











# Climate and Food Security in Central America

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To

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### Abbreviations and Acronyms

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

CAC Central American Agricultural Council, SICA

CAES Cooperative of Agricultural Services of Esquipulas (Nicaragua)

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

DICORER Regional Coordination and Rural Extension Directorate, MAGA (Guatemala)

DICTA Directorate of Agricultural Science and Technology (Honduras)

ENADE National Businessmen Meeting (Guatemala)

FAO Food and Agriculture Organization of the United Nations

FEDEARROZ National Federation of Rice Growers (Colombia)

FIAES Environmental Investment Fund of El Salvador (El Salvador)

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

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



### **Executive Summary**

To advance the goals of the Resilient Central America (ResCA) program, we have achieved the following results in the October 2018 to March 2019 semester reporting period. Regarding climate change adaptation, this semester we trained a total of 923 people; 590 men (63.9%) and 333 women (36.1%). We also strengthened 6 institutions; 3 from the public sector at the subnational level and 3 local organizations. With collaborating institutions and stakeholders, 3 policies were proposed, 2 at the sub-national level and 1 at the regional/international level. We achieved the adoption of 6 policies; 5 at the sub-national level and 1 at the regional/international level.

At the end of the first half of Fiscal Year 2019 (FY19-SA1), the cumulative numbers on climate change adaptation are as follows. During the 2.5 years of implementation, we have trained a total of 2,432 people (1,618 men and 814 women), which represent 93.5% of the Life of Project (LOP) Target of 2,600 people trained. We have also strengthened a total of 14 institutions, thus achieving 70.0% of the LOP Target of 20 institutions. Finally, we have proposed 12 policy instruments and promote the adoption of 7; which represents 57.6% of the LOP Target of 33 policies (see Table 1).

On sustainable landscapes, this semester we trained 815 people; 639 men (78.4%) and 176 women (21.6%). We strengthened 1 sub-national organization. With collaborating institutions and stakeholders, 6 policy instruments were proposed at the sub-national level; 6 were adopted and 3 implemented.

At the end of FY19-SA1, the cumulative numbers on sustainable landscapes are as follows. During the 2.5 years of implementation, we have trained a total of 1,696 people (1,243 men and 453 women). Thus, the LOP Target of 100 people trained has been well exceeded. We have also strengthened 4 institutions, achieving 40.0% of the LOP Target of 10 institutions. We have engaged in proposals of 8 policies, achieved adoption of 7 and the implementation of 3, for a total of 18 tools. This represents 7.2 % of the LOP Target of 250 instruments (see Table 1).

On February 2019, we officially kicked off the project "Harvesting Resilience: Design and Implementation of Sustainability and Productivity Strategies for Sugarcane and Livestock in El Salvador", which will be executed in Ahuachapán, El Salvador, by the Foundation for Business Development of El Salvador (FUNDEMAS). This project aims to develop resilience in the sugarcane and livestock sectors through sustainable



# **TABLE 1**ResCA Framework Indicators: FY17, FY18 and Cumulative Progress towards the Life of Project (LOP) Target as of FY19 SA1 (March 2019).

INDICATOR	LOP TARGET	FY17	FY18	CUMULATIVE (MAR 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>	2,432	93.5 %
<b>EG11.2</b> Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance	20	1	8	14	70.0 %
<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	19	57.6 %
<b>EG13.1</b> Number of people trained in sustainable landscapes supported by USG assistance	100	0	881	1,696	100 %
<b>EG13.2</b> Number of institutions with improved capacity to address sustainable landscapes issues as supported by USG assistance	10	0	3	4	40.0 %
EG13.3 Number of laws, policies, regulations, or standards addressing sustainable landscapes formally proposed, adopted, or implemented as supported by USG assistance	250	0	3	18	7.2 %

<sup>&</sup>lt;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.



#### 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 October 26, 2018, representatives of The Nature Conservancy (TNC), the Belize Fisheries Department (BFD), the Regional Unit for Fisheries and Aquaculture (OSPESCA) of the Central American Integration System (SICA), the Caribbean Fishery Management Council (CFMR), the Regional International Organization for Plant Protection and Animal Health (OIRSA), and the National Fishermen's Cooperative (NFC) hosted an exchange of experiences on the implementation of the electronic seafood traceability system, Tally, in Belize City. Participants also visited the NFC facilities, where NFC staff demonstrated in situ how they are using Tally.
- On February 28, 2019, TNC hosted the National Seaweed Working Group meeting which brought together an
  especially enriching mixture of stakeholders including fisherfolk, public donors, economic development and
  regulatory agencies. Discussions were thoroughly engaging, valuable and powerful following TNC's
  presentation on the holistic approach being utilized for the development of a new sustainable seaweed
  industry for Belize, impacting system level changes.
- Wilbur Dubon (TNC Belize) participated in the Triennial AQUACULTURE 2019 (New Orleans, Louisiana, March 9-12, 2019), the world's largest aquaculture conference and trade show. ResCA's Belize seaweed project was presented at the conference by TNC's Global Oceans Team, while Wilbur networked with industry and agency representatives at the TNC booth and in meetings. We provided samples of seaweed and cosmetics formulated with our farmed seaweed and connected with buyers wishing to purchase seaweed from Belize at a premium price.



### El Salvador

- On October 5, 2018, we trained 20 coffee producers (13 men / 7 women) on the use of solar drying in tunnels. This process began with a learning-by-doing approach, where the producers were taught how to build the solar dryers and the associated benefits of this infrastructure. These solar dryers will enhance the quality of the grain and generate differentiated or specialty coffees. Producers trained committed to building their own dryers, resulting in 13 constructed solar dryers to date which will process 21,500 pounds of coffee / wet parchment this season. The cooperatives together built 400m² of dryers total which will process 80,000 pounds of coffee per season.
- We held trainings to improve on coffee yields and cherry to green grain management. 11 members (9 men / 2 women) of the Board of Directors of San Carlos Dos Cooperative participated in this workshop on Tuesday, October 16, 2018. This training was especially important because:

  a) participants learned how yields are calculated and that improved yields is just as or at times more important for improving income than receiving an improved price, b) the Cooperative realized that it does not know exactly what its current grain yields are and how much it costs them to produce, c) although no real figures are available, it is estimated that they are not being efficient in the process. Consequently, the training has reinforced the interest in and commitment to measuring all the key issues of the process this harvest. On Wednesday, October 17, 2018 the same training was delivered to 17 members (13 men / 4 women) of the boards of directors of the ACALEM and ACOPDM cooperatives, which are planning to establish internal collection mechanisms that reward grain quality.
- We organized two international experience-exchange tours on coffee processing and value chains
  to Marcala, Honduras. On November 28, 2018, 12 people (8 men / 4 women) exchanged lessons
  learned from the Marcala coffee Designation of Origin process. The aim was to inform the
  management of the Cacahuatique Designation of Origin, promoted by the Morazán Coffee Board
  in El Salvador. On December 4 and 5, 2018, we organized a second trip to the municipality of
  Marcala, in coordination with PADECOMSM. Participants (10 men) visited two production
  cooperatives and two individual producers to learn about the experiences in organic management
  and production of agricultural materials.
- During January 2019, the tasting laboratory of the San Carlos Dos Cooperative carried out three
  days of cup quality evaluation, which are used to assess quality of coffee beans produced and
  critical to improving sales. The 49 samples evaluated were obtained from associated producers
  and individual samples served by ResCA RAICES technicians. Results were very positive and
  samples with higher cup potential have been identified. The purpose is for both individual and
  associate producers to have better access to premium markets.
- On January 24, 2019, Caffé Nero (importer from England) and Intelligentsia Coffee (roaster from the U.S.) visited the San Carlos Dos Cooperative in Morazán. The goal of their visit was to understand the coffee cultivation processes, as well as improve relationships between the

cooperative producer and buyers. Topics discussed included how to optimize the quality control in the processes for greater quality coffee and better income from the sale of coffee. Individual producers and partners of the ACALEM Cooperative, another institution involved in the ResCA project, participated in the visit. Both buyers have confirmed their interest to continue supporting the San Carlos Dos Cooperative and have committed three containers for the 2018-2019 harvest: Caffé Nero (2) and Intelligentsia Coffee (1).

• In collaboration with Catholic Relief Services (CRS), we facilitated a business trip from Sean Couts, from Peets Coffee, and Adam Kline, a coffee importer from Coffee Unified to Morazán. From February 24 to February 26, 2019, they visited the ACALEM cooperative and the ACDR producers' group and held a series of meetings to strengthen their commercial relationships. In February 2019, these coffee buyers visited the San Carlos Dos Cooperative and purchased 3.11 containers of coffee beans. The visit included cupping which produced results above expectations. For instance, this year Coffee Unified is interested in purchasing 5 containers. The visitors also learned about the sustainable management practices promoted by ResCA to conserve soil and water, as well as the Water Fund mechanism that is being developed with the support of municipal governments. Pursuant the Water Fund, they announced their intentions to propose economic incentives for the implementation of these best practices.



- We worked with the San Carlos Dos Cooperative to propose a strategy and calculation table for purchasing coffee from small producers. They started implementing this approach for the first time, since previously the cooperative had only worked with coffee from its own farms. We supported the cooperative in pilot testing, including discussing and developing a purchase protocol and payment mechanism. To date, 67 quintals of green coffee have been acquired from 8 growers. This approach is particularly important, because:
  - The San Carlos Dos Strategic Plan establishes there is a need to increase income-generating activities so that they can pay outstanding debts and move towards becoming profitable.
  - This gives small growers the chance for a better access to market sales and get better prices.
  - The improved prices can be a fundamental factor in recovering and promoting coffee-growing in the area.
  - This is a test for the operational mechanisms designed by the Water and Agriculture Fund of North Cacahuatique, where the growers who implement best practices can leverage the linkage through San Carlos Dos to get premiums from international coffee buyers.

### Guatemala

- On November 21, 2018, ResCA Guatemala staff visited the Chipaquense Integral Agriculture Cooperative Union (COINACHI) Cooperative and the Association of Community Integral Development Tzanimacabaj (ADICOTZANI) to review avocado plots with the goal of working on a commercial link between the FRUTESA buying company and the avocado producers. The aim of this alliance is to strengthen the value chain of fruit trees by integrating the producers and potential buyers in the region together with ResCA partner AGEXPORT. The following agreements were reached: a) to generate an export model through a field-based platform with high quality producers for a European market; b) to search for a certification with two Global Gap organizations.
- On March 7, 2019, we supported COINACHI as they began construction of two cold rooms to store apples in the facilities of the in Chichicastenango, Quiché. This will allow fruit growers to store their first, second and third quality fruit, reducing their post-harvest losses and helping them obtain better income. The production will be commercialized through the cooperative in December, when fruit reaches its best price in the national market. This will generate a better livelihood for the families of the communities. This project directly benefits 33 production partners and 15 indirect producers, and the families of four communities in the area. The project is supported by several institutions, including the National Fund for Agriculture (FONAGRO), the Ministry of Agriculture, Livestock and Food (MAGA), TNC, the Guatemalan Association of Exporters (AGEXPORT), the National Cooperatives Institute (INACOP), and Frutas Tropicales de Guatemala (FRUTESA) among others.
- On March 21-23, 2019, we participated in AgriTrade, the largest Central American Agricultural Trade show and expo in Antigua, Guatemala. As a partnering organization, alongside local partner host, AGEXPORT, TNC's Sub-Coordinator for ResCA Guatemala, Juan Carlos Godoy, gave a keynote speech on the challenges and opportunities for agriculture in Latin America and an overview of TNC's innovative regional strategy, Healthy Agricultural Systems (HAS), of which ResCA intervenes as the core Central American agricultural strategy. The remaining days of the Expo featured ResCA Guatemala Coordinator, Jorge Cardona, leading an exhibition booth with an innovative new Virtual Reality simulation demonstrating sustainable practices for agriculture in the Western Highlands. This simulation will be finalized and launched in July 2019. We published a press release on ResCA's website, available here: <a href="https://bit.ly/2VnBbmm">https://bit.ly/2VnBbmm</a>



## Nicaragua

- On November 2018, ten executives and administrative staff of the 5 cooperatives supported by ResCA completed the five training modules for "Lean Canvas" Business Case Methodologies used by TechnoServe (TNS). The modules were developed to strengthen participants' management and administrative capacities and prepare the cooperatives with their respective business models which will be shared with 655 partners and suppliers. The goal of these business plans is to promote the quality of milk they provide to the dairy industry, to increase the loyalty of their partners and suppliers, and to provide services in accordance with the silvopastoral practices that ResCA will be promoting.
- Between November and December 2018, we supported four dairy cooperatives (San Francisco, Nicacentro, Cerro Alegre y CASANJO) in designing their cooperative business models using the Lean



Canvas methodology and their Elevator Pitches. These pitches incorporate their action plans for 2019-2021, including expansion activities regarding silvopastoral techniques and resilience plans.

• TNS ResCA team met with the executive staff of the two historical financial alliances (Financieras FDL and FUNDESER) on February 4, 2019, in Managua. The purpose was to explain the scope and objectives of ResCA and to decide what financial product should be promoted among the six cooperatives and the 730 cattle ranchers participating in the program to adopt sustainable silvopastoral practices. Financieras FDL decided to collaborate with us on opening lines of

credit to participating cooperative ranchers, as noted in our reported indicators.



### 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 CO2; 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

• TNC presented on electronic traceability at a regional forum on "Technology Solutions for Marine Protected Areas and Fisheries Enforcement and Compliance" that is being funded by the Department of State in Belize City on February 27, 2019. Participants were very impressed with the progress shared and ResCA team was congratulated on the work completed.



### El Salvador

- During November 2018, we held a series of meetings with representatives of the Environmental Investment Fund of El Salvador (FIAES), to design and operate water funds in the Cacahuatique region. The Executive Director of FIAES expressed their interest in and financial feasibility of the proposals presented on several funds. On November 23, 2018, a collaboration agreement was reached between FIAES and CRS, which includes, among other objectives, the promotion of the design, establishment and operation of the Water and Agriculture Fund (FOAG) in East Cacahuatique, currently composed of the municipal governments of San Carlos, San Francisco Gotera, Chilanga and Yoloaquín. This alliance is strategic for the viability of Water Funds in these rural territories that do not currently have large water consumers and because FIAES is the entity that manages the environmental compensations that the companies in El Salvador must pay. FIAES is an entity created by legislative decree independent of the government, even though Governmental representatives sit on the Advisory Council.
- During December 2018, 1,400 liters of multimineral biofertilizer were manufactured and distributed to 18 producers as a method to adapt to climate change and build climate change resilience. This project aims to reduce the use of synthetic fertilizers in aquifer recharge zones. It occurred through two phases first collecting solid microorganisms and pasture fermentation and secondly adding mineral salts.
- On March 20-22, 2019, TNC's Climate and Food Security Coordinator, Horacio Rodríguez Vázquez, and TNC's Latin American Lands Director, Ginya Truitt Nakata, participated in the Chicago Council Global Food Security Symposium in Washington, D.C. This annual event convenes global influencers in food security and the theme this year was agriculture and water. One of ResCA's premier agriculture-water projects, ResCA RAICES in El Salvador, was featured in a global storytelling contest; a social media activity from ResCA was featured throughout the conference. We launched a specific website created to highlight ResCA's presence in this event: https://bit.ly/2VeQZrJ





### Guatemala

- As of October 2018, TNC began the process of planning jointly with the Climate Change Unit (UCC) and the Regional Coordination and Rural Extension Directorate (DICORER) of the Ministry of Agriculture, Livestock and Food (MAGA), an event-workshop to update the concepts of climate change, adaptation and systems of climate-friendly agriculture (SAS). We trained 42 people (38 men / 4 women), including MAGA's departmental directors of the rural extension service from each of the 22 departments of the country. It was held from December 4 to 6, 2018, with the participation of TNC and MAGA facilitators.
- On March 15, 2019, the Foundation for Ecodevelopment and Conservation (FUNDAECO) implemented actions for the sustainable management of natural resources at the microbasin level in Todos Cuchumatán, Santos Huehuetenango. Among the most successful strategies is the restoration of the forest landscape through the establishment and management of 20.38 hectares of the natural regeneration of "huito" (Juniperus standleyi), which has the PROBOSQUE entered incentive program and generated economic benefits for families. This initiative is a priority due to the importance of the species' endemism, danger of extinction and germination problems in the nursery. The project promotes the regeneration of this species and the associated flora and fauna for the ecosystem's restoration.



### Honduras

 As part of the institutional strengthening and capacity building of the Secretariat of Agriculture and Livestock (SAG) - Agricultural Education, Training and Agribusiness Development Service (SEDUCA), we organized a training course on November 8, 2018 in La Esperanza, Intibucá. This course was part of the "Diploma in Multi-products (*Multirubros*) and Multi-theme (*Multitematica*) Field Schools" following the Climate Change module. The ResCA program and the PICSA methodology (Participatory Integrated Climate Services for Agriculture) were presented.



- On November 15, 2018, we hosted a press breakfast in Tegucigalpa to disseminate the results of the first phase of the ResCA project in Honduras and present the objectives of the second phase. The spokesmen were the Meteorology Service (CENAOS-COPECO), the Secretary of Agriculture (DICTA-SAG), alongside CIAT scientists. The press release can also be found on the ResCA website, in English (<a href="http://bit.ly/2vpbovG">http://bit.ly/2vpbovG</a>) and in Spanish (<a href="http://bit.ly/2VrosyX">http://bit.ly/2VrosyX</a>). Several local media covered this event, including Abriendo Brecha, Canal6, La Prensa, El Sol de Honduras, Honduradio, SAG, El diario, PrimiciaHN, DICTA, La Tribuna, and TiempoHN, amongst others.
- On November 22-23, 2018, we organized a workshop to create and analyze scenarios looking to 2050 in agriculture and food security. The purpose of this workshop was to articulate the results of this analysis to the policy component developed by CIAT in Honduras.
- On February 6, 2019, CIAT's ResCA team participated in the installation and training of the management of the meteorological station at the Choluteca experimental office of the Directorate of Agricultural Science and Technology (DICTA). The meteorological information managed will be useful for activities of climate services in the Dry Corridor of Honduras.On March 5-6, 2019, in coordination with CIAT we organized an exchange of experiences between the Honduran and Colombian Climate Services in Cali, Colombia. A delegation from Honduras visited CIAT's Headquarters and met the climate modeling and

cultivation team. Participants discussed about successful cases of climate resilient rural communities in the department of Cauca, Colombia.

- On March 7, 2019, a ResCA Honduras delegation visited the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM) and the National Federation of Rice Growers (FEDEARROZ) in Bogotá, Colombia, to exchange experiences and lessons learned on the advances in the Framework for Climate Services applied to agriculture.
- On March 18-21, 2019, we conducted a 4-day training on the Participatory Integrated Climate Services for Agriculture (PICSA) methodology in Tegucigalpa. The workshop was hosted by CIAT. Other CIAT partners and projects from different countries such as Guatemala, Nicaragua and Colombia joined with their own funds to learn and implement the methodology. In total, we trained 7 people on this methodology (5 men / 2 women).

# Nicaragua

- Ten members of the board of directors and administrative staff of four of the dairy cooperatives ResCA is supporting, as well as five members of the ResCA technical team, visited Finca La Esperanza and Empresa SEMSA in the Western Nicaragua to learn about three varieties and two hybrids of short cycle sorghums that are suitable for producing grains and feed that can be used as a more resilient and productive option to the traditional varieties and hybrids that are currently used for forage and grain production during the summer months to feed cattle. The cooperatives took advantage of this exchange to also establish commercial links with the two suppliers of sorghum seeds mentioned, which are better adapted to the difficult weather conditions ranchers are currently experiencing in the face of climate change.
- On January 8, 2019, the first session of AFTERCARE was held with 5 milk cooperatives in Managua, where TNS experts on business advising explained the next steps and work plan for the next 6 months where management areas will be prioritized and the preparation of their resilience plans. This step will ensure the sustainability and successful promotion of silvopastoral systems to their partners and suppliers.
- With the support of TNS, during February 2019 we promoted the establishment of small plots of yellow corn and mixed sorghum (grain and forage) varieties in seven model farms as part of a strategy to ensure the proper nutrition of cattle during the summer dry season. We also provided technical assistance to farmers preparing silos, which will be used in the toughest months of the summer (March, April and early May 2019) to ensure sufficient feed for livestock and to maintain productive and healthy pastoral systems.
- On March 6, 2019, the Cooperative of Agricultural Services of Esquipulas (CAES) participated in its third Business Training Module, where participants developed their strategy and action plan for the next three years.



- On March 2019, we participated and supported the XIV National Milk Forum led by the group of
  cooperatives called CENCOOPEL, R.L. In this forum, our ally CIPAV gave a presentation entitled
  "agroecological principles of silvopastoral systems", awaking the interest of the participants and
  contributing in enhancing the importance of the establishment of these systems in livestock areas to cope
  with the climate change and strengthen the resilience of livestock families.
- On March 13, 2019, ResCA's Business Advisor from TNS visited the Board of Directors of CAES to support them preparing their Strategy and Business Model. The aim was to improve the services they provide to their 140 milk suppliers and partners, who are working on the improvement of their farms with silvopastoral systems and other more resilient practices.



#### 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 CO2; 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 November 2018, TNC presented the Seaweed Mariculture Best Management Practices Guidelines and the Seaweed Smart-Siting methodology to partners including NGO, Government and Private Sector. Partners provided valuable input which will be incorporated into the final document that ResCA Belize team is preparing.
- On February 2019, TNC, in collaboration with the Placencia Cooperative and the Turneffe Atoll Sustainability Association conducted two separate training sessions at the Calabash Caye Ranger Station (Turneffe Atoll, Belize), one for fishers and the other for reserve staff, in seaweed mariculture. During the training sessions, a new farm was established in the Turneffe Atoll Marine Reserve as a seedbank.



### El Salvador

- We facilitated the participation of the mayor of Osicala and the mayor of Gualococti, on behalf of the Intermunicipal Association of Cacahuatique Norte, in a four-days of exchange and training on inclusive territorial economic development in Barcelona, Spain (November 19-22, 2018). Participants visited several experiences of rural and urban municipalities in the region. The host and organizer of these activities was the Provincial Government of Barcelona and the event was organized for representatives of the Tri-national Border Federation of the Lempa River (El Salvador, Guatemala, Honduras). ResCA secured an invitation and the mayors financed the trip with the goal of presenting to the Provincial Council a proposal for bilateral cooperation with the Intermunicipal Association of Cacahuatique Norte linked to landscape restoration.
- We organized two trainings on bean and coffee growing using the Farmer Field Day methodology. The first took place in the municipality of San Simon on November 27, 2018, with 90 participants (72 men / 18 women). The second was held in Arambala on December 7, 2018, where we trained 94 people (69 men / 25 women). On both events also participated mayors and municipal authorities, as well as representatives from the National Center for Agricultural Technology (CENTA). The characteristic of this method is that the farmers themselves share their experiences with other farmers. Each session involves forming 4 groups and rotating through 4 stations or learning sites, where a specific topic was discussed. Participants gave very positive feedback.
- On December 5, 2018, the six Mayors of the Cacahuatique Norte Intermunicipal Association established
  the Water and Agriculture Fund for their 6 municipalities. Each municipality will contribute USD
  \$15,000 annually and a technical coordinator will be hired to ensure the success of this financial
  mechanism which will incentivize good agricultural practices in water recharge zones
- We hosted two Water Board Meetings ("Juntas de Agua") with representatives from the intervention areas. One was held in San Francisco Cantón (December 17, 2018), and the other one in San Simón (December 21, 2018). The aim was to exchange experiences in the management of potable drinking water systems and its direct and indirect intervention in the conservation of soil and water in the aquifer recharge zones. The boards identified problems and deficiencies within the territory and highlighted organizational strengthening and watershed restoration as priority initiatives. In attendance were environmental representatives from 4 municipalities and the Salvadoran Health Promotion Association (ASPS), among others.
- We provided support to create the Osicala Water Service Provider Network (AJUAGUA), conformed by 11 municipal water committees. Preliminary stages of this effort involved the delivery of a variety of training courses and the two experiences of collective work undertaken by the Mayor's Office and the San Carlos Dos cooperative with reforestation and maintenance of infiltration pits in their recharge areas. AJUAGUA's statutes have been approved, which address aspects for adaptation to climate change. In 2018, they received 5 trainings on this topic.

- On January 2019, we concluded a training course that began on August 2019 and ran for five months. We trained representatives of 10 water boards from Northern Morazán, including Perquín, Arambala, Meanguera, and San Fernando. Some of the course topics included: improvement in the operation and administration of community and municipal water systems, water management with a landscape restoration approach and adaptation to climate change, amongst others.
- On February 14, 2019, we supported the establishment of a municipal coffee nursery in Chilanga, in which 10,400 coffee shells of the Cuscatleco variety were planted. The aim of this nursery is to promote landscape restoration through agriculture, with the support of Water Boards, the municipalities of Chilanga and San Francisco Gotera, as well as 35 individual producers interested in soil restoration and whose farms are located in strategic areas for water recharge.
- On February 26, 2019, we held the second exchange of experiences between members of water boards in Ciudad Barrios. The aim was to learn about joint initiatives between the mayor's office and its network of water management boards. 46 people (29 men / 17 women) participated, including representatives of 9 water boards and environmental technicians from 6 municipal governments. These learning experiences were fully organized and funded by the water boards, which demonstrates that ResCA's effort to strengthen these institutions is achieving its goals.



- This semester, we strengthened the Intermunicipal Association of Cacahuatique Norte (AICN) through different actions. From February 27 to March 1, 2019, the mayors of AICN received a delegation from the Diputación de Barcelona (public administration of the province of Barcelona, Spain) and the Trinational Lempa River Commonwealth. They agreed on a two-year project proposal to strengthen the AICN and promote an inclusive territorial economic development approach. The proposal would represent a strengthening of governance processes promoted by ResCA's RAICES, such as the Cacahuatique Norte Water Fund. The Corporation Municipalities of the Republic of El Salvador (COMURES) has officially recognized the Association. This allows them to open a bank account and get started.
- On March 2019, we held three workshops to present the results of the hydrogeological study of Cerro Cacahuatique to seven mayors, water board administrators and key local actors. The study, developed with the support of CRS, identifies the potential water recharge zones of the springs that supply the mountain's water systems, indicating that these recharge zones, in many cases, exceed the municipal limits. This fact reinforces the current multi-stakeholder and multi-municipal efforts that ResCA's RAICES is promoting and are being defined in the Cacahuatique Este Water Fund and Cacahuatique Norte Water Fund. The workshops discussed actions needed in the identified recharge areas and action plans for this year. One of the workshops was widely reported on television.

- As part of our commitment to promote cross-collaboration between ResCA's sub-awardees and avoid duplication of efforts, on March 22, 2019 we facilitated a meeting between CRS and FUNDEMAS in San Salvador, to identify potential synergies and coordinate upcoming activities. CRS will organize a tour to Colombia scheduled for the first week of June 2019, where FUNDEMAS will coordinate the attendance of either a technician, producer, and/or project coordinator to assist the tour regarding water efficient use in agricultural production. Additionally, this April there will be an exchange of experiences between FUNDEMAS and CRS in a Field School to learn how these models are being administered. Other activities confirmed were the management and technical support for the Intersectional Roundtable in Ahuachapán and to assist the Landscape Management Committee of Ahuachapán, where leaders in the coffee, sugarcane and livestock sectors will participate.
- We worked with the San Carlos Dos Cooperative in the proposal of their 2019-2020 Farm Management Plan. This management plan was drafted with members of the Board of Directors. It includes practices for restoration, resilience and reducing pollution.
- We strengthened technical capacities of Pueblo Viejo Association for Community Development (ACDR). We trained their members on soil and water management, appropriate fertilization (4R), postharvest techniques, diluted fertilization technique during drought, as well as sampling for soil pests and disease. In 2018-2019, they set up a coffee nursery with 10,000 plants, and they have implemented 2,283 meters of hillside ditches, and dug 13 infiltration pits. Investments made for manual weed control (no herbicide used) and prepared vermicompost, with the intention of making coffee growing more sustainable. The association as such has not accessed added value markets. However, three individual farmer-members of the cooperative have sold their coffee to international buyers. One created his own brand to sell on the national market. In addition, based on soil analysis results, recommendations have been made in fertilization plans for the farmers' plantations.

### Guatemala

- We supported the municipal authorities from Olintepeque and Santa María Chiquimula socializing their Municipal Environmental Policy plans. The purpose of these policy tools is to promote the implementation of strategies, actions and legal mechanisms that contribute to reducing pollution, degradation of natural resources and promote conservation – fundamental pillars to achieving a sustainable landscape in the Guatemalan Western Highlands. These plans were approved by the local authorities.
- During January 2019, we initiated the management of two new municipal agreements to carry out
  conservation and sustainable forest management activities in high-importance municipal ejidos in Baja
  Verapáz. These sites were determined based on their productive forest capacity, their potential for high
  capacity water recharge, and the potential to promote a sustainable forest management culture. As part
  of this initiative, we will promote a strategic alliance between the National Forestry Institute (INAB) and
  the National Electrification Institute (INDE).
- In January 2019, we finished two Municipal Plans for Adaptation to Climate Change and Risk (PMACCR) for the municipality of Rabinal and the municipality of San Juan Ixcoy, with the support of ASOVERDE. These tools will serve as a policy to guide investment and promote sustainable development with the municipality and were developed in conjunction with farmers, government agencies, and municipal officials within the framework of ResCA Guatemala. As a municipal policy, Rabinal authorities will allocate funds to ensure its implementation.
- From January 29 to January 31, 2019, we organized a field trip to visit various demonstration sites for diversified crops in key agricultural value chains. We visited demonstration plots at the Nueva Esperanza Association of Integral Development (ASODINE) in Cantón San Luis Sibila, Santa Lucia La Reforma, Totonicapán; the Association of Producers of Palqui (ADIP) located in Aldea Palqui, Uspantán, Quiché; the Integral Agricultural Cooperative "Union Chipaquense" (COINACHI) and the ADICOTZANI Association, Cantones Chipaca I and Tzanimacabaj, in Chichicastenango, Quiché.
- In collaboration with the Ministry of Agriculture, Livestock and Food (MAGA) and the National Association
  for Dairy Produce Development (ASODEL), we completed the Best Practices Manual for Sustainable Cattle
  Ranching in Guatemala. This tool aims to promote the adoption of best practices to ranchers at any scale
  to increase productivity and competitiveness while simultaneously reducing the negative environmental
  impacts on biodiversity and natural resources within the parameters of climate change. We published the
  manual on ResCA's website, available here: <a href="http://bit.ly/2Vme0Zl">http://bit.ly/2Vme0Zl</a>
- On February 26, 2019, CDRO, the Municipal Forestry Office, the Environmental Technical Board, and the Municipal Council of Olintepeque launched the Municipal Environmental Policy in Quetzaltenango. This tool includes six strategic lines that will allow the implementation of policies regarding environmental and forestry education, solid waste management, wastewater management, natural resources governance, local economic development, sustainable agriculture, and conservation of natural resources. In this regard, we also engaged in the proposal of the Operational Plan of the Technical board of Municipality of



Olintepeque, a policy tool with the objective to ensure implementation of the Municipal Environmental Policy.

- We collaborated with CDRO and the Departmental Delegation of the Ministry of Environment and Natural Resources (MARN) of Totonicapán to develop the Regional Forest Firefighter Training Plan. Well-trained community-level firefighters who have technical knowledge and skills are critical for rapid decision making and acting on forest fire prevention and response, especially in a region where seasonal droughts are expected to become more prolonged and intense in the face of climate change. The course included theoretical and practical approaches, using the case of the nearbly El Aprisco Forest and ecological trail. From February 18 to February 21, 2019, CDRO, TNC, the MARN, and the Board of Natural Resources cohosted a forest fire management training for local leaders and stakeholders. To implement what was learned, we worked with the local institutions to establish a community forest fire brigade made up of authorities, water committees and youth groups. We also worked with the Municipality of Olintepeque to develop a Regulation for the Operation of Forest Firefighters of the Municipality of Olintepeque, which aims to prevent and combat forest fires, as well as establish the role and importance of forest firefighters.
- On February 28, 2019, CDRO, the Municipal Agricultural and Technical Unit (UTAM), and the Municipal
  Office of Water and Sanitation (OMAS) launched the Municipal Environmental Policy in Santa María
  Chiquimula, with the support of community authorities of 18 villages. This tool includes six strategic lines
  that will allow the implementation of policies regarding environmental and forestry education, solid waste
  management, wastewater management, natural resources governance, local economic development,
  sustainable agriculture, and conservation of natural resources.
- We worked with the Sierra de los Cuchumatanes, Huehuetenango community to implement sustainable sheep management by using a semi-intensive sheep production system. One of the actions carried out is facilities improvement (29 sheepfolds) to reduce grazing time, promote natural forest regeneration, and improve production rates (fertilizer collection and health). This and related activities improve livelihoods for women in the community, such as making work more efficient and freeing their time for other activities, and to help ensure children attend school.
- We developed a practical guide for the development and management of the vermiculture organic
  fertilizer method, which uses earthworms (*Lumbricus terrestris*) to produce organic fertilizer. The units of
  production of compost are known as Worm Combe. This guide aims to strengthen producers' knowledge
  and skills to fertilize soils without relying on chemical fertilizers or inputs that can negatively impact soils
  and water. The manual establishes the difference between chemical and organic fertilizers, detailing their

- advantages and disadvantages. These guides were delivered to 20 producers in the Paraje León community of Totonicapán.
- We supported the Olintepeque community to define and propose a Municipal Master Plan of Eco-Tourism. The aim is to reduce unsustainable usage of natural resources by promoting ecotourism as a sustainable economic activity that supports the local communities and their forests.

### Honduras

- The ResCA-CIAT team participated in a workshop hosted by FAO Honduras around climate change scenarios for the agriculture sector in Honduras. The goal is to design together with the Directorate of Agricultural Science and Technology (DICTA-SAG) and the Directorate of Fisheries and Aquaculture (DIGEPESCA) an Institutional Adaptation Plan, of which ResCA Honduras will focus on.
- On December 21, 2018, CIAT representatives met with officials of the Agro-Environmental, Climate Change & Risk Management Unit (UACC&GR) of the Secretariat of Agriculture and Livestock (SAG) to present ResCA. The objective was to identify areas for collaboration and cross-over that can be developed together.
- After a participatory consultative process with a wide range of stakeholders, on January 2019 we and the Municipality of Cabañas completed the Municipal Adaptation Plan for Climate Change. We published this policy instrument in ResCA's website, and is available here: <a href="http://bit.ly/2Vt4kN1">http://bit.ly/2Vt4kN1</a>
- On January 21, 2019, the ResCA-CIAT team met with the UACC&GR of SAG to review the Annual Operative Plan for 2019 and the actions which will be coordinated for the implementation of ResCA in the county.
- ResCA's CIAT representatives attended the first 2019 meeting of the National Adaptation Committee of Honduras on February 15, in Tegucigalpa. The aim was to join efforts for the design and adoption of adaptation policies at different scales in the territory.
- On February 26, 2019, the ResCA Honduras team from CIAT met with the local Ricegrowers Association
  - (ASOPRA) in Jesús de Otoro, Intibucá, to plan training workshops for climate services with coffee, dry bean, corn and rice producers. Additionally, the local mayor gave his approval for the Municipal Adaptation Plan, which was presented to the regional radio station Otoro Radio.
- The ResCA-CIAT team met with the Honduran Climate Change Alliance (AHCC) on February 27, 2019, in Tegucigalpa. The participants discussed the opportunity to join forces and scale up the incorporation of the Municipal Adaptation Plans into the National Municipal Development plans for Honduras.



# Nicaragua

- TechnoServe trained 293 farmers (260 men / 33 women) from 35 cattle ranching groups on a general introduction to the ResCA project and sustainable ranching general guidelines. The aim was to identify farms' existing resources, assess their potential, and find best ways to help them transition to a more sustainable production model considering economic, social and environmental aspects. The training also helped the producers design a farm plan that sets achievable goals in the medium term, prioritizing specific management aspects to improve on their farms. The information gathered from the training will inform future technical trainings on silvopastoral practices and improved farm management. It will also inform development of a sustainable management plan to achieve the desired goals for participants' productive unit.
- We published a blog that discusses the ResCA Nicaragua project and the importance of the local extension agents who work in the Departments of Boaco and Matagalpa in this project. The blog is available in English (http://bit.ly/2Glp3EA) and in Spanish (http://bit.ly/2DwZ3tK).
- On March 2019, TechnoServe's Business Advisory and Technical Assistance Units of ResCA Nicaragua visited 14 farms in Boaco, Camoapa, and San José de los Remates. The objective was to analyze the financial results for 2018 of ten double-purpose farms with one milking per day and four double-purpose farms with two milkings per day. Within the framework of ResCa Nicaragua, TechnoServe will be supporting more producers to go from one to two milkings per day to intensify the production of their farms, which would lead to the use of less area for more production. The project will also help farmers improve the milk quality.



# Regional level

- Manuel Pérez (OSPESCA) presented the Regional Plan for the Management of the Lobster Fisheries of the Caribbean (MARPLESCA) to the Scientific Advisory Group of the Western Central Atlantic Fishery Commission (WECAFC) of the United Nations Food and Agriculture Organization (FAO) on November 19, 2018 in Bridgetown, Barbados. The objective was to review the state of the fisheries in Area 31 of the FAO and of the initiatives promoted in the region to improve fisheries management. During the meeting, the draft recommendations and resolutions to be presented at the 17<sup>th</sup> Meeting of the WECAFC (2019) were reviewed. One of the recommendations reviewed was the MARPLESCA Plan in the WECAFC area. In this plan, it is recommended that countries adopt and apply this regional plan that was updated under the execution of the subproject Ecolangosta+ of the CLME+ Project and the ResCA Lobster Project of TNC Belize.
- On December 6, 2018 in Belize City, the ministers of OSPESCA approved the Regional Plan for the Management of Spiny Lobster Fisheries (MARPLESCA Plan), which is geared towards better regional-level management of the Caribbean spiny lobster (*Panulirus argus*) fishery within a framework of sustainable use, promoting ecological balance and economic/social benefits. The Ministers, in turn, instructed the Regional Specialized Directorate of OSPESCA within the General Secretariat of SICA to manage the Caribbean Regional Fisheries Mechanism (CRFM) and the Central Western Atlantic Fisheries Commission (COPACO) to ensure a harmonized plan for the greater Caribbean Sea.
- In coordination with CRS and ACUGOLFO, from December 11 to December 13, 2018, we held the first ResCA Experience Exchange Retreat in El Salvador. The three-day retreat included meetings in San Salvador, visits to ResCA project sites in Morazán, and reflective place-based activities to learn about the social impact the tragic El Salvador Civil War had on the communities in which ResCA operates today. In attendance were representatives of ResCA Sub-awardees, including AGEXPORT, CIAT, CRS, ACUGOLFO, TNS, OSPESCA, OIRSA, FUNDEMAS, Fundación CIPAV, and TNC.
- On January 23-24, 2019, Mauricio Castro Schmitz, Irene Farrow, Jorge Cardona and Horacio Rodríguez participated on behalf of ResCA in a regional TNC workshop in Bogotá, Colombia. The objective was to define metrics and common indicators of the implementation of the Healthy Agricultural Systems strategy in the region, based on specific projects being implemented throughout ResCA.
- The Regional Office and the Fisheries Working Group of SICA's Regional Unit for Fisheries and Aquaculture (OSPESCA) held a virtual meeting on February 4, 2019 to define work guidelines on the comprehensive review that will occur in 2019 of the Regional Regulation OSP 02 09 for Regional Planning of Caribbean Spiny Lobster Fisheries (*Panulirus argus*). The purpose was to review and suggest necessary changes in the Regulation according to the new realities of the region, representing adequate adaptive management.
- On February 6-7, 2019, Mitchell Ucles (CIAT) and Jesse Festa (TNC) attended the World Bank forum: "Towards a More Resilient Central America" (Hacia una Centroamérica más Resiliente) in Panama City, Panama. The event was organized in conjunction with ResCA partner SICA, the Executive Secretary for Finance Ministers in Central America (SE-COSEFIN), Coordination Center for the Prevention of Natural

Disasters in Central America (CEPREDENAC), the Regional Committee for Hydrological Resources (CRRH), and United Nations Office for the Reduction of Risks and Disasters (UNISDR). This conference featured various panelists and speakers, including Seynabou Sakho (World Bank), and Vinicio Cerezo (SICA), and working groups for hydrometeorological services, urban risk, resilient investments, discussing the improvement of regional meteorological forecasts. It was an excellent opportunity for ResCA to be positioned amongst relevant multilateral organizations in Central America, stress the importance of rural development in a traditionally urban-focused conference, and network with fellow colleagues in the sector. It's important to note that the World Bank is planning a Fall 2019 (October-November) conference in Central America called "Understanding Risk" ("Entendiendo Riesgo") where it will be crucial for ResCA to develop an engagement strategy, position panelists, and ensure presence and participation from various ResCA spokespeople. Jesse Festa (TNC) is following up to determine speaker availability for this conference and will send more information once available.

- During February 2019, TNC's Climate and Food Security Coordinator, Horacio Rodríguez Vázquez, held a
  series of meetings with SICA's Central American Agricultural Council (CAC) to explore potential
  collaboration regarding policy instruments. CAC is already working with CIAT on the development of a
  Regional Roundtable on Agroclimatic Information. CAC showed high interest in potentially adopting ResCA
  Honduras methodology on this issue and replicate it in other countries (such as Costa Rica and Panama).
  TNC, CIAT and CAC will organize a presentation of ResCA's work in the next CAC session with
  representatives of the Ministries of Agriculture, to be held in El Salvador during the second half of 2019.
- On March 1, 2019, the fishing ban for the Caribbean spiny lobster initiated across the countries belonging to the Central American Integration System (SICA) with the exception to Belize which began February 15. This ban will last until June 15 in Belize and June 30 in the remaining countries. In collaboration with OSPESCA, we proposed and implemented a communication strategy and a social media campaign to provide wide visibility. An informational video is available here: http://bit.ly/2GC2kZg



# Annexes



### ANNEX 1 PERFORMANCE MONITORING PLAN

RESULT	FY17			FY18			FY19			FY20			
	TARGET	SA1	SA2	TARGET	SA1	S2	TARGET	SA1	SA2	TARGET	SA1	SA2	LOP TARGET
INDICATOR EG11.1 NUMBER OF PE	OPLE TRAIN	IED IN CLIN	MATE CHAN	GE ADAPTA	TION SUPP	ORTED BY U	SG ASSISTA	ANCE					
(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)	10	0/0	8/2	645	215/ 120	1028/ 481	2500	1618/814					2600
INDICATOR EG11.2 NUMBER OF IN	STITUTIONS	WITH IMF	ROVED CAI	PACITY TO A	ASSESS OR A	DDRESS CLI	МАТЕ СНА	NGE RISKS :	SUPPORT	ED BY USG	ASSISTANC	Ε	
(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)	0/0/0	0/0/	1/0/0	2/3/3	1/0/0	2/3/3	5/5/5	2/6/6					20
INDICATOR EG11.3 NUMBER OF LA			ATIONS, OR	STANDARD	S ADDRESSI	NG CLIMAT	E CHANGE	ADAPTATIC	ON FORM	ALLY PROP	OSED, ADO	PTED, OR	
(TYPE: OUTCOME) / UNIT	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 /						p,, .	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	p/a/i	
implemented (p/a/i)	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	p/a/i 0/0/0	p/a/i 0/0/0	p/a/i	p/a/i	p/a/i	p/a/i	
	0/0/0	0/0/0	0/0/0	0/0/0 8/1/0	0/0/0				p/a/i	p/a/i	p/a/i	p/a/i	33
implemented (p/a/i)  Number of measures at subnational level proposed / adopted						0/0/0	0/0/0	0/0/0	p/a/i	p/a/i	p/a/i	p/a/i	33



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

RESULT	FY17			FY18			FY19			FY20			
	TARGET	SA1	SA2	TARGET	SA1	S2	TARGET	SA1	SA2	TARGET	SA1	SA2	LOP TARGET
INDICATOR EG13.1 NUMBER OF PE	EOPLE TRAIN	NED IN SUS	TAINABLE L	ANDSCAPES	S SUPPORTE	ED BY USG A	ASSISTANCE						
(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)	0	0/0	0/0	930	5/0	604/2 77	1500	1243/453					100
INDICATOR EG13.2 NUMBER OF IN	ISTITUTIONS	S WITH IME	PROVED CAI	PACITY TO A	ASSESS OR A	DDRESS SU	STAINABLE	LANDSCAP	ES ISSUES	SUPPORT	ED BY USG	ASSISTAN	CE
(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)	0/0/0	0/0/ 0	0/0/0	1/0/2	0/0/0	1/0/2	2/2/1	1/0/3					10
INDICATOR EG13.3 NUMBER OF LA AS SUPPORTED BY USG ASSISTANC		ES, REGULA	ATIONS, OR	STANDARD	S ADDRESSI	ING SUSTAII	NABLE LAN	DSCAPES FO	ORMALLY	PROPOSED	), ADOPTED	, OR IMP	EMENTED
(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)	0/0/0	0/0/0	0/0/0	1/0/0	1/0/0	1/0/0	2/0/0	1/0/0					
Number of measures at sub- national level proposed / adopted / implemented (p/a/i)	0/0/0	0/0/0	0/0/0	1/1/0	0/0/0	1/1/0	10/10 /5	7/7/3					250
Number of measures at regional or international level proposed / adopted / implemented (p/a/i)	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0					
Total	0/0/0	0/0/0	0/0/0	2/1/0			12/10						



### ANNEX 2 MEDIA COVERAGE SUMMARY

- Orozco, Andrea (2018), Impulsan estrategias a favor de agricultores frente al cambio climático, Prensa Libre, Guatemala, <a href="https://www.prensalibre.com/guatemala/comunitario/sociedad-civil-impulsa-estrategias-para-la-seguridad-alimentaria/">https://www.prensalibre.com/guatemala/comunitario/sociedad-civil-impulsa-estrategias-para-la-seguridad-alimentaria/</a>, October.
- Aguilar, Denis (2018), Presentan estrategias para mejorar la seguridad alimentaria, Diario La Hora, Guatemala, <a href="https://lahora.gt/presentan-estrategias-para-mejorar-la-seguridad-alimentaria/?fbclid=lwAR3BAgcA4tw1oogrtqK7w3n0n5">https://lahora.gt/presentan-estrategias-para-mejorar-la-seguridad-alimentaria/?fbclid=lwAR3BAgcA4tw1oogrtqK7w3n0n5</a> 8v47NQauXZQA1v Ts4OEHENU1NtBRz Qw, October.
- ChapinTV (2018), Impulsan proyecto para ayudar agricultores, ChapinTV, Guatemala, <a href="http://www.chapintv.com/actualidad/impulsan-proyecto-para-ayudar-agricultores-187838?fbclid=lwAR3Lzdk1qdkthVPOXNfJAXsvPO9L2sS-49ErzaCcpf-OTPp-yvKqQu8JYFE">http://www.chapintv.com/actualidad/impulsan-proyecto-para-ayudar-agricultores-187838?fbclid=lwAR3Lzdk1qdkthVPOXNfJAXsvPO9L2sS-49ErzaCcpf-OTPp-yvKqQu8JYFE</a>, October.
- The Nature Conservancy (2018), Innovaciones promovidas por ResCA son presentadas en el Encuentro INNOVAGRO en Perú, ResCA, <a href="http://www.resilientcentralamerica.org/organizaciones-de-la-sociedad-civil-presentan-estrategias-para-impulsar-la-seguridad-alimentaria-haciendo-frente-a-los-efectos-del-cambio-climatico-2/, October.</a>
- The Nature Conservancy (2018), Alliance formed to promote sustainable ranching practices to improve the productivity and quality of milk in Nicaragua, ResCA, <a href="http://www.resilientcentralamerica.org/alliance-nicaragua/">http://www.resilientcentralamerica.org/alliance-nicaragua/</a>, November.
- Bejarano, Manuel (2018), Capacitarán a ganaderos sobre sistemas silvopastoril, El Nuevo Diario, Nicaragua, <a href="https://www.elnuevodiario.com.ni/economia/478900-capacitaran-ganaderos-sistemas-silvopastoril/">https://www.elnuevodiario.com.ni/economia/478900-capacitaran-ganaderos-sistemas-silvopastoril/</a>, November.
- Nicaragua Al Día (2018), Promueven prácticas sostenibles para mejorar la productividad y calidad de la leche en Nicaragua, Nicaragua Al Día, Nicaragua, <a href="https://www.nicaraguaaldia.com/2018/11/05/promueven-practicas-sostenibles-para-mejorar-la-productividad-y-calidad-de-la-leche-en-nicaragua/">https://www.nicaraguaaldia.com/2018/11/05/promueven-practicas-sostenibles-para-mejorar-la-productividad-y-calidad-de-la-leche-en-nicaragua/</a>, November.
- La Nicaragua de Hoy (2018), Promueven prácticas sostenibles para mejorar la productividad y calidad de la leche en Nicaragua, La Nicaragua de Hoy, Nicaragua, <a href="https://lanicaraguadehoy.weebly.com/inicio/promueven-practicas-sostenibles-para-mejorar-la-productividad-y-calidad-de-la-leche-en-nicaragua">https://lanicaraguadehoy.weebly.com/inicio/promueven-practicas-sostenibles-para-mejorar-la-productividad-y-calidad-de-la-leche-en-nicaragua</a>, November.
- Atrévete y Explora (2018), Promueven prácticas sostenibles para mejorar la productividad y calidad de la leche en Nicaragua, Atrévete y Explora, Nicaragua,

- https://atreveteyexplora.com/2018/11/07/promueven-practicas-sostenibles-para-mejorar-la-productividad-y-calidad-de-la-leche-en-nicaragua/, November.
- Bolsa Económica (2018), Capacitan a ganaderos para una mayor productividad, Bolsa Económica, Nicaragua, <a href="https://tnc.app.box.com/s/lvhsynnh8in3tbt9vqzdia4y5z1y6bnr">https://tnc.app.box.com/s/lvhsynnh8in3tbt9vqzdia4y5z1y6bnr</a>, November.
- Abriendo Brecha (2018), Mejoran la producción de café y frijol en más de un 20%, video,
   Abriendo Brecha, Honduras, <a href="http://www.abriendobrecha.tv/mejoran-la-produccion-cafe-frijol-mas-20-video/">http://www.abriendobrecha.tv/mejoran-la-produccion-cafe-frijol-mas-20-video/</a>, November.
- Redacción (2018), Mejoran cultivos de frijol y café con programa regional, La Prensa, Honduras, <a href="https://www.laprensa.hn/economia/1234416-410/-honduras-cultivos-frijol-cafe-programa-regional-cambio-climatico-">https://www.laprensa.hn/economia/1234416-410/-honduras-cultivos-frijol-cafe-programa-regional-cambio-climatico-</a>, November.
- Admin (2018), En Alianza Estratégica con SAG y COPECO: ResCA presenta alcances para Honduras en el sector agrícola, El Sol de Honduras, Honduras, <a href="http://www.elsoldehonduras.com/agroindustria/en-alianza-estrategica-con-sag-y-copeco-resca-presenta-alcances-para-honduras-en-el-sector-agricola/">http://www.elsoldehonduras.com/agroindustria/en-alianza-estrategica-con-sag-y-copeco-resca-presenta-alcances-para-honduras-en-el-sector-agricola/</a>, November.
- Hondudiario Redacción (2018), Mejoran producción de café y frijol entre un 23%, Hondudiario, Honduras, <a href="https://hondudiario.com/2018/11/17/mejoran-produccion-de-cafe-y-frijol-entre-un-23/">https://hondudiario.com/2018/11/17/mejoran-produccion-de-cafe-y-frijol-entre-un-23/</a>, November.
- Secretaría de Agricultura y Ganadería (2018), En Alianza Estratégica con SAG y COPECO: ResCA presenta alcances para Honduras en el sector agrícola, SAG, Honduras, <a href="http://sag.gob.hn/sala-de-prensa/noticias/ano-2018/noviembre-2018/resca-presenta-alcances-para-honduras-en-el-sector-agricola/">http://sag.gob.hn/sala-de-prensa/noticias/ano-2018/noviembre-2018/resca-presenta-alcances-para-honduras-en-el-sector-agricola/</a>, November.
- Redacción (2018), Mejoran producción de café y frijol en Copán y Choluteca, Primicia Honduras, Honduras, <a href="http://primiciahonduras.hn/mejoran-produccion-cafe-frijol-copan-choluteca/">http://primiciahonduras.hn/mejoran-produccion-cafe-frijol-copan-choluteca/</a>, November.
- La Tribuna (2018), *Suben a 23% cosechas con herramienta meteorológica*, La Tribuna, Honduras, <a href="http://www.latribuna.hn/2018/11/20/suben-a-23-cosechas-con-herramienta-meteorologica/">http://www.latribuna.hn/2018/11/20/suben-a-23-cosechas-con-herramienta-meteorologica/</a>, November.

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