



Darwin Initiative: Half Year Report

(due 31 October 2014)

Project Ref No	21008
Project Title	Reciprocal Watershed Agreements: Conserving Bolivia's Chaco through Improved Livelihoods
Country(ies)	Bolivia
Lead Organisation	Natura Bolivia Foundation
Collaborator(s)	
Project Leader	Nigel Asquith
Report date and number (eg HYR3)	October 31 st 2014, HYR1
Project website	www.naturabolivia.org

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

Where the Andes Mountains meet the Chaco, extensive cattle grazing is one of the primary threats to the protection of the vegetative cover and the quality and quantity of downstream water. Cows enter forests, especially along river banks, to drink and graze, they defecate and urinate in streams, graze seedlings and compact soil. Levels of fecal coliforms in water increase, vegetation regeneration is reduced, and rainfall runs off compacted soils. This results in increased flooding and sedimentation, and dry season water flows and quality decrease.

The goal of our project is to persuade downstream water users to support alternative development projects upstream, which will allow upstream farmers to protect their forest and take their cattle out of streams. This will lead to increased upstream regeneration. With upstream forests protected, downstream areas will receive less flooding and sedimentation, and better water quality and quantity, which will in turn help improved downstream livelihoods. This will shift the local equilibrium to a virtuous cycle in which downstream users then have more resources and so more interest, in investing in upstream conservation.

Outcome: Conservation of 20,000 hectares of forest that supply water to 10,000 Bolivians, through contributions for environmental service provision to 500 poor upstream farmers

Output 1: 8 Municipal Water Conservation Funds with statutes, board gender balance

Indicator 1.1: Number of MWCF created (prior to project 2, after 8) and consolidated (prior to project 0, after 8)

Indicator 1.2: Number of women on MWCF board (prior to project 10%, after project 35%)

Activity 1.1: Design eight cooperative-managed Watershed Conservation Funds to facilitate and channel investments by water users in upstream conservation

This activity is progressing 100% successfully. After a series of meetings and training sessions in each municipality, we are well on the way to consolidating eight municipal water funds in Gutierrez, Machareti, Villa Vaca Guzman, Cuevo, Cabezas, Boyuibe, and Monteagudo. Camiri is proving more difficult, primarily because of differences in political affiliations between the President of the Water Cooperative and the Mayor. However, we expect that elections in early 2015 will break the political logjam, and we will be able to advance as hoped in Camiri.

Output 2: 20,000 ha of forest conserved through contracts/municipal decrees

Indicator 2.1: Hectares conserved under RWA (prior to project 0, after project 20,000)

Indicator 2.2: Number of municipal decrees (prior to project 0, after project 3)

Activity 2.1: Undertake baseline biodiversity and water quality data collection prior to project and collect follow up data at project end

This activity is progressing 100% successfully. On our first incursion into the area, the Mayor of the municipality of Huacareta alerted us that there was significant local interest in creating a new protected area in the Serrania de los Milagros. We decided to take advantage of this opportunity, and so focused our baseline biological surveys on this mountain chain. A team of biologists undertook a rapid biological assessment in one of the project's targeted priority conservation areas. Bird diversity was assayed over 81 hours of sampling at four sites: Laguna los Milagros (2033 masl), Hacienda Los Pinos (1605 masl), Uruguay (1026 masl) and Irenda (891 masl). We registered 2301 individuals of 121 species, representing 37 families, the most common of which were Psittacidae (22%), Emberizidae (14%), Corvidae (9%) and Tyrannidae (8%). To assess amphibian and reptile diversity we walked diurnally and nocturnally a series of 2-7 km transects at the same sites, recording 17 species of amphibians (Bufonidae, Cycloramphidae, Hylidae, Leiuperidae y Leptodactylidae) and 16 species of reptiles (Amphisbaenidae, Tropiduridae, Teiidae, Colubridae, Elapidae y Viperidae). We also assessed water quality in the streams at each of these sites. These data were used by the Municipal government to decree the creation of a new 103,000 ha protected area, the Serrania de los Milagros Water Sanctuary. More than 7,000 people in 32 communities depend on the mountain chain for water, and they appear to want strict protection (of water sources, but also of biodiversity) of an area of more than 60,000 ha. During our next reporting period we will work with local authorities to zone this area and develop a management plan that incorporates support from downstream water users to help fund such management.

Output 3: 500 families have signed conservation contracts and received compensation

Indicator 3.1: Number of contracts signed (prior to project 0, after project 500)

Indicator 3.2: Number of families with compensation packages (prior to project 0, after 500)

Activity 3.1: Undertake socioeconomic data collection prior to project and at project end

This activity is progressing 100% successfully. Between April and September a team of 15 interviewers and two supervisors visited Gutierrez, Villa Vaca Guzman, Cabezas, and Monteagudo municipalities. We decided to also include Huacareta municipality, because of the opportunity to create the 103,000 ha protected area in the Serrania de los Milagros (mentioned above). The socioeconomic data collection comprised of surveying as many households as possible, plus interviewing community leaders. The team surveyed 3723 families (78% of all households) in 158 communities, and is currently tabulating and analyzing the data, which will be returned to each community when we start the project intervention.

Output 4: 10,000 downstream water users contribute to Municipal (MWCF) funds

Indicator 4.1: Number of resolutions of water providers to either charge downstream users or to use a percentage of general funds for upstream conservation (prior to project 0, after 8)

Indicator 4.2: Number of users contributing (prior to project 0, after project 10,000)

Indicator 4.3: Annual bank transfers from water providers to MWCF accounts (prior 0, after 8)

Activity 4.1: Undertake, and then present to users, hydrological data collection and modeling to better quantify impact of upstream deforestation on water availability, flooding and droughts

This activity has been slower than we had hoped, primarily because we were delayed signing a contract with the Universidad Nacional de Colombia, our hydrological advisors. Nevertheless, this activity is now up and running, with meteorological stations installed and data being collected. To date, our explanations of the forest-water relationship to water users have been based on general findings and modeling from the Pirai river, to the north of the project area. These information sessions have actually been quite successful, having convinced the municipal water providers in Boyuibe, Villa Vaca Guzman, Cuevo, and Monteagudo to increase their tariffs and start the process that the "user pays" for provision of environmental services.

Output 5: 5,000 ha under improved cattle management, honey production, fruticulture

Indicator 5.1: Number of hectares under improved management (prior 0, after 5,000)

No activities were planned for the first half-year.

2a. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

There have been no problems or unexpected developments that could affect the budget or timetable. We were asked to expand the project into another municipality, Huacareta, but we have so far been able to do this without requiring budgetary or timeline adjustments.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: No

Formal change request submitted: No

Received confirmation of change acceptance No

3a. Do you currently expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully as it is unlikely that any requests to carry forward funds will be approved this year. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project and would like to talk to someone about the options available this year, please indicate below when you think you might be in a position to do this and what the reasons might be:

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

No

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.