

Session “Landscape Approaches for Biodiversity,
Climate Change and Sustainable Development
Co-benefits”



South American Camelids as biocultural components in the Andean Altiplano of Argentina

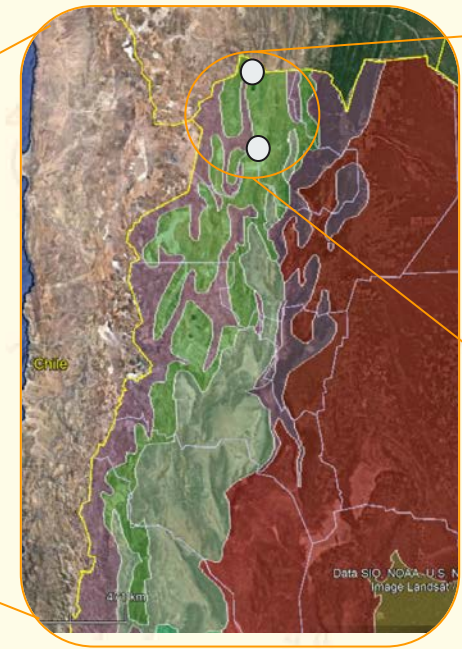
Verónica Rojo

VICAM - Argentina



The Puna or Altiplano in Argentina

- Puna
- High Andes



The Puna SEPL (Socio-Ecological Production Landscape)



The main rural livelihood is pastoralism of llamas and sheep sustained in natural vegetation.

The wild vicuñas can be integrated by chakus to the productive system as a highly-valued source of fiber.

Multispecies pastoralism is especially suitable for facing the harsh conditions of the Puna.



The Puna SEPL- Our Case Study

We work in the Puna of Argentina; Santa Catalina and Barrancas rural areas.

More than 40% of the inhabitants are considered “poor” in the official statistics.

The long lasting relationship between camelids and people can be observed by rock art and petroglyphs.



Aims of the project



Overall aim:

Coproduct with local communities an evidence-based resource management model of sustainable camelid management for poverty reduction and the post COVID-19 recovery.

Objectives: 1. Investigate the impact of COVID-19 on the local bioeconomic situation in terms of key biological and social components of the Andean Altiplano SEPL

2. Clarify necessary skills, costs and time to weave vicuña garments from fiber obtained in local chakus.

3. Enhance understanding and awareness of the multiple values of the surrounding biocultural heritage sites and the pastoralist way of life among the young people.

Biodiversity and climate change in Puna SEPL



Pastoral systems are important for biodiversity conservation and climate change issues.

The Puna shows a high level of endemism and pastoral systems are adapted to cope with climate variation.

In the Argentine Andean region, climate change threatens biodiversity as it is expected to have an increase of the interannual variation of the precipitation, associated with a reduction in the mountains rainfall and a warming of 1°C.



Suggestions



- Diversify herds, and maintain one-health sanitary management.
- Increase the relative number of camelids over total livestock.
- Model adaptive animal stocks based on available forage, in an intercultural dialogue.
- Dismiss the introduction of exotic forage species.
- Dismiss the use of fire.
- Carry out environmental impact assessments of activities such as mining.
- Develop governance mechanisms in which local ideas can be included in environmental policies regarding the maintenance of pastoral livelihoods.

Nature-based Solutions elements and co-benefits

Maintenance of adequate vegetation cover and richness, improving the resilience of the system to extreme weather events.

Increase the relative number of camelids over total livestock.

Improve the production and fair trade of camelids CP.

Pastoral systems are one of the most adapted SEPL to climate fluctuations, so they are prone to achieve a better adaptation to climate change under certain thresholds.



Multi-level governance and ecosystem connectivity

- Social and economic inequity between producers and consumers of camelid goods is notable.
- Indigenous herders need to develop governance to intervene in decision-making.
- National laws must take into account these inequities regarding the valuation of local products.
- Inequity is also noted related to mining interests that generally threaten pastoral lands.
- Multi-actor and multi-scalar governance are needed.



Final remarks

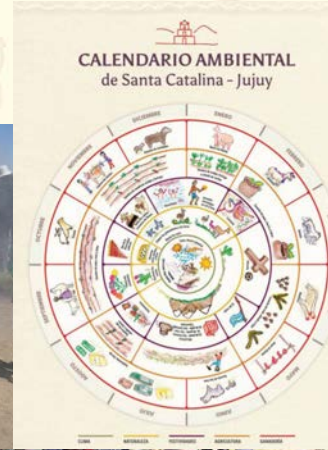


Embracing diverse visions of good quality of life for all.

Promote education and learning.

Reduce inequalities.

Ensure responsible technology, innovation and investment.



Thank you for your attention

<https://www.vicam.org.ar/>

References

Vilá B., Arzamendia Y. 2020. South American Camelids: their values and contributions to people. Sustainability Science.

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