



CONSERVATION LANDSCAPE PROGRAM
CONSERVATION OF DRY FOREST ECOSYSTEMS IN THE CARIBBEAN
QUARTERLY PERFORMANCE REPORT

1. PROJECT FACT SHEET

NAME OF THE PROJECT:

1.1. Conservation Landscapes Program - CLP Dry Ecosystem
Conservation in the Caribbean.

1.2. DATES (START/FINISH)

AGREEMENT/CONTRACT

4/12/2013 TO 9/12/2015

REPORT PERIOD

01/04/2014 TO 06/30/2014

1.3. PRIME

1.4. NAME OF PROGRAM MANAGER: INÉS CAVELIER

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

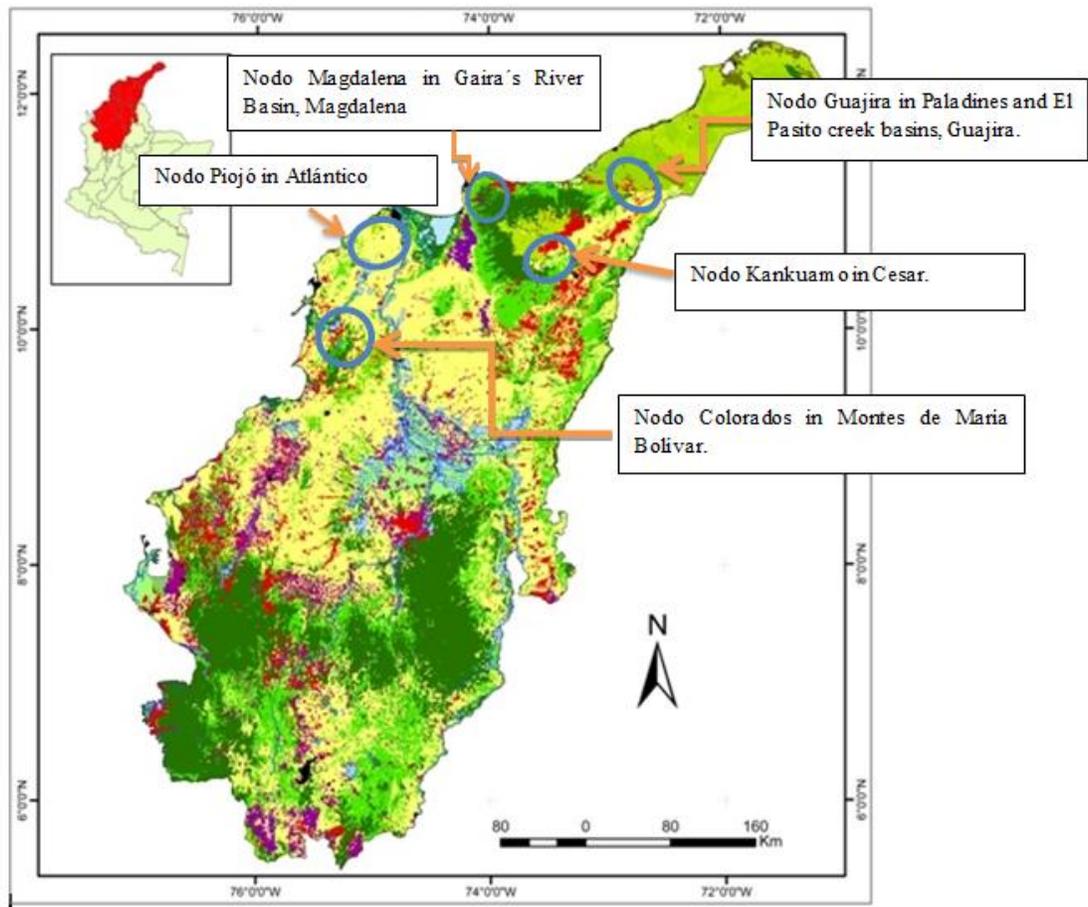
1.6. NAME OF ALTERNATE AOR: Christopher Abrams

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 CLP objective is improving TDFE's governance, biodiversity and the preservation of natural resources in the Caribbean region and strengthening 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. Improved smallholder agroforestry practices, installing connectivity tools in larger agricultural areas, implementing silvo-pastoral systems and sustainable use of natural resources will guarantee ecological integrity by enhancing connectivity, covering soils to prevent erosion, promoting watershed protection and maintaining species diversity. GOC's regional environmental authorities will be strengthened through the Regional Protected Area System - SIRAP Caribe. Main beneficiaries are the indigenous, campesino communities and local organizations associated with the target areas. NGO's will develop proposals combining economic, environmental and social components, addressing the main threats on TDFE with community participation and capacity-building. Public/private alliances will be fostered for sustainable production and other public stakeholders will be engaged for better decision-making related to TDFE conservation. Caribbean TDFE will benefit from improved management of protected areas and especially from connectivity strategies to counter fragmentation as main tools for conservation. Improved access to water and production systems' management seek to enhance productivity and livelihoods, especially for women in charge of obtaining water for daily use. Involving the private sector through off-setting mechanisms, Social Corporate Responsibility programs or green economy measures will benefit TDFE conservation by protecting ecosystem services.

2. ACHIEVEMENTS OVERVIEW

Last quarter, planning and characterization at the farm level was done with each of the families selected at Nodo Kankuamos, Nodo Colorados, Nodo Pioj6, and Nodo Guajira, and an additional agreement was signed for Nodo Magdalena to work in the Gaira river basin in Santa Marta, department of Magdalena (Map 1). This quarter, farm planning has been finished at Nodo Guajira and at Nodo Colorados there has been important progress regarding this matter. The main achievements in the remaining Nodos have been: In Nodo Pioj6 corridor planning and measurements has been finished, showing that the isolation of 58,44 hectares is required. In Nodo Magdalena an agreement was signed last quarter, socialization and preparation activities began. Finally, minor advances in implementation and planning activities were made in Nodo Kankuamos. Regarding implementation activities, it is important to highlight that 25,6 hectares of the connectivity corridor in Nodo Colorados have been isolated. Also, in Nodo Guajira the construction of three reservoirs and four water harvesting systems have been completed, and plant nurseries have been established in all of the locations.



Map 1. Locations of the programs Nodos.

Additionally, with the objective of strengthening CAR technical staff, a workshop about the design and implementation of connectivity corridors with participation of US Forest Service under an interagency agreement with USAID was done on June. On the other hand the online tool for conservation and connectivity projects in the Caribbean TDFE for the use of the regional authorities made by Fundación para la Conservación y el Desarrollo Sostenible was finished (<http://192.99.7.79/fcds/>).

Finally, Prototypes of clean cook stoves were codesigned with communities to increase the chance this new technology is better appropriated by people. A final prototype selected will be tested with communities and in the correspondent laboratory of regional Universities participating in the program.

The main challenge in this reporting period (April to June 2014) in all of the locations is the high probability of El Niño in the second half of the year, especially after an unusually dry first half of the year. Careful consideration in each of locations has to be made in order to decide if changes have to be made to achieve the objectives in each agreement.

2.1. COMPONENTS

2.1.1. Component 1 –Improved licit and Sustainable Livelihoods

Production-conservation corridors are the main conservation strategy of the program; it uses production and improved livelihoods as an incentive to free space for conservation, resulting in pressure reduction to the ecosystem. There are five locations where the development of production-conservation corridors is taking place: Nodo Colorados, Nodo Guajira, Nodo Kankuamos, Nodo Piojón, and Nodo Magdalena. Last quarter characterization and planning activities at the territorial and farm level started, and an agreement for Nodo Magdalena was signed.

This quarter, in Nodo Colorados, where a grant has been approved to connect Los Colorados Fauna and Flora Sanctuary with Cerro Maco in the department of Bolivar, farm planning started after a very careful farm characterization. The initial pre-agreements signed last quarter coupled with farm planning has allowed the isolation of 25,6 hectares in two zones: vereda Raicero where 813 lineal meters parallel to a spring and its surrounding gallery forest have been isolated and in vereda Media Luna where 1480 lineal meters have been isolated for the protection forest next to the farms. This isolations where made through 10 cooperative work sessions with campesino communities (figure 1). Finally, an agreement was signed with a plant nursery belonging to a former woodcutter where 16,000 trees are grown for the program.



Figure 1. Pictures of isolations made on Nodo Colorados.

In Nodo Guajira, where an agreement has been signed to increase the connectivity of forest patches in the Paladines and Pasito river micro-basins, the formulation of the farm plans with each of the 50 beneficiary families has been finished from which 15 belong to the Resguardo Indígena San Francisco in Pasito micro-basin and 35 belong to the Resguardo Indígena El Zahíno (12), Resguardo Indígena Rodeíto El Pozo (9), Vereda Angostura (10), and Vereda El Cumbre (4) in Paladines micro-basin. These plans include the isolation of 10 to 15 meters at each side of the basins and five meters around of the water springs (Figure 2), and have resulted in 23 conservation pre-agreements to date. Regarding infrastructure implementation, three water reservoirs with capacity of 130 cubic meters have been completed to date and other two are in the construction process, four water harvest systems with 2000 liters tanks, and three plant nurseries are under construction. Finally, training activities began with workshops in plant nursery for 50 people, solar water sanitation for 14 people, and reservoir construction and safety for five people.

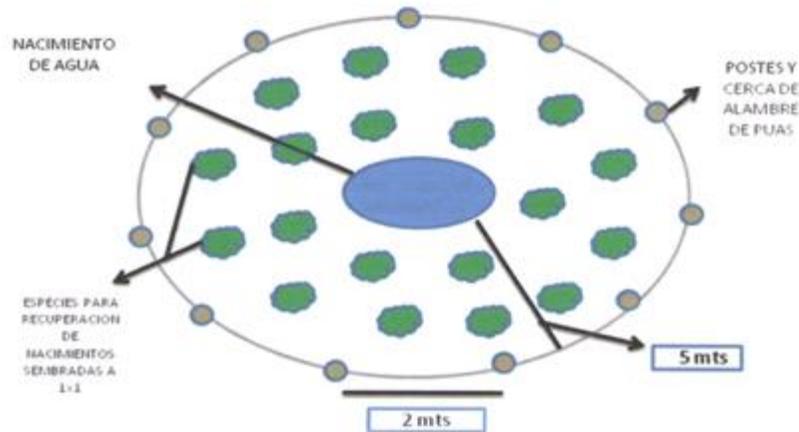


Figure 2. Isolation plan for water springs.

In Nodo Kankuamos, where an agreement was signed to link El Santuario de Vida Silvestre Besotes with the region of Murillo, there are minor advances in isolation, production systems, and farm planning. For this reason, next quarter a field evaluation will be done to analyze the agreement goals and progress, and decide if corrective measures need to take place.

At Nodo Pioj6, in a project which pursues to link the forest reserve El Palomar with the regions of Guaybana and Macondal, a connectivity map has been finished showing 58,44 hectares of corridors that need 11.345 lineal meters of isolation (Figure 3). On ground verification of the corridors allowed watching the main diversity threats of the region, desertification, land farm burning, and coal production (Figure 4). Lastly, the plant nursery is growing 4.142 trees for the project.

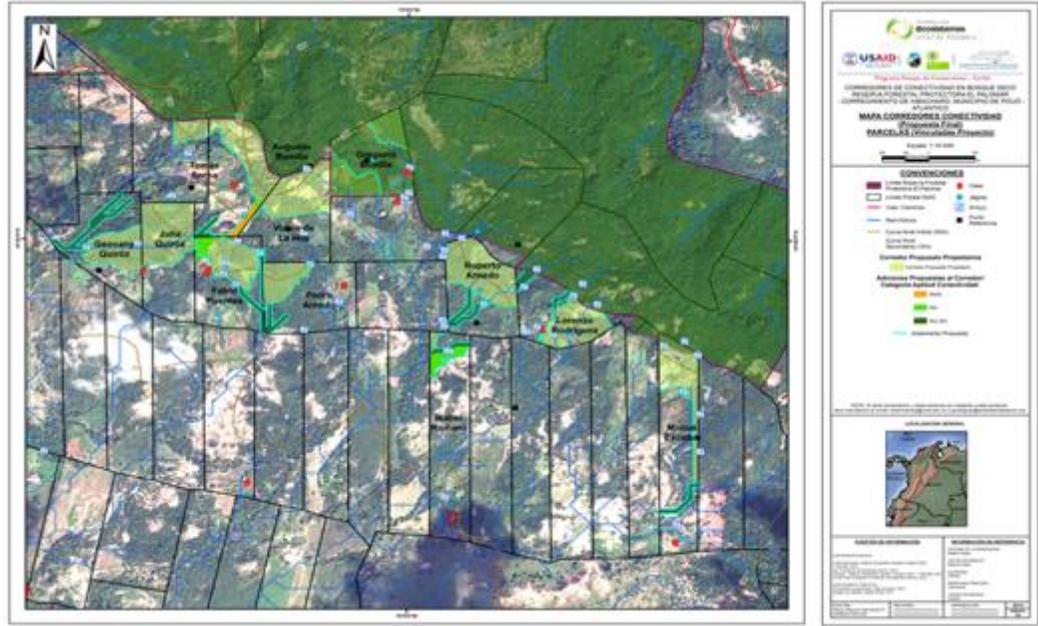


Figure 3. Map of connectivity corridors.



Figure 4. On ground verification of connectivity where diversity threats could be identified. A) Desertification. B) Burning farm land. C) Hunting. D) Coal production.

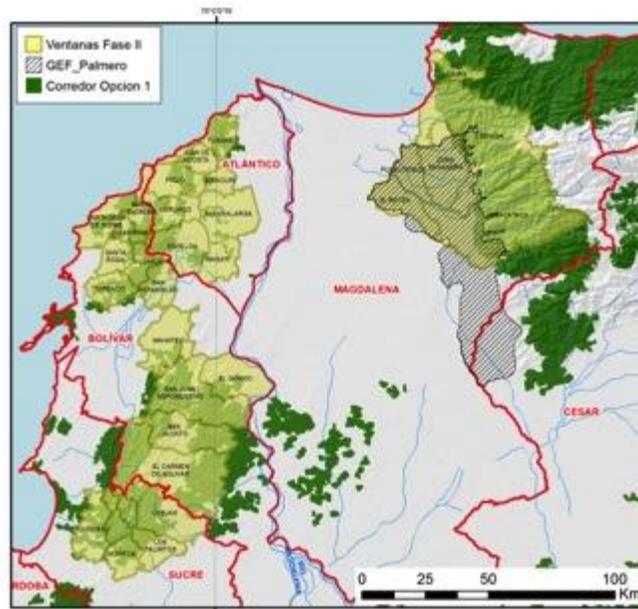
Finally, at Nodo Magdalena an agreement to develop another production-conservation corridor in Gaira River's middle basin was signed. The main achievements this quarter have been to hire the team, socialize the project in the region, and begin initial social and environmental characterization.

On the other hand, Minka-Dev in its attempt to develop an inclusive business around the dry forest promissory Corozo palm tree, launched the platform to find business opportunities and partners, in a methodology called open innovation (<http://minka-dev.com/>), a final evaluation of the business opportunities is expected next quarter.

The main challenge in all of the Nodos as expressed by the implementing organizations is the high probability of El Niño in the second half of the year. El Niño is related to dry climate in the region, which will lower the probability of successful crops. Careful consideration of each of the Nodos has to be made in order to decide if changes have to be made to achieve agreements goals (i.e. irrigation, changes on seed time etc.).

2.1.2. Component 2- Institutional Strengthening and Governance

Fundación para la Conservación y el Desarrollo Sostenible finished the online tool for the use of regional authorities. This tool can be used online at <http://192.99.7.79/fcds/> where layers of conservation projects, tropical dry forest, conservation priorities, infrastructure and mining projects, amongst others are available. No activities have been developed for the appropriation of the tool with SIRAP Caribe members, since testing of the tool needed to be done. The divulgation of this tool to SIRAP Caribe members will be done once the second phase of the project finishes next quarter, to show SIRAP members the result from both phases. The second phase of the project consist on three windows at a finer scale (1:25.000) (Map 2). The first window for the region of Montes de Maria in Bolivar and Sucre departments were Nodo Colorados is, the second one in the departments of Atlántico and Bolivar were Nodo Piojó is, and the third one in Magdalena department where Nodo Magdalena is. This new windows will allow the CLP to facilitate decision making regarding connectivity in the areas where GEF Palmero, PROMAC, Fundación Semana, among other projects, are working with SIRAP Caribe members. The first two windows have been finished and Magdalena window will be finished on the next quarter.



Map 2. 1:25.000 windows.

Additionally, with the objective of strengthening CAR technical staff a workshop covering the subject of the design and implementation of connectivity corridors in alliance with the US Forest Service was done on June 2014. US Forest Service covered the theory, while the field and hands-on experience was shown in Nodo Colorados with the help of Fundación Herencia Ambiental Caribe. This workshop allowed on ground knowledge of the implementation of the corridors while stressing the importance of connectivity for ecosystem health.

Finally, following the promissory palm strategy structured by Universidad Nacional. This quarter Universidad Nacional chose and characterized the investigation plots, finished individual palm marking (figure 5), and started data collection on Amarga palm (*Sabal mauritiiformis*) and Corozo palm (*Bactris guineensis*). This information will provide the necessary data to build a sustainable management plan for these palms. Work to develop the sustainable management plans for estera palm (*Astrocaryum malybo*) and sará palm (*Copernicia tectorum*) will begin later on the process, since most of the data to develop the plans can be gathered from existing documents.



Figure 5. Individual marking at Finca la Pastora, corregimiento de San Antonio, Sucre.

2.1.3. Component 3 – Social Capital and Community Participation

Community participation is at the heart of the program since territorial and farm planning, conservation strategies, and the clean cook stoves strategies are built with local communities.

The clean cook stoves strategy is moving forward in two ways. The first one is by designing a stove based on the principles of human center design, which takes into consideration all the needs of the people to co-design the stove. Following this design method a set of stove prototypes have been designed (Figures 6,7). Next quarter, field and laboratory testing will be done in order to check health, environmental, and efficiency variables. At the institutional level, the team is helping structure a national strategy for the implementation of clean cook stoves. In order to achieve this, a workshop is being planned for the next quarter in alliance with institutions such as the Global Alliance for Clean Cook Stoves (GACC), EnDev Peru, the Ministry of Environment, Fundación Natura, and the Colombian Clean Energy Program (CCEP).

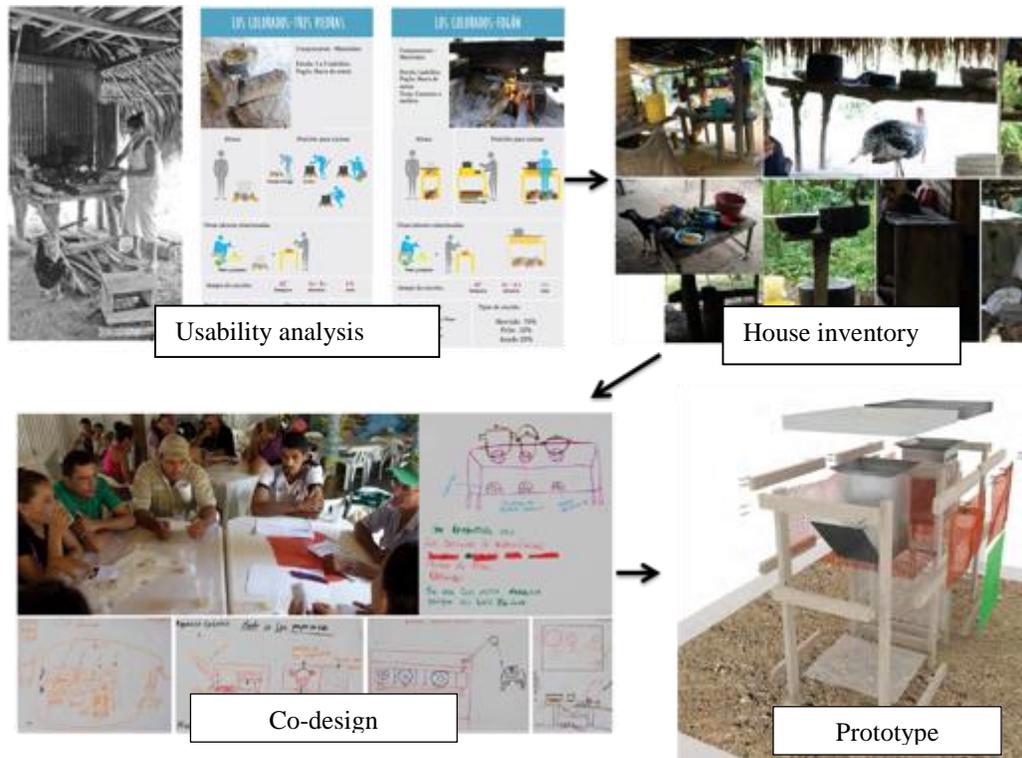


Figure 6. Clean stove design process.



Figure 7. Prototypes.

Finally, following the programs need to systematize knowledge and success stories to build social capital in the region, Tropenbos finished a full map of academic sector stakeholder with their curricular strengths, and needs on each Nodo. This information will be the base to structure a TDFE sustainable

production knowledge systematization project with this organization, in an agreement that will be signed next quarter.

3. SUMMARY

3.1. ACHIEVEMENTS

- Starting implementation of infrastructure, isolations, and training in Nodo Colorados, Nodo Guajira, Nodo Pioj6, and Nodo Kankuamos.
- Developing the online tool that will facilitate connectivity and conservation decision making for the environmental regional authorities CAR.
- Developing the prototypes of a clean cook stove designed specifically for the Caribbean region.

3.2. CHALLENGES AND ADJUSTMENTS

- After particularly dry climate during the first half of the year, the forecast of a Ni6o season the second half in Colombia threatens the success of the planned crops. This has led to a slowdown of the burn rate due to the difficulty in implement agricultural activities, and the risk to sign new agreements including such activities (i.e. silvo-pastoral systems with Fundaci6n Panthera and Fundaci6n Carboandes). Careful consideration of possible solutions to this problem will have to be undertaken in each of the locations.

4. PERFORMANCE INDICATORS

	Advance 2Q	Advance 3Q	Total advance	% Acumm. Advance	Total goal
DO4-001 Number of hectares of biological significance and/or natural under improved natural resource management as a result of USG assistance (F4.8.1-26)	10,08	553,15	563,23	8,64	6517
DO4-002: number of institutions/public and private organizations with improved capacity for effective environmental resource management.		10	10	38,46	26
"F 4.8.1-29 Number of person hour of training in natural resources management and/or biodiversity conservation supported by USG assistance.	908	2317	3705	40,98	9.040

DO4-001 DETAIL		
Local Operator	Hectares	Description
Fundación Herencia Ambiental Caribe	25,6	Selected areas for conservation
Fundación Cerrejón para el Agua	527,55	Land use planing
Total advance 3rd. Quarter 2014	553,15	

DO4-002 DETAIL		
Local Operator	Number of institutions	Description
ECONAT	10	Training in Biodiversity - Econat

F 4.8.1-29 DETAIL	
Local Operator	Advance
Asoprokan	202
Fundación Cerrejón para el Agua	660
Fundación Herencia Ambiental	450
Tropenbos	45
Econat	960
Total advance 3rd. Quarter 2014	2317

