # of species of roots & tubers produced by each family	-	-	3.0	2	2.8
	80% of households producing over 10 species of culinary, medicinal, repellent, and aromatic herbs	30%	30%	87.5%	54%	65%
	Average # of species of culinary, medicinal, repellent, and aromatic herbs	-	-	12.5	6	11
	100% of households producing gardens in two seasons	10%	85% producing year round	85% producing year round	79% producing year round	-
	100% of households have diversified land use: .5mz average in vegetable production in gardens and patio	.015mz/HH	.41mz/HH	-	1 mz/HH	0.73 mz/HH
	Average amount of land held by each household in mz	14.8 mz	-	-	4.6 mz	5.8 mz
	Food sources: 70% of household food consumed is produced	36% of families produce more than half of what the HH consumes	55% of HH food is produced	-	45%	45%
	71 households with home gardens functioning	0	24 HH	45 HH	67 HH	95
	150 households diversifying with fruit trees and vine crops	24 HH	53 HH	95 HH	95 HH	95
	100% families with increased production and access to protein sources	-	-	-	53% (62 coops)	53% (62HH)
	Average # of chickens per household	11	-	-	11	-
Desired Outcome 4: Improved conditions for water recycling and storage for human	100% of households have access to water for irrigation for production	15%	31%	75% (total 34 systems)	75% (total 34 systems)	75% (total 34 systems)

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consumption and irrigation to strengthen capacity to produce diverse foods year round.	100% of households have access to clean, filtered drinking water at home	-	33%	47%	63% (40 systems)	63% (40 systems)
Desired Outcome 5: Improve economic opportunities in the communities for youth and women,	70% of households with diversified household income from farmers markets or rural enterprises	2% from fruit/veg/eggs	30% from fruit/veg/eggs	49% from fruit/veg/eggs	96% from fruit/veg/eggs	79% from fruit/veg/eggs
	Number of households that have incorporated at least one new source of income					61
	Income resulting directly from the economic activity supported by the project and additional to the individual's or household income prior to the project (average/year)					$941 CORDOBAS
	3 value added rural enterprises for women or youth established	0	1	1	2	2
Desired Outcome 6: Strengthen youth and women's participation and leadership in the cooperatives.	# youth leaders	8	8	8	8	8
	# youth leaders with leadership posts in local cooperative, CUE San Ramon, local government, or other initiatives	3	5	14	14	14
	# youth leaders with leadership posts in local government (COMUSSAN), other organizations or other initiatives	0	2	7	7	7
	8 youth leaders trained and leading M&E activities	50%	50%	100%	100%	100%
	200 women direct beneficiaries	24	53	143	130	130
Desired Outcome 7: Foment healthy food cultures among children and families through education.	275 schoolchildren involved in school gardens and food education activities	0	120	274	236	236
	6 school gardens functioning and supported by youth leaders	0	3	6	3	3
Coffee	Average amount of land dedicated to coffee production (ha)	-	1.2 ha	1.3 ha	1.3 ha	2.3 ha
	Average amount of coffee harvested annually (lbs)	-	1820lbs	1120lbs	1020lbs	-
	Percentage of coffee crop affected by la roya	-	-	-	65%	-
Income by Source (average per	Wage Labor				$26,750	$26,757

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HH)	Coffee Sales				$15,828	$15,789
	Selling Prepared Food				$1,900	$2,567
	Other				$4,290	$1,200
	Sale of Milk				$2,133	$5,050
	Egg Sales				$1,330	$910
	Fruit Sales				$1,410	$758
	Sale of Basic Grains				$2,875	$3,050
	Sale of Vegetables				$1,121	$1,680
	Remittances				$-	$-
	TOTAL				$25,194	$23,693

VERACRUZ Desired Outcomes	Evaluation Indicators	2011	2012	2013	2014	2015
Desired Outcome 1: Reduce seasonal hunger and increase access and availability of diverse foods year round	70% of households save at least 6 varieties of vegetable seed at home	no data	no data	18%	85%	-
	Average # of seeds saved per household				10.5	-
	70% of households produce maize	10%	38%	no data taken	71%	59%
	Average amount of maize produced per household (kg)				230.6 kg	-
	70% households produce beans	48%	42%	no data taken	74%	59%
	Average amount of beans produced per household (kg)				32.5 kg	-
	80% households save bean seed at home	no data	52%	no data taken	71%	59%
	80% households save maize seed at home	no data	52%	no data taken	68%	59%
	Months of adequate provisioning	no data	10 months	10 months	9 months	10 months
	Length of thin months	no data	2 months	2 months	3 months	2 months
	Number of HH reporting a positive change in thin months					57

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	Reduced CMI score	no data	20	24.35	9.3	4.4
	Number of HH reporting a positive change in food security based on CMI score					131
	30% of household food consumed is produced	no data	18%	no data taken	35%	50%
Desired Outcome 2: PROMOTE LOCAL AND SUSTAINABLE PRODUCTION/PREPARATION/CONSUMPTION AT THE COMMUNITY LEVEL WITH THE PARTICIPATION OF SCHOOL TEACHERS, RESEARCHERS, YOUTH LEADERS, AND COMMUNITY PROMOTERS	3 community seedbanks established serving 120 families	0	0	1	5	5
	4 model gardens functioning and in use	1	2	2	2	3
	5 school gardens functioning and in use	1	2	4	3	3
	200 students benefitting from school gardens	25	75	150	83	86
Desired Outcome 3: RESCUE OF TRADITIONAL AGRICULTURAL PRACTICES AND THE DEVELOPMENT OR IMPLEMENTATION OF NEW SOVEREIGNTY TECHNOLOGIES	100% of households implementing at least 3 traditional practices or new agroecological practices in their gardens, fields, and patios	no data	25%	no data	97%	91%
	Number of HH who have adopted Good Agricultural Practices promoted by the project					139
	Average # of soil fertility practices used by households	no data	no data	no data	5	5
	Average # of soil conservation practices used by households	no data	no data	no data	4	3.4
	70% of households saving at least 6 varieties of vegetable seed	no data	0%	18%	85%	-
Desired Outcome 4: INCREASED AVAILABILITY OF FOOD FOR CONSUMPTION BY PARTICIPATING FAMILIES THROUGH THE DIVERSIFICATION OF FOOD PRODUCTION	120 home gardens installed	30	60	110	110	139
	100% of households producing gardens in two seasons	-	-	-	76%	-
	80% of families producing more than 6 species of vegetables, vine crops and cucurbitacea.	-	24%	23%	94%	94%

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	Average # of vegetables, vine crops & cucurbitaceas species produced per household	-	no data	-	17	16
	% of vegetables, vine crops, & cucurbitaceas grown & consumed by household	-	no data	-	78%	-
	% of families with over 8 species of fruits and fruit trees	-	-	26%	30%	91%
	Average # of fruits & fruit trees species	-	-	-	16	14
	% of fruits grown & consumed by household	-	-	-	69%	-
	70% of families producing more than 1 species of roots and tubers	-	-	39%	91%	97%
	Average # of roots & tubers species produced by household	-	-	-	3	3
	70% of households producing over 6 species of culinary, medicinal, repellent, and aromatic herbs	-	19%	32%	97%	94%
	Average # of culinary, medicinal, repellent, & aromatic herbs species produced by household	-	no data	no data	16	13
	100% families with increased production & access to protein	-	no data	no data	62 chicken coops installed	94 chicken coops
	Average # of chickens per household	-	no data	no data	9 chickens	-
	Average amount of land held by each family	-	no data	no data	0.7 ha	1.07 ha
Desired Outcome 5: COFFEE PRODUCING FAMILIES DIVERSIFY THEIR DAILY DIET USING NEW RECIPES AND FOODS IN A STABLE MANNER	Weekly dietary diversity score increased to 9 average.	-	6.9	6.86	7.3	8.5
	100% families consuming more than 6 food groups daily	-	100%	84%	94%	100%
	Number of HH reporting a positive change in dietary diversity					113
Desired Outcome 6:	% households using chemicals (total & by	-	-	-	26% TOTAL	3% TOTAL

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FAMILIES REDUCE THEIR DEPENDENCE ON EXTERNAL INPUTS WITHIN THEIR PRODUCTION SYSTEMS	area)	-	-	-	3% in Huerto	0% in Huerto
		-	-	-	0% in Patio	0% in Patio
		-	-	-	0% Milpa	3% Milpa
		-	-	-	27% Cafetal	0% Cafetal
	100% households implementing at least 2 soil conservation practices	-	-	-	88%	85%
	100% households implementing at least 2 soil fertility practices	-	25%	-	91%	91%
	Number of households that have adopted new GAPs promoted by the project.					139
Desired Outcome 7: FAMILIES COLLECT RAINWATER AND REDUCE THEIR HOUSEHOLD CONSUMPTION THROUGH THE ADOPTION OF ECOTECHNOLOGIES	% of households using artisanal irrigation systems	0	30%	80%	53%	-
	% of households with access to clean, filtered drinking water at home	-	-	-	9%	32% (44 systems)
	50% of households have improved access to water for irrigation for production via water catchment or storage systems	0	0	8%	15%	33% (46 systems)
Desired Outcome 8: FAMILIES MAKE GOOD, EFFICIENT USE OF WOOD/TIMBER RESOURCES	# of wood, fuel, and fruit trees established	1050	580	450	915	0
Desired Outcome 9: STRENGTHENING OF WOMEN AND YOUTH ORGANIZATION THOUGH PARTICIPATION IN PROJECT ACTIVITIES AND TRAININGS	# youth leaders	6	6	6	8	8
	# direct female beneficiaries	60	60	125	125	139
	# direct female youth beneficiaries participating in training activities (6-18 years of age)	30	61	160	112	112
Desired Outcome 10: PROMOTE THE ECONOMIC AUTONOMY OF YOUTH AND WOMEN TO GUARANTEE THEIR SUSTAINABILITY	2 value added rural enterprises for women or youth established	0	0	1	1	5
	70% of households with diversified household income from farmers markets or rural enterprises	0	0	65%	63%	74%

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	Average income resulting directly from project activities					M$1853
	# of youth participating in regional and international exchanges and trainings	4	4	6	6	6
	Number of HH that have incorporated at least one new source of income resulting from the project					139
	Income resulting directly from an economic activity supported by the project (average/year)					$1853 PESOS
Income by Source (average per HH)	Wage Labor	-	$3,705	-	$11,806	$14,819
	Coffee Sales	-	$7,326	-	$8,824	$6,218
	Selling Prepared Food	-	-	-	$941	$782
	Other	-	$48	-	$724	$3,400
	Sale of Purple Banana Leaves	-	$565	-	$465	$456
	Egg Sales	--	-	--	$220	$344
	Fruit Sales	-	-	-	$141	$991
	Sale of Basic Grains	-	$33	-	$47	$35
	Sale of Vegetables	-	$1	-	$73	$517
	Remittances	-	-	-	-	$176
Coffee	Average amount of land dedicated to coffee production (ha)	1.6 ha	-	-	1.9ha	1.03 ha
	Average amount of coffee harvested annually (quintales)	-	877lbs	857lbs	862lbs	-
	Percentage of coffee crop affected by la roya	-	-	-	55%	-

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