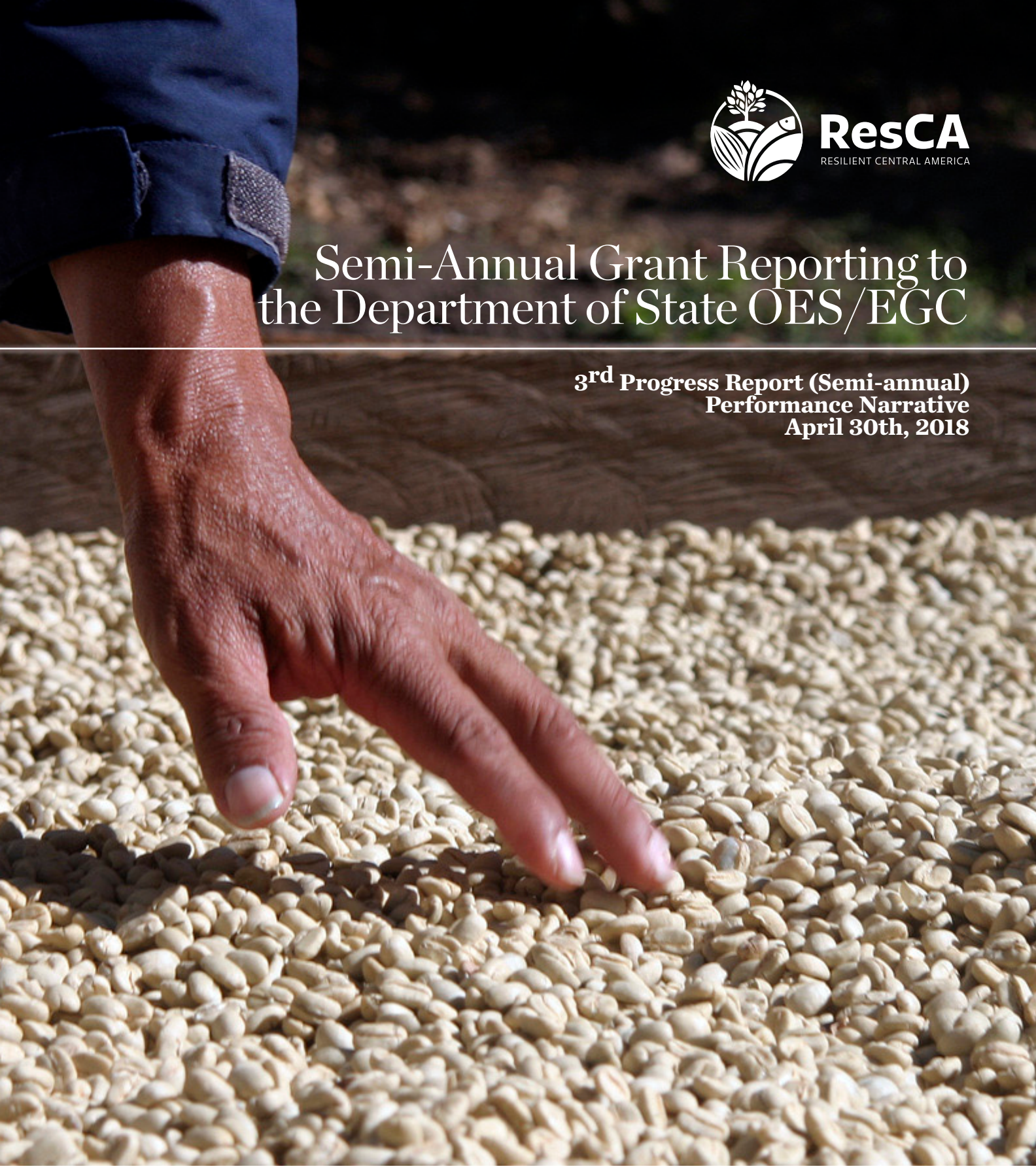

ResCA
RESILIENT CENTRAL AMERICA

Semi-Annual Grant Reporting to the Department of State OES/EGC

3rd Progress Report (Semi-annual)
Performance Narrative
April 30th, 2018

ResCA RESILIENT CENTRAL AMERICA

Gift of the United States Government

The Nature Conservancy Latin America

AgroLAC 2025

ResCA
RESILIENT CENTRAL AMERICA

Semi-Annual Grant Reporting to the Department of State OES/EGC

3rd Progress Report (Semi-annual)
Performance Narrative
April 30th, 2018

Resilient Central America (ResCA)
Program for Climate and Food Security in Central America

To:

Hillary Clifford (CliffordHA@state.gov) GOR and Project Manager, State Department.
Anushree Banerjee (BanerjeeA@state.gov), State Department.

Submitted by:

The Nature Conservancy (TNC)
Ginya Truitt Nakata (ginya.truittnakata@tnc.org) Lands Director, Latin America Region LAR.
Mauricio Castro Schmitz (mcastro@tnc.org), Lands Manager, LAR.
Anabella Palacios (a.palacios@tnc.org) Climate & Food Security Coordinator, LAR.

ResCA
RESILIENT CENTRAL AMERICA

Table of Contents

ResCA
RESILIENT CENTRAL AMERICA

INTRODUCTION

This is the third **Progress Report** for the "Resilient Central America Program" (ResCA), or "Program for Climate and Food Security in Central America" (S-LMAQM-16-GR-1290) led by The Nature Conservancy (TNC) and submitted to the Office of Global Change (EGC), Department of State (DoS), for the period of performance from **October 2017 to March 2018.**

In the present report a summary of major activities and assessment of the overall project's impact has been included. For a better organization and attention to the reader, it has been divided in two major sections:

SECTION I of this report includes:

- A summary of the work done by the Program staff at the Regional level in creating an enabling environment to promote a Climate Resilient Agriculture agenda in the region, inserted in Latin America's Healthy Agricultural Systems Strategy.

- This section also includes a list of approved sub-awards, countries of implementation, and tentative sub awards being discussed with potential organizations in the region.

- A summary of the changes and improved policies and procedures to strengthen our Performance Monitoring Plan (PMP) based on the recommendations received by DoS on February 2018. Please See Annex 1 and Annex 1.1

- An infographic with expected results and outcomes for ResCA is attached which highlights the program's vision and strategy, the expected outcomes by 2020 and the obtained results up until March 2018. Please see Annex 2.

SECTION II includes:

- A summary of the two internal projects being implemented by TNC local offices: **"Multi-stakeholder compact to secure a sustainable and resilient fishery sector in Belize"** and **"Building Resilience through a Green Growth Compact (GGC) strategy for food security and climate-smart agriculture in Guatemala".**

1. A summary of the progress achieved by the International Center for Tropical Agriculture (CIAT) project in Honduras called **"Agro-Climatic Forecast and Climate-Site-Specific Management System (CSMS) for climate-smart agriculture in dry bean crop in Choluteca and coffee crop in Copan, Honduras,** and the project **Restorative Agriculture in Critical Ecosystems (RAICES)** approved by DoS in December 2017 and being implemented by Catholic Relief Services (CRS) in El Salvador. This project summaries include the narrative for the indicators and outcomes for this period that have been summarized in the OES-EFC indicators templates for Adaptation (EG. 11-1) and Sustainable Landscapes (EG. 13 -1; 13-3). Attached to this Report the following documents are included:
2. A "Project Spotlight" completed template to highlight an activity under the Guatemala Project. Please see Annex 3
3. Completed Indicators Templates. Please see Annex 4 Sustainable Landscapes and Annex 4.1 Adaptation Indicators
4. Complete Subawards Progress Reports. Please see Annex 5 Belize, Annex 6 Guatemala, Annex 7 Honduras and Annex 8 El Salvador.

Section I

PROGRESS REPORT

Progress at the regional management level

Selection and Development of Projects: During this semester, the team has mostly focused on the design and approval of subawards to be implemented by local and international organizations with focus on climate resilient agriculture in Central America. In December, the project **Restorative Agriculture in Critical Ecosystems (RAICES)** was approved by Department of State (DoS), and the project initiated operations in January 2018. ResCA, in partnership with CRS, is building a model for agricultural landscape restoration and advocating for an enabling policy and governance environment at the national, regional, and local levels in the Nahuaterique Conservation Area located in El Salvador.

As mentioned in our previous report, this partnership has been steadily growing to strengthen the linkages between water and sustainable agriculture. CRS and TNC already participated in a few regional learning exchanges to share best practices regarding water and agricultural management in key landscapes in Central and South America. For example, in March 2018 the CRS Landscapes Team participated in a field visit to Extrema municipality, State of Minas Gerais, in Brazil, where a successful TNC Water Fund has been under implementation for the past few years. It started as a plan to restore agricultural areas to protect water sources at the municipal level with a sustainable financing mechanism and payments for environmental services (PES). Since then, Extrema's municipal restoration program has been winning global recognition and the model is scaling up to 200 municipalities in the area of Mantiqueira Mountains based on the restoration prototype developed there. The main lessons learned from this project, especially those at the municipal policy level, will be explored to be replicated in territories such as El Salvador. For example, Extrema approved a Municipal Environmental Law that focuses on water as the principal driver for the sustainability of the region and good agricultural management to preserve watersheds in the region that can be perfectly replicated in the focus region of the ResCA project. The program has been quite successful in terms of increasing quality and water volume, biodiversity levels, forest coverage and productivity and investments levels by local farmers. CRS will also be attending the next Water Funds training given by TNC in Lima in the month of May, and will continue to explore solutions to replicate and improve implementation in El Salvador under the RAICES ResCA project.

In the next months, the Program is expecting to approve the remaining US$1.5M funds planned for subawards. The pipeline for project approval has been rebuilt and tentatively secured four projects ideas to be executed by Technoserve, the International Center for Tropical Agriculture (CIAT), Central American Fisheries and Aquaculture Organization (OSPESCA) and FUNDEMAS or CLUSA in El Salvador. In Nicaragua, Technoserve in alliance with CIPAV – Center for Research in Silvopastoril Systems- will work towards increasing the resiliency of dairy farmers in the northeast regions of Boaco and Matagalpa. It will seek to integrate key private sector actors in the dairy industry to promote intensive, silvo-pastoral business models that will increase the sustainability of this key national value chain. The project has been already sent for DoS approval and is finalizing negotiations with Grupo LALA for additional financial support to the scope of this project. This is a great achievement for the program, since having one of the largest regional dairy companies supporting the project and learning from it can impact industry standards at business practice level. This project is expected to be approved by end of April.

In Honduras, ResCA will be replenishing the project being executed by CIAT with an amendment which is expected to be sent for approval to DoS by early May. This project is under preparation and will focus on building national capacity for the provision and use of agricultural climate services within the country, building on the capacity previously built in national climate organizations (such as the Center for Atmospheric Studies (CENAOS) and the Ministry for Agriculture and Livestock).

At the regional level, ResCA is under negotiations with OSPESCA to design a project that will contribute to define more specific targets regarding desired stock for Spiny Lobster fisheries, associated socio-economic benefits for fisherman, as existing gaps in available data sets that should be addressed. It is important to mention that the Caribbean spiny lobster, Panulirus argus, is a highly migratory resource and is widely distributed in the Western Central Atlantic Ocean. The greatest stock abundances are observed in the Western Caribbean and is a key value chain to work in this region. This project is expected to be sent for approval by the end of May, beginning of June.

Lastly, in El Salvador, the ResCA team is considering, on one hand, to work with Fundemas in Ahuachapan mountain range to preserve

watersheds and promote sustainable agricultural practices with sugarcane and livestock producers. And in the other hand, with CLUSA in El Balsamo Region promoting agroforestry systems to restore soil and promote sustainable economic development with producers' organizations. Both projects ideas are under review and initial stages of discussion.

In summary, ResCA continues on track with its workplan to create an extensive network of actors working for the sustainability of the agricultural sector, farmers' livelihoods, and environmental resilience. Table 1 below includes a summary of the "Sub awards Pipeline of ResCA Projects", including submitted projects for approval and ideas that would allocate the remaining funds.

N	COUNTRY	IMPLEMENTER	NAME	DOS STATUS	RESCA FUNDS	COUNTERPART FUNDS	TOTAL
1	BE	TNC BE	Multi-stakeholder compact ...	**A**	1,260,288.94	505,000.00	1,765,288.94
2	GU	TNC GU	Building Resilience through a Green Growth Compact (GGC) strategy for food security and climate-smart agriculture in Guatemala...	**A**	2,203,566.94	1,675,000.00	3,878,566.94
3	HO	CIAT	Agro-Climatic Forecas	**A**	382,825.00	391,233.00	774,058.00
4	GU	AGEXPORT	Increasing the resilience...	**A**	370,000.00	60,000.00	430,000.00
5	ES	CRS	RAICES	**A**	700,156.36	897,227.87	1,597,629.29
6	GU	FUNDAECO	Micro-Watershed Climate Re...	**A**	110,058.01	124,831.73	234,889.74
7	GU	ASOVERDE	Improvement of capacities to climate....	**S**	91,880.80	116,045.15	207,925.95
8	GU	CDRO	Indigenous communities ...	**S**	124,872.48	124,652.35	249,524.83
9	NI	Technoserve	GaneMas	**S**	869,824.86	200,000	1,069.824.86
10	RG	OSPESCA		**IP**	200,000	TBD	
11	ES	TBD		**IP**	420,000	TBD	
		TOTAL			**3,172,806.22**		

Reference:
A: Approved **S:** Submitted **IP:** In preparation

Coordination with AgroLAC 2025

The project pipeline has been closely coordinated with the Inter-American Development Bank (IDB) to strengthen the AgroLAC 2025 collaboration platform through the Technical Advisory Committee process set up in April 2017 to ensure consistency, strengthen impact, and prevent overlap of targeted funds for related purposes. During the design phase, project proposals have received important inputs from IDB colleagues and created synergies with local actors and current projects in implementation in Central American countries.

In March both teams from TNC and IDB coordinated the logistics and prepared the agenda for the Annual meeting of the Sustainable Agriculture LACC Working Group to be held in Villavicencio, Colombia which was sponsored by the IDB and coordinated by TNC, followed by a field visit to municipalities where The Conservancy and its partners are involved in the implementation of silvopastoral systems. The goal of this meeting is for LACC members and stakeholders to share knowledge and experiences, analyze future needs and opportunities and agree on critical actions to build better agricultural systems in the Latin American region.

ResCA and LAR Lands Healthy Agricultural Systems Strategy Planning

As mentioned in the previous report, the Latin America Lands Regional Conservation unit (LAR Lands) team has been working for the past few months on a Healthy Agricultural Systems (HAS) regional strategy to guide and strengthen TNC lands programs and initiatives from a systems-change approach, including ResCA. The strategy will amplify and scale up resilient agricultural systems and practices for both conservation and sustainable production outcomes. A component of work to inform strategy application is the mapping of territories to identify encroachment of agriculture upon critical and biodiverse ecosystems, identifying lands most appropriate for restoration, conservation, sustainable intensification, or a combination thereof.

With this in mind, LAR Lands led a workshop October 2-6, 2017 to discuss the development of the regional HAS strategy with program leaders and key colleagues from TNC's Latin America region and Global Lands teams, along with key scientific expert partners from organizations like University of Minnesota Institute on the Environment, CIPAV and CIAT. Held at El Hatico Natural Reserve, a sustainable ranch outside Cali, Colombia that has decades of experience implementing HAS practices with demonstrated ecological and productive benefits, a group of twenty-two TNC and ResCA staff and external guests dove into the issues, priorities, and tasks involved in aligning existing projects, strategies, and resources around the comprehensive HAS strategy. By the end of the workshop, it was agreed amongst the groups that TNC and other conservation organizations need to strategically carry out interventions to agriculture in Latin America, given that agriculture is a complex system with relationships and feedback loops to natural ecosystems and social systems. Addressing the emerging global challenges of depleted natural resources - particularly water, soil, biodiversity, and land - to provide the needed food for a growing planet and the manifold threat of climate change requires a systems lens and must be therefore approached through systems thinking and a system change approach. Since then, the LAR Lands Regional Team organized and convened a series of co-creation workshops with stakeholders in 2017 and 2018 to gather input and better understand agricultural systems in Latin America and how to transform them to reach conservation and sustainable production outcomes. Using a multi-stakeholder platform approach to developing strategic and synergistic interventions, LAR Lands settled on a set of four intervention pathways that target 1) producers; 2) agribusiness and supply chain actors; 3) policy-makers and regulators; and 4) markets and financial institutions. The ResCA program as part of TNC's healthy agricultural systems strategy will be tailoring and incorporating this systems approach to our interventions. This approach, developed and adjusted to the needs of TNC in Latin America with Global Change Labs at Stanford University, has provided a framework with which TNC will plan and implement interventions to achieve impact at scale.

As an initial outcome to the October workshop and subsequent meetings, our aspirational goal for the HAS strategy and the ResCA Program is to transform the agriculture system in Latin America into a mutually reinforcing system with nature, using regenerative and resilient production practices. We envision a future where agricultural systems are more resilient and more productive through their capacities to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.

As such, ResCA is foreseen to become a prime example of what the rest of the Latin American Region will follow in sustainable agriculture and environment, providing examples and knowledge to guide the regional strategy. The ResCA strategy has been fully drafted (see Annex 9) and gives guidance about the appropriate policies, production systems, market bottlenecks, value chains dysfunctionalities, and capacity issues that should be tackled during the life of the Program. The program will be a foundation for new approaches that TNC will drive in the region, combining sustainable agriculture and conservation variables. It will provide strategic guidance for TNC and our partners in the field, both to help us achieve program indicators and also look to get greater impact for the efforts and outcomes of the ResCA projects. The ResCA strategy will be updated and fully aligned with the TNC LAR HAS strategy by June 2018 when LAR Lands completes the strategy business plan.

1 At the time of the workshop, the term being used for the strategy in discussion was Climate Resilient Agriculture (CRAG). It was pointed out by colleagues in TNC and outside experts that the CRAG term is already commonly used in the field to describe practices and values that do not necessarily align with LAR Lands' use of the word. Consequently, LAR Lands decided to adopt the name HAS shortly after the workshop.

Program Communications Development

In the last semester, the Marketing and Communications team for ResCA has advanced the communications objectives of visibility and awareness around this project. This built on the achievements in semester 2 (March 2017 – October 2017) of establishing the branding and visual identity guidelines and working on the webpage development.

For the past few months, the big achievement for ResCA Marketing and Communications was the launch of the official website: www.resilientcentralamerica.org. This website has robust content in English and Spanish, is visually appealing, and serves as a home base for all interested parties to understand more about the Resilient Central America program. The Home Page has four main sections:

THE HOME PAGE HAS FOUR MAIN SECTIONS:

ABOUT US	PROGRAMS
Contains general information about the project and contacts for more information.	Describes each of the (4) approved ResCA projects until now: Belize, El Salvador, Guatemala, Honduras.
RESOURCES	**ABOUT US**
Features news articles (blogs), relevant academic publications on food security and climate change, and project spotlights (fact sheets of each program) which were finalized in Q2.	This section includes information about TNC, AgroLAC, and information about where visitors can subscribe to get more information about the project.

The goal of the website was to use short, concise facts and numbers to communicate to our audiences briefly what is the ResCA project and therefore provide a click-path to the subpages to learn more. We are updating content on a bi-weekly basis and continuing to perform quality assessment (QA) tests to ensure the site is fully functional. Over the following quarter we will begin to add more robust content to communicate early results of the project and highlight more details of each project.

To leverage a new website, it was important for us to launch a social media visibility campaign and establish corresponding social media channels. In today's digital marketing space, it is necessary to create joint platforms (social media and website), rather than pursuing one of the two channels. Therefore, we created a ResCA Facebook account and a ResCA Twitter account with the goal of activating this visibility and awareness campaign. The principal goal of this campaign is to drive traffic to the newly created website. Since January 15, we have secured 12,885 impressions, which are defined as the total number of views of a conversation on both Facebook and Twitter. We have seen a total of 201 engagements across both platforms, and we expect our followers and reach to grow over the coming months as we continue to produce digital content for these platforms.

Another focus this semester was to generate more robust content explaining the project and creating interest in its approaches. Our Program Director, Ginya Truitt Nakata, wrote several blogs that discussed the business case for healthy agricultural

solutions and the climate solutions in Latin American agriculture, which are two important cross-cutting themes for ResCA. We also invested time in cultivating a magazine article for The Nature Conservancy's "Nature" magazine, a publication that is sent to over 800K subscribers across the United States. This article highlighted the story of Rene Gaspar, a local coffee producer who has implemented agroforestry practices to improve the climate-resilience of his coffee cultivations, while also receiving various other environmental benefits. Rene is one of the producers who will be impacted through ResCA Guatemala's intervention in the Western Highlands. The brief article can be found here. To maximize the exposure of this article, the ResCA Marketing and Communications team developed a longer, more elaborate piece that is in production and will be finalized at the beginning of the next semester. The draft article is currently in Spanish, but will be translated to English and printed locally and hosted digitally on the ResCA website in the following semester.

As established in our communications strategy, our visibility and awareness objectives will continue into the next semester, when we aim to expand our digital content, increase generation of our content through early results, and activate several traditional media engagements through key Central American media (print, radio, TV) outlets.

Data Quality Assessment (DQA) Measures

ResCA scored well overall in the 2017 Data Quality Assessment Survey received during the Fall 2017 and has many practices consistent with high quality data reporting that are necessary for EGC to accurately report the outcome results of this program. Only one category, "Integrity," was flagged for improvement by DoS, and the team has been diligently working internally and with partners on updating its procedures and policies to improve on this category, as well as clarifying its overall procedures in the TNC Performance Monitoring Plan (PMP) on accuracy of data and retention of monitoring documentation:

1. ResCA uses the DoS-issued OES-EGC Adaptation and Sustainable Landscapes Indicators Reporting Template to collect, enter and organize the data each semester; subawardees submit their completed templates and related reporting documentation to TNC, which in turn reviews and verifies, submitting synthesized report back to the Donor with a clear timeline.
2. The PMP Section II, Overall Data Management (pg. 20-23), has been updated, adding or clarifying on the following procedures:
   a. Subsection to "Integrity" that defines the procedure to make sure at least two individuals verify that each data point is entered into the standard database accurately, minimizing risk of data entry error.
   b. A supervision procedure to ensure processes and data are of consistent, high quality over time.
   c. A schedule to support staff in the field and subawardees in data collection and management to ensure data is registered accurately and managed properly.
   d. Subsection to Data Quality Assessment Procedures, defining a specific procedure within ResCA team to ensure quality, validity, consistency, and timeliness.
   e. Clarification on the plan for storing and organizing the data collection and date entry guidelines has been added. This includes a mechanism to reduce the possibility that data can be altered by an individual.
   f. Guidance clarifying that TNC retains documents and data for a minimum of three years for both primary and secondary sources.
   g. Update to the section for cases in which there could be missing data contributing to projects indicators.

The updated document has been uploaded as Annex 1 and Annex 1.1.

Section II

PROGRESS REPORT

Projects at the Regional or National Level

As mentioned above, two internal projects and two sub awards have been granted, to date. A summary of the main achievements and activities to date of each of these projects can be found below. For more details, a list of the full reports can be found in the Annexes mentioned above with links to each Progress Report.

A MULTI-STAKEHOLDER COMPACT TO SECURE A SUSTAINABLE AND RESILIENT FISHERY SECTOR IN **BELIZE**

Over the past six months, ResCA has focused its efforts on value chain realignment for the spiny lobster fishery with the National Fishers Cooperative (NFC) in Belize. In December 2017, the Conservancy signed a Memorandum of Understanding (MoU) with the Central American Fisheries and Aquaculture Organization (OSPESCA) to collaborate on the implementation of initiatives for the sustainability of the spiny lobster fishery. The project supported validation of data collection methods for evaluation of spiny lobster populations at the national level with the Belize Fisheries Department (BFD), and regionally through OSPESCA. Catch data collected in co-ops in Nicaragua, Honduras and Belize were analyzed using cohort analysis, a first step in standardizing methods across the region, which is a key objective of the Caribbean Spiny Lobster Regional Fishery Management Plan (MARPLESCA Plan) that has been endorsed by the member states in 2012, including Belize.

ResCA team has also been working with NFC in developing and implementing market strategies that will improve sustainability and profitability through value chain alignment with premium markets. The Cooperative Board fully endorsed ResCA's actions and at the Annual General Meeting on March 24th, 2018 the Minister of Fisheries congratulated NFC on continuing to be the role model in traceability and market diversification.

ADAPTATION TRAINING

A total of 16 people participated in two separate training sessions of Seaweed Cultivation on November 21-23, and December 9-10. The first training in November consisted of one-day theory and one and a half day practical. The theory covered topics such as the biology of both seaweed species farmed in Belize, the local market structure, farm setup and maintenance, and the socioeconomic benefits of seaweed farming. The practical sessions for days two and three were

done at Little Water Caye, where trainees were taught the complete process of farm setup and maintenance, harvesting, tying of ropes used for rearing, selection methods and so forth.

In total, there were nine (9) women who participated in the training and received certifications. Six of these women are now working with the Placencia Cooperative. One woman, Ms. Mariko Wallen, received further training and is working with the Fisheries Specialist to assists with data collection. She is an important leader in the community and has recently shared her experiences at the 62nd Session on the Commission of the Status of Women at the United Nation Headquarters in New York. The training sessions in December were conducted in a similar fashion, but with seven (7) traditional male fishers. Due to inclement weather, the practical session was shortened by a half day, but the practical activities for day two were intensified to cover all aspects of seaweed farming curriculum (this activity contributes to to EG. 11-1 Adaptation Indicators).

CHALLENGES

The current challenge is the reluctance of the Belize Fisheries Department (BFD) in empowering the Conservancy to move ahead with the design of national level fisheries management systems and the regulations that would support that. In order to mitigate this, the Conservancy has used the ResCA results to refocus its strategy for developing the national level database that was intended to feed into the Adaptative Management Framework (AMF). TNC instead is developing a prototype model based on the regional level MARPLESCA Plan from OSPESCA, and implementing it at the Cooperative level with NFC. This creates an enabling environment for BFD's adoption of systems that are compliant with the regional system.

A total of **16** people participated in two separate training sessions of Seaweed Cultivation on November 21-23, and December 9-10.

B BUILDING RESILIENCE THROUGH A GREEN GROWTH COMPACT (GGC) STRATEGY FOR FOOD SECURITY AND CLIMATE-SMART AGRICULTURE IN **GUATEMALA**

ResCA is addressing the challenge of rebuilding the resilience of people and nature in Guatemala. The program here is focusing on 15 municipalities in the Western Highlands in which 983,761 people live, and therefore, will be impacted by the project.

ADVANCES AT THE LANDSCAPE LEVEL

At this level, ResCA will lead the development of a sustainable productive landscape zoning map and the alignment of all organizations in the Western Highlands to develop a common green development agenda – an agenda known as the Green Growth Compact (GGC). The expected outcome is a long-term, interinstitutional agreement, in which strategies are posed to increase resilience while increasing productivity in the livelihoods, territory, and institutions of the Western Highlands of Guatemala. This sustainable productive landscape zoning map for the Western Highlands is an effort that will provide fundamental and strategic inputs to decision makers in terms of how to organize the territory in order to make of it the best usage of sustainable agriculture, forest conservation and development of infrastructure for urban development in the face of climate change. For this purpose, ResCA Guatemala started working with the USAID-funded M-REDD+ Project in Mexico implemented by TNC. ResCA is building on M-REDD+'s accomplishments and lessons learned in the Yucatan Peninsula and Chiapas, so the experience in the Western Highlands of Guatemala can be carried out with much more assertive actions. To date, the existing mapping information in Guatemala has been assessed, and local institutional support has been secured. Next semester, a consortium of companies will carry out the mapping process with the technical lead by the Guatemala and Mexico TNC staff.

IMPACT ON POLICY

A National Strategy for Low Emission Livestock was proposed to the National Bovine Livestock Board, specifically within the framework of the National Adaptation and Mitigation Plan for Climate Change.

This Strategy was elaborated as an instrument for the implementation of the National Bovine Livestock Policy (MAGA, 2013). It is also part of the legal framework to regulate the reduction of vulnerability (Decree 7-2013) and contributes to the fulfillment of the Guatemala Commitments acquired in 2015 to the United Nations Framework Convention on Climate Change (UNFCCC) through the National Determined Contributions (NDC). Together, the National Bovine Livestock Policy and the proposed National Strategy make up the Nationally Appropriate Mitigation Action (NAMA) of a Sustainable and Low Emissions Livestock from Guatemala. These public policies are aimed at transformational change towards low carbon growth within the livestock sector, which combines development, increased productivity and mitigation to climate change. Precisely the National Strategy aims to: i) Increase the productivity and profitability of bovine production systems within the farms; ii) Increase the competitiveness of milk and meat production in national and international markets; and iii) Reduce the intensity of national emissions of greenhouse gases from the cattle subsector. These contributions made by ResCA Team are key for the modernization of the cattle subsector which will have a nation-wide impact in the long term (this activity contributes to EG. 13-3 Sustainable Landscape Indicators).

The program here is focusing on **15** municipalities in the Western Highlands in which **983,761** people live

CHALLENGES

Due to the government's low expenditure levels, extension technicians have been contracted in smaller numbers so that most municipalities, including those in the Western Highlands, do not receive that support yet. As a mitigating action and to reach indicators goals, ResCA will establish strategic alliances with organizations and projects that are creating extension capacities in local producers and technicians so that producers can count on this support. These organizations are: Counterpart International, Popoyán and CDRO.

ResCA will establish strategic alliances with organizations and projects that are creating extension capacities in local producers and technicians

The subaward proposals for ASOVERDE and CDRO to carry out the Municipal Adaptation Plans for Climate Change and training activities are significantly delayed and still under review by DoS. It has not been possible to sign the agreements and start execution. Hopefully this will be remediated in the coming weeks to start execution activities during the month of May 2018.

C AGRO-CLIMATIC FORECAST AND CLIMATE-SITE-SPECIFIC MANAGEMENT SYSTEM (CSMS) FOR CLIMATE-SMART AGRICULTURE IN DRY BEAN CROP IN CHOLUTECA AND COFFEE CROP IN COPAN, **HONDURAS**.

The activities carried out in Honduras under the ResCA project framework have allowed the strengthening of capacities for the adaptation of different actors, and small-scale producers have been trained to improve production while government institutions implement new tools to provide better climate information to producers. During this period, the project achieved its main objectives, including reaching targets as set in the M&E plan. Training workshops were developed in rural communities; the methodology used was Farmer Field Schools (FFS), and the topics of cultivation and Climate Smart Agriculture were introduced in workshops and practiced in the School Plot.

Capacity building activities were also carried out for Comisión Permanente de Contingencias (COPECO) on climate forecasting issues and Secretaría de Agricultura y Ganadería (SAG) on issues of crop forecasts. The activities of construction of adaptation plans were also initiated in two municipalities of Western Honduras with the support of TNC Guatemala field staff working under ResCA Program.

TRAINING IN CLIMATE CHANGE ADAPTATION

126 people from five rural communities completed a training in sustainable climate production practices for bean cultivation through the Farmer Field School (FFS) methodology. A total of six workshops were carried out between August 2017 and March 2018 in the villages of La Anona, Hato Viejo, La Tajeada, El Burrillo and Yoloran. The intension of the training is to generate changes in knowledge and behavior in the participating producers towards a sustainable agriculture adapted to climate. At the end of the project it is expected that 250 farmers have completed the training process corresponding to 5 workshops and practical sessions.

The curriculum was designed by CIAT's knowledge management team in consultation with national experts on dry bean production. During the first workshop, the basic concepts of climate were discussed, as well as climate's impact at a local level. The second workshop was about increasing production and reduction of climatic risk through the selection and proper use of seeds. The third workshop focused on elements of climate, local climate variability and adaptation options. The fourth and fifth workshops centered on pest and disease management. The sixth workshop on harvesting and commercialization was carried out at the request of the farmers. 58 women and 68 men completed the workshop cycle. Some delays occurred due to the electoral crisis in Honduras during November, December and January; however, all activities resumed and met their deadlines (this activity contributes to EG. 11-1 Adaptation Indicators).

INSTITUTIONAL CAPACITY IMPROVEMENT.

Capacity building workshops were held with the following institutions: Oceanographic and Seismic Atmospheric Studies Center (CENAOS) of the Permanent Contingency Commission (COPECO), and the Secretariat of Agriculture and Livestock (SAG). During two weeks at the COPECO facilities, training was developed to strengthen knowledge on climate prediction, using satellite images and software for building seasonal climate models based on statistical analysis and local historical data and sea surface temperature.

Likewise, with the SAG, joint work sessions were developed to use crop-modeling tools to predict yield reduction for basic grains. Analysis of climate and soil data, by clustering methods were performed and validated with local actors, these are important inputs for subsequent crop modeling analyzes that provide information to policy makers.

> At the end of the project it is expected that **250** farmers have completed the training process corresponding to **5** workshops and practical sessions.

POLICY DEVELOPMENT

An exchange of experiences was carried out between CIAT-Honduras and TNC staff of ResCA Guatemala. One of the main objectives achieved was to understand and adopt the methodology of TNC Strategic Planning for the development of Municipal Adaptation Plans to Climate Change and Vulnerability Risk. Following TNC's recommendations, the CIAT ResCA team began the process of Preparation, Information Management and conformation of the planning team at the municipalities of Santa Rita and Cabañas in Western Honduras. This will impact the policy outcome of the project, by bringing two Municipal adaptation plans to the region that will be created with a strong participatory approach by bringing together the main stakeholders of the communities. In the next few months, CIAT will be developing a few participatory consultation workshops with public officials, communities and producers and local organizations on the topics of threats, impact, adaptation measures and strategies to mitigate those effects.

CHALLENGES

Some delays in project activities arose due to the electoral crisis in Honduras during periods of November, December and January. However, all the activities have been resumed and compliance with agreed deadlines is expected.

D RESTORATIVE AGRICULTURE IN CRITICAL ECOSYSTEMS (RAICES), **EL SALVADOR.**

This project is being executed by Catholic Relief Services (CRS) El Salvador with the goal of promoting agriculture restoration at a landscape scale in ways that promote resilient livelihoods and water security. The project's activities are being planned and developed in partnership with a local organization ACUGOLFO.

The project's focus area is the Nahuaterique Conservation Area, including the Cacahuatique Mountain Range and the mountains in the northern areas of the department of Morazan, El Salvador. Severe land degradation is intensifying vulnerability to climate change, including reducing agricultural productivity and degrading water resources. Nahuaterique Conservation Area is one of seven conservation areas prioritized by the national government to create biological corridors and sustainable development programs.

The intervention aims at promoting restorative agriculture at a landscape scale through strategic engagement with multiple stakeholders, including: national government agencies, municipal governments, local stakeholders (farmers and water operators), and private agriculture companies (primarily related to coffee). Although the project has been approved recently, the RAICES project has been presented to the head of the National Environment Investment Fund (FIAES) and during the month of April will be presented to the Ministry of Environment (MARN) and the Ministry of Agriculture (MAG) with the aim of developing shared synergies.

Although it is too early in the project to talk meaningfully about progress toward its goals, the organization has been able execute important training activities regarding adaptation and sustainable landscapes techniques that have been reported in the Indicators section and further increasing ResCA goals for producers training and institutional strengthening.

ADAPTATION TRAININGS TO IMPROVE RESILIENCE

A total of 52 producers participated in workshops on pruning techniques in coffee plantations to improve resilience to climate change, and to increase productivity and quality. 27 participants attended the workshop in San Simon, and 25 participants attended the workshop in Oscicala. Producers and promoters from both municipalities learned about the importance of pruning techniques with the objective of establishing model farms and supporting the replication/ sharing of knowledge. The activity was partially financed with funds from DoS, Blue Harvest Program (IDB) and H. Buffet Foundation (this activity contributes to EG. 11-1 Adaptation Indicators).

Other training activities have included water committees in the Municipality of Oscicala to initiate the process of creating a network of municipal water committees. Among the benefits of creating a network are: 1) Greater capacity of incidence to benefit the sector of the water operators; 2) a space for learning and mutual support; 3) possibility of purchases of unified materials to reduce costs, and, above all, 4) greater facility to coordinate actions of protection for the water recharge areas.

A total of **52** people participated in workshops on pruning techniques in coffee plantations to improve resilience to climate change.

At last, the San Carlos Dos Cooperative has made substantial improvements to its value chain managed to surpass its previous top Specialty Coffee rating of 86 with several samples rated at 90 points, which can be attributed to quality trainings and the building of a database of data georeferenced by lots, which helps to ensure these gains result in permanent improvements to the post-harvest process

A total of **113** people participated in **8** training activities that are being planned and implemented in partnership with Acugolfo.

SUSTAINABLE LANDSCAPE TRAININGS

A total of 113 people participated in 8 training activities that are being planned and implemented in partnership with Acugolfo. Six trainings took place in the department of Morazan, one was a workshop in Siguatepeque, Honduras and the other an observational study exchange visit to the departments of Intibuca and La Paz. RAICES is leading activities related to governance and access to markets (components 1 and 3), and Acugolfo is implementing the training and meetings described in components 2 and 3 of the project which focus on restoring agro-ecosystem services to protect water resources in agricultural areas, and to increase farmer and producer organization access to value chains, respectively.

Under Component 1 "Policy Development with Public and Private sector partners" 43 people participated in a mid-day workshop to familiarize leaders of the water communities with the water situation in the Department of Morazan. A total of 42 people attended 3 different half-day workshops in the municipalities of Oscicala and San Simon to focus on ways to improve infiltration in recharge zones as a climate change resilience strategy. Finally, RAICES held two workshops, one in Potrero Adentro (8 participants), and one in San Francisco (10 participants), to revise their water statutes and regulations to improve sustainability of water systems.

As part of Component 2 "Restore agro-ecosystem services", RAICES developed a cross-project, four-day learning exchange visit to Honduras. Two municipal Environmental Officers and two coffee mill owners participated in the exchange, where they visited farms that successfully used the no-burn Quezungual agroforest system to produce basic grain and sustainably manage the soil and water resources.

Under component 3 "Increase farmers and producers' organizations access to value chains", 5 cooperative leaders and workers participated in a one-day workshop in the San Carlos Dos cooperative. The participants learned practical strategies to reduce the consumption of water and energy, and to minimize residues during coffee processing. The workshop was partially financed by DoS, and with Blue Harvest funds (IDB), and the training was developed by a hired consultant and co-supported by the RAICES chain value technician (this activity contributes EG. 13-1 Sustainable Landscapes Indicators).