



CONSERVATION LANDSCAPES PROGRAM CONSERVATION
OF DRY FOREST ECOSYSTEMS IN THE CARIBBEAN

QUARTERLY PERFORMANCE REPORT

1. PROJECT FACT SHEET

1.1 NAME OF THE PROJECT: Conservation Landscapes Program - CLP Dry Ecosystem
Conservation in the Caribbean.

1.2 DATES (START/FINISH)

Agreement/Contract

4/12/2013 to 29/04/2016

Report period

01/10/2015 to 31/12/2015

1.3 PRIME

1.4 NAME OF PROGRAM MANAGER: Pedro A. Chavarro

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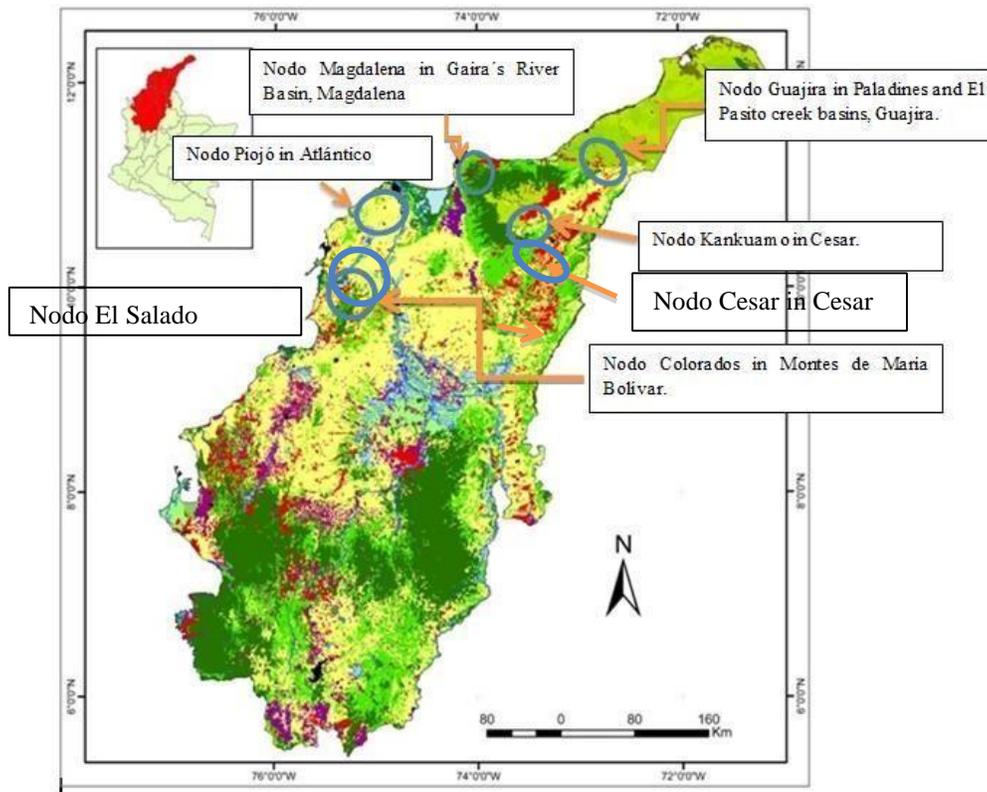
1.5 NAME OF USAID AGREEMENT OFFICE REPRESENTATIVE (AOR): Ximena García

1.6 NAME OF ALTERNATE AOR: Daniel López

1.7 USAID MECHANISM NUMBER: AID-514-A-09-00004

1.8 OVERALL PROGRAM DESCRIPTION: The Caribbean region (13 million hectares) encompasses more than six million ha of tropical dry forest ecosystem (TDFE) in Colombia, of which 82% has been affected by deforestation. TDFE conservation is a priority for USAID and Colombia; thus, the purpose of the CLP is to improve governance in the TDFE, promote biodiversity, preserve natural resources in the

Caribbean region, and strengthen environmentally sustainable livelihoods for the associated communities. Remaining forest patches coupled with existing protected areas and communities will be the center of conservation efforts. The focus will be to implement land use management tools at the landscape level, restoring connectivity with a biodiversity-friendly productive matrix and ecological corridors. Improving smallholder agroforestry practices, installing connectivity tools in larger agricultural areas, implementing silvopastoral systems, promoting the sustainable use of natural resources and agrobiodiversity supported by value chains, and inclusive businesses and fair markets will guarantee ecological integrity by enhancing connectivity, covering soils to prevent erosion, promoting watershed protection, maintaining species diversity and increasing productivity and income per land area, thus reducing the threat on dry forests. GOC's regional environmental authorities will be strengthened through the Regional Protected Area System - SIRAP Caribe, and other stakeholders will be engaged with this model for sustainable land use and conservation in TDFE territories in a pilot area.



Map 1. Locations of the program's Nodos.

2. ACHIEVEMENTS OVERVIEW

During the quarter, a series of Contracts and Agreements were signed for a total amount of COP 1.072,6 million pesos, including: (i) new agreement with Sociedad Audubon for COP 576.32 million in order to *“Promote the development of the Northern Colombia Birding Trail designed under Agreement CLP043 through activities that promote rural economic development and the conservation of priority ecosystems with the participation of local communities,”* (ii) contract with F. para la Inversión Social (FIS) for COP 150 million in order to *“Design and build alternative systems of storage and supply of rain water for rural areas of the Colombian Caribbean,”* which will allow to design and build alternative options for water storage and supply for the rural area of Hibacharo in the Department of Atlántico, (iii) new contract with the company Minka-Dev for COP 113.91 millions in order to *“Link the characterization of corozo's populations to the development of the chain of supply of the business model and to carry out a study to determine the economic dimension of the Palma Amarga in market terms, with emphasis on vernacular architecture,”* (iv) contract with the forestry expert and professor Rene López for COP 44 million in order to *“Provide professional services for the scientific coordination and advisory during the generation of contents for a publication on native tree and shrub species of the dry forest in the Caribbean region,”* (v) contract with the company BBD Americas (Angel Balanzó) for COP 36 million in order to *“Establish a process of socialization of the activities to promote birdwatching being carried out by the CLP with different entities and relevant associations in the sector of tourism in the country and assist in the analysis of the feasibility of generating sustainability and resources for these activities through mechanisms contained in the sources of promotion of the tourism sector¹,”* (vi) contract with the consultant Harold Arango for COP 40.95 million in order to *“Provide professional services for the analysis of experiences in the implementation of the investments made under the CLP and other programs or investment projects implemented by Patrimonio Natural, under the unified conceptual approach Incentives to Environmental Conservation,”* and (vii) contract with Gregorio Orlando Porras in order to *“Provide professional services for the development of an analytical model of the physical operation of the efficient cookstoves developed by Patrimonio Natural.”*; this model will be used to study the effects of modifications that seek to improve the thermal efficiency of the stove, and to evaluate alternative design and materials.

Furthermore, USAID supported the program in obtaining additional national resources from the Colombian Presidential Agency of International Cooperation (APC-Colombia), providing COP 102.5 million, which were added to Agreement CLP 040 subscribed with F. Carboandes. These resources were used to strengthen four (4) silvopastoral systems financed by USAID and to implement the Efficient Stoves Program in several rural communities in the Department of Cesar. Consequently, new resources were added to USAID’s Agreement CLP-040, including the implementation of 10 new silvopastoral systems for livestock producers in Nodo Cesar who supply of milk to COLANTA, a company that will

¹ According to the Work Plan 2015-2016 and ¹ seeking to ensure the sustainability of birding promotion activities once the program is completed in April 2016, the CLP planned to support the design of a strategy coordinated with the tourism promotion policies, plans and programs, led by both the Vice Ministry of Tourism and related bodies as well as specialized private sector associations

provide technical support for the monitoring of these interventions during the CLP and after the program is completed.

Regarding production-conservation corridors that include agroforestry systems, the main achievements were: (i) In **Nodo Colorados**, the program achieved the strengthening of nine (9) public and private institutions in the region with improved capacity on effective environmental resource management (DO4-002 indicator) as a result of the work completed in October with the support of F. Herencia Ambiental Caribe (additional progress in this Nodo was reported in the previous quarterly report), (ii) in **Nodo El Salado**, and as a result of completing Agreement CLP-041 with F. Semana, 50 farming families have increased their economic benefits (contribution to indicator DO4-003 and FPN-1) by having sustainable production systems in 77.5 has (indicator FPN-3), which offer more productive crops per unit area reducing threats on the TDFE, (Table 1 shows a summary of the quantities, prices, and revenue received by 25 families of this Nodo during October-December 2015 from sales of seven agricultural products to the restaurant chain Crepes & Waffles) (iii) in **Nodo Cesar** 59.5 additional hectares were included as Civil Society reserves with the support of F. Carboandes (reservations *La Nacional* and *Las Nubes*, contributing to indicator DO4-001) and 252 beneficiaries were recorded with improved energy services as a result of the implementation of the efficient stoves by a group of 63 families located in rural communities in the municipalities of Pueblo Bello, Valledupar, and Codazzi, and (iv) in **Nodo Hibacharo**, once Agreement CLP-039 with F. FES was completed, 12 hectares of agroforestry systems were established with an equal number of families (see indicators FPN FPN-1 and FPN-3)

Outstanding among the strategies related to business ventures impacting the mitigation or reduction of threats to biodiversity are: (i) the results of the to efficient stoves program that reduces the use of wood as fuel and (ii) the strategy aimed at raising revenues by more productive crops per area unit, decreasing the need to extend the agricultural frontier, achieved through an alliance with Crepes & Waffles.

Regarding the Efficient Stoves Program, and as mentioned above, the CLP team worked in coordination with F. Carboandes to prepare training processes on the installation and operation of the efficient stoves developed by the program, which in December benefited 63 families of the Department of Cesar with more efficient energy options. This result also contributed to achieve this quarter the total target for the DO4-011 indicator with activities different to those that had already been executed regarding the provision of energy in rural schools and health centers for rural indigenous communities in Sierra Nevada de Santa Marta. Furthermore, specialized laboratory tests were conducted under controlled temperature and combustion conditions to the stoves designed by the CLP team, which generated specific recommendations that have been implemented to improve the prototype stoves.

As a result of the alliance between the CLP and the main chain of restaurants of Colombia (Crepes & Waffles), which established the promotion strategy aimed at increasing revenues by more productive crops per area unit, this company introduced a new product in their Christmas Menu as part of the campaign "*Cosecha de Mi Tierra*" (Harvest of my Land) at all points of sale in the country (Agra Salad, which uses the "cuarentano red bean" as main ingredient). In this sense, new sale agreements were signed during the quarter to supply an additional 1,000 kg of cuarentano red beans to C&W at a price nearly 20% above of that of the local market. This was the result of direct negotiations between the Marketing Management of C&W and producers of Nodo El Salado (see Picture 1), who met in Bogota with support

of the CLP team. In these agreements, 20 producers agreed to provide the indicated amount of beans to C&W restaurants in Medellin, Bogota and Cartagena in order to meet the demand for the Christmas Menu and other products in the first half of 2016. In this context, the total sales volume of producers of El Salado was COP 6,627,875, corresponding to 1,318.5 kg of agricultural products supplied during November-December 2015 by 20 families, all of which are considered as vulnerable population due to being displaced. As shown in Table 1, 85.1% of these revenues correspond to the production of 1,074 kg of cuarentano red bean, which is the main product incorporated to C & W's menu; other products (109 kg of chili pepper, eggplant, lemongrass, and moringa) were supplied to C & W restaurants in Cartagena.



Picture 1. Eduardo Macia, founding member of C&W, with producers of Nodo El Salado and CLP team.

Table 1. Summary of product sales to Crepes & Waffles – Nodo El Salado- Nov.-Dic.-2015

Product	Total sales Nov.-Dic. 2015 (kg)	Number of families participating (*)	Sale price (COP/Kg)	Total revenue (COP) (**)	% sales
Chili Pepper	24	3	2,000	48,000	0.7%
Eggplant	40	2	2,000	80,000	1.2%
Cuarentano Red Bean	1074	14	5,250	5,638,500	85.1%
White Bean	122	2	5,250	640,500	9.7%
Black Bean	13.5	2	5,250	70,875	1.1%
Lemongrass	30	1	2,500	75,000	1.1%
Moringa	15	1	5,000	75,000	1.1%
TOTAL	1318.5			6,627,875	100.0%

(*) Some families provide more than one (1) product

(**) According to F. Semana's Baseline, the average income of families in the rural area of El Salado was \$180,000/month in 2014

2.1. COMPONENTS

2.1.1 **Component 1 – Improved Licit and Sustainable Livelihoods**

Progress in Component 1 includes the execution of specific actions for each of the nodos, as well as strategies related with business initiatives implemented by the CLP to mitigate threats to biodiversity in the TDFE.

The CLP has identified four main strategies to mitigate threats to biodiversity in the Dry Tropical Forest, which are related to business initiatives: (i) promoting actions connected with business options that do not destroy the TDFE, such as birdwatching tourism; (ii) the sustainable use of biodiversity from Non-Timber Forest Products (NTFP), considering the incentives it generates to the conservation of the TDFE; (iii) promoting and increasing revenues in growing areas through the planting of more productive crops per area unit, aiming to reduce the need to expand the agricultural frontier; (iv) lowering the impact on the forest through the reduced use of wood as fuel, thus building an efficient stoves market in rural areas.

Concerning the first strategy, and under the agreements with **National Audubon Society**, the training of 46 people in the region ended on December 11 of 2015 (see Picture 2) with a Graduation Ceremony held at Universidad Popular del Cesar. As a result of the two Agreements signed with Audubon, during the quarter a total of 3,670 training hours were provided aimed at preparing them to work as birdwatching guides. During this period, highlevel contacts with the Vice Ministry of Tourism and the Office of the Vice President of Tourism of PROCOLOMBIA were made in order to promote the Northern Colombia Birding Trail and obtain resources to strengthen and ensure the sustainability of this initiative. As a result of this process, Patrimonio Natural and PROCOLOMBIA agreed to define a specific Work Plan in January 2016, for the period between March and December 2016.



Picture 2. Group of birdwatching guides graduates. Valledupar, 11 December 2015

In regard to the second strategy, related to the sustainable use of biodiversity products, and according to the priorities set by the Work Plan 2015-2016, the company Minka-Dev was hired in December in order to work together with CUDESAC in defining a sourcing strategy for corozo as part of the inclusive business model developed by the CLP. As for the third strategy, the preparation of areas and the planting activity carried out in low rainfall conditions in El Salado during the previous quarter were successful, as they allowed providing 1,000 kg of beans, and 109 Kg of chili pepper, eggplant, lemongrass, and moringa to Crepes & Waffles. In like manner, and for restaurants of the same chain in Cartagena, 140 kg of bean ("rojo carenta" bean and "cabecita negra" bean) were sold during the quarter by producers of San Juan Nepomuceno. Additional plantings of other products will take place during the next quarters in Nodo Colorados, including an aquaponics pilot project, enabling the combined cultivation of plants and fish in recirculation systems with reduced consumption of fertilizer and surface water available in some of the properties, in order to supply the products demanded by Crepes & Waffles restaurants in the Caribbean region.

Finally, in relation to the strategy aimed at reducing the use of wood as fuel through the efficient stoves program, the Program continues working on the implementation of the business model strategy, by incorporating Minka Dev's insights into the activities that are being tested. Furthermore, the group of entrepreneurs is undergoing a series of strengthening workshops with the aim of developing additional skills that will help them put into practice the activities the business model requires with greater ease. On the other hand, the stove design has gone through a phase of technical testing conducted by Orlando Porras (Pictures 3 and 4). These tests have revealed new ways to improve even more the technology by changing the dimensions of some components and redesigning the stove's structure in a way that will lower production costs and the amount of material required to

build the product. As a result, the program will have a more reliable and accessible product for the final user.



Pictures 3 and 4. Stoves prototypes that were tested in November 2015

In **Nodo Cesar**, progress was made considering that the project obtained the Registration Resolution for private reserves La Nacional and Las Nubes Reserves issued by the National Parks System, which will represent about 59,5 Has under environmental protection; which have Indicative Environmental Management Plans currently under implementation.

Regarding the implementation of silvopastoral systems aimed at reducing the threat to biodiversity posed by unsustainable farming practices, by the end of the quarter were established a total of 2 hectares in fodder banks with hay fields (Cuba 22 Variety) and matarratón in four farms, as well as the establishment of live fences with 1,600 native trees (Oaks, Red Ceiba, Carreto, Yellow-Elder), which were selected by farmers. As a result of these implementations, cattle breeders have increased tree cover on land for various uses in livestock production and generated environmental conservation benefits that these trees will provide in the medium and long term; likewise, the incorporation of new forage areas is contributing to the diversification of food sources in terms of quality (more protein) and quantity (10 tons of fresh forage), mainly for the drought period of the second quarter of 2016

In **Nodo El Salado**, as mentioned above, and as the final result of Agreement CLP-041 completed in December with F. Semana, 50 families established sustainable production systems in 77.5 hectares, comprising 20.5 hectares of agroforestry systems and 57 hectares of silvopastoral systems. Said silvopastoral systems included 15 mixed fodder banks with leucaena, moringa, buttercup, white mulberry, purple maralfalfa, and quickstick. These production systems allowed producers to provide the above-mentioned quantities of beans and other products to Crepes & Waffles.

In **Nodo Hibacharo** (FES Agreement), during this quarter 12 hectares were included under sustainable production processes, as well as 2.5 hectares with stake fences that allowed to reduce soil erosion and recover soil. Demonstrative plots were established in 0.6 ha, where Agroforestry Systems (SAFs) were conceived as soil-retaining and water-harvesting productive systems.

According to the results of soil analysis, management measures focused on three factors were implemented: use of vegetation covers, application of organic matter, and control of physical properties. Thus, a model of land recovery and management was prepared together with producers, consisting of three components: A. Technical process, B. Theoretical and practical participatory training process, and C. Organizational process.

2.1.2 **Component 2- Institutional Strengthening and Governance**

Upon completion of the activities in Nodo Colorado supported by F. Herencia Ambiental Caribe, progress is reported in nine (9) institutions comprising government agencies, NGOs, and local communities of the region with improved capacity for effective environmental resource management (Indicator DO4-002), including the SILAP of San Juan Nepómuceno, F. Cultural TEFA, and a group of small producer associations of the region, such as ASOPROMIL, who have been supplying products to the restaurant chain Creppes & Waffles and the Floran and Fauna Sanctuary of Los Colorados).

Furthermore, the progress mentioned above concerning the Efficient Stoves Program is directly related to key sub-issue 3, called *Development Research (DVR) under USAID Key Issue Research, Science, Technology, and Innovation*, considering that the development of stove prototypes produced by the CLP continued during this period, including the validation and improvement of stove design parameters, with the purpose of fulfilling the requirements previously defined by the rural population of the Montes de María region in the Colombian Caribbean.

2.1.3 **Component 3 – Social Capital and Community Participation**

Community participation is at the heart of the program given that territorial and farm planning, conservation strategies, monitoring activities, commercial relations, and cook stoves strategies are built with the active participation of local communities.

During the quarter, significant progress was made regarding the number of local communities and other stakeholders that implemented sustainable practices for the preservation of biodiversity (DO4-012 Indicator), reporting a set of 14 communities and local stakeholders, mainly in Nodos El Salado and Hibacharo, which represents 25% of the overall goal of the program (35 communities). Likewise, during this quarter, there have been significant advances in agreements that were signed with Audubon in terms of capacity and competence building of the local population, as a process of specialized training for a group of 45 tourist guides was completed, providing real opportunities to generate better income for an equal number of families through a low-impact activity aimed at promoting TDFE conservation values.

3. SUMMARY

3.1 ACHIEVEMENTS

The main achievements of the quarter relate to the following CLP indicators: (i) as mentioned earlier, fulfilling the goals of indicator DO4-002 (Number of institutions/public and private organizations with improved capacity for effective environmental resource management) and assistance and DO4011 (number of beneficiaries with improved clean energy services due to USG), (ii) F.4.8.1-29, showing progress during the quarter represented by 4,065 person hours of training in training processes in natural resource management and/or conservation of biodiversity, reaching a cumulative total of 18,825 person hours of training, thus exceeding by 56,8% the agreed overall goal for this indicator, 12,000 person hours of training; (iii) DO4015, showing progress during the quarter represented by USD \$ 70,265 leveraged resources from public and private sources, reaching a cumulative total of USD \$1,218,454, a figure that exceeds in 10.8% the goal agreed for this indicator, USD \$1,100,000; and (iv) DO4-003, showing progress en términos de number of 252 people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance, reaching a cumulative total of 848 people, which represents 70% of the goal agreed for this indicator (1,212 people).

The advances in strategies to promote business activities aimed at reducing or mitigating threats to biodiversity should also be highlighted: (i) introduction of a new product on the menu of the restaurant chain Crepes & Waffles (Agra Salad on the Christmas Menu), which includes the cuarentano red bean supplied by producers supported by the CLP in Nodo El Salado; (ii) new sales agreements between producers of El Salado and C & W, facilitated by the CLP team, which ensured product supply for the Christmas Menu of this chain of restaurants nationwide, generating new revenues for 20 families totaling COP 6,627,876; (iii) specific technical recommendations resulting from controlled tests made with the purpose of improving the design of efficient stoves prototypes developed by the Program, and (iv) completion of the training provided to a group of 45 tourist guides for birdwatching in the Colombian Caribbean, which now have more and better capabilities for generating income based on a sustainable activity that promotes the conservation of the TDFE.

Specifically, the following progress has been made in relation to the commercialization of products: (i) sales agreement signed in Decemeber between producers of Nodo El Salado y C& W to supply 1,000 kg of bean; (ii) sales agreement between Crepes & Waffles and producers of the rural area of San Juan Nepomuceno, selling 140 kg of bean ("rojo carenta" bean and cabecita negra bean).

3.2 CHALLENGES AND ADJUSTMENTS

The main challenge of this quarter was to ensure the efficient implementation of the remaining activities to conclude the signed agreements in Nodo Cesar and Nodo El Salado, which are related to pending agroforestry plantings and/or silvopastoral systems. As mentioned in the previous report, the strategy for overcoming the issues related to low levels of rain has involved privileging the presence

of native forage species adapted to the TDFE conditions in the design of agroforestry systems, which will allow to mitigate the effects of scarce rain; as for uncultivated systems, prioritizing them in areas or zones in the farms having the best access to superficial water sources, incorporating the use of organic preparations for pest control; and, in general, considering the need to modify cultivation conditions, making them better equipped to face seasonal rainfalls, typical of the Colombian Caribbean.

5. ANNEXES

Monitor Report

USAID COLOMBIA		TOTAL INDICATOR				FY2016 FY2015				PROGRESS		QUARTERLY PROGRESS					
Project: All						Type: All											
Type	DO	QY	IR	Oficina	Project	FY		FY2013		FY2014		FY2015		FY2016		Grand Total	
Indicator						Total FY/ Actual	Total FY/ Target	Total FY/ Actual	Total FY/ Target	Total FY/ Actual	Total FY/ Target	Total FY/ Actual	Total FY/ Target	Project Total Actual /	Project total / Target		
CLP-01					Number of person hour of training in natural resources management and/or biodiversity conservation supported by USG assistance (F 4.8.1-29)			4,431	4,520	10,329	4,520	4,695	2,960	19,455	12,000		
DO4-001					Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance. (F 4.8.1-26 MANDATORY)			1,875	3,200	5,858	3,317	112	1,883	7,845	8,400		
DO4-002					Number of institutions/public and private organizations with improved capacity for effective environmental resource management			10	16	7	10	9		26	26		
DO4-003					Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance. (F 4.8.1-6)					596	612	252		848	1,212		
DO4-011					Number of beneficiaries with improved clean energy services due to USG assistance.			2,500	2,500		200	252		2,752	2,700		
DO4-012					Number of communities and other stakeholders adopting sustainable practices to improve biodiversity conservation.			6	15	13	20	14		33	35		
DO4-015					Amount of investment (US dollars) leveraged from public and private sources for improved biodiversity conservation in protected areas and buffer			165,324	500,000	982,862	600,000	70,265		1,218,451	1,100,000		
FPN-1 (PPC)					Number of families benefited by the sustainable systems for conservation supported by the PPC.			150	150	142		107		249	300		
FPN-3 (PPC)					Number of hectares in the process of sustainable production.			100	400	132		90		222	500		

Date of printing (mm/dd/yyyy)

06/08/2016

