



**ResCA**  
RESILIENT CENTRAL AMERICA

# Semi-Annual Progress Report

6<sup>th</sup> Semi-Annual Progress Report  
April 2019 – September 2019



Gift of the United States Government





# Climate and Food Security in Central America

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Sixth Semi-Annual Progress Report, April 2019 - September 2019

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# Abbreviations and Acronyms

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ACDR	Pueblo Viejo Association for Community Development (El Salvador)
ADICOTZANI	Association of Integral Development of the Community of Tzanimacabaj (Guatemala)
ADIP	Association of Producers of Palqui (Guatemala)
AGEXPORT	Guatemalan Association of Exporters (Guatemala)
AHCC	Honduran Climate Change Alliance “Ayuda en Acción y Alianza Hondureña de Cambio Climático” (Honduras)
AICN	Inter-municipal Association of Cacahuatique Norte (El Salvador)
AJUAGUA	Osicala Water Service Provider Network (El Salvador)
ASODEL	National Association for Dairy Produce Development (Guatemala)
ASODINE	Association of Integral Development of Producers Nueva Esperanza (Guatemala)
ASOPRA	Jesús de Otoro Local Ricegrowers Association (Honduras)
ASOVERDE	Green Development Association of Guatemala (Guatemala)
ASPS	Salvadoran Health Promotion Association (El Salvador)
ASPROCHIT	Sacapulteca Association of Onion Producers (Guatemala)
BFD	Belize Fisheries Department (Belize)
BMP	Best Management Practices
BWSFA	Belize Women’s Seaweed Farming Association
CAC	Central American Agricultural Council, SICA
CAES	Cooperative of Agricultural Services of Esquipulas (Nicaragua)
CBD	United Nations Convention on Biological Diversity
CDRO	Association of Cooperation for Rural Development in Western Guatemala (Guatemala)
CRFM	Caribbean Fishery Management Council Caribbean Regional Fisheries Mechanism
CENAOS	Oceanographic and Seismic Atmospheric Studies Center (Honduras)
CIAT	International Center for Tropical Agriculture
COCODE	Development Community Council (Guatemala)
COINACHI	Chipaquense Integral Agriculture Cooperative Union (Guatemala)
COMURES	Corporation of Municipalities of the Republic of El Salvador (El Salvador)
COPACO	Central Western Atlantic Fisheries Commission
COPECAFE	Integraded Coffee Savings and Credit Cooperative (Guatemala)
COPECO	Permanent Contingency Commission (Honduras)
CRFM	Caribbean Fishery Management Council Caribbean Regional Fisheries Mechanism
CRS	Catholic Relief Services – United States Conference of Catholic Bishops

CSA	Climate Smart Agriculture
DICORER	Regional Coordination and Rural Extension Directorate, MAGA (Guatemala)
DICTA	Directorate of Agricultural Science and Technology (Honduras)
EEZ	Exclusive Economic Zone(s)
ENADE	National Businessmen Meeting (Guatemala)
FAO	Food and Agriculture Organization of the United Nations
FDM	Fishery Development Model (Belize)
FEDEARROZ	National Federation of Rice Growers (Colombia)
FIAES	Environmental Investment Fund of El Salvador (El Salvador)
FIP	Fishery Improvement Project (Belize)
FOAG	Water and Agriculture Fund (El Salvador)
FONAGRO	National Fund for Agriculture (Guatemala)
FUNDAECO	Foundation for Ecodevelopment and Conservation (Guatemala)
FUNDEMAS	Foundation for the Business Development of El Salvador (El Salvador)
GIMBUT	Inter-institutional Group for Forest Monitoring and Land Use (Guatemala)
HAS	Healthy Agricultural Systems
IDEAM	Institute of Hydrology, Meteorology and Environmental Studies (Colombia)
INAB	National Forest Institute (Guatemala)
INACOP	National Cooperatives Institute (Guatemala)
INDE	National Electrification Institute (Guatemala)
MAGA	Ministry of Agriculture, Livestock and Food (Guatemala)
MARN	Ministry of Environment and Natural Resources (Guatemala)
MARPLESCA	Regional Management Plan for the Caribbean Spiny Lobster
MPA	Marine Protected Area
MZSP	Sustainable Landscape Zoning Map (Guatemala)
NAMA	Nationally Appropriate Mitigation Action
NFC	National Fishermen's Cooperative (Belize)
OIRSA	Regional International Organization for Plant Protection and Animal Health, SICA
OMAS	Municipal Office of Water and Sanitation (Guatemala)
OSPESCA	Regional Unit for Fisheries and Aquaculture, SICA
PICSA	Participatory Integrated Climate Services for Agriculture
PMACCR	Municipal Plan for Adaptation to Climate Change and Risk (Guatemala)
PMP	Performance Monitoring Plan
PPCSL	Placencia Producers Cooperative Society Ltd. (Belize)
RAICES	Restorative Agriculture in Critical Ecosystems (El Salvador)
ResCA	Resilient Central America, Program for Climate and Food Security in Central America
SAG	Secretariat of Agriculture and Livestock (Honduras)
SE-COSEFIN	Executive Secretary for Finance Ministers in Central America
SEDUCA	Training and Agribusiness Development Service, SAG (Honduras)
SICA	Central American Integration System
TNC	The Nature Conservancy
UACC&CR	Agro-Environmental, Climate Change and Risk Management Unit, SAG (Honduras)
UCC	Climate Change Unit, MAGA (Guatemala)

UNFCCC United Nations Framework Convention on Climate Change  
USAID United States Agency for International Development  
UTAM Municipal Agricultural and Technical Unit (Guatemala)  
WECAFC Western Central Atlantic Fishery Commission, FAO

To advance the goals of the Resilient Central America (ResCA) program, we have achieved the following results in the April to September 2019 semester reporting period. Regarding climate change adaptation, this semester we trained a total of 2,097 people; 1,291 men (61.6%) and 806 women (38.4%). We also strengthened 20 institutions; 1 from the public sector at the national level; 3 from the public sector at subnational level and 16 local organizations. With collaborating institutions and stakeholders, 41 policies were proposed, 5 at the national level, 33 at the subnational level and 3 at the regional/international level. We achieved the adoption of 11 policies; and the implementation of 13 policy instruments.

At the end of the Fiscal Year 2019 (FY19-SA2), the cumulative numbers on climate change adaptation are as follows. During the 3 years of implementation, we have trained a total of 4,443 people (2,868 men and 1,575 women), thus exceeding the Life of Project (LOP) Target of 2,600 people trained. We have also strengthened a total of 34 institutions, also exceeding the LOP Target of 20 institutions. Finally, we have proposed 29 policy instruments and promote the adoption of 18 and the implementation of 13; exceeding the LOP Target of 33 policies (see Table 1).

On sustainable landscapes, this semester we trained 1,963 people; 1,632 men (83.1%) and 331 women (16.9%). We strengthened 9 local organizations. With collaborating institutions and stakeholders, 2 policy instruments were proposed; 34 were adopted and 37 implemented.

At the end of FY19-SA2, the cumulative numbers on sustainable landscapes are as follows. During the 3 years of implementation, we have trained a total of 3,659 people (2,875 men and 784 women). Thus, the LOP Target of 100 people trained has been well exceeded. We have also strengthened 13 institutions, exceeding the LOP Target of 10 institutions. We have engaged in proposals of 10 policies, achieved adoption of 41 and the implementation of 40, for a total of 91 tools. This represents 36.4 % of the LOP Target of 250 instruments (see Table 1).

**TABLE 1**  
 ResCA Framework Indicators: FY17, FY18 and Cumulative Progress  
 towards the Life of Project (LOP) Target as of FY19 SA2 (September 2019).

INDICATOR	LOP TARGET	FY17	FY18	CUMULATIVE (SEP 2019)	PROGRESS TOWARDS THE LOP TARGET (%)
<b>EG11.1</b> Number of people trained in climate change adaptation supported by USG assistance	2,600	10	1,509 <sup>1</sup>	4,443	100 %
<b>EG11.2</b> Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance	20	1	8	34	100 %
<b>EG11.3</b> Number of laws, policies, regulations, or standards addressing climate change adaptation formally proposed, adopted, or implemented as supported by USG assistance	33	0	10	60	100 %
<b>EG13.1</b> Number of people trained in sustainable landscapes supported by USG assistance	100	0	881	3,659	100 %
<b>EG13.2</b> Number of institutions with improved capacity to address sustainable landscapes issues as supported by USG assistance	10	0	3	13	100 %
<b>EG13.3</b> Number of laws, policies, regulations, or standards addressing sustainable landscapes formally proposed, adopted, or implemented as supported by USG assistance	250	0	3	91	36.4 %

<sup>1</sup> We updated this in the 5<sup>th</sup> semiannual report (from 1,649 to 1,509), as one training in El Salvador (World Environment Day celebration in San Simon, 6/5/2018) did not meet the definition for indicator EG11.1.





# Objective 1

## TRADE AND ACCESS TO MARKETS

ResCA seeks to link producers (farmers and fishers) to global and regional demand for “cleaner” and more sustainable agricultural products through interventions such as building traceability and validation mechanisms into supply chains, as well as promoting policy and regulatory reform that supports creation of and producer connection to sustainable supply chain initiatives. Encouraging regional and global market demand for goods produced through climate-smart agricultural is key to the Program’s long-term success. Supporting governments to promote policies and extension services to establish Climate Smart Agricultural practices and verify sustainable sourcing of crops and fish is critical to proliferation of climate-smart approaches at national levels, ensuring they are linked to and supported by market demand for environmentally friendly crops and fish. This semester, we achieved the following outcomes per country.

# Belize

- On March 17-18, 2019, Alex Martinez (TNC) attended the Seafood Expo North America in Boston, Massachusetts, a leading trade event for seafood purveyors. He met with Tequesta Bay, one of the largest distributors in North America, as well as buyers such as Red Lobster and Costco, who are interested in sourcing sustainable lobster from Belize and who are also interested in supporting the Spiny Lobster Fisheries Improvement Project (FIP) that we are developing under ResCA. He also met with the Seafood Alliance for Legality and Traceability who will be showcasing the Tally system in Belize, as well as with (En)Visible, a block chain traceability provider interested in collaborating on our seaweed aquaculture project.
- On April 24-25, 2019, Alex Martinez and Julie Robinson (TNC) met the Future of Fish team at the Illinois Field Office in Chicago to develop both our Sustainable Fisheries and Sustainable Aquaculture programs. During the trip, they also met with (En)visible and Estee Lauder, who we are engaging to develop a new premium supply chain for sustainably farmed seaweed.
- Based on the analysis of first year's collection of data on lobster landings using the Tally electronic traceability system at the National Fishermen Producer's Cooperative Society Ltd., we made technical revisions to the system interface in order to advance data quality in readiness for the June 15<sup>th</sup> opening of the 2019 Spiny lobster season.
- During July 2019, ResCA Belize colleagues Julie Robinson and James Foley (TNC) presented to Beverly Wade and Mauro Gongora, Fisheries Administrator and Policy & Planning Coordinator respectively for the Belize Fisheries Department (BFD) the progress with the Tally electronic traceability system. This included potential applications of Tally data to fisheries management and the ability of fishery visualization and simulation tools currently under development to project long term outcomes to the fishery based on selection of different management options. These concepts were received warmly, paving the way for the continued development of these systems.
- After many months of engagement, fostering and facilitation, the Belize Women's Seaweed Farming Association (BWSFA) was finally officially registered under Belize's Companies and Corporate Affairs Registry



on July 8<sup>th</sup>, 2019 and the Certificate of Corporation was released on August 8<sup>th</sup>, 2019. This is an important aspect of promoting gender equity, building community resilience through diversification and building a strong industry for the country. This will also allow the BWSFA to access funding to support their work in developing new products and supply chains for sustainably farmed seaweed, filling a niche in the nascent Belize seaweed industry. Several meetings were held to develop, review and finalize their Articles and Memorandum of Association. The BWSFA supports women in coastal communities in creating consistent sources of income through the sustainable and environmentally-responsible development of the seaweed industry in Belize. The objectives of the BWSFA are:

- To empower its women by strengthening its organizational capacity to generate income by 2024.
  - To see the development of seaweed farms and the creation of value-added seaweed products to become more resilient to climate change through diversification of income.
  - To develop the seaweed industry in Belize and become an integral part of the development of the industry as a viable hard currency income earner for the country.
  - To promote environmental stewardship in future generations through awareness and outreach in coastal communities.
- The efforts of the BWSFA and TNC have been recognized and we were invited to provide a training to other women at the Women in Fisheries Forum in Belize. It was the instance in this program where women were building the capacity of other women and marked a turning point for the BWSFA.
  - On August 12-13, 2019, farm materials were distributed to three fishing camps in southern, western and northern Turneffe Atoll Marine Reserve (TAMR) to support establishment of two new seedbanks and nine seaweed farms by nine farmers during the fourth quarter of 2019.
  - On August 16, 2019, TNC Belize renewed their Memorandum of Cooperation with the Belize Trade and Investment Development Service (Beltraide), a statutory body of the Government of Belize, to continue collaboration on the establishment of a sustainable seaweed aquaculture industry for the country



# El Salvador

## El Salvador – RAICES

- On April 2, 2019, we held a training session on the creation of strategic management plans for members of the San Carlos Dos Cooperative.
- On April 13, 2019, we participated in the [Expo Café](#) El Salvador 2019, whose objective is to connect national producers and roasters with the foreigner and Salvadoran consumers through different types of Specialty Coffees. Organized by the Salvadoran Coffee Council and with the participation of the San Carlos Dos cooperative, we displayed a stand at the event to present the practices taking place to make coffee production more environmentally friendly and profitable in the intervention areas. At the event, we highlighted the importance of responsible purchasing: the market can contribute promoting best environmental practices on farm and post-harvest by prioritizing the purchase of committed producers, and even acknowledging them with better prices. Part of the stand contained the famous cafeteria and restaurant Clavo y Canela, which displayed its products and announced its practices of responsible coffee purchasing with Cosecha Azul.
- We also co-organized the “Consume what Morazán Produces” Fair with other local entities, held on August 3-4, 2019, in Morazán. The objective of this event was to position local products including coffee. About 60 exhibitors (farmers and institutions) participated and over 500 visitors attended. ResCA partner ACUGOLFO hosted a stand in which producers associated with ResCA promoted the best environmental practices they are implementing in the project, along with a local coffee cupping.
- During this reporting period, we hosted a series of three training workshops on international coffee markets, and 75 people participated.



- As part of the institutional strengthening support provided to the [Farming Association of Sierra Lenca de Morazán \(ACALEM\)](#), on May 17, 2019, we delivered material and equipment to assemble a tasting laboratory in Jocoaitique, Morazán. This consisted of one thresher, one set of screens, and one windmill. The establishment of this laboratory will give a boost to the strategic commitment this cooperative has made to generate quality coffee and improve access to market. Also, on June 2<sup>nd</sup>, 2019, the ACALEM cooperative achieved their first coffee export with PANAMERICAN COFFEE TRADING. The total sale was of 236 coffee bags of 69kg which benefitted around 20 associated producers and three individual farmers.



# Guatemala

- At the beginning of April 2019, within the framework of ResCA, AGEXPORT staff and students from San Carlos University of Guatemala, requested the Municipality of Chichicastenango to expand and improve the roads and the ditches in the community of Chipaca Primero, municipality of Chichicastenango, Quiche, where fruit producers of the Cooperativa Integral Agrícola Unión Chipaquense (COINACHI) are located. On April 30, 2019, AGEXPORT and San Carlos University achieved the approval and execution of this project. Stretching five kilometers, this highway is in one of ResCA Guatemala's main intervention areas, which is in development of export processes with FRUTESA. This will facilitate the transportation and commercialization of products from the COINACHI cooperative, especially during the rainy season, when road conditions worsen. COINACHI is one of the most prosperous ResCA's demonstration sites, where peach, apple, and plum are produced, and soon, avocado. This road infrastructure along with the productive infrastructure of the two cold rooms that were recently inaugurated, will provide high resilience to the COINACHI demonstration site.



# Nicaragua

- On May 20, 2019, we hosted a workshop with six milk cooperatives (CAES, CASANJO, San Felipe, San Francisco, Cerro Alegre, and NICACENTRO). The objective was to contribute to the strengthening of the management capacities of these cooperatives in tax and fiscal aspects, due to the reforms of the Tax Consultation Law in Nicaragua and its application for cooperatives with respect to the Income Tax. The workshop also focused on how to strengthen financial capacities in the six cooperatives and provide better services to their partners and suppliers. Attendees included accountants, managers and some presidents from the cooperatives. For more information, see this [brief overview](#). As a follow up, on July 2019, our Business Advisor worked with the San Francisco Cooperative management team an Advance Finance Workshop. To achieve that, the cooperative was asked to bring their monthly financial statements (balance sheet and income statement), with the corresponding horizontal and vertical measurement and their suggested financial ratios (liquidity, solvency, management and profitability). Then we helped San Francisco Management team with their needs, annexes of financial reports such as: depreciations, bank reconciliations, update cost structures, update balance point, raw material inventories, products in process, or finished products, billing analysis by segments or products, definition of costing processes, profitability analysis, among others financial topics.
- We organized the first agricultural fair, called "Together we are ResCA", in the municipality of Camoapa. The objective was to offer farmers agricultural inputs, supplies and seeds at lower prices than the regular market,

thanks to the sales and discounts negotiated with five allied commercial houses that came to offer their products; EMINICA, FORMUNICA, BAYER, SEMSA, and CODINSA. The financial FDL also attended. Producers that participated bought seeds of yellow corn, sorghum seed, backpack pump and fertilizers for winter planting.

- With the support of National CIPAV Expert and technical material they provide, we also held the first workshop on the "Development of resilience plan" to 5 ResCA Nicaragua member cooperatives, where



we address with them how climate change is affecting livestock and vice versa, how the carbon capture occurs and what can be done from farms and cooperatives to combat climate change and promote resilience in livestock farms. In the last part of the workshop, we help each cooperative to work their Resilience Plan. The ResCA Nicaragua Business advisor and the National CIPAV expert – with the help of the international CIPAV experts – will be visiting each cooperative individually to help them make discussions to adjust and improve their Resilience Plan and also to promote their implementation.

- During July and August 2019, ResCA Nicaragua’s Strategic Business Advisor and Directors of the CAES Cooperative elaborated a Strategic Marketing Plan which will strengthen the portfolio of products and services while also updating the organizational chart to identify which members need further training on developing more sustainable and resilient models of milk production. Additionally, the Board of Directors for the cooperative finished construction of its’ Meeting Room, which is significant for them as they strengthen market opportunities and legitimacy with potential buyers.





## Objective 2

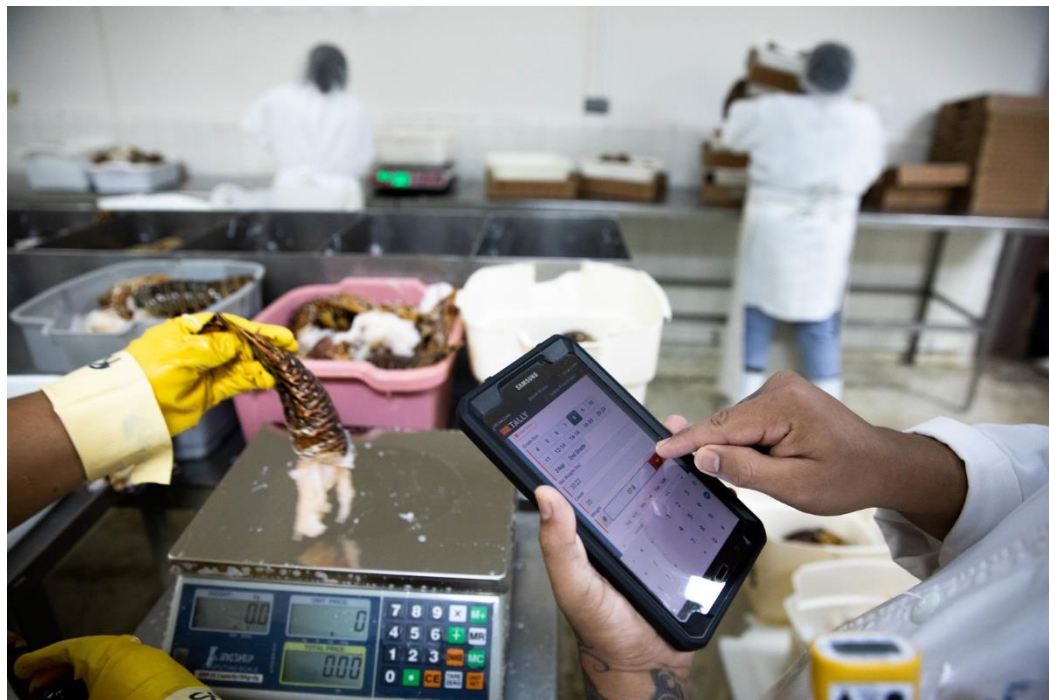
### INCREASED SUSTAINABLE AND CLIMATE RESILIENT PRODUCTIVITY

ResCA seeks to establish agricultural policies, strategies, and practices that sustainably increase productivity and decrease pressure to expand into new, forested areas that would release CO<sub>2</sub>; fisheries and mariculture practices that improve the resilience of fish stocks and their resilience to climate change; and new sources of finance (or facilitate access to current sources of finance), such as agricultural credit and innovative business models. It will also add more value to farm and fisheries products locally to make continued proliferation of these practices possible. This semester, we achieved the following outcomes per country.



# Belize

- On March 23-25, 2019, in collaboration with the Placencia Producers Cooperative Society Ltd (PPCSL), we trained and certified 11 coastal community members in sustainable seaweed cultivation. The three-day training was completed by six men and five women from coastal communities in Southern Belize.
- At the end of April 2019, we completed the preliminary analysis on all lobster landings collected via Tally electronic traceability system at the National Fishermen Cooperative. With this tool, for the first time in Belize we are able to separate landings and catch per unit effort by fishing zones for the lobster season.
- On May 29, 2019, we presented electronic traceability Tally system to over 100 partners within the Belize conservation network at MSBC Natural Resource Management Symposium in Belmopan.
- During May 2019, we held three different training sessions which resulted in a total of twenty-six individuals (22 men / 4 women) being trained in seaweed cultivation and harvesting. Among these people, 3 Conservation Officers of the Turneffe Atoll Sustainability Association, 1 NGO member, 4 Turneffe fishers and 9 Officers of Belize Fisheries Department were trained and certified in sustainable seaweed cultivation. Building capacity in seaweed farming is an important strategy to build climate resilience in coastal communities through diversification. Additionally, seaweed farms reduce ocean acidification locally, while providing nursery habitat for ecologically and commercially important species.



- On June 20, 2019, we conducted a site visit to the existing and prospective seaweed farm sites in Turneffe Atoll Marine Reserve, Belize, along with the Turneffe Atoll Sustainability Association. The purpose of the trip was to monitor progress, assess production and project implementation challenges, as well as identify opportunities for improvement.

- On June 25, 2019, Wilbur Dubon and Seleem Chan (TNC) led the revamping of the structure and composition of the Belize National Seaweed Working Group in Belize City to ensure proper representation from conservation, social, financial and government partners, in preparation for development of a National Seaweed Industry Development Workplan.



- On July 8, 2019, we coordinated meetings between key fishery stakeholders in electronic traceability in Belize (Belize Fisheries Department, National Fishermen Producers Cooperative Society Ltd., Ministry and OIRSA representatives), and staff from FishWise, for an initiative called the Seafood Alliance for Legality & Traceability (SALT). SALT is a global alliance for knowledge exchange and collaboration to promote legal and sustainable fisheries through improved transparency in seafood supply chains, with a focus on traceability. The goal was to capture lessons learned so other implementers can learn about the challenges and opportunities of a small coop's effort in traceability.
- On July 10-11, 2019, ResCA Belize colleagues Julie Robinson and Seleem Chan (TNC) met with representatives from the Belize Women Seaweed Farming Association (BWSFA) in Placencia to discuss the development of a proposal by Ms. Susan Fuller on behalf of BWSFA. The proposal is to seek funding for the BWSFA to create value added products from seaweed (gel and powder).
- At the end of September 2019, an experimental seaweed mariculture design was constructed at Snake Point, Turneffe Atoll. It was overseen by Seleem Chan, TNC's Seaweed Mariculture Project Coordinator. The objective of this experimental farm is to test three different cultivation methods at multiple depths to determine the best system for optimum growth conditions and minimum maintenance requirements.

# El Salvador

## El Salvador – RAICES

- During April 2019, we completed the collection of soil samples in the demonstration plots that will be worked with the municipal governments, as well as necessary points to feed the Digital Soil Map (MDS). Between crossing variables and extrapolations, the MDS is an instrument that identifies soil conditions in large territories and provides fertilization recommendations in a farm without needing the analysis of the place. A total of 79 samples have been obtained, with 60 used to build the MDS in three new municipalities (San Isidro, San Antonio and El Rosario). This process trained municipal technicians and producers to draw samples under the correct protocols.
- On April 2019, we successfully completed the technical assistance program provided to La Adobera Water Community in San Fernando. This plan covered administrative, accounting and other management aspects. The program also provided a dynamic infographic about water resources that addresses infiltration and groundwater issues, as well as information on climate change adaptation. Technical assistance in collecting information through gauging and other methodologies was also provided. As a result, La Adobera Water Community has now a flow registry on a monthly basis to determine the behavior of water availability in dry and wet seasons. This action is the first step taken to protect their water sources.
- We also strengthened El Cerro Hamlet Water Committee in San Simon, through technical support on reviewing and revising their internal regulations. Additionally, three board members participated in workshops on watershed management, system operations and maintenance, sanitation and chlorination, community organizing, and setting fees. As a result, now they have a Water Security Plan that CORDES worked on, and we provided support for sharing it in a broad-based discussion. They also started investing resources to set up 500 infiltration pits and reforest the water recharge area.
- On May 30, 2019, we organized an exchange tour to share experiences in the municipalities of El Tránsito (Usulután), Osicala (Morazán), and Ciudad Barrios (San Miguel). Participants included city halls and civil society organizations from Osicala and Ciudad Barrios. The objective was to learn about the experience of the El Tránsito Environmental Management Team, as a mechanism for citizen participation in the municipal environmental management plan.
- On June 25-27, 2019, we organized a 3-day exchange of experiences tour. Twenty representatives from six municipalities (mayors, technicians and members of the municipal council) representing the North Cacahuatique Intermunicipal Association (AICN), the new AICN manager and a member of ADEL-Morazán visited experiences in El Salvador and Honduras. The tour covered selective waste collection, administration of integrated waste management centers, compost and bio-fertilizer generation from waste, administration of an ecological agriculture training center, administration for the collection and commercialization of basic grains, as well as the presentation of joint policies and the local public policies for "Zero Hunger" and "Clean City". In addition, the director of the Rio Lempa Trinational Border Association of Municipalities gave a very useful presentation with guidance on good development of joint municipal initiatives. Highlights from this

tour include (a) the two associations signed a collaboration agreement, and (b) the mayors and participants returned with greater clarity about the importance of integrated solid waste management.

- On July 12, 2019, we hosted a training workshop for junior high and high-school students in Ciudad Barrios, where we provided general information on climate change. The aim was to increase their knowledge on environmental matters, of water and of soil.
- During August 2019, we supported the network of community water operators of Ciudad Barrios and the Ciudad Barrios Municipal Office developing a proposal to protect water recharge areas. These proposals consisted of the following activities: planting 1,000 forest trees, constructing 1,000 linear meters of hillside ditches, maintaining 2,200 meters of hillside ditches, constructing 10,000 infiltration trunks and building 100 2x1x1 infiltration pits. This agreement was negotiated with community water operators and local land owners.
- Also, as part of the institutional strengthening process of the Ciudad Barrios Municipal Government, we continued the capacity building actions within the Environmental Office. During this reporting period, we tutored two technicians, one specialized in environmental management and the other specialized in water resources. We provided technical support in the areas of water resource management, watershed management, climate change, systems management, and plan development, among others. We are also accompanying the Mayor's office in the process of creating a multi-stakeholder Committee on Water, Environment and Agriculture, and the Water Fund which is to be the financial instrument of this committee.



- We also provided support to set up the Water Recharge Area Management Plan of the Arenera Hamlet Water Committee, as well as developing the diagnostic analysis of the system, to be updated on a yearly basis. Additionally, members of the Water Committee have been trained on project preparation and management with a climate change adaptation approach, as well as on landscape restoration, preparation of organic fertilizers, use of mountain microorganisms, among other relevant topics. As a result, members of the Committee have carried out adaptation and resilience actions, working in coordination with farmers in the water recharge area to do soil conservation and water infiltration actions, including reforestation. They have built 2,000 ditches and reforested the water recharge area. The board also decided to invest their own funds to attend an exchange tour to Honduras to learn from the experience in water resource management and governance from other stronger water committees. They have also participated in a series of meetings to

form the Ciudad Barrios Water, Environment and Agriculture Committee; and they also became members of the Ciudad Barrios Water Committee Network.

- We also developed the Bylaws of the Environment Association of Ciudad Barrios, through a participatory process with water committee network (RECOAMCIBA) members, school teachers, farmers and municipal officers. The aim is to create a Citizen Committee to promote environmental, water and agriculture restoration. Bylaws included an organizational chart with responsibilities, and areas of action. Discussion also covered the creation of a new association with the future Ciudad Barrios Water Fund. Participants in the process included the city government environmental unit (which will have a role in the new association), and the mayor was involved in some of the workshops. It is expected that the association play a very important role in raising awareness in the population as a whole, and promoting citizen actions, spurring the city government on to enact further environmental policies, and ensure they are implemented (reinforcement). Furthermore, in order to establish firmer ties between city hall and citizens on environmental matters, or to continue putting environmental issues on the political agenda, if there is change in the government. The association is envisioned as the entity in charge of the future Ciudad Barrios Water Fund.
- On August 30, 2019, we organized a field trip to Arambala, El Salvador, to exchange experiences on productive coffee farms and water catchment. 21 producers (15 men / 6 women) from the Chilanga and Yoloaiquin municipalities visited producers from the Arambala municipality to learn first-hand about their experiences implementing best management practices for farming and establishing coffee plants in hydrological recharge zones. Producers visiting Arambala learned how their peers are using fertilizers for improved yield and reducing costs, about the recently constructed plant for organic supplies, the local soil conservation efforts, improved agronomic management practices, and marketing strategies for coffee.
- We developed a proposal of the statutes for the Osicala Water Committee Association (AJUAGUA). The statutes were approved by their assembly, and to be official, the municipality must approve them as well. The Watershed Management Association for Chilanga, San Francisco Gotera and San Carlos (AGEMIS) is in a similar situation. The statutes were revised and modified in several workshops, and they were finally approved by their assembly. We helped them with the process of gathering and preparing the required information to be officially recognized by the Ministry of Governance; process currently underway.
- We supported the implementation of the guidelines established in the Ciudad Barrios Water Protection Ordinance. The most notable implementation remarks are the following:
  - *Creation of a municipal water protection fund.* This instrument is in the process of being created, and for the time being it will receive contributions from the mayor's office, IICA, water operators and ResCA RAICES. This fund will be managed by a multi-stakeholder committee (Called the Environment Association of Ciudad Barrios). The aspects of the committee such as identity, objectives, operation, organizational chart, legal status, and work activities were discussed in various workshops with representatives of water boards, schools, city hall and institutions. There are even individuals appointed to different positions, but the creation of the committee has not yet concluded as it is currently being presented to the city hall for approval.
  - *Promote environmental awareness and education.* On March 29, 2019, a coalition involving the mayor's office and eight schools, and with co-financing from municipal businesses and World Vision, launched an extended campaign to raise awareness about waste management. This consists of community clean-up activities, garbage separation and recycling, and the sharing of outreach materials. The Multi-stakeholder Committee and the mayor agreed to use the Water Fund budget to promote a contest for young people in the municipality to award the best videos on water issues and the actions that are being taken or can be taken at the local level. There were four categories of awards (for different student ages) and it took place on June 5, 2019.
  - *Reinforcement.* Water pollution actions have been fined, as called for by the ordinance.

- *Hydrogeological Study.* The main recharge areas in the municipality have already been identified, as required by the ordinance. This has also been a key aspect in the regulations-development process.
- *Ordinance regulations.* We conducted several working sessions focused on discussing and drafting the ordinance regulations. These regulations are now pending municipal council approval.
- We also proposed the municipal ordinance on " Water Recharge Area Protection, Responsible Use and Exploitation of Water Resources" in Delicias de Concepción. We developed a series of participatory workshops to develop this policy instrument; and the outcomes were presented and approved by community leaders and by the representatives of the community Water Boards in attendance. The Ordinance has not yet been approved by the Municipal Council, as it is still being reviewed by the municipal alderman.
- In San Simón, we proposed the regulations for the Water Resources Protection Ordinance, and the Municipal Council approved them. In Osicala, the Water resource Protection Ordinance and regulations were also discussed and are soon to be submitted to the Municipal Council. In Gualococti, the Water Resource Protection Ordinance and regulations were prepared, and the Municipal Council approved both.

### El Salvador – FUNDEMAS

- FUNDEMAS joined the inter-institutional roundtable formed by Ahuachapán partners to promote and exchange experiences that contribute to creating synergies for the projects that are already running in the area.



- We organized two technical visits with Fundación CIPAV (Colombia) to El Salvador. Through these visits, action plans have been developed for the approach with sugarcane producers and farmers in the department of Ahuachapán, together with project technicians, sugar mills, agricultural technicians of the municipalities, FUNDAZUCAR, PROLECHE, and producers' associations. We also co-develop a strategy for developing a sustainable production model of for sugar cane and livestock in Ahuachapán. We organized two seminars (one with producers from Southern Ahuachapán and one in Northern Ahuachapán) to present the experiences of sustainable sugar cane production in Colombia, led by CIPAV.

- On July 8-12, 2019, we hosted the Corporate Social Responsibility Week and Sustainability 4.0 event in San Salvador. Representatives from government entities and the private sector in El Salvador attended, including sugar mills, livestock farmers, representatives of the international cooperation organizations, amongst many other participants. During this week, ResCA Regional Coordinator Horacio Rodríguez Vázquez (TNC) participated in dialogue roundtables, gave a keynote speech and hosted participatory workshops which helped strengthen alliances between local and national governments, private sector, farmers and civil society organizations. Also, during the event we hosted a networking space for the key actors of the environmental and agricultural sector of the department of Ahuachapán; among its participants were, local governments of the five Project intervention municipalities, FUNDAZUCAR, and FUNDEMAS. Discussions were held on the importance of agriculture and its impact on the environment; one of its conclusions was that El Salvador is a country with great potential for agriculture; however, it is necessary to perform restoration management on the different ecosystems in which productive activities are developed. One of the main agreements was to coordinate synergies within the framework of the different initiatives that each actor represents.

- On July 15, 2019, we presented ResCA to sugarcane producers at the Sugar Mill “*Ingenio La Magdalena*” in Santa Ana and designed a joint work plan to address the project. A separate session was held to train livestock producers and mulatto II grass seeds were distributed in order to establish model farms that will promote sustainable production systems.



- On September 11, 2019, both ResCA Sub-Awardees in El Salvador, CRS and FUNDEMAS, conducted a joint tour in Ahuachapán and Atiquizaya to identify model plots for the best management practices in livestock production in order to coordinate efforts and achieve a greater impact in the overlapping intervention zones between both projects.



# Guatemala

- On March 18, 2019, the municipal council of Rabinal, Baja Verapaz, issued two agreements that promote the management of sustainable landscapes, with the establishment of usufructs for two real estates owned by the Municipality of Rabinal, located in the town of Pachalum and the summit of El Chol. A total of 122.81 hectares were granted in favor of the Association of Green Development of Guatemala (ASOVERDE) for a period of 25 years. The granted areas will be intended for sustainable forest management actions, focused on facilitating the process of planning, implementation, monitoring and evaluation of innovative initiatives for the conservation of ecosystem services.
- During April 2019, we developed a zoning map of sustainable land use, based on a combination of Raster images of the forest dynamics mosaic 2006-2010 and the image of forest cover by Guatemalan forest types. This critical analysis of the Raster images has resulted in an update of forest dynamics until 2012 with data analysis of forest loss per year for Guatemala's 2% of its total forest cover.

- During May, 2019, we constructed two macro tunnels to grow vegetables were constructed in Xesiguán, Rabinal, Baja Verapaz and La Igualdad, San Marcos, with the support of ASOVERDE. Farmers in both communities are producing vegetables for the local and international market, and these protected agricultural practices should build resilience for the upcoming rainy season, specially to protect the crops from frost and hail. Later, between the end of July and the beginning of August 2019, ASOVERDE established fertilizer irrigation systems in the 3 macro-tunnels with tomato and chile pepper crops which will improve production yields in La Igualdad.



- As part of the climate-smart practices' project implemented by FUNDAECO and ResCA Guatemala, on June 1, 2019, 11,110 trees were planted to restore the forest landscapes on 10 hectares of degraded areas of the micro-basin in Rio Limon, in Sierra de los Cuchumatanes, Huehuetenango. These actions form part of the

mitigation and adaptation to climate change strategy. Also, FUNDAECO and local producers in the Limón and Azul river micro-basins started implementing mulch fertilizer, utilizing brushwood and sheep manure, across the 10 hectares of reforested areas. This landscape restoration practice will maintain soil humidity during the upcoming dry season for potato farmers in the area.

- We carried out capacity building activities for climate change resilience in Sierra de los Cuchumatanes, Huehuetenango, including designing a manual used to train 15 local technicians, municipality government officials, and local ResCA partners. Additionally, we hosted three workshops attended by 28 community leaders.



- On June 5, 2019, ResCA Regional Coordinator Horacio Rodríguez Vázquez was interviewed by La Ventana Radio, FGER 700 AM, a radio show based out of Guatemala City that highlights innovation and progress towards the 2030 UN Sustainable Development Goals. Horacio spoke for ten minutes explaining the work ResCA is executing at the regional level and also the importance of our work in Guatemala. Listen to the radio interview [here](#) and see social media posts [here](#) and [here](#).
- During June 17-24, 2019, the CDRO ResCA Project, through the School of Agro-Environmental Training in Totonicapán, developed and certified 51 people as Agro-environmental Promoters and Environmental Educators with Emphasis on Climate Change. This certification was a result of a six-month period and was supported by MARN, MAGA, INAB, and CUNTOTO. On July 2019, the third process of this certification started, with the participation of 48 people.
- Additionally, we trained 1,242 people on issues of adaptation to climate change. With this capacity building effort, we are promoting resilience by forming a critical mass of citizens, including a significant number of women and youth who will take on the challenges of the climate change agenda in the Western Highlands of



Guatemala. Between August and September 2019, AGEXPORT led conservation actions for soils in an area of approximately 10 hectares in Uspantan, Sacapulas and Chichicastenango. They established conservation structures including irrigation ditches that allow for infiltration, terraces, living and fixed barriers to stabilize soil, and mini-irrigation systems in order to improve agricultural production over the winter, using a leveled terrace design.

- At the beginning of September 2019, ASOVERDE reforested an area of 30 hectares in Uspantan, Chichicastenango Quiche, Rabinal Baja Verapaz, San Pablo San Marcos, Concepción Chiquirichapa Quetzaltenango, as part of the actions for reforestation in sloped areas and under the design for establishing gallery forests. They achieved an 85% average tree success rate—using the highly adaptive species of male pine, red pine, cedar, alder, and oak—which is considered a very good result given the low precipitation and drought that has occurred. These reforestation actions are part of the conservation of the 7 hydrological recharge zones of the Naranjo, Samala, Ocos, Palqui, Cubulco, Salama, and Copon watersheds.

- The CDRO partner strengthened 1 community organizational structure in Paraje León, municipality of Santa María Chiquimula, department of Totonicapán, who guides and accompanies the agricultural producers of the community in their productive work. This strengthening is based in the fact that the productive community facility has minimal and modest vegetable

production infrastructure, which is managed collectively under the tutelage of the organization's leadership, who has institutionally committed to incorporate the practices learned in the capacity building processes.

- Additionally, 6 organizational entities were strengthened, namely: 2 Municipalities (Todos Santos and San Juan Ixcay), 3 Grassroots Organizations (ICUZONDEHUE, ADAT and Joya Hermosa) and a government institution (CONAP) with the objective of contributing to the increase of skills and capacity to evaluate or address the risks of climate change. For this purpose, workshops were held with topics related to Climate Change Resilience, in which the participation of technical personnel from these instances, committed to replicate the knowledge acquired based on the training and the didactic materials received.
- FUNDAECO developed the Training Module for Climate Change Resilience aimed at community leaders, local technicians and professionals to increase resilience to climate change in the Western Highlands. This module has already been used successfully to train people during this reporting period. The module consists of basic concepts on climate change, which is adaptation to climate change, environmental vulnerability and how organizations can be strengthened to assume adaptation to climate change. The material is very graphic, explaining the concepts to be shared with well-achieved images.
- To make progress in achieving the goals, visits and meetings were held with municipal officials, technical staff, municipal councils and Mayors. It was possible to obtain 3 municipal agreements that recognize the Municipal Plans for Adaptation to Climate Change and Risk, in the municipalities of Sacapulas and Uspantán, department of Quiché, and Concepción Chiquirichapa, department of Quetzaltenango. The Municipal Plans for Adaptation to Climate Change and Risk were prepared in another effort, but had not been formalized by the municipal

authority, for which efforts were made in this reporting period. The Municipal Plans for Adaptation to Climate Change and Risk are territorial management instruments that use the methodology of Open Standards that was applied in a participatory manner with the representation of all sectors of the municipal territory. The municipal plans propose measures to adapt to climate change in forests, water, agricultural activity and municipal productive infrastructure in a period that covers the next 20 years.

- The CDRO partner accompanied the development of 1 regulation institutional instrument for the Management of Water Resources in the municipality of Olintepeque, which has been approved by 8 communities in the municipality. This has been generated with the participation of community leaders, local and municipal authorities through participatory workshops. Currently the corporation of municipal authorities approved these regulations as well.

# Honduras

- On April, 2019, we conducted three collaborative workshops in El Corpus Choluteca and Jesus of Otoro Intibucá with communities of corn, bean and rice producers. The objective was to learn and integrate climate information in the planning of the next planting campaign.
- On May 14, 2019, together with the Secretariat of Agriculture and Livestock (SAG), we supported the implementation of the Western Participatory Agroclimatic Table in Santa Rosa de Copán. The objective was to present the climate perspective and prepare meteorological bulletins for technicians and farmers for the upcoming 2019 crop cycle.
- We trained one hundred and thirty-three farmers (60 women and 73 men) in 9 communities using the PICSA methodology. During the training sessions, participants developed knowledge in climate information, climate variability, seasonal forecasts and weather resilient production practices. Through school farm plots, the groups of producers participating in the training implemented weather resilient practices such as seed selection, inter-cropping, and modified planting dates, among others.
- On June 18, 2019, we participated in the socialization of the Offer and Demand study of the Extension Services offered in Honduras, hosted by DICTA and CARE in Tegucigalpa within the framework of the DLEC project. We proposed to include the Climate Services component in the extension model through the PICSA methodology implemented by ResCA.
- On June 18-19, we participated in the CSA Climate Smart Agriculture (CSA) Practice Prioritization Workshop for dry corridor of Honduras facilitated by CIAT-IFAD, the proposed methodology will be used by ResCA-Honduras in the formulation of adaptation policies and sustainable landscapes.
- On June 25, 2019, we held the first training workshop for extension workers in the PICSA (Participatory Integrated Climate Services for Agriculture) methodology in Tegucigalpa, Honduras. The purpose of the workshop was to empower 27 participants in the use of the tools to improve the capacity of rural communities



to use climate information for agricultural decision making. Eight organizations participated in the training included staff from Comisión de Acción Social Menonita (CASM), the Municipal Government of Trojes, GIZ, MiAmbiente, Swisscontact, UNAH, Word Vision, Ayuda en Acción and SAG. The aim of the training was to build the capacity of participants for step-by-step implementation of the PICA methodology with farmers as a part of extension services, as well as to share experiences across technical assistance organizations around the use of climate information in agricultural extension.

- On June 26, 2019, we participated in the radio program "La hora del café" in Santa Bárbara. Transmitted by Radio América, ResCA showcased their climate resilience interventions in coffee systems in Honduras. Meetings with IHCAFE directives were carried out to program institutional strengthening activities. See the interview here: [bit.ly/326adjB](http://bit.ly/326adjB)
- On August 2, 2019, we participated in a joint action planning meeting with the Rural Opportunities-Swisscontact project in the Choluteca region, the first actions of which will be carried out next month in September for training extension agents and producers in the PICA methodology for dry beans.
- On August 29-30, 2019, we facilitated the realization of the Agroclimatic Technical Tables (*Mesas Agroclimáticas*) in Santa Rosa de Copán and Choluteca. The aim was to prepare for the final 2019 season (*postrera*) in coordination with the Secretariat of Agriculture and Livestock (SAG) and the National Meteorological Service (CENAOS-COPECO). Newsletters with recommendations for the September-November period will be available soon.
- On September 6, 2019, we presented the agroclimatic perspective at the final cycle of production in La Ciénaga, Yuscaran, El Paraíso, in collaboration with COPECO-CENAOS, In addition, COPECO-CENAOS presented the crop modeling exercise in Cropwat, which helps to determine the best window for planting in relation to the hydrological requirements of beans and the rain forecast for the given time period.



# Nicaragua

- On April 1, 2019, we hosted a workshop with the project's technicians with the objective of strengthening the capacities of the team in the reproductive diagnosis of pregnancy in cattle. The diagnosis of pregnancy in cattle ranching is important because it is the moment where producers make decisions such as when to dry off the cow, treatment to perform if there is no return to heat, treatment if there are pathologies, discards, etc. As a result, each producer can have productive cows, manage their herds more efficiently, and reduce the pressure on land and forage to achieve improved resource management.
- During June 2019, we trained the 32 groups of producers actively participating in the project with the module "Practical feeding of bovines in the tropics". Objectives of this module are: 1) to identify the optimal time to use the pastures and to assess the economic and nutritional importance of the pastures and forages; 2) to provide information on how to take advantage of the pastures and forages; and 3) to recognize the types of food and their nutritional contributions. A good diet with grasses and forages is a good way for cattle to emit less greenhouse gases when they burp.
- On July 14, 2019, we facilitated a workshop with six of the dairy cooperatives in the project (CASANJO, NICACENTRO, Cerro Alegre, San Francisco, San Felipe, and Esquipulas) on Livestock Resilience and Climate Change. The goal of this workshop was for each cooperative to commit to including these principles in its 2019 strategic action and work plans. The workshop was centered on four objectives: 1) to understand the origin, effects and alterations caused by climate change in the livestock sector; 2) to learn what the characteristics of livestock resilience to climate change looks like and how it contributes to carbon sequestration; 3) to define strategies for the development of livestock that are resilient to climate change; and 4) to develop a resilience plan for the cooperative to promote with their partners/producers. Over 26 executives from each of the six cooperatives participated in the workshop which will set forth the work plan for 2019-2021.



- With the support of CIPAV – our specialist partner in silvopastoral systems (SPS) and natural resource management- we signed 35 collaboration agreements with 35 model farms (8 intensive SPS and 27 more traditional SPS). In this report we are documenting [34 collaboration agreements](#) with investments in inputs and programmed equipment’s totaling US\$93,067.00. Of that total investment, US\$58,092.00 are contributed by the ResCA project (USG Funds) and US\$34,975.00 by the 35 partner farmers. One agreement is pending with the partner Rafael Granjo from Camoapa, who will replace a demo farm that withdrew from the project, owned by the San Francisco Cooperative.
- On July 22-31, 2019, we trained the 32 groups of farmers implementing model farms on the “Rotational grazing” module, also known as Voison, an intensive pastoral management system, which is simpler and a low-cost measure that can have a greater positive impact on the production, profitability and overall sustainability of livestock. With adequate rotation, the pastures will have enough grass cover, well fed cattle, and will improve soil management which prevents erosion, and retains carbon in the soil.



- On August 7, 2019, we visited the Model Farm of Doña Cleotilde Martínez, in El Paraíso community of Boaco, with the goal of providing technical assistance in productive and reproductive registration of cattle herds and business consulting to help draft an Income Statement for 2018, which is also serving ResCA Nicaragua as a project indicator baseline. As a result of the visit, the family was able to see clear evidence of how these practices are helping increase their profit margin with milk sales to the San Felipe cooperative, another cooperative that ResCA Nicaragua is intervening in.

- On September 2019, Cooperative San Francisco, Camoapa, Boaco. ResCA Nicaragua, with a strategic Business Advisor conducted a workshop about the State of Results on the Farm (LB2018) with nine of the project’s producer partners from the Cooperative San Francisco Cooperative in the Department of Boaco. At the beginning of the workshop, an inventory was conducted of the livestock, the available pastureland, and the equipment and infrastructure on the farms. Next, an exercise covered the costs and income from a year of operation (in the case, using data from 2018 as the base). Income was then divided between income from the sale of milk and from the sale of animals (cows sold, weaned calves, and bulls sold). Then, the monthly expenditures were registered considering the costs of maintaining the gates, maintaining the herd, feeding the herd (winter/summer), milking, financing, and administration. With the resulting information from the exercise, the producers can understand the utilities and loses obtained during the period and learn the cost of producing a liter of milk and a kilogram of meat. This is key information to improve the administration of their businesses and to improve strategic decision making.



- We trained 528 partner families in forage conservation techniques to make them more resilient, a necessary practice to ensure that the livestock families can feed their animals all year round, especially during the dry season and bad winters. The three objectives of the training module are: 1) To learn the biological, technological, and economic aspects involved in the conservation of foraging plants, 2) To learn the importance of the different types of conservation of foraging plants to improve the nutrition of their livestock and 3) To learn the best way to store forage food. In the last case, they also spent a practical day in the field with the 32 producer partner groups of the project.



## Regional level

- On August 6-9, 2019, ResCA Regional Coordinator Horacio Rodríguez Vázquez participated in FAO's Innovation Week of the Americas in Montevideo, Uruguay, to present ResCA's interventions in agriculture through the use of technology, highlighting the ResCA Honduras project led by CIAT. Read more [here](#) (Spanish).
- CIAT and TNC Latin America participated in a live forum on national TV (TNH) to present climate change adaptation actions in Central America and Honduras with a specific highlight of ResCA's work in Choluteca, Intibucá and Copán. The one-hour forum was broadcasted by the station on national TV and via this [YouTube link](#) as well as via [Facebook Live](#) on ResCA's page.
- TNC developed the [Sustainability Guide for Integration in Companies](#), which was officially launched on July 9, 2019 during the Sustainability Week organized by FUNDEMAS in San Salvador, El Salvador. A press release was launched to 27 media outlets in El Salvador and regionally, most notably covered by [El Mundo](#) and [El País](#) while interviews were given with the following media outlets, publishing articles in [El Economista](#), [El Diario de Hoy](#). A live in-studio interview with Heloisa was featured on [Orbita TV](#). This guide was also proposed to the Directorate of Agricultural Science and Technology (DICTA) of Honduras to support their strategic institutional planning.
- OSPESCA is developing a Regional Seafood Traceability Standard, with emphasis on Caribbean spiny lobster fisheries, and a digital system (TRAZAR-AGRO) in partnership with the Agricultural Health Regional International Organization (OIRSA). The OSPESCA Council of Ministers requested in December 2018 the Agricultural Health Regional International Council (CIRSA) to officially adopt the Regional Traceability Standard as they are the competent authorities in food traceability and safety. Once the CIRSA adopts the standard, then OSPESCA authorities will consequently adopt the standard.
- On September 10-13, 2019, several training workshops were conducted in Honduras to implement the fishery product traceability. These workshops were promoted using the application framework of the TRAZAR-AGRO of OIRSA system and ResCA. The objective is to start the implementation of the regional traceability standard with actors in the fishery sector; especially processing companies, shipowners, and fishers. As a result, the TRAZAR-AGRO implementation started already to be implemented in Honduras, Belize and Nicaragua. On September 10 2019, the National Government of Honduras issued the [Executive Decree 010-2019](#), acknowledging the implementation of the Agreement for Technical Cooperation to develop, administer and operate the National Registry System of Cost-effectiveness and Traceability of the Farming, Aquaculture, and Fishing (SINART), which will be managed by the Agriculture and Livestock Secretariat (SAG) of Honduras, the National Service of Food Sanitation and Safety (SENSA) of Honduras, and the International Organism for Regional Farming Sanitation (OIRSA) of the SICA System. The implementation of the traceability system in Honduras has allowed Caribbean spiny lobster fishery products to be exported to the European Union.



## Objective 3

### AGRICULTURAL AND ENVIRONMENTAL MANAGEMENT

ResCA seeks to establish agricultural policies, strategies, and practices that sustainably increase productivity and decrease pressure to expand into new, forested areas that would release CO<sub>2</sub>; fisheries and mariculture practices that improve the resilience of fish stocks and their resilience to climate change; and new sources of finance (or facilitate access to current sources of finance), such as agricultural credit and innovative business models. It will also add more value to farm and fisheries products locally to make continued proliferation of these practices possible. This semester, we achieved the following outcomes per country.

# Belize

- The Belize Ministry of Agriculture, Fisheries, Forestry, the Environment, Sustainable Development and Immigration announced the expansion of Fishery Replenishment Zones on April 2<sup>nd</sup>, 2019. TNC co-led this initiative under the guidance of the BFD, other NGOs and stakeholders. The expansion of Fisheries Replenishment (no-take) Zones ensures that Belize complies with several international obligations such as the United Nations Convention on Biological Diversity (CBD) to conserve 10% of all marine and coastal ecological regions by 2020, the United Nations Sustainable Development Goals and Belize's Growth and Sustainable Development Strategy to name a few. The total area of Belize's waters under no-take status has now increased from 4.5% to 11.6% and includes some of the most underrepresented habitats in the current marine protected areas (MPAs) system of Belize. With this declaration, Belize has now committed to protecting 391,246 hectares of critical marine habitat. This places Belize as a leader and, once implemented, Belize will be in a tie for 4<sup>th</sup> place globally in terms of % no-take in the Exclusive Economic Zone (EEZ). TNC led this initiative with the Government of Belize and partners for the past seven years.
- At the end of April 2019, TNC Belize completed the seaweed farm Baseline Ecological Monitoring Report (Oct 2017 – Dec 2018). The report highlighted that seaweed rafts may help to mitigate thermal stress to seafloor habitats and if done at scale and following Best Management Practices Guidelines, may help to mitigate climate change impacts on coral reefs. Additionally, results show that seaweed farms can support up to 34 species of fish and 28 species of invertebrates including nursery grounds for the Caribbean spiny lobster, parrotfish and crabs.
- On May 8th and 9th, Julie Robinson and Alex Martinez (TNC) met with Joaquim Ferreira Leite and Cayetano Casado of the NDC Partnership to discuss Belize's National Determined Contributions as they relate to Fisheries and Alternative Livelihoods to address Climate Change. They presented our TNC/ResCA work on Fisheries and Alternative Livelihoods projects through ResCA, and our contributions towards building climate resilience in these sectors.
- On May 15-16, 2019, ResCA held the first workshop to develop the Fishery Improvement Project (FIP) and the Fishery Development Model (FDM). This workshop was attended by key stakeholders including both major productive fishing cooperatives in Belize (representing 80% of the national fishery), representatives from NGOs, subnational governments and the National Government of Belize. Solutions were explored to address weaknesses identified in the Marine Stewardship Council Pre-Assessment that was completed in February. During August 2019, interviews were conducted between TNC Belize, Future of Fish and key stakeholder organizations involved in the FIP-FDM to identify areas of strength and gaps in capacity, expertise and funding for actions contributing to this FIP. Then, on September 3-4, a second workshop was held with the participation of industry, government, NGOs and fishers to build upon the ideas generated in the first workshop. All participants worked together to develop a workplan and signed a symbolic agreement to participate in the FIP once it is officially launched.
- The Northern Fishermen Producers Cooperative Society Ltd. (Northern) committed to also join the Spiny Lobster FIP. By the end of September 2019, they had further provided verbal commitment to officially be a

partner on the FIP and sign our sustainability and communications policy. Both Northern and National Fishermen Producers Cooperative Ltd. (National) and other partners, including the BFD and the Belize Fishermen Cooperative Association, agreed to commit to participating in the proposed FIP Steering Committee. As part of their commitment to lead the charge and develop a replicable fisheries management model, National also signed multiple agreements and commitments that allows their catch data to be linked to the visualization tools mentioned above.

- Later, on September 23-26, 2019, James Foley (TNC Belize) attended the Latin American Fishery Improvement Project (FIP) Community of Practice (CoP) workshop in Lima, Peru. He presented to an audience of approximately 100 representatives from governments, industry, NGOs and fishers who are involved in the FIPs throughout Latin America, on TNC's strategy to employ electronic traceability that supports the FIP+ Fishery Development Model (FDM) in order to achieve sustainable lobster and conch fisheries in Belize. This generated a lot of interest in the Belize project throughout the region and created networking opportunities to strengthen our work in Belize and help guide FIP/traceability efforts across Latin America.



# El Salvador

## El Salvador - RAICES

- We promoted the creation of a multi-stakeholder platform to protect water sources in four municipalities. The Water and Agriculture Fund (FOAG) -Cacahuatique Este is made up of the municipalities of San Carlos, Gotera, Chilanga and Yoloaiquín; the water operator EMDESA; the network of 12 community water boards, AGEMIS; and by the entities FIAES, ADEL-Morazán and ACUGOLFO / CRS. A joint investment of about \$50,000 has been agreed upon and some primary intervention actions have been defined: there are 45 dams for runoff control in the El Zapote creek (based on Nature Based Solutions). Negotiations have also been initiated with producers located in the recharge zone, where currently six producers will be supported with improved pastures, provided that they carry out conservation work in their lots of basic grain.
- We also promoted the implementation of the FOAG Northern Cacahuatique, with the support of the Intermunicipal Association of Northern Cacahuatique (AICN). This mechanism is made up of the following municipalities: Osicala, Gualococti, San Simón, San Isidro, San Antonio and El Rosario. We have assessed that FOAG can be a mechanism that helps to revitalize this Microregion. It was created years ago (2003) but had never been able to operate. AICN is the administrative body, while the FOAG is waiting on its bylaws and regulatory processes and proper legal figure to come through. AICN opened a bank account for the FOAG, where the six municipalities are allocating \$30,000 for year 2019, and \$20,000 has been the seed capital put up by ResCA, for a total budget of \$50,000. The San Carlos Dos Cooperative, FIAES, ADEL-Morazán and PADECOMSM have expressed interest in being part of this Fund, but their active participation has yet to be organized. Discussions of the activities and investment plans did not get going until September 2019, as efforts focused initially on operationalizing the AICN, finally achieved an official and secure financing mechanism (starting in September 2019, AICN operations will be covered by an automatic monthly contribution from each city hall), and also achieved appointment of a AICN manager engaged in June (whose salary has been covered by CRS Blue Harvest program through September 2019). Nevertheless, in order to make the most of this agricultural season, ResCA RAICES is using part of the financing to set up demonstration plots with several city halls that are part of the FOAG. The FOAG officially starts operations in September 2019, opening up participation beyond mayors, to include specialists, municipal council members and local leaders. The first priority activities that are being carried out are a contest to choose logos for the AICN and FOAG, as well as the working plan to provide coffee growers with loans that are conditioned on using best agricultural practices. On September 25, 2019, the North Cacahuatique FOAG planning committee discussed the proposed loan issuance mechanism that RAICES presented and approved it almost in its entirety.
- At the beginning of April 2019, we held a series of meetings with mayors from nine municipalities in Morazán to develop territorial management plans focused on promoting good practices among their producers. We proposed five Municipal Agriculture and Water Plans to the municipalities of Yoloaiquín, San Antonio, San Isidro, Osicala, Meanguera, and San Simón. These plans combine incentives, technical assistance and evidence-based communication strategies for sharing the results with local and national stakeholders. A fundamental element of these plans included an incentive-based commitment connecting the delivery of municipal agricultural packages (fertilizers and seeds) to the implementation of good soil and water

management practices by participating farmers in at least a section of their plot. Examples of the good practices included in the plans are: no burning, soil cover management, restricting herbicide use, following the 4R recommendations for fertilizing<sup>2</sup>, among others. The Yoloaiquín plan was approved by the Municipal Council. In Gualococti and El Rosario, although formal plans have yet to be drafted, they have started to implement the proposed actions. As a result, we established 256 demonstration plots (400 m<sup>2</sup>) with the goal of demonstrating that productivity can be increased using soil cover and greater shade, green manures and 4R fertilization techniques. Most of the plots consist of staple grains and some pasture. 105 of these plots will be financed by the municipal governments and the remaining others by ResCA RAICES and the sister CRS's project "ASA". Most of the plots will be in basic grains and some in pastures and coffee. In addition, we trained and accompanied municipal technicians and farmers in these municipalities as they installed demonstration plots and applied best management practices in their farms.

- As part of Earth Day and due to the leadership of El Salvador in the United Nations Decade for the Restoration of Ecosystems (2021 - 2030), Catholic Relief Services (CRS) and the Environmental Investment Fund of El Salvador (FIAES) signed an agreement on April 23, 2019, to foster inter-institutional cooperation for the recovery of productive capacities through the restoration of ecosystems. The joint actions will focus on the generation and consolidation of Water and Agriculture Funds (FOAG), strengthening the capacities of key actors, including a Media Training Program, and the dissemination of knowledge based on effective experiences on the field. The event was covered by [press, radio](#) and television media, highlighting an [extended report by TCS](#).
- In coordination with the members of the two FOAGs, we hosted the territorial forum "Challenges and solutions for the restoration of water and agriculture in the Cerro Cacahuatique", held in San Francisco Gotera, Morazán, on April 26, 2019. 275 people (236 men / 39 women) attended, including water boards, community associations, municipalities and territorial entities, government representatives and national NGOs. During this event, it was publicly announced that two Water and Agriculture Funds (FOAGs) had been created to promote and finance water source protection and restoration activities; one in the northern area, and another in the east of Cacahuatique mountain. This event was used to position the restoration work that local governments and organizations are investing in, providing a strategic emphasis on a shift in agricultural practices. The objective of the Forum was also to present evidence and build attendants' capacities in the use of best practices in agricultural management. The event was covered in the [media](#).
- Since launching the FOAG (Water Fund and Agriculture) in April in San Francisco Gotera, several national actors have requested meetings with the ResCA RAICES team. The team has met with the coordinators of the water resources areas of the MARN (Ministry of the Environment) and its REDD+ restoration program; with the representative and technicians for the IICA (Inter-American Institute for Cooperation on Agriculture); with the representative and technicians for the FAO; with the head of the climate change division for the MAG (Ministry of Agriculture); and with the coordinators of the water and sustainability projects of the AECID (Spanish Agency for International Development Cooperation). As a result, several possible synergies have been identified and joint coordination is underway with IICA and FAO.

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<sup>2</sup> More info at: <https://www.nutrientstewardship.com/4rs/4r-principles/>

- On May 31, 2019, we organized a coffee forum in Osicala, Morazán, to communicate the achievements, progress and challenges of the region's coffee plantations, and to highlight the work being done through the CRS-ACUGOLFO projects. 120 people attended, including producers from Morazán, municipal environmental offices, government institutions and NGO representatives.



- On July 2019, we facilitated the participation of mayors from the intervention area of Morazán, including the municipalities of Osicala, San Francisco Gotera, and San Isidro participated in the [Water Funds Summit](#), organized by the Latin American Water Funds Alliance in Mexico City, of which ResCA lead TNC participates. The mayors, who in April, 2019 launched together with ResCA El Salvador RAICES the [Water and Agriculture Fund \(FOAG\)](#) in Morazán were able to hear experiences and learn how other water funds in Latin America are being consolidated and strengthened as well as the models of water funds that involve private sector stakeholders, something the FOAG is exploring.
- We presented to (8) of the municipalities – mayors and municipal councils - that consolidate the [Water and Agriculture Fund \(FOAG\)](#), a Digital Soil Map that includes 535 soil analysis studies and models from the geographic and topographic variables, amongst indicators. This tool is providing valuable information on soil nutrition and different varieties of fertilizer that should be applied in certain regions of the Cacahuatique Mountain Range (Morazán). This map is being utilized by mayors to make better informed decisions regarding the agricultural packages they are purchasing and providing to local producers that are based on sound science. Representatives from almost all the municipal officials from 6 mayoral districts, community leaders, and crucial players from the territory (MARN, FIAES, ADEL-Morazán and Fundación Campo), worked together for a whole day on September 3, 2019, with the Water and Agriculture Fund (FOAG) of Northern Cacahuatique. As a result, improved consensus was established for the FOAG model for building and identifying concrete strategies and actions for development. 77 people participated.
- As a result of the collaboration agreement between ResCA RAICES and AZURE, the following water operators obtained a water system assessment with recommendations for improvement and proposals for access to financial facilities: Municipal Water Supply System of Osicala; Municipal Water Supply System of Delicias de Concepcion; Water Supply System of ASCOFAV, Osicala; Municipal Safe Water Supply System of Gualococti; Safe Water Supply System of San Francisco, San Simon; and the Water Supply System of Hoja de Sal, Osicala. It is worth remarking that in the case of Osicala, the assessments show that the urban system has a water service deficit. In response, the mayor negotiated with the San Carlos Dos Cooperative to gain access to a cooperative owned spring. Therefore, AZURE completed the technical portfolio for the works, and the municipality asked for a loan to construct a water pipe from the new spring, as negotiated with the cooperative. The technical portfolio of Delicias de Concepción and Hoja de Sal are also being developed by AZURE.
- During this reporting period, we hosted 24 capacity-building workshops with the participation of 435 farmers; of these 99 are women and 336 men. Topics covered included: results from soil analysis and appropriate soil



nutrition; adequate practices in pasture, corn, coffee and beans; mulch and green manure management; establishment of demonstration plots; pest sampling in coffee plantations; shadow and pruning management in coffee plantations; coffee varieties, among others.

- We also established agreements signed by 229 farmers in the following municipalities: : Chilanga, Yoloaiquin, Ciudad Barrios, San Simon, Villa San Antonio, Arambala, Gualococti, Perquín, and San Fernando. In these agreements, farmers commit to establish a set of best agricultural practices in nine different productive systems (according to the crop) on part of their land, and to heed project staff technical recommendations, and participate in at least 80% of training sessions. In exchange, they will receive technical assistance and certain agricultural supplies. Commitment values on both sides vary on a case-by-case basis.

### El Salvador - FUNDEMAS

- ResCA FUNDEMAS joined the inter-institutional roundtable formed by Ahuachapán partners to promote and exchange experiences that contribute to creating synergies for the projects that are already running in the area.
- Five demonstration farms (one per municipality) have been installed, in which technical assistance has been provided for pasture division, improved pasture, protein banks for livestock feed and water harvesting. In total, we hosted 16 training sessions and trained 248 people (214 men / 34 women).
- On April 25, 2019, we hosted a workshop with cattle ranchers from San Francisco Menéndez, Ahuachapán. During this session, they validated and review the stakeholder network and analyzed potential bottlenecks within the sector.
- 4/30/ 2019. San Francisco Menendez, Ahuachapán, El Salvador. A planning session included the revision of a plan for the development of climate-smart agriculture by Alberto Abelino, engineer of the Trifinio plan and a meeting with the mayors of the municipalities of San Francisco Menendez, Jujutla, Ahuachapán, Atiquizaya and El Refugio to discuss the project and work plan. The project team RAICES of CRS and Caritas in Ahuachapán established coordination and cooperation in the territories where staff, location and technical contributions will be provided among the organizations.

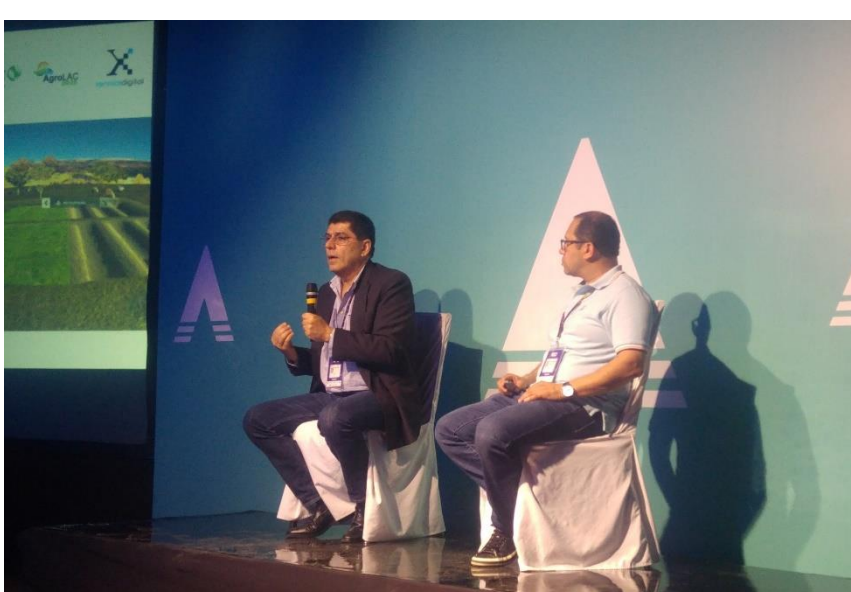


- 4/30/ 2019. San Salvador, El Salvador. ResCA FUNDEMAS staff met with the company Vista Volcanes, a sustainable agriculture development center that focuses on high productivity certified organic technology for the leaders of the RAICES project and Caritas in Ahuachapán.
- On August 5-8, 2019, we organized an international field trip to Valle del Cauca, Colombia, where technicians from the Sugar Mill La Magdalena and Grupo CASSA, CRS and the AGAS de R.L. participated. The purpose of this visit was to learn about CIPAV Foundation’s work in sustainable production systems in sugarcane and livestock in the El Hatico Natural Reserve, Hacienda Lucerna and ALGUIMAR Balsora. As part of this trip, a resilient production model that can be applied in the department of Ahuachapán (El Salvador) was developed. In addition to the field visits, a strategic meeting was held with CENICAÑA representatives to discuss strengthening relationships between the sugarcane sectors of Colombia and El Salvador.
- **09/11/2019 – 09/13/2019. San Salvador, El Salvador.** The ResCA FUNDEMAS team have initiated work sessions with the Milk Producer Association of El Salvador (PROLECHE), who joined the project as a key private sector actor in order to promote best agricultural management practices for milk production at the national level.
- On September 2019, we signed collaboration agreements with the mayors of Ahuachapán and Atiquizaya. In this agreements, they committed to promote and implement sustainability strategies to be developed within the framework of ResCA in their municipalities. At the same time, they agreed to follow through on best agricultural practice actions and the reforestation that will take place in the zone that was outlined in the project framework.
- ResCA FUNDEMAS partners the Rancher Association of Ahuachapán Sur-AGAS and the Agricultural Association of Ranchers of the Arch of Ahuachapán—as representatives of ranchers in the both the northern and southern zones of Ahuachapán in relation to milk production in the ResCA Project Framework – signed agreement letters to promote action related to the implementation of best agricultural practices that are climate change resilient on the partner farms. These farms will serve as demonstration farms for other milk producers in these municipalities.



# Guatemala

- 04/08/2019. San Marcos & Quetzaltenango, Guatemala. As part of the monitoring and validation process of the municipal plans for climate change adaptation, in coordination with ResCA Guatemala and ASOVERDE, the opening and meeting agenda with the municipal councils was held to explain the purpose of the municipal agreements of the climate change adaptation plans developed in the previous project with CNCG. The meeting involved local ties such as the municipalities of Concepción Chiquirichapa and San Juan Ostuncalco of Quetzaltenango, and in San Marcos, the municipality of San Pablo. The three meetings in the municipal council resulted in the validation of the plans and the approval of the elaboration of the municipal agreements under the process of legal review of each of the municipalities. By the end of April, these municipal agreements will be delivered and validated by the legal unit of each of the municipalities.
- We participated in the Volcano Innovation Summit 2019, which is a global initiative that serves as a platform to exchange visions and future experiences and its' mission is to incorporate Latin America into the global network of innovation, science and culture, businesses, entrepreneurs, creative leaders and investors for conversation and inspiration. ResCA Guatemala presented the progress of the initiative to train producers on climate change using virtual reality, being developed by Xennial Digital, and showcasing 7 practices of micro and macro rainwater harvesting to reduce effects of drought in crops. The complete module will be ready in July 2019 and a public presentation will be made to inform the initiative to partners and possible cooperators and investors.



- The ASOVERDE team and the municipality of Rabinal, Baja Verapaz generated a work plan for the reforestation of 59.45 hectares in degraded areas and in high capacity water recharge zones with a potential for forest use. Under ASOVERDE's consultancy, the municipality is managing the process to disseminate restoration processes in degraded areas through reforestation. The work plan involves the edition of informative audiovisual capsules, that will include notes to inform the community and invite local groups and organizations of interest to be part of the activity. There has been significant progress in the process of generating municipal agreements for climate change adaptation plans in these municipalities. To date, the agreements have the guarantees by the municipal councils of authorization and legal order for their creation.
- On May 7, 2019, we participated in the XI National Forestry Congress "Forests, Climate Change, Livelihoods and Innovation" in Angitua. In addition to the participation of ResCA partners in the Congress, ResCA partner ASOVERDE conducted a training for 48 forestry professionals in "Use of VANT'S (unmanned aerial vehicles) as a Technological Tool for Forest Monitoring and Protection" as part of ResCA activities.
- A community rainwater catchment system (42,000 L) was constructed in the ResCA demonstration plot in Xesiguán, Rabinal, Baja Verapaz, as a method to build resilience to drought. The community will use this catchment system thanks to the governance of a municipal regulation that ensures proper water allocation.
- Alongside ResCA Guatemala partner ASOVERDE, 9 hectares were reforested in advance of the upcoming rainy season in Guatemala. The selected parcel is a communal area and the municipality is establishing a municipal regulation to ensure maintenance, conservation and proper use of firewood. See this [short 4-minute video](#) prepared by the Rabinal Muni. Additionally, agroforestry systems were planted with basic grains and pepper plants in advance of the upcoming rainy season in Guatemala. This pepper plant tree species has the dual purpose of producing the spice which has national and international commercial value and also timber and non-timber products, that should generate local income for the producers. A community methodology is in development for the maintenance and use of this system by farmers. Forest and fruit species were planted in the Concepcion Chiquirichapa municipality, in order to restore the local landscape and its ecosystems, and contribute to the agricultural sustainability of the area. This area is located within 3 micro-basins of great importance, which are currently at high risk of drought.
- Three macro tunnels were built, and producers were informed and taught about the construction, management, productive use, and how to establish an irrigation system.
- The FUNDAECO ResCA Project, within the processes of restoring the landscape of the micro-basins of the Quisil, Limón and Azul rivers, and the sustainability of agricultural and livestock production systems, succeeded in generating 14 hectares of Soil Conservation, 28 hectares of Reforestation with species, and 3 hectares of oats in livestock management and protection of the regeneration of the Juniperus species. FUNDAECO, within the processes of restoration of the landscape and rehabilitation of degraded areas of the micro-basins of the Limón and Azul rivers, and the sustainability of the water recharge zone, achieved 22 hectares of reforestation were established with the diversification of conifer species, among them the Juniper trees, and which have been entered into the INAB forestry incentive program.



Community producers learned about the development of activities underway for food security, livestock production, agriculture and forestry under ResCA's climate change adaptation and municipal governance models.

- The CDRO ResCA project, which is part of the socialization and validation of the guidelines for Hydrological Resource and Solid Waste Management in the municipality of Olinstepeque, currently has two focuses, seeking the approval by the municipal council and the 8 communities involved in the project, for the mentioned guidelines that include both the management of hydrological resources and solid waste for the San Juan Olinstepeque Quetzaltenango Municipal region.
- ResCA Guatemala partner ASOVERDE, as part of the actions for integrating agroforestry systems with gardening and fruit systems, has achieved the creation of an area of 12.17 Ha in these municipalities that form a part of the integrated management for sustainability of these 5 watersheds: Salinas, Salamá, Naranjo, Samala, and Suchiate.
- Producers including youth, women and community leaders were trained in topics of natural phenomena and ecosystems and hydrography of Guatemala. Within the training process the participating students are implementing community projects based on natural resources according to the knowledge acquired in the workshops. These projects have had an impact at the local level, such is the case of the production of dishes made from the natural foliage of a native bush called Maxan (*Calathea crotalifera* S. Watson) as an alternative for the reduction of single-use plastic plates.
- CDRO also trained 15 nurseries responsible persons for the production of forest plants in the tree nursery of Olinstepeque. This theme falls under the topic of sustainable landscapes, since the issue of forest restoration is being addressed as well as soil sterilization, substrate preparation, bag filling and evaluation of plant quality for commercialization.
- From July 29 to August 2, 2019, we organized an Exchange of Experiences with the Copanch'orti' Community in the department of Chiquimula, with agricultural producer partners of the ResCA project. The tour was directed to Agricultural Producer Partners of the ResCA project and took place in the municipalities of Olopa and San Juan Ermita in the department of Chiquimula. The participant groups

- FUNDAECO, as part of the organic productive improvement of the potato through the management of sheep manure in sheepfolds, achieved 15 hectares of semi-organic potato crop under the management of organic fertilizers of sheep.

- ResCA Guatemala and ASOVERDE brought producers from the Western Highlands intervention sites in Huehuetenango, Quiche, San Marcos, and Totonicapán to the eastern dry corridor of Chiquimula for an exchange of experiences visit. The visit was to the following communities: Camotán, Jocotán, Olopa and San Juan Ermita and together with the Copanch'orti'

were: ADIP Uspantan Quiche, COINACHI Chichicastenango Quiche., CDRO: Paraje León., ASOVERDE: Equality Community San Pablo San Marcos, Tojcoral Concepción Chiquirichapa Quetzaltenango, and FUNDAECO of the ICUZONDEHUE group and the Yaxeo community of the municipality of San Juan Ixcoy de Huehuetenango, who are currently agricultural producing partners, within the process of acquiring knowledge of climate change adaptation actions. This knowledge is currently developed by the Copanch'orti community within the communities of the municipalities of Olopa and San Juan Ermita of the department of Chiquimula, which are located geographically within the Dry Corridor of Guatemala, as they are within an area of high vulnerability and risk in terms of droughts, food insecurity and agricultural, livestock and forestry losses due to the lack of rainfall, which is the biggest factor in the problem.

- We proposed the “National policy of irrigation and adaptation to climate change 2020-2032” to the Ministry of Agriculture, Livestock and Food (MAGA). This policy tool has been developed in a comprehensive scheme of agricultural development under irrigation, water resource management aligned with Guatemalan development priorities and the new regulations issued by the country during the last 5 years, such as K’atun 2032: Our Guatemala, the 2030 Agenda with objectives and goals prioritized by Guatemala; Legislative Decree 7-2013 Framework Law to Regulate Vulnerability Reduction, mandatory adaptation to the effects of climate change and the mitigation of greenhouse gases, from which the National Climate Change Action Plan and Strategy National Development with Low Emissions. The proposal poses financial mechanisms that combine the use of water resources for agriculture with forestry incentives for areas of water recharge, payment for environmental services by users from the basin below to the water conservators basin above. Subsidies are proposed for infra subsistence and subsistence farmers, prioritizing family farming through the Family Farming Program. The actors of the policy range from the peasants to the agro-export businessmen, through stakeholders in the territory. Roles of the academy, organizations of indigenous peoples, private sector, public sector and civil society are also established. It is expected to be useful for all people, associations, companies and institutions that are current and potential users of irrigation systems.

# Honduras

- On April 5, 2019, CIAT was invited to participate in the workshop "Gaps and Opportunities in the Implementation of Public Policies of the Agrifood and Food Security in the Climate Change," organized by CCAFS in Tegucigalpa. We presented ResCA's best management practices.
- We were invited to participate in a local agroclimatic table with producers. The ECOSAGA CLIFOR project of GIZ exchanged experiences with the CIAT ResCA team in Climate Services to strengthen the decision-making of producers.
- We accompanied the planting of a community school plot, with seeds of corn, sorghum and biofortified beans donated by HarvestPlus as an adaptation strategy for the shortage of rain forecasts in the coming months in the dry corridor of Honduras.
- We met with the International Research Institute for Climate and Society (IRI) to find support opportunities in the activities developed by ResCA in Climate Services, mainly in the design of the National Climate Services Framework policy of Honduras.
- We also met with the organization Ayuda en Acción to present the PICSA training methodology and agreed upon involving territorial extension agents in the Lempira region in the upcoming June workshop which will help implement tools in other municipalities of the ResCA project.
- A [blog](#) was published and written by Diego Obando (ResCA CIAT-Honduras) on the [ResCA home page](#) that discusses the ResCA Honduras project and a recent inter-exchange that took place between Honduran actors to visit institutions and communities in Colombia and learn more about how meteorological processes can be useful for small-scale agricultural producers.



- We met with CODDEFFAGOLF, (Committee for the Defense and Development of the Flora and Fauna of the Gulf of Fonseca), the purpose was to articulate actions of the organizations within the framework of ResCA, it was agreed to start with a pilot training in climate for producers in the coastal marine zone.
- We held a meeting in the municipal mayor's office with the association of Cajas Rurales with the purpose of offering training in agroclimatic information through the PICSA tool and to also present to the mayor the opportunity to develop a Municipal Plan for Adaptation to Climate Change.
- We held the first meeting to socialize the construction methodology of the Municipal Climate Change Adaptation Plan. Several local actors are interested in supporting the formulation and proposed to include other local actors.
- We supported the Science and Farming Technology Directive (DICTA) with the delivery of rain gauges to measure precipitation. Additionally, an instructional video was created featuring installation and use directions. A daily precipitation logbook was also included, which together will contribute to the ability of producers to make better agricultural decisions. [Video](#). [Notebook](#).
- As our support of the Technical Agroclimatic Roundtables of the Western and Gulf of Fonseca region, we developed and delivered the Agroclimatic bulletins, which include the recommendations for the key productive items for these two regions in the next production cycle. [Western Bulletin](#). [Gulf of Fonseca Bulletin](#).
- CIAT, at the request of the Vice Minister of Agriculture of Honduras, developed a presentation on Sustainable Agriculture Adapted to Climate for 35 technicians during the national workshop named "Family Agriculture: Inclusive, Innovative, and Resilient."
- We with the climate change team of the Secretariat of Agriculture and Livestock (SAG) with the goal of planning the development of an early alert guide for climatic events for the rice producers in the northern region of the country.





# Nicaragua

- We published a blog authored on the importance of scaling up sustainable silvopastoral systems and the context in Nicaragua’s milk route (via lactea) of Boaco and Matagalpa in [English](#) and [Spanish](#).
- On May 2019, we trained 32 organized groups of livestock farmers on the module “Climate change and livestock”. The objectives were share key elements of climate change (definition, history, causes and consequences); to recognize the existing relationship between climate change and livestock and the ways in which livestock contribute to climate change and vice versa; and to identify the actions and activities that can be done or not done in their farms to contribute to the reduction of greenhouse gases.
- On July 2019, we formalized a collaboration agreement with Fundación CIPAV and the 35 families that will develop model farms in Boaco and Matagalpa. Through this joint agreement, ResCA and the 35 families will work together to serve as model farms to scaling resilient practices to over 718 families/farms by promoting and adopting best practices in livestock management and the establishment of silvopastoral systems. It’s important to note this agreement included a co-investment between ResCA and the 35 model farms being established is a fundamental step to advancing the next phase of this project.
- On September 2019, we finished the installation of 22 electric fences (5 function with solar/photovoltaic energy and 17 function with alternative or conventional energy) on the same number of model farms in the municipalities of Esquipulas, Matiguas, Rio Blanco, Boaco, Muy Muy, San José de los Remates, and Camoapa. Farmers, on their own accord, managed the cutting and then the placement of the posts in the field in accordance with the design requirements. During the installation, 54 producers learned how to install the electrical connections and about the different accessories used in the process like the grounds, tensioners, and others that are necessary for the adequate function of the fences.



## Regional level

- On July 18, 2019, the **Regional Management and Conservation Plan for the Caribbean Spiny Lobster (the MARPLESCA Plan)** was proposed to the Central-Western Atlantic Fisheries Commission (COPACO), at the XVII Meeting of the Western Central Atlantic Fisheries Commission (WECAFC) in Miami, Florida. Member States of the Commission **adopted** the plan through the [Recommendation WECAFC/XVII/2019/9 “On the Management of Caribbean Spiny Lobster in the WECAFC Area”](#). This plan was developed, proposed, and adopted within the framework of the sub-project titled “Ecosystem Approach to Fishing for the Caribbean Spiny Lobster (ECOLANGOSTA+)”, coordinated by OSPESCA for the Shared Live Marine Resources project of the Great Caribbean Marine Ecosystem and North Platform of Brazil (CLME+) along with the ResCA Regional SICA/OEPESCA project. This Plan was already adopted by the fisheries ministers of the Central American Integration System (SICA) last December 2018.
- As the MARPLESCA Plan was adopted, some Plan activities started to be implemented:
  - The Caribbean lobster ban was monitored through national contacts and the publication of the lobster-fishing opening was made with the support of the TNC team.
  - Data collection was supported in Guatemala and Panama, to support measures to amend Regulation OSP-02-09 for Regional Fisheries Management of the Caribbean Spiny Lobster (*Panulirus argus*).



- On July 2019, delegates from the national fisheries and aquaculture offices of the SICA countries were trained in San Salvador on the computer application of a fishery assessment model for Caribbean lobster stocks within the framework of the MARPLESCA Plan. The workshop was developed in two work sessions, first with presentations on the Caribbean Spiny Lobster Population Assessment Model content based on the MARPLESCA Regional Plan and the IT platform; and secondly, with concluding with a practical session with exercises for the computer application of the MARPLESCA Plan for fisheries evaluation using data from countries and the region. The inauguration of the event was presided by high-level ministers Vinicio Cerezo, SICA Secretary General; Efraim Medina, OIRSA Regional Director and Rigoberto Soto, Vice Minister of Agriculture and President Pro Tempore of SICA. We published a [press release](#) on the ResCA website.
- On July 31 2019, TNC officially launched a collaboration with [FAO's Regional Knowledge Platform on Family Farming](#). As part of this strategic alliance, TNC will share publications produced by ResCA projects on this platform.
- On August 12-16, we hosted the second annual ResCA interexchange in Tegucigalpa with participants from all seven projects. Meetings were held for the first two days (Tuesday & Wednesday) in Tegucigalpa with a field visit to Choluteca and to the Gulf of Fonseca mangrove system.



# Issues for the attention of the U.S. Department of State

## STAFF CHANGES

- As of August 19, 2019, Irene Farrow joined the TNC Africa Program as Business Development Specialist and Grant Writer. Irene supported the ResCA Program as Monitoring and Evaluation Specialist, and served as Interim Coordinator while the search for the Climate and Food Security Coordinator took place. Moraima Guzmán ([moraima.guzman@tnc.org](mailto:moraima.guzman@tnc.org)) will support with the M&E process, as well maintaining fluid communications with sub-awardees regarding technical progress and indicators, to make this transition as smooth as possible.

## BELIZE

- A key technical staff and our primary point of contact for using the electronic traceability system and visualization and simulation tools for fisheries management, resigned from Belize Fisheries Department (BFD). This has been a major setback and TNC staff are having to sensitize other BFD staff which has led to a lot of repetition of what has already been done.
- Another major hurdle we have been coping with is the pervasive price war on Spiny lobster that has ensued this season which started in February. The price war between the private companies and cooperatives has escalated to an unprecedented level over the last few months. This price war has been a major distraction for both National and Northern, taking their attention away from our efforts to officially launch the FIP in September. Even with the price war, we were able to get verbal commitments but the signing of all the commitments and official launch of the FIP has been delayed until October.

## EL SALVADOR

- One of the most significant challenges has been coordinating actions with public sector actors. Nayib Bukele started his mandate as President on June 1, 2019. Due to the change of government in El Salvador, many of the government agencies are still not clear about the strategic lines of work and it is not yet known whether current public policies will change, especially in the Agriculture and Environment sectors; so far they have not pronounced themselves on the issue of climate change. It is expected that the next semester there will be more clarity about their new strategies. In the context of changes in authorities, policy related issues are moving slow, particularly at the sub-national level. Program staff will be working to raise the population's awareness using science-based evidences. Staff will also work to empower local leaders on these issues for policy discussions. The goal is to lower the overall political cost.
- However, both ResCA sub-awardees in El Salvador -CRS and FUNDEMAS- have approached the new ministers. To date, we have presented ResCA's main components, objectives, current activities and results to the Minister of the Environment and the Minister of Agriculture. They have expressed interest in continuing and expanding the existing cooperation agreements.



# Issues for the attention of the U.S. Department of State

## HONDURAS

- Multiple days of protests against the National Government caused blockages on the roads in different regions of the country, making it difficult to conduct some workshops. Likewise, the limited availability of municipal officials hinders their inclusion in the formulation of policy instruments. In response, we selected new municipalities to develop the climate change adaptation plans.
- Changes of authorities and technical staff within the meteorological service has required to dedicate extra time engaging with the new officials, to ensure alignment with the objective of strengthening the National Climate Services System.

## NICARAGUA

- Nicaragua continues in an economic recession aggravated by 2 reforms approved by the National government in 2018. The first one, a Social Security law reform; and the second one, a Tax Reform which, according to experts in the field, is regressive and is affecting negatively the economic activities, including livestock and agricultural, tourism, construction and foreign investment sectors. As result of the crisis, it is expected that the Nicaraguan economy will have a negative growth of Gross Domestic Product (GDP) from -5.4 to -6.8% according to FUNIDES projections (Nicaraguan Foundation for Economic and Social Development).

# Proposed activities for the next reporting period

## EL SALVADOR

- We will support local governments using the digital soil maps as a basis to schedule the delivery of agricultural packages and raise awareness about the implementation of good practices.
- We will develop the internal regulations and start the legal standing approval for each of the three Water Funds (North Cacahuatique, East Cacahuatique and Ciudad Barrios). We will also support the strengthening and implementation of the Water and Agriculture Municipal plans.
- We will continue working on farmer organization rules and procedures, including water-smart practices to promote sustainable landscapes. We will also organize trainings on financial schemes for sustainable practices.

## NICARAGUA

- We will follow up with technical support to 35 model farms where the trainings are carried out and the farmers can practice what they learn and see the cumulative effects of the adoption of silvopastoral technologies.
- We will coordinate with associations and actors along dairy sector value chain to establish two sustainable roundtables in Boaco and Matagalpa.

## GUATEMALA

- The next period of reporting will be focused on terminating all the activities in time and manner both indicators and outcomes. The main two targets are: a) the Landscape Sustainable Zoning Map which will render a sustainable productive zoning model that contributes to the establishment of guidelines for the use of the territory that ensure the capitalization of opportunities without exceeding the regeneration capacity of ecosystem services for the well-being of majorities in Guatemalan society. The model aims to identify and define the critical areas for conservation, sustainable forest management and performance improvement in agricultural and livestock areas. It will constitute a tool that informs about the current state of natural resources and estimates the potential for landscape redesign through territorial management and the infrastructure that supports them, improving the adaptive capacity and resilience of the ecosystem services of the territory. And b) the Green Growth Compact which consists on an institutional instance formed by the most influential people and organizations present in the Western Highlands which will assume the task of designing the resilient and prosperous future for the region for the next 30 years.

# Proposed activities for the next reporting period

## HONDURAS

- Institutional strengthening in climate services over the next period will focus more directly on capacity building needed in COPECO for the development of the National Framework for Climate Services (NFCS), as well as ongoing training on forecasting. ResCA will also support capacity building for CENAOS-COPECO, DICTA and SAG in crop modeling and simulation to improve crop specific recommendations based on climate forecasts. Capacity building will also support the development of the resilience plan for the dry bean sector including methodologies and tools for prioritization of CSA practices for beans.
- In the upcoming period, ResCA will focus on full implementation of PICSA in the selected communities, with a focus on the “*postrera*” 2019 and “*primera*” 2020 planting seasons. This will include implementation and evaluation of adaptation practices for climate variability. In addition, new training workshops on PICSA for agricultural extension agents and youth studying agricultural sciences will be carried out by CIAT.
- ResCA will also support the development of a resilience plan for the dry bean sector, linked to SAG’s Institutional Climate Change Adaptation Plan, the development of municipal adaptation plans, and development of the National Climate Service Framework. Activities will include workshops, stakeholder mapping exercises, cost benefit analyses, surveys and document preparation and review. A broad range of stakeholders will be engaged in each process that include stakeholders related to climate information and use, stakeholders related to the dry bean sector, and stakeholders at the municipal level related to climate change adaptation.

## REGIONAL LEVEL

- The Caribbean Regional Fisheries Mechanism (CRFM) and OSPESCA are convening the second High-Level Meeting of Ministers of Fisheries and Aquaculture to be held in October 2019 in Belize City. This ministers meeting will produce a joint Declaration whereby, *inter alia*, the adoption and implementation of the MARPLESCA Plan in the SICA and CARICOM region is considered.
- OSPESCA will support the implementation of lobster traceability system pilots in at least three Central American countries.
- OSPESCA will also provide technical assistance to develop small-scale lobster fisheries data collection guidelines for stock assessment purposes in at least two Central American countries.



# Annexes



## ANNEX 1 PERFORMANCE MONITORING PLAN

RESULT	FY17			FY18			FY19			FY20			LOP TARGET
	TARGET	SA1	SA2	TARGET	SA1	S2	TARGET	SA1	SA2	TARGET	SA1	SA2	
<b>INDICATOR EG11.1 NUMBER OF PEOPLE TRAINED IN CLIMATE CHANGE ADAPTATION SUPPORTED BY USG ASSISTANCE</b>													
(TYPE: OUTCOME) / UNIT		m/f	m/f		m/f	m/f		m/f	m/f		m/f	m/f	
Total number trained, males/females (m/f)	<b>10</b>	0/0	8/2	<b>645</b>	215/120	1028/481	<b>2500</b>	1577/ 769 <sup>3</sup>	2868/1575				2600
<b>INDICATOR EG11.2 NUMBER OF INSTITUTIONS WITH IMPROVED CAPACITY TO ASSESS OR ADDRESS CLIMATE CHANGE RISKS SUPPORTED BY USG ASSISTANCE</b>													
(TYPE: OUTCOME) / UNIT	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	
Number of institutions strengthened, National governmental/ sub-national governmental/ other (Ng/sg/o)	<b>0/0/0</b>	0/0/0	1/0/0	<b>2/3/3</b>	1/0/0	2/3/3	<b>5/5/5</b>	2/6/6	3/9/22				20
<b>INDICATOR EG11.3 NUMBER OF LAWS, POLICIES, REGULATIONS, OR STANDARDS ADDRESSING CLIMATE CHANGE ADAPTATION FORMALLY PROPOSED, ADOPTED, OR IMPLEMENTED AS SUPPORTED BY USG ASSISTANCE</b>													
(TYPE: OUTCOME) / UNIT	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	
Number of measures at national level proposed / adopted / implemented (p/a/i)	<b>0/0/0</b>	0/0/0	0/0/0	<b>0/0/0</b>	0/0/0	0/0/0	<b>0/0/0</b>	0/0/0	4/1/0				33
Number of measures at sub-national level proposed / adopted / implemented (p/a/i)	<b>0/0/0</b>	0/0/0	0/0/0	<b>8/1/0</b>	0/0/0	8/1/0	<b>10/1/0</b>	10/6/0	23/15/11				
Number of measures at regional or international level proposed / adopted / implemented (p/a/i)	<b>0/0/0</b>	0/0/0	0/0/0	<b>1/0/0</b>	0/0/0	1/0/0	<b>2/2/0</b>	2/1/0	2/2/2				
<b>Total</b>	<b>0/0/0</b>	0/0/0	0/0/0	<b>9/1/0</b>	0/0/0	9/1/0	<b>12/3/0</b>	12/7/0	29/18/13				

<sup>3</sup> We updated this in the 6<sup>th</sup> semiannual report (from 1,618/814 to 1,577/769), as one training in El Salvador (Forum on "Women's Role in Water Resource Management and Administration, 3/22/2019) did not meet the definition for indicator EG11.1.

**ANNEX 1**  
**PERFORMANCE MONITORING PLAN**

RESULT	FY17			FY18			FY19			FY20			LOP TARGET
	TARGET	SA1	SA2	TARGET	SA1	S2	TARGET	SA1	SA2	TARGET	SA1	SA2	
<b>INDICATOR EG13.1 NUMBER OF PEOPLE TRAINED IN SUSTAINABLE LANDSCAPES SUPPORTED BY USG ASSISTANCE</b>													
(TYPE: OUTCOME) / UNIT		m/f	m/f		m/f	m/f		m/f	m/f		m/f	m/f	
Total number trained, males/females (m/f)	<b>0</b>	0/0	0/0	<b>930</b>	5/0	604/277	<b>1500</b>	1243/ 453	2875/784				100
<b>INDICATOR EG13.2 NUMBER OF INSTITUTIONS WITH IMPROVED CAPACITY TO ASSESS OR ADDRESS SUSTAINABLE LANDSCAPES ISSUES SUPPORTED BY USG ASSISTANCE</b>													
(TYPE: OUTCOME) / UNIT	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	Ng/sg/o	
Number of institutions strengthened, National governmental/ sub-national governmental/ other (Ng/sg/o)	<b>0/0/0</b>	0/0/0	0/0/0	<b>1/0/2</b>	0/0/0	1/0/2	<b>2/2/1</b>	1/0/3	1/0/12				10
<b>INDICATOR EG13.3 NUMBER OF LAWS, POLICIES, REGULATIONS, OR STANDARDS ADDRESSING SUSTAINABLE LANDSCAPES FORMALLY PROPOSED, ADOPTED, OR IMPLEMENTED AS SUPPORTED BY USG ASSISTANCE</b>													
(TYPE: OUTCOME) / UNIT	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	
Number of measures at national level proposed / adopted / implemented (p/a/i)	<b>0/0/0</b>	0/0/0	0/0/0	<b>1/0/0</b>	1/0/0	1/0/0	<b>2/0/0</b>	1/0/0	2/0/0				250
Number of measures at sub-national level proposed / adopted / implemented (p/a/i)	<b>0/0/0</b>	0/0/0	0/0/0	<b>1/1/0</b>	0/0/0	1/1/0	<b>10/10/5</b>	7/7/3	7/41/40				
Number of measures at regional or international level proposed / adopted / implemented (p/a/i)	<b>0/0/0</b>	0/0/0	0/0/0	<b>0/0/0</b>	0/0/0	0/0/0	<b>0/0/0</b>	0/0/0	1/0/0				
<b>Total</b>	<b>0/0/0</b>	0/0/0	0/0/0	<b>2/1/0</b>	1/0/0	2/1/0	<b>12/10/5</b>	8/7/3	10/41/40				

## ANNEX 2 EVIDENCE LIST

### OES-EGC Indicator Reporting Templates

- EG11 Climate Change Adaptation Indicators Reporting Template: <http://bit.ly/2OwmE3X>
- EG13 Sustainable Landscapes Indicators Reporting Template: <http://bit.ly/2AVBWaE>

### BELIZE

- Belize EG11.1 Evidences: <http://bit.ly/2Bxp5ve>
- Belize EG11.2 Evidences: <http://bit.ly/31sAsPO>
- Belize EG11.3 Evidences: <http://bit.ly/35SOyxt>

### GUATEMALA

- Guatemala EG11.1 Evidences: <http://bit.ly/2W7NPUo>
- Guatemala EG11.2 Evidences: <http://bit.ly/2BEIjiY>
- Guatemala EG11.3 Evidences: <http://bit.ly/2MIG5FB>
- Guatemala EG13.1 Evidences: <http://bit.ly/2WaO2X5>
- Guatemala EG13.3 Evidences: <http://bit.ly/3619nXC>

### EL SALVADOR

- RAICES EG11.1 Evidences: <http://bit.ly/2Jcqyel>
- RAICES EG11.2 Evidences: <http://bit.ly/2VH2wOb>
- RAICES EG11.3 Evidences: <http://bit.ly/33Srj4l>
- RAICES EG13.1 Evidences: <http://bit.ly/340Ss5D>
- RAICES EG13.2 Evidences: <http://bit.ly/34280WR>
- RAICES EG13.3 Evidences: <http://bit.ly/2W6eDo2>
- FUNDEMAS EG13.1 Evidences: <http://bit.ly/2JhgNvY>
- FUNDEMAS EG13.2 Evidences: <http://bit.ly/35XC7QS>

### HONDURAS

- Honduras EG11.1 Evidences: <http://bit.ly/31u1JBn>
- Honduras EG13.3 Evidences: <http://bit.ly/2N7SBx9>

### NICARAGUA

- Nicaragua EG11.1 Evidences: <http://bit.ly/35ZKn2P>
- Nicaragua EG11.2 Evidences: <http://bit.ly/31I7bRk>

## ANNEX 2 EVIDENCE LIST

### **NICARAGUA**

- Nicaragua EG13.2 Evidences: <http://bit.ly/2oc9fDl>
- Nicaragua EG13.3 Evidences: <http://bit.ly/2JiMHlv>

### **REGIONAL**

- OSPESCA EG11.3 Evidences: <http://bit.ly/2Mp0Kgn>

### **Project Spotlight – TechnoServe (Nicaragua)**

- Project Spotlight: <http://bit.ly/2BEJiPX>

ANNEX 3  
MEDIA COVERAGE SUMMARY

- Truitt Nakata, Ginya (2019), *A new model for sustainable ranching systems in Nicaragua*, ResCA, blog, [http://www.resilientcentralamerica.org/en/sustainable\\_ranching\\_nicaragua/](http://www.resilientcentralamerica.org/en/sustainable_ranching_nicaragua/), March.
- Truitt Nakata, Ginya (2019), *Un nuevo modelo de ganadería sostenible en Nicaragua*, ResCA, blog, [http://www.resilientcentralamerica.org/ganaderiasostenible\\_nicaragua/](http://www.resilientcentralamerica.org/ganaderiasostenible_nicaragua/), marzo.
- Pineda, Rebeca (2019), “FIAES y CRS firman convenio para restaurar los ecosistemas de El Salvador”, *Diario Co Latino*, El Salvador, <https://www.diariocolatino.com/fiaes-y-crs-firman-convenio-para-restaurar-los-ecosistemas-de-el-salvador/>, April 26.
- ResCA (2019), “Se crean Fondos de Agua y Agricultura como mecanismos innovadores para la conservación de manantiales y el fomento de la agricultura sostenible en el Cerro de Cacahuate”, ResCA, press release, <http://www.resilientcentralamerica.org/se-crean-fondos-de-agua-y-agricultura-como-mecanismos-innovadores-para-la-conservacion-de-manantiales-y-el-fomento-de-la-agricultura-sostenible-en-el-cerro-de-cacahuatque/>, April 29.
- Nacionales (2019), “FIAES: El 70% de los suelos del país están degradados”, *Periódico Digital 102nueve.com*, El Salvador, [http://www.102nueve.com/2019/04/30/fiaes-el-70-de-los-suelos-del-pais-estan-degradados/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=fiaes-el-70-de-los-suelos-del-pais-estan-degradados](http://www.102nueve.com/2019/04/30/fiaes-el-70-de-los-suelos-del-pais-estan-degradados/?utm_source=rss&utm_medium=rss&utm_campaign=fiaes-el-70-de-los-suelos-del-pais-estan-degradados), April 30.
- “Se crean Fondos de Agua y Agricultura como mecanismos innovadores para la conservación de manantiales y el fomento de la agricultura sostenible en el Cerro de Cacahuatque”, *El País*, El Salvador, <http://elpais.com/sv/se-crean-fondos-de-agua-y-agricultura-como-mecanismos-innovadores-para-la-conservacion-de-manantiales-y-el-fomento-de-la-agricultura-sostenible-en-el-cerro-de-cacahuatque/>
- Obando Bonilla, Diego (2019), *¿Qué tan útil puede ser la información agroclimática para un agricultor? Intercambio de experiencias Honduras-Colombia*, ResCA, blog, <http://www.resilientcentralamerica.org/que-tan-util-puede-ser-la-informacion-climatica-para-un-agricultor/>, May.
- La Ventana (2019), Programa 7 (5/6/2019), La Ventana Radio, Guatemala, <https://anchor.fm/laventana/episodes/La-Ventana---Programa-7-562019-e48tlk/a-agnqif>, May.
- Instituto Hondureño del Café (2019), “La Hora del Café” desde El Lago de Yojoa, <https://www.facebook.com/caficultura/videos/337058753858955/?t=100>, June 27.

ANNEX 3  
MEDIA COVERAGE SUMMARY

- Alemán, Uveli (2019), “La agricultura es parte de la solución al cambio climático”, *Diario El Mundo*, El Salvador, <https://elmundo.sv/la-agricultura-es-parte-de-la-solucion-al-cambio-climatico/>, July 10.
- El País (2019), “Se presentó la Guía para Integrar la Sostenibilidad en las Empresas y talleres dirigidos a productores agropecuarios, empresarios y funcionarios públicos para fomentar la resiliencia al cambio climático”, *El País*, El Salvador, <http://elpais.com.sv/se-presento-la-guia-para-integrar-la-sostenibilidad-en-las-empresas-y-talleres-dirigidos-a-productores-agropecuarios-empresarios-y-funcionarios-publicos-para-fomentar-la-resiliencia-al-cambio-climat/>, July 11.
- El Economista (2019), “La importancia de contar con una guía para integrar la sostenibilidad en las empresas”, *El Economista*, El Salvador, <https://www.eleconomista.net/economia/La-importancia-de-contar-con-una-guia-para-integrar-la-sostenibilidad-en-las-empresas-20190719-0018.html>, July 19.
- Guzmán, Jessica (2019), “El Salvador perderá más del 35% del área de cultivo de café en 2050”, *El Diario de Hoy*, El Salvador, <https://www.elsalvador.com/eldiariodehoy/el-salvador-perdera-mas-del-35-del-area-de-cultivo-de-cafe-en-2050/622877/2019/>, July 20.
- SICA-OSPESCA (2019), “Desarrollan plataforma informática para monitorear la población de Langosta del Caribe en la región Centroamericana”, ResCA, <http://www.resilientcentralamerica.org/desarrollan-plataforma-informatica-para-monitorear-la-poblacion-de-langosta-del-caribe-en-la-region-centroamericana/>, July 23.
- Orellana, Javier (2019), “Transferimos toda la responsabilidad al productor”, *La Prensa Gráfica*, El Salvador, <https://www.laprensagrafica.com/economia/Transferimos-toda-la-responsabilidad-al-productor-20190728-0445.html>, July 29.



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