## **IPSI Case Study Summary Sheet**

Please submit this form along with your case study. We ask that you keep your responses here as concise as possible. This information will be posted on the IPSI website unless otherwise requested. Please inform the IPSI Secretariat if there are any responses you would not like made public.

#### **Basic Information**

Title of case study (should be concise and within approximately 25 words)

South American Camelids as biocultural components in the Andean Altiplano

#### Submitting IPSI member organization(s)

VICAM: Vicuñas, camelidos y ambiente



#### Other contributing organization(s) (IPSI members and/or non-members)

Santa Catalina, Jujuy Province primary school. Aboriginal community of Morritos Universities of Lujan and Jujuy

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National Offiversity of Sajay					
Format of case study (manuscript or audiovisual)	manuscript	Language	english		
Keywords (3-5 key concepts included in the case study)					
Vicuñas, pastures, llamas, environmental education					
Date of submission (or update, if this is an update of an existing case study)					
Web link (of the case study or lead organization if	www.vicam.org.ar				

## Geographical Information

Country (where site(s) or activities described in the case study are located – can be multiple, or even "global")			
Argentina			
Location(s) (within the country or countries – leave blank if specific location(s) cannot be identified)			
NW Jujuy province, Laguna Pozuelos Basin			
Longitude/latitude or Google Maps link (if location is identified)			
Latitud: -21.9461, Longitud: -66.0522 21° 56′ 46″ Sur. 66° 3′ 8″ Oeste			

https://www.google.com/maps/place/Santa+Catalina,+Jujuy/@-21.945713,-66.056946,1346m/data=!3m2!1e3!4b1!4m5!3m4!1s0x940147deb1cafe4f:0x25a8d5f97d8a30e!8m2!3d-21.9464467!4d-66.0514759?hl=es-ES

Ecosystem(s) (please place an "x" in all app
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Forest		Grassland		Agricultural	In-land water		Coastal	
Dryland	Χ	Mountain	Χ	Urban/peri-urban	Other (Please specify)	4000 masl		

#### Socioeconomic and environmental characteristics of the area (within 50 words)

The altiplano is a dryland in high altitude about 4000 meters above sea level. The climate is harsh, windy. The populations of the NW of Argentina, especially those of the high plateau, are of indigenous origin and their productions marginalized with a very small market. More than 40% of the inhabitants are considered "poor" in the official statistics of the country and have their basic needs unsatisfied, a percentage that increases in rural areas

Description of human-nature interactions in the area (land-use, traditional resource management practices etc. – within 50 words)

The Puna ecosystem support one of the most long-lived, culturally distinctive socio ecological systems in the world: Andean pastoralism. This system was based on camelid species until the Spanish conquest in the XVIth century, when European species like sheep, goats, cows and donkeys were introduced. Andean peasants base their subsistence on the herding of domestic animals. Livestock is mainly composed of llamas, sheep and goats. Multispecies pastoralism is especially suitable for facing the harsh conditions of the Puna. The vicuña as a wild camelid could be integrated to the Andean socio-ecological system as a highly-valued source of fiber.

#### Contents

Note: The following fields are used for information about activities described in the case study or the production of the case study itself, and contents may vary depending on the nature of the case study. For example, a case study about on-the-ground activities may include the rationale, objectives etc. for the activities; a case study about a SEPLS-related policy may describe the policymaking process; or a case study describing a SEPLS may address particular practices used there. Please make an effort to fill as many fields as possible.

Status ("ongoing" or "completed") On going

Period (MM/YY to MM/YY)

01/00 to 01/22

Rationale (why activities or policies described, or information shared in the case study are needed – within 50 words)

A sustainable pastoralist economy with complementary use of vicuñas by local communities implies the conservation of the habitat and wild flora and fauna. The Argentinean Puna is a dryland in which water and natural vegetation primary productivity is concentrated on patches like primary basins, high valleys and wetlands. Carrying capacity is variable and is influenced by climate change.

Objectives (goals of activities or policies described, or of producing the case study – within 50 words)

To coproduce with local communities an evidence-based resource management model, towards a sustainable biocultural system that includes llama pastoralism and the conservation and sustainable use of vicuñas in a global changing climate scenario. To revalue traditional practices in camelid management.

Activities and/or practices employed (within 50 words)

To assess present and past pastoral systems and vicuña populations in regards to their use of forage resources and water. To estimate the impact of pastoralism on wetland ecosystems -e.g. overgrazing, habitat fragmentation. To give environmental education courses. To develop coproduced (with local communities) wild vicuñas management techniques. To give environmental education courses.

Results (within 50 words)

VICAM recovered, in collaboration with local Andean communities, an ancient prehispanic wildlife capture technique, the "Chaku," that enables shearing fiber from live vicuñas by surrounding them. The group has developed approaches which will permit the regular capture and shearing and release of wild vicuñas. The approaches generate income for economically deprived indigenous communities and give the communities the incentives of conservation of ecosystems and species

Lessons learned (factors in success or failure, challenges and opportunities – within 40 words)

Local traditions are declining, although some resilient management practices are still in use, so the revaluing and blending of local indigenous and scientific knowledge through environmental education is crucial. The encouragement of the autonomy of indigenous communities in environmental decisions can be an alternative for sustainability. local communities have many economic pressures that deteriorate traditional practices.

Key messages (within 40 words)

Intercultural dialogue is key

Co-produced scientific and local knowledge is a very effective tool.

It is essential to give women a voice and to be leaders in the proposals

The project must take root in the local school

Relationship to other IPSI activities (if the case study is related to any other IPSI collaborative activities, case studies, etc.)

Not yet

Funding (any relevant information about funding of activities or projects described in the case study)

Midori Prize was the main funding

# Contributions to Global Agendas

## CBD Aichi Biodiversity Targets (<a href="https://www.cbd.int/sp/targets/">https://www.cbd.int/sp/targets/</a>)

Please place an "x" in the "direct" or "indirect" boxes next to any of the CBD's Aichi Biodiversity Targets to which the work described in this case study contributes as appropriate. Note: please mark only those that the case actually has made or is making a contribution, not those to which it could make a potential contribution in the future.

Target	Description	Direct	Indirect
M	By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	х	
	By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	Х	
<b>3</b>	By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.		
	By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.		
	By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.		
<b>~</b>	By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.		
<b>1</b> 7	By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	Х	
8	By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.		
29	By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.		
10	By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.		

11	By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	x	
12	By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.		х
13	By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	x	
14	By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	х	
5	By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.		
16	By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	Х	
1/17	By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.		
718	By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	X	
19	By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	х	
20	By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.		

## UN Sustainable Development Goals (SDGs) (<a href="https://sustainabledevelopment.un.org/sdgs">https://sustainabledevelopment.un.org/sdgs</a>)

Please place an "x" in the "direct" or "indirect" boxes next to any of the UN Sustainable Development Goals to which the work described in this case study contributes as appropriate. Note: please mark only those that the case actually has made or is making a contribution, not those to which it could make a potential contribution in the future.

SDG	Description	Direct	Indirect
1 POPERTY	End poverty in all its forms everywhere		Х
2 ZERO HUNGER	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	Х	
3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote wellbeing for all at all ages		
4 QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all		Х
5 GENDER EQUALITY	Achieve gender equality and empower all women and girls	Х	
6 CLEAN WATER AND SANITATION	Ensure availability and sustainable management of water and sanitation for all		
7 AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all		
8 DECENT WORK AND ECONOMIC SKOWTH	Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all	X	
9 NOUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation		
10 REDUCED INEQUALITIES	Reduce inequality within and among countries		
11 SUSTAINABLE CITIES AND COMMUNITIES	Make cities and human settlements inclusive, safe, resilient and sustainable		
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns		Х
13 ACTION	Take urgent action to combat climate change and its impacts		Х

14 LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development		
15 UPE ON LAND	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss	Х	
16 PEACE JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels		Х
17 PARTNERSHIPS FOR THE GOALS	Strengthen the means of implementation and revitalise the global partnership for sustainable development		