

## Darwin Initiative Capability & Capacity: Final Report

To be completed with reference to the “Project Reporting Information Note”:  
(<https://www.darwininitiative.org.uk/resources/information-notes/>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes.

**Submission Deadline: no later than 3 months after agreed end date.**

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### Darwin Initiative Project Information

|                                   |   |
|-----------------------------------|---|
| Project reference                 | DARCC034  |
| Project title                     | Vicuña management for biodiversity conservation and local livelihoods in the Bolivian highlands     |
| Country(ies)                      | Bolivia   |
| Lead Organisation                 | Lilian Painter [REDACTED]   |
| Project partner(s)                | ACOFIVB   |
| Darwin Initiative grant value     | £199,998  |
| Start/end dates of project        | 1 <sup>ST</sup> April 2023 – 31 <sup>th</sup> March 2025  |
| Project Leader's name             | Oscar Loayza Cossio [REDACTED]  |
| Project website/blog/social media | <a href="https://bolivia.wcs.org/">https://bolivia.wcs.org/</a>                                     |
| Report author(s) and date         | Oscar Loayza, Humber Alberto, José Luis Mollericona, Linda Rosas & Lilian Painter.<br>30 April 2024 |

## 1 Project Summary

The project aimed to strengthen the national capacity of Bolivia's vicuña management system by enabling the replication of best practices developed in Apolobamba across the country. These included techniques in vicuña census, shearing, and marketing of vicuña fiber, as well as habitat monitoring—especially of peatlands. The goal was to institutionalize these practices at a national scale, supporting both species conservation and local livelihoods.

The project addressed the needs for consolidating technical, organizational, and governance capabilities of the National Association for Vicuña Management (ACOFIVB) and regional associations. There was a need to standardize and legally consolidate operational procedures, improve wildlife monitoring and disease surveillance, and ensure proper vicuña fiber shearing and sale.

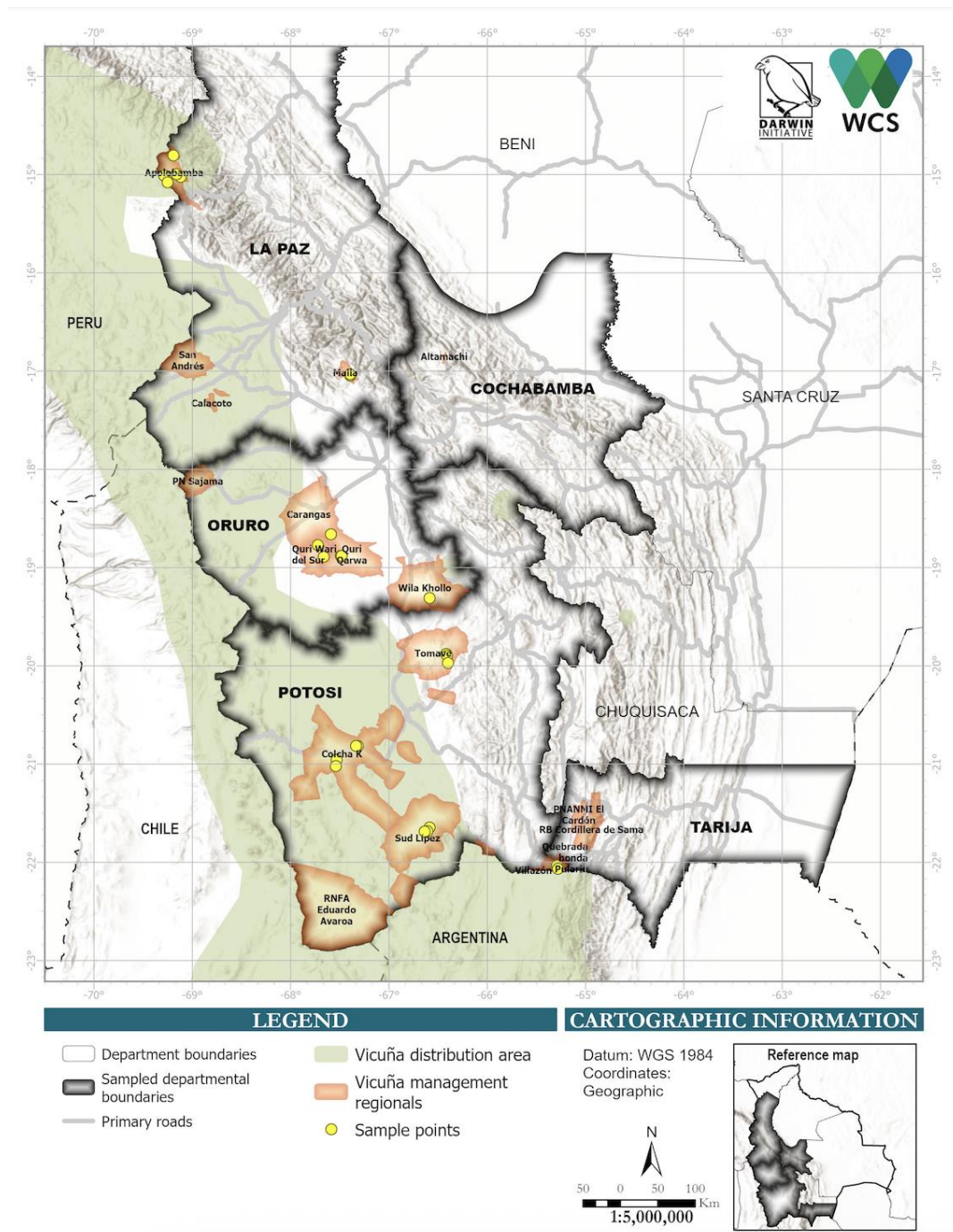
Highland ecosystems—peatlands, pastures, and wetlands—are under pressure from degradation, unsustainable land use, and climate change. The vicuña, an emblematic wild camelid, relies on these fragile ecosystems. Other associated species such as the Andean flamingo and Andean hairy armadillo also depend on these habitats. Vicuña poaching and habitat fragmentation further threaten biodiversity.

The project targeted extreme poverty in highland Indigenous communities, with 5,500 families (primarily Aymara and Quechua) relying on vicuña management. These communities face limited

economic opportunities and marginalization. The sustainable use of vicuña fiber presents a viable income source when managed correctly.

The challenges were identified through long-standing collaborations with Indigenous communities, regional associations, and national biodiversity authorities. The high poverty levels, biodiversity pressures, and weak institutional frameworks highlighted the need for an integrated approach combining conservation with livelihood improvements.

The project spanned vicuña management zones across six Bolivian departments (La Paz, Oruro, Potosí, Tarija, Cochabamba, and Chuquisaca), including five protected areas: Apolobamba, Sajama, Eduardo Avaroa, Sama, and El Cardón.



## 2 Project Partnerships

The project was grounded in collaborative principles, with its structure, implementation, and outcomes shaped by strong engagement with formal partners, Indigenous communities, and relevant national authorities. Partnerships evolved organically from local needs and demonstrated a high degree of ownership, mutual accountability, and a shared vision for biodiversity conservation and poverty reduction.

This project collaborates with the Association for the Commercialization of Vicuña Fiber of Bolivia (ACOFIVB), which represents 11 regional associations consisting of 113 communities involved in vicuña management, encompassing approximately 5,500 families. These communities primarily consist of Aymara and Quechua people from the highlands of La Paz, Oruro, Potosí, Tarija, and Cochabamba; regions of the country with an extreme poverty rate of 73%.

The activities carried out within the project are conducted in full coordination with our main partner, ACOFIVB, and through it, with the Regional Associations of Vicuña Managing Communities (ARCMV). Implementation is carried out in coordination and consultation with the competent national authority, the General Directorate of Biodiversity and Protected Areas (DGBAP), under the Vice Ministry of Environment, Biodiversity, Climate Change, and Forest Management and Development (VMMABCCGDF). In the case of activities in protected areas, coordination is also maintained with the National Protected Areas Service (SERNAP) through the Directors of the corresponding protected areas (Apolobamba, Sajama, Eduardo Avaroa, Sama and El Cardon).

The partnerships built on longstanding relationships with Indigenous communities managing vicuñas. The project emerged directly from their expressed needs for institutional strengthening, sustainable income generation, and enhanced ecological monitoring systems. The Association for the Commercialization of Vicuña Fiber of Bolivia (ACOFIVB) played a central role in articulating these needs. All formal partners were involved in the planning, implementation, monitoring, and evaluation phases of the project. However, the report was developed by WCS. Regular coordination meetings and joint technical field activities ensured participatory decision-making and continual adaptation based on community feedback.

ACOFIVB led community mobilization, delivery of training, and coordination across regional associations. ARCMVs implemented field schools, coordinated fiber shearing events, and carried out biodiversity and habitat monitoring. DGBAP and VMMABCCGDF ensured policy alignment and technical validation with national biodiversity strategies. SERNAP coordinated within protected areas, engaging site-specific authorities. WCS Bolivia supported scientific and technical implementation, logistical planning, and drafting of the Final Technical Report.

The relationships established are expected to endure beyond the life of the project. With the formalization of ANMVB, supported by a robust legal and governance framework, vicuña-managing communities now have a stronger institutional mechanism to advocate for sustainable use and conservation of their resources. The finalized National Vicuña Management Plan (2025–2029) and national commercialization regulations further institutionalize the collaborative arrangements between communities and government authorities. These frameworks will serve as a foundation for ongoing biodiversity monitoring and resource management efforts across Bolivia's highland ecosystems.

In addition to formal partners, several non-partner institutions and actors contributed to project activities. Local schools engaged in biodiversity monitoring through iNaturalist, promoting environmental education and citizen science. Municipal governments provided logistical and financial support for training events and coordination. The British embassy was informed of project progress through regular communications, though not directly involved in implementation. Technical specialists, including ecologists and veterinarians, supported field diagnostics, animal welfare protocol development, and peatland condition assessments. Their involvement ensured scientific robustness and strengthened local trust in monitoring systems.

## 3 Project Achievements

### 3.1 Outputs

**Output 1** Legal consolidation of ACOFIVB and their regional associations.

The [legal constitution](#), [deed of incorporation](#), [election of directorate](#) y [minutes of approval of statutes](#) and [Internal Regulations of the National Association of Vicuña Managers of Bolivia](#) (ANMVB) have been approved. All these documents were submitted for notarial protocolization, thereby granting them legal validity. Subsequently, a formal request for the legal recognition of the ANMVB was prepared and submitted to the Vice Ministry of Autonomies for its review and the corresponding granting of [legal status](#). The ANMVB will have national scope, although its activities will be implemented in the 6 departments that have vicuña populations out of the 9 departments in the country.

**Output 2** Field schools implemented by ACOFIVB with regional associations on best practices for animal welfare, population census, capture, mechanical shearing, disease surveillance, fiber selection, fiber collection and sale.

#### 2.1 Eleven regional associations participate in field schools on vicuña census.

A total of 23 field schools and technical support activities were conducted for vicuña population estimation in 12 Regional Associations of Vicuña-Managing Communities (ARCMV) — Sud López, Colcha K, Tomave, Villazón, Quri Qrwa, Quri Wari del Sur, Carangas, Wila Khollo, Calacoto, Malla, Apolobamba, and Altamachi — along with 3 Vicuña-Managing Communities (CMV) not affiliated with a regional association (Quebrada Honda, Pulario, and San Andrés de Machaca), and 5 National Protected Areas (Eduardo Avaroa National Flora and Fauna Reserve, Cordillera de Sama Biological Reserve, El Cardón Municipal Area of Integrated Management, Sajama National Park, and Apolobamba National Area of Integrated Management, which is also an ARCMV). These cover all vicuña conservation and management areas in the country.

As a result, 916 people participated in the training courses (30% women and 70% men), and [1,390 people](#) took part in the census activity (26% women and 74% men). A total population of 118,327 vicuñas was recorded. The social structure of the vicuñas was: 58% family groups, 39% male groups, 1% solitary vicuñas, and 2% undifferentiated individuals. The family group structure consisted of 60% females (mothers), 27% offspring, and 13% males (jañachos or breeders). A total of 238 vicuñas with mange were identified. The birth and survival rate of vicuña offspring at the time of the population estimation was 44%, and the male-to-female ratio in family groups was 1:4.7.

#### 2.2 Eleven regional associations participate in field schools on vicuña capture, visual disease surveillance and mechanical shearing.

Based on the experience gained through field schools and training activities, during the 2024 vicuña fiber shearing season (from September 1 to December 15, 2024), 164 capture and shearing events were carried out in the 12 ARCMVs and their respective CMVs, out of the 271 events [requested and approved by the National Biodiversity Authority](#). Two technical teams were organized to provide on-site assistance and strengthen training for CMVs and ARCMVs during the herding, capture, and shearing of vicuñas. Between 2 and 3 field schools were conducted in each ARCMV.

Throughout 2024, [health monitoring](#) continued in vicuña populations across 12 Regional Associations of Vicuña-Managing Communities (ARCMV): Altamachi, Calacoto, Malla, Carangas, Wila Khollo, Quri Wari del Sur, Quri Qarwa, Colcha K, Tomave, Sud López, Villazón,

and the Yurita Ucumasi CMV. The results showed a reduction in mange prevalence from 5% in 2022 to only 1.7% in 2024, based on a sample of 2,460 vicuñas.

This progress suggests a strengthening of sanitary management for vicuñas, enabled by the implementation of technical guidelines developed with project support, including [protocols](#) for animal welfare and care for vicuñas with mange during capture, shearing, and release in Bolivian communities.

### **2.3 Eleven regional associations, 1,625 men and 875 (35%) women participate in field schools on fiber selection and fiber collection and storage.**

During the 2024 shearing campaign, a total of [1,639.65 kilograms of raw vicuña fiber](#) was collected. After removal coarse hairs and impurities 1,285.95 kilograms of selected vicuña fiber was obtained and made ready for commercialization, while 182.84 kilograms still in process of selection. Social participation in the 164 events of herding, capture, and shearing involved 2,562 families and 6,701 individuals, including 3,557 men (53%) and 3,144 women (47%). In 2024, as a result of the shearing and selection of the 2023 fiber stock, the commercialization of vicuña fiber was carried out. In September 2024, with the participation of the Vice Ministry of Environment, Biodiversity, Climate Change and Forest Development (VMABCCGDF), the General Directorate of Biodiversity and Protected Areas (DGBAP), and the National Protected Areas Service (SERNAP); regional associations from Apolobamba, San Andrés, Calacoto, Quri Qarwa, Whila Khollo, Quri Wari del Sur, Carangas, Tomave, Colcha K, Sud Lípez, and Villazón; the governments of Oruro, La Paz, and Potosí; and WCS Bolivia technicians, the distribution of economic benefits was carried out for all regional associations and vicuña-managing communities as part of the [15th vicuña fiber sale](#). A total of 2,134.38 kilograms of vicuña fiber was sold, generating an income of 5,827,305 Bolivianos (approximately USD 837,256).

**Output 3** Field schools implemented by ACOFIVB and regional organizations on peatland and wildlife monitoring

### **3.1 Eleven regional associations participate in field schools on conservation and monitoring of highland peatlands and associated wildlife species.**

With the participation of local communities, in 2023 and 2024, 27 sites, including peatlands and wetlands, were [monitored](#) across various regional associations to evaluate their condition and analyze their relationship with vicuñas, which depend on these habitats for food and water. The healthiest sites were: Puyo Puyo (La Paz): 51% cushion plants and 25% water coverage; Portón Huari (Oruro): 25% cushion plants and 13% water; Chiuma Sikawilla (Potosí): 43% cushion plants and 32% water. In contrast, some sites were degraded, with dry peat and bare soil, such as Río Grande 2 (Potosí): 72% dry cover and almost no water; Huaylloco (Oruro): 55% dry cover.

Average forage production was 2,198 kgDM/ha during the wet season and 824 kgDM/ha during the dry season. Some water parameters indicated elevated conductivity and alkalinity at specific sites such as Salar Pakana (Oruro) and Kalcha (Potosí), with high electrical conductivity (>1000 µS/cm) and high levels of dissolved solids during the dry season. For example, in Huacochani (La Paz), a pH near 9 was recorded, reflecting high alkalinity.

Moreover, the analysis of aquatic macroinvertebrate presence indicated an overall altered ecological condition in the Oruro, La Paz and Potosi sites. The analysis showed that degraded sites offer lower habitat suitability for vicuñas, which in some cases also face threats such



as hunting and livestock fencing, which fragments their habitat. Identified risks included rapid soil degradation, water stress, and isolation of small wetlands.

Recommendations include: Restoring critical sites, reducing livestock pressure, creating ecological corridors, and strengthening community-based management.

### **3.2 Eleven regional organizations map priority peatlands and identify indicator species to be monitored.**

Of the twelve ARCMVs in Bolivia, nine have peatlands present within their territories. These peatlands [have been identified and mapped](#) for each Regional Association, as well as for the associated Protected Areas. With the participation of local communities, [37 key species \(including plants and animals\)](#) have been identified across the twelve ARCMVs for monitoring vicuña habitat. Additionally, to facilitate data collection and systematization, a “Mountain Peatland Biodiversity” project has been created on the iNaturalist platform for each Regional Association to support ongoing monitoring efforts by each organization.

### **3.3 Four monitoring reports on size and water level of priority peatlands.**

Based on the training and capacity-building activities for monitoring vicuña habitat, the following reports have been produced: [Methodology for Monitoring of Peatlands](#), [Training on Monitoring of Biodiversity Indicator Species in Vicuña Habitat](#), [Peatland Biodiversity Monitoring](#), [Peatland and Their Water Sources Monitoring During the Dry Season](#), and the [Final Report on the Status of Peatlands](#) in the Regional Vicuña Management Associations (both dry and wet seasons).

### **3.4 At least 6 local schools monitor indicator species using iNaturalist.**

As part of the efforts to conserve vicuñas in Bolivia, [participatory biodiversity monitoring](#) was carried out in peatlands and their habitat, using a citizen science and environmental education approach through the iNaturalist platform. Community monitors recorded observed biodiversity in their territories. The process included 9 workshops, [field schools](#), training sessions on monitoring, and practical field activities. [Key species for monitoring](#) were identified, and [11 “Biodiversity in Mountain Peatlands” projects were created](#)—one for each ARCMV (Regional Vicuña Management Association). To date, these projects have resulted in over 3,800 biodiversity records, more than 650 identified species, and 268 trained local monitors.

## **Output 4 Vicuña regulations reviewed by ACOFIVB and revolving fund established**

### **4.1 Participatory review of current regulations and inputs for a manual of functions and administrative procedures with regional associations**

In coordination with ACOFIVB, the DGBAP, and with the participation of Regional Associations and Vicuña Management Communities across the country, the [National Vicuña Management Plan 2025–2029](#) was developed and updated. This instrument will guide the conservation and sustainable use of vicuñas throughout the national territory in the coming years. In addition, the [technical guidelines for vicuña management](#) have been updated and adjusted. This technical standard establishes the procedures for the proper protection and sustainable harvesting of wild vicuña fiber, with a strong emphasis on animal welfare in harmony with the conservation of its habitat. The document is currently under review by the national authority for formal approval. A [Guide](#) and a [Vicuña Management Calendar](#) have also been consolidated to facilitate the implementation of management activities, ensuring the conservation of the species.

## **4.2 Adjusted regulations and establishment of a revolving fund with agreement of regional associations.**

In coordination with ACOFIVB and with the participation of vicuña management communities, the [first regulation for the commercialization of vicuña fiber](#) has been developed. This regulation will provide guidance, organization, and transparency for the vicuña fiber commercialization process. In addition, an [internal regulation](#) and [organizational statute](#)—approved by the communities—have been established for the operation of the National Association of Vicuña Managers of Bolivia. However, a funding source for the establishment of the revolving fund is still pending.

### **3.2 Outcome: Consolidate ACOFIVB capacity to support sustainable and informed management of vicuña, increasing benefits to 5500 Indigenous households and monitoring capacity of critical biodiversity habitat within highland pastures over 12M hectares.**

#### **0.1 Regulations of ACOFIVB include monitoring of critical biodiversity habitat within 12M hectares of highland pastures.**

The project has supported ACOFIVB establish a [monitoring system for peatlands](#), grasslands, and water sources, as well as for the [participatory biodiversity of indicator species](#) of fauna and flora associated with the vicuña's habitat. [Representative peatlands](#) were identified in each ARCMV for the implementation of the monitoring activities within the vicuña's distribution area, covering approximately 12 million hectares.

#### **0.2 Income of 5500 vicuña herder households increases by 30% by Year 2, from a baseline of USD119 a year.**

With the implementation of the project, during the first year (April 2023 – March 2024), 2,134 kg of vicuña fiber were harvested and commercialized, generating an income of [REDACTED]. A total of 7,160 families participated—30% more than in previous cycles—with an average distribution of USD [REDACTED] per family. In the second year (April 2024 – March 2025), 2,562 families participated, and 1,468 kg of fiber were harvested. The commercialization process is currently underway, with expected revenue of [REDACTED] based on an estimated price of USD [REDACTED] per kilogram of fiber, resulting in an estimated average income of USD [REDACTED] per family—47% higher than in the first year.

#### **0.3 ACOFIVB governance capacity is consolidated by Year 2**

The governance capacity of ACOFIVB has been strengthened through the updating of the legal documentation of the Regional Associations of Vicuña Management Communities (ARCMVs) affiliated with ACOFIVB. All necessary documents have been developed for the establishment of the [National Association of Vicuña Managers of Bolivia \(ANMVB\)](#), which is intended to replace ACOFIVB—an ad hoc association originally created to facilitate the collection and commercialization of vicuña fiber. All required documentation for obtaining legal status has been [submitted](#). However, this is a bureaucratic process that takes time and is being closely followed until completion. Once finalized, it will consolidate the governance structure of the vicuña management communities within the framework of the newly formed ANMVB. Key management instruments have also been updated, including the National Vicuña Management Plan, the Technical Guidelines for Vicuña Management, the Regulation for Vicuña Fiber Commercialization, and the Vicuña Management Guide, among others.

### 3.3 Monitoring of assumptions

#### **Changes in government authorities do not hinder coordination for the legal consolidation of ACOFIVB and its regional organizations.**

During the project, there were several changes in authorities, especially within the leadership of the Associations and communities managing vicuñas. However, the new leaders assumed their responsibilities with great commitment to advance and ensure the continuity of the project. Naturally, an orientation was necessary to help them fully understand the scope of the initiative and what could—and could not—be expected from it.

#### **The vicuña fiber market is not affected by the global recession or other macroeconomic disruptions.**

There were impacts on fiber prices and purchasing demand due to a conflict involving the Italian company Loro Piana—the world's most significant buyer of vicuña fiber—and the commercialization of fiber with communities in neighboring Peru, following an [investigation published by Bloomberg](#). Additionally, [local artisans presented observations to the auction](#) and this delayed fiber sales. Nonetheless, the commercialization model established in Bolivia, the legal standing and legitimacy of ACOFIVB, and the strong social support for the sustainable use and trade of vicuña fiber in Bolivia enabled the sales to proceed without major disruptions.

#### **Political conflicts do not prevent travel across the Bolivian Altiplano.**

During the project's implementation, frequent political and social conflicts occurred at the national level, along with fuel shortages, inflation, and a lack of foreign currency. All these factors created difficulties in carrying out scheduled activities, causing delays in local coordination and implementation. Adaptive revision of the timelines in coordination with ACOFIVB, national and local authorities, and the vicuña managers allowed the project to continue.

#### **The economic crisis and increase in illegal vicuña hunting do not threaten the implementation of the national legal and sustainable vicuña management program.**

Planned activities were carried out, although adjustments to the schedule and additional efforts from the technical team and partners were required to meet all objectives. Illegal hunting occurs mainly outside managed and conserved areas and poses a threat to vicuña populations. However, all stakeholders involved in vicuña use are working to expand management zones and reduce areas most affected by poaching. Importantly, recent censuses do not indicate a significant impact of illegal hunting on vicuña populations.

## 4 Contribution to Darwin Initiative Programme Objectives

### 4.1 Project support to the Conventions, Treaties or Agreements

This project contributes both directly and indirectly to the fulfilment of national regulations and international agreements, as all activities respect and adhere to the obligations, standards, and agreements established at both national and international levels related to the conservation and sustainable use of vicuñas and their habitat. For example:

- **Nagoya Protocol on Access and Benefit-Sharing (ABS):** by supporting Indigenous ownership and the fair, equitable, and sustainable use of a wild species for the benefit of the local community.
- **CITES:** through the sustainable management and use of vicuña fiber, supporting the protection and conservation of an important wild vicuña population listed in Appendix II of CITES, and ensuring that fiber commercialization is conducted with the proper authorizations issued by the CITES authority for that purpose.
- **Ramsar Convention:** by monitoring peatlands (fragile and strategic ecosystems in the high Andes), grasslands, and their water sources, promoting the protection and



conservation of habitats where vicuñas coexist with domestic species belonging to local communities and other wildlife species.

These different management guides produced and approved by the communities, are essential for the sustainable use and conservation of vicuñas and have already been formally submitted by ACOFIVB to the Vice Ministry of Environment, Biodiversity, Climate Change, and Forest Development for review and formal approval. Altogether, these actions directly support Bolivia's national vicuña management and conservation program. They also serve as a foundational basis for implementing species conservation strategies and actions that benefit the local population, aligned with Supreme Decree 0385, which establishes the Sustainable Vicuña Management Program in coherence with the National Biodiversity Strategy.

#### **4.2 Project support to biodiversity conservation and multidimensional poverty reduction**

The project contributes to biodiversity conservation at the national level by strengthening the capacity of the National Association of Vicuña Managers (ANMVB), through regional associations and vicuña management communities, to improve the management and conservation practices of vicuñas and their habitat, with an emphasis on animal welfare. This improvement is measured through the monitoring of vicuña populations (estimates or censuses) and the monitoring of biodiversity associated with peatlands, water sources, and grasslands that make up the vicuña habitat in the Bolivian Altiplano.

These efforts include the development of regulations, the implementation of field schools on population censuses, capture, shearing, disease surveillance, and fiber selection, as well as habitat monitoring with an emphasis on key peatlands for biodiversity within highland grasslands.

By increasing the benefits for more than 5,500 Indigenous families and improving surveillance capacity over more than 3 million hectares of vicuña habitat, the project significantly contributes to biodiversity conservation and sustainable management practices. Furthermore, the overlap of various vicuña management areas with national or subnational protected areas helps strengthen the governance and conservation of those protected areas. In some cases, the establishment of community-managed areas enhances and reinforces connectivity between protected areas and neighbouring Indigenous lands, supporting the application of better ecosystem conservation practices. These efforts have been recognized in Bolivia by the XXV Meeting of the Vicuña Convention as *Other Effective Area-Based Conservation Measures (OECMs)* contributing to Target 3 of the Convention on Biological Diversity (CBD).

The project has had an important impact on human development and well-being, particularly in poverty reduction, in the following ways:

##### **Increased Livelihood Opportunities:**

By improving the governance capacity of the National Association of Vicuña Managers and supporting sustainable management practices of vicuñas and their habitat, the project creates additional livelihood opportunities for Indigenous households involved in vicuña management. This contributes to poverty reduction by diversifying income sources and enhancing the economic resilience of local communities.

##### **Training for Indigenous Communities:**

Through the National Association and the Regional Associations, the project empowers Indigenous communities by involving them in decision-making processes and providing them with training and support in vicuña management practices. This empowerment promotes greater self-sufficiency and autonomy for future management cycles and generations—both essential elements for long-term poverty reduction.

**Income Generation:**

The sale and commercialization of vicuña fiber, along with the improvement of management practices with an emphasis on animal and social welfare, directly contribute to increasing household income. This income boost has a significant positive impact on poverty reduction among local Indigenous communities.

**Capacity Building and Governance Development:**

The project strengthens the governance capacity of key organizations such as ACOFIVB and supports the creation of the National Association of Vicuña Managers of Bolivia (ANMVB), which evolves beyond ACOFIVB to represent vicuña managers holistically—not just as a body responsible for fiber commercialization. By improving governance structures and capacities, the project enhances the effectiveness and efficiency of vicuña management initiatives, ultimately yielding better outcomes for Indigenous communities. This supports sustainable development and poverty reduction by ensuring that resources obtained and managed are used effectively and transparently for the benefit of the intended populations.

**Protection and Conservation of the Vicuña Resource:**

The project contributes to protecting, restoring, and promoting the sustainable use of the species and the local terrestrial ecosystems of the communities, while addressing desertification and biodiversity loss. It directly supports the monitoring, conservation, and sustainable use of wetlands (strategic and fragile ecosystems in the high Andean region), grasslands, and water sources, as well as the protection, conservation, and sustainable use of vicuñas—ensuring long-term viability of the resource.

The project also contributes to the overarching goal to **"End poverty in all its forms everywhere"**, by directly supporting the **improvement and diversification of Indigenous communities' livelihoods**, and specifically contributes to the following SDG targets:

- **By 2030, ensure equal rights to economic resources**, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technologies, and financial services, including microfinance.
- **By 2030, build the resilience of the poor and those in vulnerable situations**, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters.

**4.3 Gender Equality and Social Inclusion (GESI)**

|  |   |
|--|---|
| Please quantify the proportion of women on the Project Board <sup>1</sup> .  | In the Project team, there is a participation of 43% women (including technical staff, consultants and administrative support).                               |
| Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women <sup>2</sup> . | WCS Bolivia is led by a woman, and in the Regional Associations of Vicuña Managers, 5 out of the 12 organizations include women on their boards of directors. |

<sup>1</sup> A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

<sup>2</sup> Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

| GESI Scale               | Description  | Put X where you think your project is on the scale |
|--------------------------|--|--|
| <b>Not yet sensitive</b> | The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach   |  |
| <b>Sensitive</b>         | The GESI context has been considered, and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups, and the project will not contribute to or create further inequalities. |  |
| <b>Empowering</b>        | The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups  | X  |
| <b>Transformative</b>    | The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change   |  |

The project involves joint activities with all stakeholders engaged in vicuña management within the intervention territory. During communal activities, active participation from both women and men has always been encouraged, as fleece handling require fine manipulation which women often perform with greater skill. Vicuña management activities are characterized by their inclusivity, offering opportunities for participation across all generations, from children to elders. The regulations promote full community engagement and the revival of ancestral communal practices without discrimination based on age, social or economic status, or gender.

#### 4.4 Transfer of knowledge

Through the implementation of the project, support was provided for the updating and development of technical and management instruments for vicuña management and biodiversity monitoring, including: the [National Vicuña Management Plan 2025–2029](#), [Technical Guidelines for Vicuña Management](#), [Vicuña Fiber Commercialization Regulations](#), [Biodiversity Monitoring Manual for Vicuña Habitat](#), [Protocol for Treating Vicuñas with Mange](#), and the Vicuña Management and Shearing [Calendar](#) and [Guide](#). These instruments consolidate the socio-community model for the sustainable use and conservation of vicuñas and strengthen the generation of direct economic income for local communities. This model can be replicable in other countries, if vicuñas are managed and sheared in the wild.

#### 4.5 Capacity building

As part of the International Year of Camelids (2024), several events such as symposia, workshops, and meetings were held, in which ACOFIVB was invited to participate, showcase, and share the successful experience of vicuña conservation and sustainable use under the socio-community-based model applied in Bolivia. Among these events, the following can be mentioned:

On September 16–17, 2024, the 1st Regional Meeting on South American Camelids was held in La Paz, Bolivia, under the theme “*Nurturing Life, Preserving the Future.*” The event gathered representatives from Bolivia, Chile, Argentina, Ecuador, and Peru, and was inaugurated by Luis Arce, President of the Plurinational State of Bolivia, as well as Qu Dongyu, Director-General of the Food and Agriculture Organization (FAO) of the United Nations. Participants included members of the ACOFIVB Board of Directors (Oscar Alejo, President of ACOFIVB; Pedro

Ancari, Treasurer of ACOFIVB; and Daniel Maydana, ACOFIVB Technician), along with representatives from the DGBAP, including Director Omar Freddy Osco and technical staff Eleuterio Maraza, Waldo Colque, and Moisés Casilla. Technical personnel from SERNAP also took part, as well as llama and alpaca producer organizations (such as ANAPCA, ADEPCA, and others).

On December 5, 2024, the First International Symposium on Wild Camelids was held in La Paz, Bolivia, bringing together experts from Bolivia, Peru, and Argentina to discuss the conservation and sustainable use of emblematic species like the vicuña and the guanaco. Bolivia was recognized for its progress in vicuña management, the commercialization of vicuña fiber, and the low incidence of mange. The event was inaugurated by the Vice Minister of Environment and Water, Franz Álvaro Quispe O. Attendees included members of the ACOFIVB Board (Oscar Alejo, President of ACOFIVB; Pedro Ancari, Treasurer; and several leaders of vicuña management communities across the country), the DGBAP Director and technical staff (Eleuterio Maraza, Waldo Colque, and Moisés Casilla), llama and alpaca producer organizations (ANAPCA, ADEPCA), as well as representatives from public and private universities.

On December 13, 2024, the Ministry of Foreign Affairs of the Plurinational State of Bolivia organized a high-level meeting of experts, producers, and authorities from Argentina, Peru, Chile, and Bolivia, titled *“Toward the Decade of Camelids: Promoting Collaboration Among Countries.”* The aim was to develop joint strategies to strengthen the sustainable development of camelids in South America beyond 2024, through a proposed South–South Cooperation Agenda based on the strengths and needs of Bolivia, Peru, Argentina, and Chile. The event included llama and alpaca producers, members of the ACOFIVB Board, technical staff from DGBAP, MDRyT, SERNAP, universities, and other stakeholders.

## **5 Monitoring and evaluation**

The implementation of the project’s monitoring and evaluation plan has been continuously supervised by the project coordinator, with support from the technical team and the participation of the ACOFIVB Board of Directors. It was carried out in accordance with what was established in the project proposal document. Information about the project has been regularly communicated to ACOFIVB. The implementation of activities has been conducted in close coordination. All activities carried out within the framework of the project were reported to the Government of Bolivia through the General Directorate of Biodiversity and Protected Areas (DGBAP), as the competent national authority. The achievement of results is evidenced by the application of several instruments that support the conservation and sustainable use of the vicuña, including: The National Vicuña Management Plan, updated Technical Guidelines for Vicuña Management, Fiber Commercialization Regulation, Bylaws and Internal Regulations of the National Association, Monitoring Manual for Biodiversity in Vicuña Habitat, and Vicuña Management Calendar and Guide.

## **6 Lessons learnt**

One of the project’s most notable strengths was the consistent and multi-level coordination established with the ACOFIVB Board of Directors, the Regional Vicuña Management Associations (ARCMVs), and the Community Vicuña Management groups (CMVs). This coordination framework effectively bridged national, regional, and local levels, ensuring widespread engagement and ownership. The collaboration was further strengthened through institutional alignment with national authorities, particularly the General Directorate of Biodiversity and Protected Areas (DGBAP), and SERNAP in the case of protected areas. In addition, departmental and municipal governments played a vital role in operational activities such as population censuses, herding, capture, and shearing within their respective jurisdictions.

This experience highlights a critical lesson: the need to clearly define, respect, and operationalize the distinct roles of local rights holders and government institutions. Doing so not only reinforces legitimacy and trust but also fosters more sustainable and inclusive conservation outcomes.

## **7 Actions taken in response to Annual Report reviews**

The annual report highlighted the need to consolidate actions related to Outputs 3 (Field Schools on peatland and wildlife monitoring) and Output 4 (Vicuña regulations and revolving fund). Important advances have been secured for Output 3 and Output 4 was achieved partially. Between November 2024 and February 2025, biodiversity monitoring training was conducted using the iNaturalist platform, with an emphasis on bofedales (peatland wetlands) as critical vicuña habitats. This training reached 298 participants (32% women), contributing to 3,800+ biodiversity records and the identification of over 650 species. Activities actively promoted the participation of women and multiple generations, especially in tasks requiring care and skill (e.g., fleece selection and biodiversity monitoring). Capture and shearing events reached 6,701 participants (47% women), reflecting the inclusive nature of vicuña management practices.

In terms of advances linked to Output 4, there have been important institutional governance and legal Advances. Drafting and submission of legal documents for the National Association of Vicuña Managers of Bolivia (ANMVB), intended to replace the transitional ACOFIVB structure. Additionally, several management instruments were established, such as: The National Vicuña Management Plan (2025–2029), Updated Technical Guidelines and Commercialization Regulation, Statute and Internal Regulations of ANMVB, Vicuña Management Guide and Calendar, Biodiversity Monitoring Manual. A first-ever regulation on vicuña fiber commercialization was developed with ACOFIVB and CMV participation to improve transparency and accountability in the fiber market. While legal documents for ANMVB were submitted, legal recognition is still pending at the close of the project due to the bureaucratic process.

## **8 Sustainability and legacy**

The project has significantly raised the national and regional profile of community-based vicuña management in Bolivia. There is growing interest in this socio-community model from other Andean countries such as Peru and Argentina, where similar highland ecosystems exist. At the international level, demand for Bolivian vicuña fiber has increased due to the ethically and ecologically sound practices promoted by the project, which align well with corporate commitments to social and environmental responsibility.

The project has contributed directly to building technical and organizational capacity among local communities and institutions. One of the most significant achievements has been the legal consolidation of the ANMVB, a milestone reached after 17 years of attempts by ACOFIVB. The project supported this process by updating the legal documentation of local associations (ARCMVs) and drafting the foundational documents for the national association. This represents a major step forward in strengthening governance and autonomy among vicuña-managing communities. Capacity has also been strengthened at all levels, from national to local, through the training of community members in animal welfare, mechanized shearing, and proper fleece handling, in compliance with national technical guidelines. This enhances the long-term sustainability and professionalism of the sector.

The tools and institutions established during the project are designed for long-term use. The ANMVB, now fully constituted, is positioned to take over key governance and coordination roles, previously held only by ACOFIVB, which was limited to commercial functions. The new national body enhances the sector's organizational resilience and its ability to advocate for and implement sustainable practices.



Moreover, the development and updating of critical technical tools provide enduring resources for decision-makers to improve animal welfare, health, and habitat management. The focus on local capacity, institutional strengthening, and regulatory tools ensures that results will persist beyond the life of the project. No significant changes to the proposed sustainability outcomes have been necessary. The legacy of the project is multi-dimensional:

- Social: Enhanced community organization, legal recognition, and local empowerment.
- Economic: Improved fiber quality and access to responsible markets, leading to increased income.
- Ecological: Strengthened management of vicuña populations and their habitat through science-based tools and monitoring.
- Technical: A comprehensive suite of national guidelines and protocols to ensure best practices are institutionalized.

With the conclusion of Darwin Initiative funding, key staff have transitioned to roles within WCS Bolivia, partner NGOs, and the newly formed ANMVB, ensuring continuity. Equipment and training materials remain with local associations and communities, further supporting local ownership and autonomy in vicuña management.

## **9 Darwin Initiative identity**

At the beginning of the project's implementation, the project and the Darwin Initiative were presented to ACOFIVB, the Regional Associations and Vicuña-Managing Communities, as well as representatives from Departmental and Municipal Autonomous Governments and the Ministry of Environment and Water, through DGBAP, as the national authority. The identity of the Darwin Initiative has been acknowledged in all communications, publications, press releases, scientific articles, and materials related to vicuña management activities, with its logo and branding included where appropriate.

The Darwin logo has been featured in all supporting documents used in field schools, training sessions, result presentations, national meetings, international symposia, discussions, field reports, and workshop reports, among others, conducted as part of the project's activities.

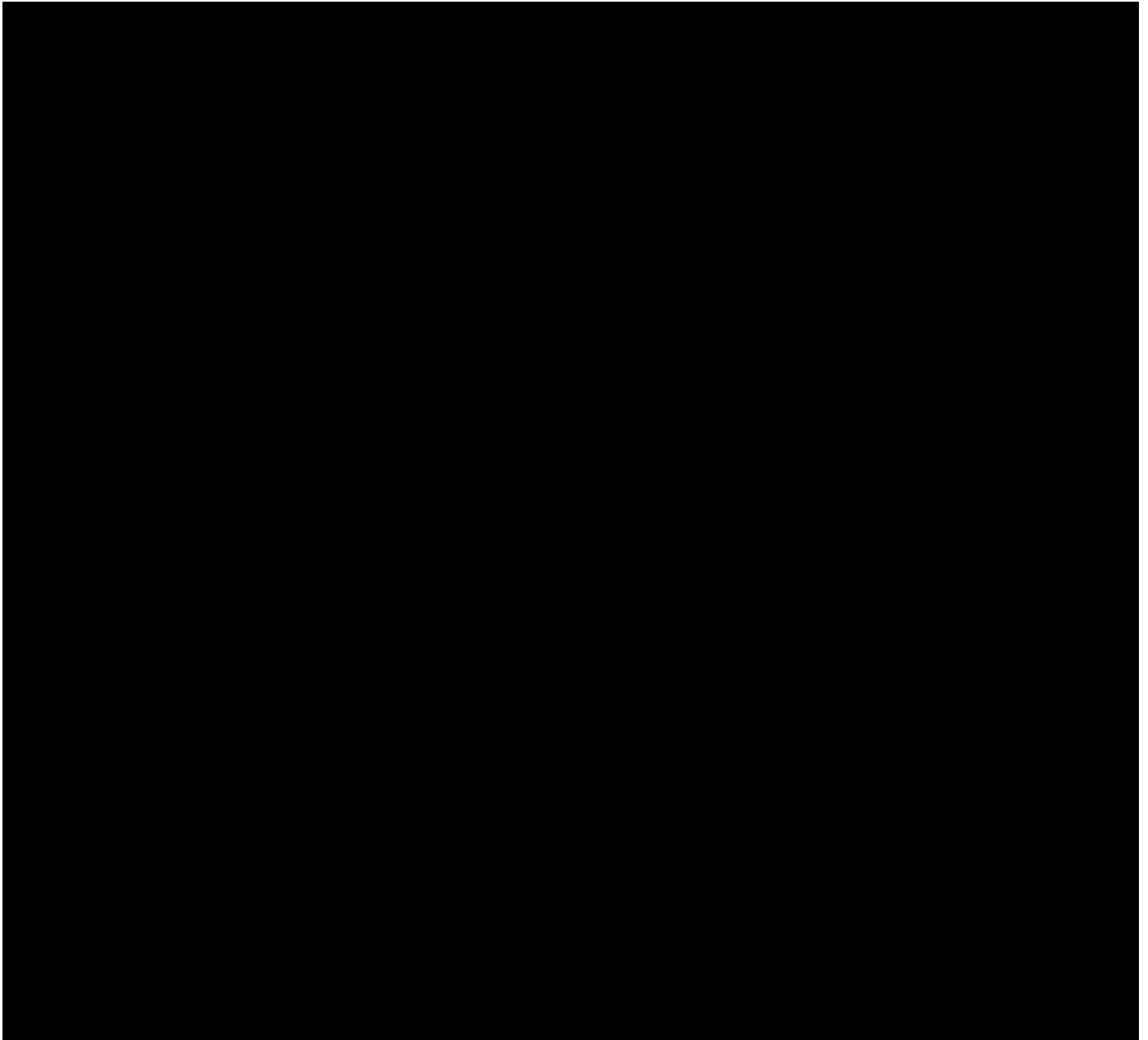
Darwin Initiative funding is presented as an independent project in WCS reports to national authorities. As a result, the authorities from the General Directorate of Biodiversity and Protected Areas (DGBAP), along with our partners ACOFIVB and their ARCMVs, are well acquainted with this project and its funding source.

## **10 Risk Management**

The change in leadership within some regional associations and vicuña-managing communities required time and effort to induct new board members into the project's activities and restart work, which to some extent caused delays in bringing the new leadership up to speed and securing their commitment to implement the proposed actions. However, we do not consider that this significantly affected the overall execution of the project.

On the other hand, one of the main challenges faced in the last year of project implementation has been the shortage of fuel, the scarcity of U.S. dollars, and the uncontrolled increase in prices across the country. Additionally, frequent social conflicts, often involving road blockades as a form of protest, have posed operational challenges. Nonetheless, preventive measures were taken in advance to ensure that, although some activities had to be rescheduled or delayed, these issues did not cause major disruption to the development of the project.

## **11 Safeguarding**



## **12 Finance and administration**

## 12.1 Project expenditure

| Project spend (indicative) since last Annual Report | 2024/25 Grant (£) | 2024/25 Total actual Darwin Initiative Costs (£) | Variance % | Comments (please explain significant variances) |
|---|-------------------|--|------------|---|
| Staff costs (see below)                             |                   |  |            |   |
| Consultancy costs                                   |                   |  |            |   |
| Overhead Costs                                      |                   |  |            |   |
| Travel and subsistence                              |                   |  |            |   |
| Operating Costs                                     |                   |  |            |   |
| Capital items (see below)                           |                   |  |            |   |
| Others (see below)                                  |                   |  |            |   |
| <b>TOTAL</b>  | 101,011           | 101,011  | 0          |   |

| Staff employed (Name and position)          | Cost (£) |
|---|----------|
| H. Alberto - Vicuña specialist              |          |
| J. Luis Mollericona - Wildlife veterinarian |          |
| K. Mancilla - Administrative support        |          |
| M. Cecilia Flores - Administrative support  |          |
| <b>TOTAL</b>                                |          |

| Capital items – description | Capital items – cost (£) |
|-----------------------------|--------------------------|
| Electrical shearing tools   |                          |
| <b>TOTAL</b>                |                          |

| Other items – description | Other items – cost (£) |
|---------------------------|------------------------|
| Office materials          |                        |
| Vehicle maintenance       |                        |
| Document Printing         |                        |
| <b>TOTAL</b>              |                        |

## 12.2 Additional funds or in-kind contributions secured

| Matched funding leveraged by the partners to deliver the project | Total (£) |
|--|-----------|
| Staff costs  |           |
| Overhead costs   |           |
| Travel & Subsistence   |           |
| Other costs  |           |
|  |           |
| <b>TOTAL</b>   |           |

| Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project | Total (£) |
|--|-----------|
| <b>TOTAL</b>   |           |

### 12.3 Value for Money

The project demonstrated value for money, delivering meaningful and measurable outcomes through a cost-effective approach. With a total budget of [REDACTED] the project reached 7,160 families, translating to just [REDACTED] per family over 24 months. Despite the modest investment, families generated an average of [REDACTED] each through vicuña fiber sales in 2024, representing a threefold return on the original investment. This shows a highly efficient conversion of inputs into economic benefits for the target communities.

Beyond income generation, the project promoted sustainable management of highland ecosystems, supporting both biodiversity conservation and traditional livelihoods. By aligning economic incentives with environmental stewardship, the project strengthened the long-term viability of community-based natural resource management.

## 13 Other comments on progress not covered elsewhere

The project has also allowed us to support the training of 9 new Bolivian professionals (8 of them women). The students have addressed various topics, including:

- [Prevalence of ectoparasites and endoparasites in vicuñas \(\*\*Vicugna vicugna\*\*\) in the Apolobamba National Integrated Management Natural Area, La Paz, 2023](#)  
*Author: Cinthia Coronel Mamani*
- [Genotoxic risk in vicuña \(\*\*Vicugna vicugna\*\*\) populations exposed to gold mining, 2023](#)  
*Author: Liz Helen Romero Patzi*
- [Identification of gastrointestinal parasites in vicuñas \(\*\*Vicugna vicugna\*\*\) in the Municipality of Colcha K, Potosí Department, 2023](#)  
*Author: Miriam Ochoa Portillo*
- [Determination of external parasites in vicuñas \(\*\*Vicugna vicugna\*\*\) in the Municipality of Colcha K, Potosí Department, 2023](#)  
*Author: Leonor Karen Ochoa Portillo*
- [Hematological values and morphological description of blood cells in wild vicuñas \(\*\*Vicugna vicugna\*\*\) from the departments of La Paz and Potosí, 2024](#)  
*Author: Flavia Judith Huanca Villanueva*
- [Identification of gastrointestinal parasites through coprological analysis of vicuñas \(\*\*Vicugna vicugna\*\*\) in two regions of Bolivia, 2024](#)  
*Author: Jasmin Dayana Mendoza Seckho*
- [Assessment of fiber quality by sex and age in vicuñas \(\*\*Vicugna vicugna\*\*\) in the Regional Association of Colcha K, Potosí Department, 2024](#)  
*Author: Neid Flora Portillo Castro*
- [Identification of gastrointestinal parasites in vicuñas \(\*\*Vicugna vicugna\*\*\) in regional associations of the Oruro Department, 2024](#)  
*Author: Cinthya Linvania Uruño Mamani*

- [Effect of reduced grazing areas on the population dynamics of vicuñas \(\*Vicugna vicugna\*\) in Sajama National Park – Oruro, 2025](#)

Author: Juan José Pérez Ochoa

#### 14 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

One of the most notable accomplishments has been the participatory development and national submission of two critical governance tools: the *National Vicuña Management Plan (2025–2029)* and the *Vicuña Fibre Commercialization Regulation*. These instruments were developed in collaboration with local vicuña-managing communities, regional associations, and consolidated through the National Association of Vicuña Managers of Bolivia (ANMVB), ensuring a bottom-up approach that centers community ownership and traditional knowledge.

The project has significantly contributed to Bolivia's leadership in South American camelid conservation. Through support to ANMVB, Bolivia played a prominent role in international events, including the launch of the *International Year of South American Camelids*, the *1st Regional Meeting on South American Camelids* ("Nurturing life, preserving the future"), and the *First International Symposium on Wild Camelids*, with participation from Argentina, Chile, Ecuador, and Peru. These platforms elevated Bolivia's best practices in sustainable vicuña management, particularly in animal welfare during roundups and shearing, habitat and health monitoring, and population surveillance.

Importantly, the project supported Bolivia's third national vicuña census (2023–2024), which covered over 70% of vicuña territory, including Protected Areas and community-managed zones. The census recorded 118,327 vicuñas, and when extrapolated to include the remaining 30%, it is estimated that Bolivia now hosts approximately 169,000 vicuñas. This represents a remarkable recovery from 33,844 in 1996 and 112,249 in 2009. This growth highlights the success of the community-based management model and the conservation strategies implemented across high Andean ecosystems.

Finally, the project has empowered local talent, supporting the professional training of nine new Bolivian researchers (eight of them women), contributing to gender equity and building national capacity in biodiversity monitoring and camelid health.

These results not only support biodiversity conservation and the implementation of CITES and the Convention on Biological Diversity but also contribute meaningfully to poverty reduction and gender equity in remote Andean communities.

#### Image, Video or Graphic Information:

| File Type<br>(Image /<br>Video /<br>Graphic) | File Name or<br>File Location  | Caption,<br>country and<br>credit                           | Online accounts<br>to be tagged<br>(leave blank if<br>none) | Consent of<br>subjects<br>received<br>(delete as<br>necessary) |
|--|--|---|---|--|
| JPG  | <a href="#">Workshop to update the National Plan for Vicuña Management</a> | Workshop to update the National Plan for Vicuña Management, |   | Yes  |



|     |   |   |  |     |
|-----|---|---|--|-----|
|     |   | Bolivia,<br>H_Alberto@WCS   |  |     |
| JPG | <a href="#">Wild vicuña</a>   | Wild vicuña in<br>Apolobamba,<br>Bolivia,<br>H_Alberto@WCS                                    |  | Yes |
| JPG | <a href="#">Community<br/>based<br/>management of<br/>wild vicuña</a> | Community<br>members herding<br>wild vicuña for<br>shearing, Bolivia,<br>H_Alberto@WCS        |  | Yes |
| JPG | <a href="#">Monitoring of<br/>vicuñas</a>                             | Park guard<br>participating in<br>vicuña census in<br>Apolobamba,<br>Bolivia<br>H_Alberto@WCS |  | Yes |
| JPG | <a href="#">Vicuña portrait</a>                                       | Wild vicuña in<br>Apolobamba,<br>Bolivia. R.<br>Wallace@WCS                                   |  |     |

## Annex 1 Report of progress and achievements against final project indicators of success for the life of the project

| Project summary   | Progress and achievements   |
|---|---|
| <p><b>Outcome</b> Consolidate ACOFIVB capacity to support sustainable and informed management of vicuña, increasing benefits to 5500 Indigenous households and monitoring capacity of critical biodiversity habitat within highland pastures over 12M hectares.</p> |   |
| <p>Outcome indicator 0.1</p> <p>Regulations of ACOFIVB include monitoring of critical biodiversity habitat within 12M hectares of highland pastures.</p>  | <p>A system is in place for <a href="#">community based monitoring of wetlands (peatlands), grasslands, and water sources, as well as for the biodiversity</a> of indicator species of fauna and flora associated with vicuña habitat. Representative peatlands were identified in each Regional Association of Vicuña-Managing Communities (ARCMV) for the implementation of this monitoring.</p> <p>At the national level, the <a href="#">vicuña distribution area</a> covers approximately 12 million hectares of land with potential for sustainable use and monitoring. Of this area, more than 3 million <a href="#">hectares are under vicuña management</a> and protection, encompassing 12 Regional Associations and 5 Protected Areas.</p> |
| <p>Outcome indicator 0.2.</p> <p>Income of 5500 vicuña herder households increases by 30% by Year 2, from a baseline of USD119 a year.</p>  | <p>With the implementation of the project, in the first year, <a href="#">2,134 kg of fiber were harvested and marketed</a>, generating an income of USD 837,256, with the participation of 7,160 families (30%) more than in previous periods resulting in an average distribution of USD 117 per family.</p> <p>In the second year, <a href="#">2,562 families participated, 1,468 kg of fiber were harvested</a>, and an income of USD 576,924 is expected by marketing at USD 393 per kilogram of fiber, generating an average income of USD 225 per family, or a 47% increase over the baseline.</p>   |
| <p>Outcome indicator 0.3.</p> <p>ACOFIVB governance capacity is consolidated by Year 2.</p>   | <p>The governance capacity of ACOFIVB's board has been strengthened through the updating of the legal documentation of the Regional Associations of Vicuña Management Communities (ARCMV) affiliated with ACOFIVB. The <a href="#">National Association of Vicuña Managers</a> has been established, and all the necessary documentation for the granting of its legal status has been <a href="#">submitted</a>, which will consolidate the governance capacity of the vicuña-</p>   |

|  |   |
|--|---|
|  | <p>managing communities within the framework of the formation of the ANMVB.</p> <p>The management instruments for vicuña management have been updated, including the <a href="#">National Vicuña Management Plan</a>, the <a href="#">Technical Guidelines for Vicuña Management</a>, the <a href="#">Commercialization Regulations</a>, the <a href="#">Vicuña Management Guide</a>, among others.</p>   |
| <b>Output 1</b><br>Legal consolidation of ACOFIVB and their regional associations.   |   |
| Output indicator 1.1 Internal regulations of 11 regional associations developed and approved by Yr 1.  | The legal documentation has been collected and updated (notarized copy of the Legal Status, Organizational Statute and Internal Regulations, Notarized Power of Attorney for Legal Representation, and the ID card of the Legal Representative) for all the Regional Associations of Vicuña Management Communities (ARCMV) affiliated with ACOFIVB. Based on this, the <a href="#">National Association of Vicuña Managers of Bolivia (ANMVB)</a> has been established.   |
| Output indicator 1.2.ACOFIVB and 11 regional associations are legally established by Yr 2.   | The <a href="#">constitution</a> , <a href="#">board election</a> , approval of the <a href="#">Organizational Statute</a> , and Internal Regulations of the National Association of Vicuña Managers of Bolivia (ANMVB) have all been approved. These documents were submitted for notarization, granting them legal validity. Subsequently, a formal request for the recognition of ANMVB's legal status was drafted and <a href="#">submitted to the Vice Ministry of Autonomies</a> for review and the corresponding granting of legal status. |
| <b>Output 2.</b><br>Field schools implemented by ACOFIVB with regional associations on best practices for animal welfare, population census, capture, mechanical shearing, disease surveillance, fiber selection, fiber collection and sale. |   |
| Output indicator 2.1.<br>Eleven regional associations participate in field schools on vicuña census.   | <a href="#">A total of 23 field schools</a> and technical support activities were conducted for vicuña population estimation in 12 Regional Associations of Vicuña-Managing Communities (ARCMV) — Sud Lípez, Colcha K, Tomave, Villazón, Quri Qrwa, Quri Wari del Sur, Carangas, Wila Khollo, Calacoto,   |

|   |   |
|---|---|
|   | <p>Malla, Apolobamba, and Altamachi — along with 3 Vicuña-Managing Communities (CMV) — Quebrada Honda, Pulario, and San Andrés de Machaca — and 5 National Protected Areas — Eduardo Avaroa National Flora and Fauna Reserve (RNFA), Cordillera de Sama Biological Reserve (RB), El Cardón AMI National Park (PN AMI), Sajama National Park (PN), and Apolobamba ANMIN, which is also an ARCMV. These represent all vicuña management and conservation areas in the country.</p> <p>As a result, 916 people participated in the training courses (30% women and 70% men) and 1,390 people participated in the census activity (26% women and 74% men).</p>  |
| <p>Output indicator 2.2.</p> <p>Eleven regional associations participate in field schools on vicuña capture, visual disease surveillance and mechanical shearing.</p> | <p>Twelve regional associations participated in <a href="#">three field schools conducted</a> in Oruro, Uyuni (Potosí), and El Alto (La Paz) to reinforce the application of the "Technical Guidelines for Sustainable Utilization of Vicuñas", especially regarding herding, capture, and shearing of vicuñas, fleece management, health, and animal welfare in general.</p> <p>Based on the experience gained through field schools and the training received, during the 2024 vicuña fiber harvesting season (September 1 to December 15), 164 capture and shearing events were conducted in 12 ARCMVs and their affiliated CMVs, out of the <a href="#">271 events requested and approved by the National Biodiversity Authority</a>. Two technical teams were formed to provide on-site technical assistance and reinforce training for CMVs and ARCMVs during the herding, capture, and shearing of vicuñas. Between 2 and 3 field schools were conducted in each ARCMV.</p> <p>At the national level, the potential capture population in designated sites was 21,035 vicuñas, of which 10,534 were captured and 7,899 were sheared (representing 75% of the captured vicuñas). Among these, 3,984 vicuñas (50%) were sheared using manual scissors, and 3,915 (50%) using electric shears, resulting in a total of <a href="#">1,639.65 kilograms of raw vicuña fiber</a>. After selection to remove coarse hairs and impurities, 1,285.95 kilograms of selected vicuña fiber (with added value) were prepared for commercialization, and 182.84 kilograms remain in the selection process.</p> |

|  |  |
|--|--|
|  | <p>Social participation in the 164 events of herding, capture, and shearing involved 6,701 people (2,562 families), including 3,557 men (53%) and 3,144 women (47%).</p> <p>Throughout 2024, <a href="#">health monitoring</a> continued in vicuña populations across 12 Regional Associations of Vicuña-Managing Communities (ARCMVs) — Altamachi, Calacoto, Malla, Carangas, Wila Khollo, Quri Wari del Sur, Quri Qarwa, Colcha K, Tomave, Sud López, Villazón — and the CMV Yurita Ucumasi. The results showed a reduction in mange prevalence from 5% in 2022 to 1.7% in 2024, based on evaluations of more than 2,460 vicuñas.</p> <p>This information has contributed to strengthening vicuña management through the implementation of <a href="#">technical guidelines, animal welfare and care protocols for vicuñas with mange</a> during the capture, shearing, and release processes in Bolivian communities.</p> |
| <p>Output indicator 2.3.</p> <p>Eleven regional associations, 1,625 men and 875 (35%) women participate in field schools on fiber selection and fiber collection and storage.</p>  | <p>Two teams were organized to provide technical assistance and reinforce on-site training to the CMV and ARCMV during herding, captures, and shearing of vicuñas. Between 2 to 3 field schools were held in each ARCMV. In the 164 events of herding, capture, and shearing involved 6,701 people (2,562 families), including 3,557 men (53%) and 3,144 women (47%).</p>  |
| <p><b>Output 3.</b></p> <p>Field schools implemented by ACOFIVB and regional organizations on peatland and wildlife monitoring</p>   |  |
| <p>Output indicator 3.1.</p> <p>Eleven regional associations participate in field schools on conservation and monitoring of highland peatlands and associated wildlife species</p> | <p>In 2023 and 2024, <a href="#">participatory monitoring was conducted</a> at 27 sites across peatlands across the twelve various regional associations to evaluate their condition and initiate regular monitoring. The focus was to assess the relationship of these habitats with vicuñas, which rely on them for food and water.</p>  |
| <p>Output indicator 3.2.</p> <p>Eleven regional organizations map priority peatlands and identify indicator species to be monitored.</p>   | <p><a href="#">Of the twelve ARCMVs in Bolivia, nine have peatlands, which have been identified and mapped</a> for each Regional Association as well as for the Protected Areas. The remaining ARCMV's did not have any peatlands.</p>   |



|  |  |
|--|--|
| <p>Output indicator 3.3.</p> <p>Four monitoring reports on size and water level of priority peatlands.</p> | <p>Based on the training and capacity-building activities for monitoring and follow-up of vicuña habitat, the following reports have been produced:</p> <ul style="list-style-type: none"> <li>• <a href="#">Methodology for monitoring peatlands (high-Andean peatlands)</a></li> <li>• <a href="#">Results of the monitoring of peatlands and their water sources during the wet season</a></li> <li>• <a href="#">Training on monitoring biodiversity indicator species in vicuña habitat</a></li> <li>• <a href="#">Results of biodiversity monitoring associated with peatlands</a></li> <li>• <a href="#">Results of the monitoring of peatlands and their water sources during the dry season</a></li> <li>• <a href="#">Final report on the status of peatlands in the Regional Associations of Vicuña-Managing Communities</a></li> </ul>   |
| <p>Output indicator 3.4.</p> <p>At least 6 local schools monitor indicator species using iNaturalist.</p>  | <p>In dialogue with the vicuña managers indicator species are being monitored at the community level, and not through schools. As part of the efforts to conserve the vicuña in Bolivia, participatory <a href="#">biodiversity monitoring</a> was carried out in peatlands, using a citizen science and environmental education approach through the iNaturalist platform. Community monitors recorded the biodiversity observed in their territories. The process included 9 workshops, field schools, <a href="#">and training sessions on monitoring</a>, along with practical field activities. <a href="#">Key species</a> for monitoring were identified, and <a href="#">11 projects were created on iNaturalist</a> under the theme “Biodiversity in Mountain Peatlands,” enabling monitoring within each ARCMV. To date, these efforts have resulted in over 3,800 biodiversity records, more than 650 identified species, and 268 local monitors.</p> |
| <p><b>Output 4.</b></p> <p>Vicuña regulations reviewed by ACOFIVB and revolving fund established</p>       |  |

|  |   |
|--|---|
| <p>Output indicator 4.1.</p> <p>Participatory review of current regulations and inputs for a manual of functions and administrative procedures with regional associations.</p> | <p>In coordination with ACOFIVB, an evaluation <a href="#">of the current distribution and investment of resources from vicuña</a> shearing and the bottlenecks or limitations for reinvesting these resources into the management activity has been carried out, and alternatives have been identified and proposed. This diagnosis informed the update of the <a href="#">Vicuña National Management Plan 2025-2029</a>.</p>  |
| <p>Output indicator 4.2.</p> <p>Adjusted regulations and establishment of a revolving fund with agreement of regional associations.</p>  | <p>In coordination with ACOFIVB and with the participation of vicuña-managing communities, the first <a href="#">vicuña fiber commercialization regulation</a> has been developed, which will guide the process of collection and marketing of vicuña fiber. Additionally, an internal regulation and organizational statute, approved by the communities, are in place for the operation of the National Association of Vicuña Managers of Bolivia. However, establishment of a revolving fund is pending.</p> |

**Annex 2 Project's full current indicators of success as presented in the application form (unless changes have been agreed)**

| Project summary  | SMART Indicators   | Means of verification  |
|--|--|--|
| <b>Outcome:</b><br>Consolidate ACOFIVB capacity to support sustainable and informed management of vicuña, increasing benefits to 5500 Indigenous households and monitoring capacity of critical biodiversity habitat within highland pastures over 12M hectares. | 0.1 Regulations of ACOFIVB include monitoring of critical biodiversity habitat within 12M hectares of highland pastures.<br>0.2 Income of 5500 vicuña herder households increases by 30% by Year 2, from a baseline of USD119 a year.<br>0.3 ACOFIVB governance capacity is consolidated by Year 2.  | 0.1 ACOFIVB regulations including monitoring responsibilities.<br>0.2 List of beneficiaries amongst vicuña herders, disaggregated by gender.<br>0.3 Exit evaluation of governance capacity.  |
| <b>Output 1</b><br>Legal consolidation of ACOFIVB and their regional associations.   | 1.1 Internal regulations of 11 regional associations developed and approved by Yr 1.<br>1.2 ACOFIVB and 11 regional associations are legally established by Yr 2.  | 1.1 Communal minutes approving internal regulations of regional associations.<br>1.2 Public registry of legal constitution of 11 regional associations and ACOFIVB.  |
| <b>Output 2</b><br>Field schools implemented by ACOFIVB with regional associations on best practices for animal welfare, population census, capture, mechanical shearing, disease surveillance, fiber selection, fiber collection and sale.                      | 2.1 Eleven regional associations participate in field schools on vicuña census.<br>2.2 Eleven regional associations participate in field schools on vicuña capture, visual disease surveillance and mechanical shearing.<br>2.3 Eleven regional associations, 1,625 men and 875 (35%) women participate in field schools on fiber selection and fiber collection and storage.  | 2.1 Training materials and participant lists of field schools, disaggregated by gender.<br>2.2 Training materials and participant lists of field schools disaggregated by gender.<br>2.3 Training materials and participant lists of field schools, disaggregated by gender.           |
| <b>Output 3</b><br>Field schools implemented by ACOFIVB and regional organizations on peatland and wildlife monitoring.  | 3.1 Eleven regional associations participate in field schools on conservation and monitoring of highland peatlands and associated wildlife species.<br>3.2 Eleven regional organizations map priority peatlands and identify indicator species to be monitored.<br>3.3 Four monitoring reports on size and water level of priority peatlands.<br>3.4 At least 6 local schools monitor indicator species using iNaturalist. | 3.1 Training materials and participant lists of field schools disaggregated by gender<br>3.2 Maps of priority peatlands and lists of indicator species for 11 regional organizations.<br>3.3 Monitoring reports of priority peatlands.<br>3.4 Monitoring reports of indicator species. |
| <b>Output 4</b><br>Output 4 Vicuña regulations reviewed by ACOFIVB and revolving fund established  | 4.1 Participatory review of current regulations and inputs for a manual of functions and administrative procedures with regional associations.   | 4.1 Workshop meetings with suggested adjustments to existing regulations and inputs for manual of functions and administrative procedures.   |

|   |   |   |
|---|---|---|
|   | 4.2 Adjusted regulations and establishment of a revolving fund with agreement of regional associations. | 4.2 Reviewed regulations and manual for management of revolving fund. |
| <p><b>Activities</b> (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1.1 Develop internal agreement between ACOFIVB and its 11 regional organizations for the whole process.</p> <p>1.2 Communal workshops with all regional organizations and at least 35% women participants to develop internal regulations.</p> <p>1.3 Transcribe internal regulations in a statute and by-laws format and presented for approval by the regional associations.</p> <p>1.4 Register internal regulations in the Public Registry and legal status for ACOFIVB and 11 regional organizations (Personeria Juridica).</p> <p>1.5 Communication of legal status of ACOFIVB and vicuña management program with biodiversity and law enforcement agencies to increase awareness on the impact of wildlife traffic.</p> <p>2.1 Field schools on vicuña censusing with 11 regional associations.</p> <p>2.2 Field schools on vicuña capture, disease surveillance and mechanical sharing, and evaluation of their implementation with 11 regional associations.</p> <p>2.3 Field Schools on fiber selection and fiber collection and storage; and evaluation of their implementation with 11 regional associations.</p> <p>3.1 Field schools on conservation and monitoring of highland peatlands and associated wildlife species; and evaluation (dry and humid seasons)..</p> <p>3.2 Identify priority peatlands and indicator species to be monitored with each regional association.</p> <p>3.3 Monitor size and water level of priority peatlands at the end of the wet season and end of the dry season.</p> <p>3.4 Support ACOFIVB and regional associations work with local schools and monitor indicator species using iNaturalist .)</p> <p>4.1 Support ACOFIVB develop a bottom-up methodology to evaluate and adjust the current regulations, including benefit distribution to establish a revolving fund.</p> <p>4.2 Regional workshops to review current regulations and provide inputs for a manual of functions and administrative procedures.</p> <p>4.3 Approval by regional organizations of adjustments to regulations and establishment of revolving fund.</p> |   |   |
| <p><b>Important Assumptions</b></p> <p>(Max 100 words):</p> <ul style="list-style-type: none"> <li>• Changes in government authorities do not prevent coordination for legal consolidation of ACOFIVB and its regional organizations.</li> <li>• Vicuña fiber market is not affected by global recession or any other macro-economic disruption.</li> <li>• Political conflicts do not prevent travel across Bolivian highlands.</li> <li>• Economic crisis and increase of illegal hunting of vicuñas do not threaten implementation of the legal and sustainable national vicuña management program.</li> </ul>   |   |   |

**Table 1 Project Standard Indicators**

| DI Indicator number | Name of indicator   | Units  | Disaggregation | Year 1 Total | Year 2 Total | Year 3 Total | Total achieved | Total planned |
|---------------------|---|--------|----------------|--------------|--------------|--------------|----------------|---------------|
| DI-A01              | Number of people in eligible countries who have completed structured and relevant training                  | People | Men            |              |              | 641          | 641            | 60            |
| DI-A01              | Number of people in eligible countries who have completed structured and relevant training                  | People | Women          |              |              | 275          | 275            | 60            |
| DI-B01              | Number of new or improved habitat management plans available and endorsed                                   | Number | New            |              |              | 2            | 2              | 2             |
| DI-B01              | Number of new or improved habitat management plans available and endorsed                                   | Number | Improved       |              |              | 3            | 3              | 3             |
| DI-A03              | Number of local or national organizations with enhanced capability and capacity (12 regional organizations) | Number | Local          |              |              | 12           | 12             | 0             |
| DI-A03              | Number of local or national organizations with enhanced capability and capacity (ACOFIVB)                   | Number | National       |              |              | 1            | 1              | 0             |

**Table 2 Publications**

| Title   | Type<br>(e.g. journals, manual, CDs) | Detail<br>(authors, year)  | Gender of Lead Author | Nationality of Lead Author | Publishers<br>(name, city)              | Available from<br>(e.g. weblink or publisher if not available online)   |
|---|--------------------------------------|--|-----------------------|----------------------------|---|---|
| Protocol for the care of vicuñas ( <i>Vicugna vicugna</i> ) affected by sarcoptic mange during capture, shearing, and release in Bolivian communities | Manual                               | MMAyA, VMABCCGDF, DGBAP, SERNAP, ANMIN Apolobamba, ACOFIV Bolivia y WCS. | N/A                   | Bolivian                   | Wildlife Conservation Society<br>La Paz | <a href="https://bolivia.wcs.org/Portals/14/Veterinarios/MMAyA-WCS2025-ProtocoloVicunaConSarna.pdf?ver=GO7sPvJ4G9WlU51tZ4dldA%3d%3d">https://bolivia.wcs.org/Portals/14/Veterinarios/MMAyA-WCS2025-ProtocoloVicunaConSarna.pdf?ver=GO7sPvJ4G9WlU51tZ4dldA%3d%3d</a> |



| <b>Title</b>  | <b>Type</b><br>(e.g. journals, manual, CDs) | <b>Detail</b><br>(authors, year)  | <b>Gender of Lead Author</b> | <b>Nationality of Lead Author</b> | <b>Publishers</b><br>(name, city)        | <b>Available from</b><br>(e.g. weblink or publisher if not available online)  |
|---|---|---|------------------------------|-----------------------------------|--|---|
|   |   | 2025  |                              |                                   |  |   |
| Hematological profile of wild vicuñas ( <i>Vicugna vicugna</i> ) from the Apolobamba National Natural Integrated Management Area, Bolivia   | Journals                                    | Mollericona-Quispe Jose Luis, Alarcón-Silva Paola, Alberto-Alberto Humber, Coronel-Mamani Cinthia, Alfaro-Flores Adalid, Loayza-Cossio Oscar & Robert Wallace<br>2024 | Male                         | Bolivian                          | Therya Notes<br>Yucatán - México         | <a href="https://doi.org/10.12933/therya_notes-24-148">https://doi.org/10.12933/therya_notes-24-148</a>   |
| Health monitoring and implementation of sanitary and animal welfare actions during the capture, shearing, and release of vicuñas in Bolivia | Summary in Book                             | Mollericona Jose Luis, Alberto Humber, Loayza Oscar, Miranda Guido, & Robert Wallace<br>2024  | Male                         | Bolivian                          | Universidad Nacional Mayor de San Marcos | <a href="https://veterinaria.unmsm.edu.pe/docs/2025/revistas/marzo/Libro_Camelidos_Silvestres_UNMSM_2024.pdf">https://veterinaria.unmsm.edu.pe/docs/2025/revistas/marzo/Libro_Camelidos_Silvestres_UNMSM_2024.pdf</a>           |
| Integrated monitoring in the Regional Association of Vicuña Management  | On line                                     | WCS 2024  | N/A                          | Bolivian                          | WCS web page                             | <a href="https://bolivia.wcs.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=50932&amp;PortalId=14">https://bolivia.wcs.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=50932&amp;PortalId=14</a> |

| <b>Title</b>   | <b>Type</b><br>(e.g. journals, manual, CDs) | <b>Detail</b><br>(authors, year)  | <b>Gender of Lead Author</b> | <b>Nationality of Lead Author</b> | <b>Publishers</b><br>(name, city)       | <b>Available from</b><br>(e.g. weblink or publisher if not available online)  |
|--|---|---|------------------------------|-----------------------------------|---|---|
| Communities of Apolobamba (ARCMV)  |   |   |                              |                                   |   |   |
| Mining expansion may reduce livestock but facilitate vicuñas recovery in tropical Puna of South America. | Journals                                    | Sandoval-Calderon AP, van Kuijk M, Hautier Y, Alberto H. and Verweij PA. 2024 | F                            | Bolivian                          | Front. Conserv. Sci.                    | <a href="https://research-portal.uu.nl/ws/files/235629796/fcsc-05-1405392.pdf">https://research-portal.uu.nl/ws/files/235629796/fcsc-05-1405392.pdf</a>   |
| Calendar for vicuña management   | En line                                     | MMAyA, SERNAP, WCS, ACOFIV (2025)   | N/A                          | Bolivian                          | Wildlife Conservation Society<br>La Paz | <a href="https://bolivia.wcs.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=51713&amp;PortalId=14">https://bolivia.wcs.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=51713&amp;PortalId=14</a>   |
| El Cardón Natural Park and Integrated Management Area conducts the first vicuña census                   | On line                                     | WCS Bolivia 2024  | N/A                          | Bolivian                          | Wildlife Conservation Society<br>La Paz | <a href="https://bolivia.wcs.org/es-es/Recursos-Informativos/Sala-de-noticias/articleType/ArticleView/articleId/22779/El-area-protegida-de-El-Cardon-realiza-su-primer-censo-de-vicunas.aspx">https://bolivia.wcs.org/es-es/Recursos-Informativos/Sala-de-noticias/articleType/ArticleView/articleId/22779/El-area-protegida-de-El-Cardon-realiza-su-primer-censo-de-vicunas.aspx</a>   |
| Workshop for the development of the National Vicuña Management Plan                                      | On Line                                     | ACOFIVB, MMAyA, WCS 2024  | N/A                          | Bolivian                          | Wildlife Conservation Society<br>La Paz | <a href="https://bolivia.wcs.org/es-es/Recursos-Informativos/Sala-de-noticias/articleType/ArticleView/articleId/23396/Taller-para-la-elaboracion-del-Plan-Nacional-de-Manejo-de-la-Vicuna-del-Estado-Plurinacional-de-Bolivia-2024-2029.aspx">https://bolivia.wcs.org/es-es/Recursos-Informativos/Sala-de-noticias/articleType/ArticleView/articleId/23396/Taller-para-la-elaboracion-del-Plan-Nacional-de-Manejo-de-la-Vicuna-del-Estado-Plurinacional-de-Bolivia-2024-2029.aspx</a> |
| International Symposium: Conservation and Sustainable Management   | On Line                                     | ACOFIVB, MMAyA, WCS 2024  | N/A                          | Bolivian                          | Wildlife Conservation Society           | <a href="https://bolivia.wcs.org/es-es/Recursos-Informativos/Sala-de-noticias/articleType/ArticleView/articleId/24031/Simposio-Internacional-Conservacion-y-Manejo-Sostenible-de-la-vicuna-y-el-guanaco.aspx">https://bolivia.wcs.org/es-es/Recursos-Informativos/Sala-de-noticias/articleType/ArticleView/articleId/24031/Simposio-Internacional-Conservacion-y-Manejo-Sostenible-de-la-vicuna-y-el-guanaco.aspx</a>   |

| <b>Title</b>                  | <b>Type</b><br>(e.g. journals, manual, CDs) | <b>Detail</b><br>(authors, year) | <b>Gender of Lead Author</b> | <b>Nationality of Lead Author</b> | <b>Publishers</b><br>(name, city) | <b>Available from</b><br>(e.g. weblink or publisher if not available online) |
|-------------------------------|---|----------------------------------|------------------------------|-----------------------------------|-----------------------------------|--|
| of the Vicuña and the Guanaco |   |                                  |                              |                                   | La Paz                            |  |

## Checklist for submission

|   | Check      |
|---|------------|
| Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the <b>correct template</b> (checking fund, type of report (i.e. Annual or Final), and year) and <b>deleted the blue guidance text</b> before submission?   | <b>Yes</b> |
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| <b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:BCF-Reports@niras.com">BCF-Reports@niras.com</a> about the best way to deliver the report, putting the project number in the Subject line. All supporting material should be submitted in a way that can be accessed and downloaded as one complete package. | <b>No</b>  |
| If you are submitting photos for publicity purposes, <b>do these meet the outlined requirements (see section 14)?</b>   | <b>Yes</b> |
| <b>Have you included means of verification?</b> You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.   | <b>Yes</b> |
| Have you involved your partners in preparation of the report and named the main contributors?   | <b>No</b>  |
| Have you completed the Project Expenditure table fully?   | <b>Yes</b> |
| Do not include claim forms or other communications with this report.  |            |