

CITES and the Convention on Biological Diversity: In search of sustainable use of the *Vicuña* (*Vicugna vicugna*) in Northwestern Argentina

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In Argentina, actions for the conservation of the vicuña have, until now, concentrated on regulating the commercialization of this species' valuable fiber, included in Appendix I CITES¹ (prohibited commerce) in 1975, since the only legal commercialization is of animals from breeding farms and originating from wild populations of the Province of Jujuy, which were included in Appendix II (controlled commerce) in 1997 (CITES, 2002).

¹Acronym for the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Even so, illegal commerce continues: in April 2000, the Secretary of Environment and Sustainable Development of the Province of Salta (SMADS), in the Northwest of the country, had seized 65 Kg (143 pounds) of fiber taken from 213 pelts while other Andean provinces hold even larger quantities, taken away from smugglers on the frontiers with Chile and Bolivia (Anonymous, 2002).

In July 2001, in the capital of Salta, native weavers in the locality of San Antonio de los Cobres offered tourists vicuña gloves for US\$ 10. This price is low, because the product takes 40 g [about 1.4 ounces] of fiber, which is valued at an average price of US\$ 350/Kg [US\$159/lb] on the national market. Besides not covering the cost of the raw material (US\$ 14), the price did not include the cost of labor, which is to say, of the spinning, knitting, washing and finishing, which indicates that the fiber used to knit the gloves originated from illegal poaching destined for the internal market (personal observation).

The simple extraction of the species, without assuming any obligation of providing a continuous supply through time, signifies an environmental cost of 0, which, added to the price of labor (about \$3 per pair of gloves) and subtracting the sale price (US\$ 10), results in a good profit for the knitters.

Furthermore, the confiscation of 370 pelts early in March 2002, indicates that the incentives for illegal trade grew together with the economic crisis which Argentina suffered: the poachers received \$ 150 -equivalent to US\$ 68- for each pelt (Anonymous, 2002). On the other hand, the brutal 100% devaluation since January 2002 of the Argentine peso which had been on a parity with the US dollar during the last 10 years, implies paying with devalued money for a product immediately convertible into dollars on being dumped onto the international market, which affects all species with commercial value (Barbarán, 2001a; Denis, 1916; Mares and Ojeda, 1984).

This scenario, where the recession and unemployment dominating the country must also be considered, permits predicting that illegal trade will tend to increase together with the disparity and the degradation of the ecosystem.

Freese (1998), underlines that under conditions of open access, through indefinite property rights or lack of resources to control access to private properties, populations of any species with commercial value will continue to be harvested while they represent an immediate gain. The harvest only will be stopped when the population becomes so scarce that the gain does not cover the costs of the harvest and the value of the trapper's time.

Nevertheless, one supposes that the populations of vicuña would have increased owing to the prohibition on commerce, since it would be possible to export the fiber originating from wild populations. For that, first a complete census of the species must be performed, which till now SMADS has not been able to carry out due to lack of funds, although a population of 6000 to 7000 vicuñas in the territory of Salta is estimated (Barbarán, 2001b; Zjaria, personal communication).

Neither are there any studies relative to the impact of overgrazing of the vicuña's habitat: scarce forage, associated with the hydric deficit during dry years, produces high mortality, which adds to that linked to furtive poaching. This activity is principally practiced by inhabitants impoverished by the death of their livestock, caused by lack of regeneration and supply of forage resources, the motive that induces them to emigrate, or to put more pressure on wild fauna in an attempt to cover their subsistence needs (personal communication).

Taking into account the low carrying capacity of pastures on the puna, in 1994 the Instituto Nacional de Tecnología Agropecuaria (INTA) [National Institute of Farm Technology], through their Abrapampa Experimental Station (Province of Jujuy) implemented, as an alternative, a breeding program in semi-captivity (Canedi y Rebuffi, 2000). There are 20 breeding farms in Argentina in the hands of small producers, involving 1,250 individual animals, while 45,000-50,000 vicuñas are found in the wild, according to estimates of the INTA.

A market study reports a potential annual demand of 37,100 Kg [81,620 pounds] of fiber, for which 248,000 animals have to be sheared, taking into account that this process is carried out only every 24 months, generating business of US\$ 11,130,000 (considering a price of US\$ 300/Kg and a production of 0.3 Kg of fiber per animal) to which should be added US\$ 30 millions for the possibility of selling 30,000 live vicuñas per year, at a hypothetical value of US\$ 1000 each (Rebuffi, 2000).

Notwithstanding, four breeding farms (three located in the province of Salta and one in Jujuy) began with establishments fluctuating between 12 and 36 animals provided by the Abrapampa Station, from the business point of view they had no income-yielding capacity, although the producer has the possibility of financing the construction of corrals, selling the fiber with no added value to an export business connected to the INTA (Abdo, 2000). This author also reports problems with the transfer of technology to the producers and the lack of development of the activity.

The low scale production of breeding farms does not cover market demand, just as indicated in Rebuffi's (2000) projections, which encourages illegal commerce, now favored by the new exchange policy. In Peru, where property rights and use of the vicuña are granted to indigenous people, an evaluation of community management experiences showed that breeding farms are not profitable when they have less than 250 individuals, while taking advantage of natural populations (capture and shearing with subsequent liberation) is more convenient and generates direct benefits for those of the community through the payment of a daily wage (Lichtenstein et al., 2000).

What, then, is the impact of CITES on sustainable use?

The effectiveness of CITES depends on technical capacity and the disposition of member countries to implement its decisions, which depends to a large extent on political and institutional factors.

CITES functions in countries where citizens can use fauna only with government permission, where the control of commerce is efficient, where there is strong centralization and this centralization is popularly accepted (Martin, 2000a). This is not the case with Argentina, where the provinces maintain jurisdiction over the management of fauna, which leads to permanent conflicts between the provincial states and the federal government (Reynoso y Bucher, 1989).

On the other hand, CITES concentrates on commerce and not on management of the species listed in its different appendices, which does not promote the effective recuperation of species, which, like the vicuña, see their habitat affected by competition with domestic livestock, which threatens the wild populations, even if control of commerce is effective.

Prohibition of commerce can be detrimental to flora and fauna and to trappers' incomes, because it eliminates the economic value of the species and consequently the incentive to preserve it as opposed to other uses of the land. In effect, the puna inhabitants prefer to maintain a herd of identifiable ownership and not wild fauna which is perceived as belonging to no one, even though they later sell the products at a low price on the internal market, while overgrazing continues.

The seizure of pelts of dead vicuñas demonstrates the effectiveness of police procedures, which should not be confused with an effective conservation policy, which elementally should prevent the death of the animals. The lack of funds to invest in conservation could be solved through the sale of the seized fiber, but, despite different systems of commercialization having been proposed with this objective, SMADS preferred not to sell for fear of negative repercussions, dumping the product of a species included in Appendix I of CITES on the internal market (Barbarán, 2001b).

This decision led to more illegal trade, as is shown by the recent seizing of 370 skins: not using the fiber previously seized did not help to protect the vicuñas that remained alive in nature, which, added to the fact that illegal poaching is carried out on public lands for common use where there is no control of access to the resource, is a clear example of the Tragedy of the Commons defined by Hardin (1968).

Child (1996) indicates that the base of any economic system is based on property, price and exchange, therefore ceding property rights to fauna to the inhabitants would encourage sustainable use, warning that neither will there be any conservation if there is no commerce.

This is the foundation of the CAMPFIRE Program of Zimbabwe, which has it clear that to focus solely on the fauna, promoting its use in order to conserve it, implies denying that the principal ecological problems, (as in the puna), are overgrazing and soil erosion. Furthermore, as occurs here, in Africa the inhabitants value their herd more, which is private property, than the fauna that is common property, it being necessary to make the use of forage resources compatible between the vicuñas and domestic livestock.

Considering that the missions of CITES and the CBD (Convention on Biological Diversity) are intimately related, both conventions signed a memorandum of cooperation in 1998, CITES also established a plan of action in order to assure a better synergy with the CBD and establish a plan of joint work (CITES Secretariat, 1998).

According to Martin (2000b), the low effectiveness of CITES for conserving species with commercial value would indicate the need for putting control under the umbrella of the Convention on Biological Diversity-CBD- (resulting

from Rio '92), under no circumstances does the CBD have as the only objective the control of commerce without also considering problems such as destruction of the habitat, overharvesting, and land tenancy, among other aspects. This Convention, unlike CITES, demands of the parties the adoption of economic and social means which act as an incentive for sustainable use.

In Argentina will it be possible for rural communities, government and CITES-CBD to work together to define a more realistic policy of use which functions on the ground?

The inhabitants, in their condition of poverty and marginality, live worried about daily survival with little or no possibility of planning for the future, which is why they cannot face alone the challenge of recovering the ecosystem, at the same time withstanding low levels of harvest of resources while the resources are recuperating, being necessary, in addition to security of land tenure, external subsidies that permit moving toward sustainability (Tietenberg, 1996).

However, the simple handing over of lands or rights of land use to the occupants of public lands, without a project of whole development which ensures management of the ecosystem to benefit its occupants, will only provide the continued expulsion of the population and the increase of settlements in the emergency shantytowns which surround urban centers.

In addition, it has just become clear that aid for development should not be considered as an end in itself, but as a motor for the takeoff of Andean societies, setting out to assume their own problems. A study of 340 development initiatives carried out in the Semiarid Chaco of Salta, indicates the existence of a true industry of poverty, where the indigenous beneficiaries of the projects participate as much as the technical staff and organizations which promote them: the results indicate that the government of Salta invested several million dollars since 1969, without any improvement in the poverty and emigration indicators (Barbarán, 2001c).

At the institutional level, in spite of there being legislation in Salta on the use of renewable natural resources since 1858 and public organizations were created to administer them, the renewable natural resources had been degraded as if neither laws nor the institutions in charge of executing them (Barbarán, 2000).

Gruss and Waller (1988) point out that in Argentina that year, there were 3000 laws and decrees, between national and provincial, in force that regulated the use of fauna, identifying as one of the principal limitations to achieving conservation objectives the lack of continuity of directors of public divisions entrusted to administer renewable resources.

Between 1949 and 2000, the entity presently called SMADS changed director 36 times, which shows the political character of assignments to particular positions, despite that this agency, in accordance with its missions and functions, has a clear technical profile, being impossible to define strategies, to project operative goals and fulfill commitments in the long run (Barbarán, 2001d).

Although SMADS is taking measures to correct this situation, it would be difficult for it to be able to get projects going for sustainable use, without a program of institutional strengthening which would permit it to overcome its problems of leadership, human resources and extension to the environment.

Consequently, projects ought to be implemented by nongovernment organizations of proven trajectory and technical capacity, exempt from electoral and party fluctuations. Reality shows that politics of conservation based on the simple emission of laws and on the adhesion to international pacts, represents an elegant form of eluding the responsibility of true administration of natural resources, while maintaining the rhetoric of sustainable use.

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Vicuña pelts seized by the border police of the Republic of Argentina (Gendarmería Nacional) from smugglers near the frontier of Argentina with Chile, in the warehouse of the Secretary of Environment and Sustainable Development of Salta. Photograph by Francisco Barbarán (10/2000).

Notes to readers

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