
Production and handling systems of alpaca and vicuñas

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As a domestic breed, alpaca is raised in farms and its principal use is the fibre that presents many colors, mainly white. The animals are sheared once in a year and produce from 1.5 to 3 kilos of fleece (*vellón*). The meat production is complementary and it is mainly used in the local market. However it can be submitted to a transformation process in dry-salty meat, commonly known as “*charqui*” (meat/dry-salty). As well, its skin can also be used to produce leather and coats. The alpaca begins its reproduction between the 2 and 3 years of age, it has a gestation period of 11.5 months and gives one baby alpaca per year.

The alpaca: general characteristics

Figure 1 describes the distribution of the breeds and recalls the production system used for alpaca

Breeders distribution

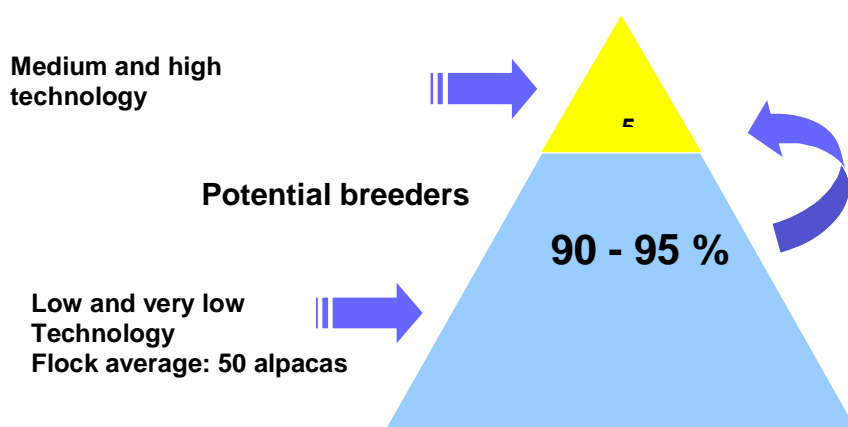


Figure 1. Distribution of the breeders and the production system used for alpaca.

Family income distributions

Activities	Percentage
Alpaca breeding	36.9
Sheep breeding	17.5
Salary for work	15.0
Commercial activities	8.0
Llamas breeding	7.8
Craft	6.7
Bull breeding	4.8
Others activities	3.1
Poultry breeding	0.3
Total	100.0

Productive indicators

Indices	Unit	Low technology	Low technology	Mean technology	Ideal technology
Reproducers percentage	%	8.0	6.0	5.0	5.0
Natality	%	55.0	55.0	60.0	70.0
Litter mortality	%	15.0	12.0	10.0	8.0
Shering percentage	%	35.0	45.0	60.0	65.0
Fiber production per alpaca	Kg	1.50	2.00	2.50	3.00
Meat production	Kg	20.0	25.0	28.0	30.0
Reproducer price	US \$		100.0	200-300	300-500
Fiber price	US \$	1.00	1.20	2.00	2.50
Meat price	US \$	1.00	1.00	1.10	1.20

Source: Bustinza 2001, Gutierrez 1993, Corpuno 1982, CONACS 2003.

Rural sector	Rural sector/commercialization and transformation	Urban sector/commercialization and transformation
Raising/Cattle		
Alpacas and llamas	Fiber	Categorization/sorting/top/spinning/ Preparation/clothes
	Meat	Fresh and meat/dry-salty/jam, inlays/other
	Skins	Skins/tannery
	Animals	Reproducers/pets
	Other	Tourism, semen, embryos
Production area	Regional market	International market
	National market	

Commercial productive structure of the worth chains in the domestic camelids sector

The countries involved in the agreement (Peru, Bolivia, Argentina, Chile and Ecuador), have developed some mechanisms to control the production systems of the specie, that allow the increase of population and maintain its sustainable use. A resolution is emitted by the agreement, to the requesting country, to endorse the CITES Agreement and to modify the appendices.

Vicuña: conservation and management

The CITES Convention is the entity that supervises the vicuña fiber's commerce, allowing the commerce only to countries that reach a certain credit of population as described in the Appendices II (threaten), and not in the Appendices I (extinction danger). Peru and Bolivia are the only countries that have the total of their species that respect the criteria contained in Appendices II.

Convention CITES

The following are the countries who signed the agreement for vicuñas conservation and care that also established a management system:

1. Under Captivity: Argentina¹ and Chile².
2. Under Semi captivity: Peru, Argentina, Chile³ and Bolivia⁴.
3. Wild: All countries.

Vicuña's management systems

¹Reports 20 deposits in the Jujuy province and 1 in the Salta province.

²Reports 3 captivity installations in the Tarapacá region.

³Reports 2 wild handling modules in the Tarapacá region.

⁴Reports 94 Vicuña's Conservation and handling units.

Source: Reports 2002-2003 of the countries members of the Agreement for the Vicuña Conservation and Handling.

Captivity production system

This production system consists of a complete system for the vicuña species, that includes infrastructures, shears, fiber handling, food handling, productive and health handling aspects.

Semi-captivity production system

This production system is defined as management system within the vicuña ecosystem or habitat, in extensive confinement conditions. (Define in the Resolution N° 259-03, Agreement for the Vicuña Conservation and Handling).

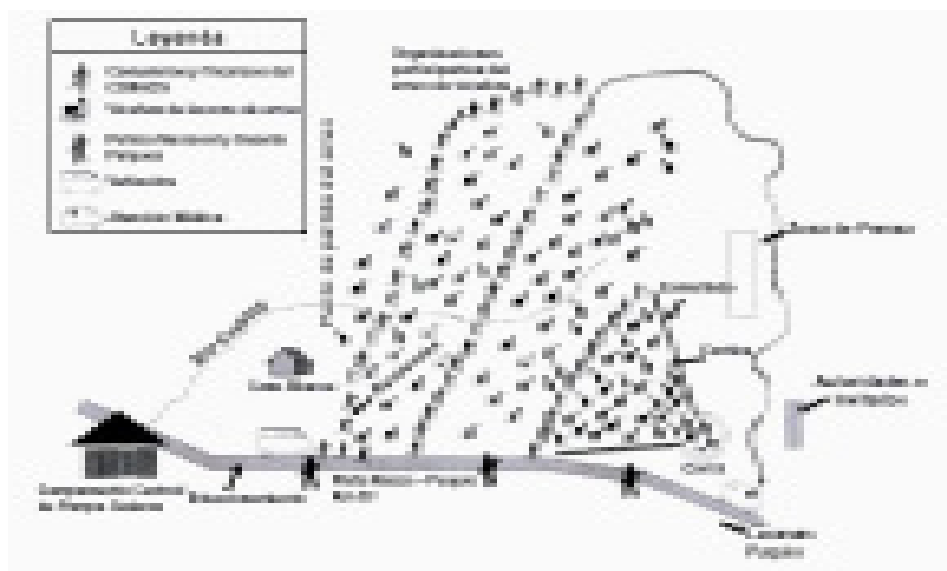
This management system has adequate conditions of territorial extension, of natural grass, similar to their wild habitat with a good health plan, without supplementary food and taking into account the species sociobiology, in other words, with an adequate relation between males and female vicuñas.

Module of Sustainable Use (MUS)

The Module of Sustainable Use (MUS) involves a progressive program of new technologies acquisition in the altoandinas communities, until the country could reach a complete capacity in executing and keeping the protection activities of the Vicuña, such as their conservation, handling and use.

The MUS involves three aspects in the management of the species:

1. The production of vicuña fibre obtained from the alive animal.
2. Guarantee the vicuña's protection against furtive hunters.
3. Provide an add value to the obtained fiber through the sorting and cleaning activity, generally performed by women.



Vicuñas' capture and shears operative in Pampas Galeras - Ayacucho

In Peru some activities have already started through the MUS activities, that allow:

- Conservation and handling of the Vicuñas species performed by the farmers communities.
- Pre-treatment, preparation and processing of the fibre, before its transportation to the collecting centers.
- Correct management of sheared and not sheared Vicuñas in Chacra of Pampa Galeras - Ayacucho.

A Peruvian case
