

Darwin Initiative/D+ Project Half Year Report (due 31st October 2019)

Project reference	26-021
Project title	Biodiversity conservation, vicuña health and local livelihoods in Apolobamba, Bolivia
Country(ies)/territory(ies)	Bolivia
Lead organisation	Wildlife Conservation Society (WCS)
Partner(s)	Marka Cololo de Antaquilla, Apolobamba protected area
Project leader	Wildlife Conservation Society (WCS)
Report date and number (e.g. HYR3)	HYR1
Project website/blog/social media etc.	https://bolivia.wcs.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).

We coordinated activities with the Apolobamba protected area and the national protected area service (SERNAP), the indigenous territory of Marka Cololo Copacabana Antaquilla, the Regional Association of Vicuña Managers of Apolobamba (ARMV Apolobamba) and representatives of 12 vicuña manager communities (VMC): Agua Blanca, Cololo, Cañuhuma, Medallani, Amarka, Puyo Puyo, Apacheta, Antaquilla, Hilo Hilo, Ulla Ulla, Ucha Ucha y Plan Aeropuerto. See *Annex 1* for a map of the project area.

Output 1: Completed diagnostic of peatland and their water sources; native pastures and associated biodiversity indicator species

Activity 1.1 As a first step towards we developed two methodological proposals to conduct research on both the native pastures and peatlands in Apolobamba. These studies will evaluate the peatlands and native pastures in order to establish a baseline of plant species and determine the stocking rates under different management regimes; identify and characterize problems under the current management systems; and propose interventions leading to their recovery, conservation and long-term sustainable management. Field work is planned for the first quarter of 2020. A map of communities, pastures and peatlands and areas of vicuña presence is shown as *Annex 1*. During October and November 2019, the team will work with park rangers and communities to conduct rural participatory diagnostics to map grazing areas and their intensity of use, learn about ancestral and current management systems and carry out an inventory of stocking rates in different areas.

Activity 1.3. In order to complement and confirm the selected indicator species (andean cat, Chilean flamingo, pampas cat, mauri catfish and the vulnerable marbled waterfrog) we are developing a list of native and wild plant and animal species and their degree of threat, based on the IUCN categories, degree of endemism, as well as economic and cultural relevance.

Distribution maps will then be developed in the next six months and a baseline on the final list of indicator species will be carried out by March 2020. To date five plant genera have been identified as indicators of overgrazing in grasslands: *Festuca*, *Calagrostis*, *Nototriche*, *Ranunculus* and *Agrostis* in native pasture lands. Indicator genus for overgrazing in peatlands include *Distichia*, *Bromus* and the species *Oxychloe andina*, whilst a dozen more are still under consideration.

Output 2: Completed diagnostic of vicuña health condition and mange prevalence as an indicator of carrying capacity and climatic trends.

Activity 2.1 The baseline of vicuña mange prevalence will be established during the shearing campaign that involves capture and handling of the animals due to begin in October.

Activity 2.3 The first stage of the analysis of climate change scenarios and their influence on pastures, peatlands and water sources in Apolobamba has been a historical analysis of changes in temperatures and rainfall from 1950 to 2000 (*Annex 2: Maps on projections in temperature and rainfall for Apolobamba Protected Area*). This analysis shows a trend towards an increase in temperature of 2°C and a reduction in rainfall both in amount and seasonality. All the information on mange prevalence that will be gathered during the vicuña captures in October 2019, as well as the evaluation of the quantity and quality of the vicuña fibre, will be fed into the climate change scenarios to project prevalence into the future. Once the analysis of the scenarios has been concluded, it will be discussed and complemented by the vicuña managers in a participatory workshop planned for the first quarter of 2020.

Output 3: Apolobamba protected area, Marka Cololo Indigenous organization and the regional association of vicuña managers establish a pasture, peatlands and their water sources, and vicuña health management plan.

In this semester, we developed conditions for establishing habitat and health management plans to be developed in Yr. 2. In May, we conducted classroom training on health management of the main infectious and parasitic diseases affecting domestic camelids, and most importantly of ectoparasites, that affect their skin and fiber. Participants included 219 people (33 % women and 67% men) from 10 communities (*Annex 3: Participant lists Classroom training May 2019*). Another field school was held on the use of veterinary drugs in domestic camelids in July 2019, with 10 communities. The purpose was to strengthen the preventive veterinary practices and treatments of livestock diseases that can affect wild vicuñas through transmission from direct contact or by sharing pastures and water sources. Participants included 180 people from 10 out of 14 vicuña manager communities in Apolobamba (35% women and 65% men) (*Annex 4: Participant lists Classroom training July 2019*). A meeting was held with the Regional Association of Vicuña Managers of Apolobamba and the Protected Area to coordinate and plan for the upcoming vicuña census in August. The meeting was attended by 16 community representatives from 10 vicuña manager communities and 2 representatives of the protected area. Each of the VMC established a defined communal area to manage vicuñas. We conducted workshops on good practices for managing vicuñas, with the participation of 347 people (42% women and 58% men) (*Annex 5: Participant lists August 29th, 2019*). Technical assistance was provided for the organization of the annual vicuña census in Apolobamba. A total of 12,703 vicuñas were counted (*Annex 6: Photographs on the ANMIN Apolobamba census*). An additional vicuña census was supported in Sajama National Park (Oruro Department) with a total of 892 vicuñas counted (*Annex 7: Photographs on census in Sajama National Park*). Finally, two meetings were conducted in September to organize the shearing campaigns, with a total participation of 116 community representatives, most of them men (6% women and 94% men) (*Annex 8: Attendance lists September 12th and September 26th 2019*).

Output 4: Increased resilient livelihoods through improved business capacity and quality control of the regional association of vicuña managers of Apolobamba

Activity 4.1. The Community Association for the Marketing of the Vicuña Fiber of Bolivia (ACOFIVB) and WCS signed a cooperation agreement to carry out joint actions towards ensuring the conservation and sustainable management of wild vicuña. ACOFIVB represents 11 Regional

Associations of Vicuña Managing Communities (ARCMV) that brings together more than 100 Vicuña Managing Communities (CMV) in the departments of La Paz, Oruro, Potosí, Tarija and Cochabamba. This agreement will allow the development of management tools for the vicuña management communities (CMV), the Regional Associations (ARCMV) and the ACOFIVB association, within the framework of a conservation model for the species and its habitat, benefiting vicuña managing communities in Bolivia. Initial steps towards better marketing of the vicuña fiber have been taken during this first semester with the project. Activities towards improving fiber quality have centered on improvement of the tools used to shear the animals such as electric razors to produce a more homogenous fiber length and reduce the time for manipulating animals, consequently reducing their stress.

2a. Give details of any notable problems or unexpected developments/lessons learnt 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.

N/A

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: Yes/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No

3a. Do you currently expect to have any significant (e.g., 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. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

N/A

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

The project budget will be affected by exchange rate variations. The actual effects and proposed solutions will be analyzed and reported in the next annual report.