

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Transfer from Appendix I to Appendix II of the population of vicuña (*Vicugna vicugna*) of the province of Catamarca, for the exclusive purpose of allowing international trade in wool sheared from live animals, in cloth, derived manufactured products and other handicraft artefacts bearing the label 'VICUÑA – ARGENTINA'.

B. Proponent

Republic of Argentina.

C. Supporting statement1. Taxonomy

- 1.1 Class: Mammalia
- 1.2 Order: Artiodactyla
- 1.3 Family: Camelidae
- 1.4 Genus: *Vicugna vicugna*, (Molina, 1872)
- 1.5 Scientific synonyms: None
- 1.6 Common names: English: Vicuña
French: Vigogne
Spanish: Vicuña
German: Vikunja
- 1.7 Code number: CITES A.119.004.002.002 (CITES Identification Manual)

2. Biological parameters

2.1 Distribution

Currently, the vicuña is naturally distributed over Argentina, Bolivia, Chile and Peru. The species was recently reintroduced to Ecuador using specimens from the other range States. In these countries, the vicuña occupies the Andean Altiplano, normally at altitudes above 3,000 m, where the vegetation is consistent with shrubby steppes and herbaceous grasses, adapted to the rigorous weather conditions.

In Argentina, the vicuña is found in specific regions of the provinces of Jujuy, Salta, Catamarca, La Rioja and San Juan, always in the habitats of the phyto-geographical provinces of the *puna* and high Andes (Cabrera, 1976). For the sector covered by this proposal, these environments cover approximately 10,000,000 ha (100,000 km²) in north-western Argentina at altitudes of 3,000-3,200 to 4,800-5,000 m, between 21° 04'S to the north on the border with Bolivia (province of Jujuy) and approximately 30°S (in the province of San Juan) and between 67° 30'W and 69° 20'W on the border with Chile.

The province of Catamarca is in north-western Argentina between 25° 12' and 30° 04' S and between 69° 03' and 64° 58' W, and its borders are: the province of Salta to the north; the

provinces of Tucumán and Santiago del Estero to the east; Córdoba and La Rioja to the south and the Republic of Chile to the west over the Andes. In the province of Catamarca, the vicuña inhabits wide sectors of *puna* and high Andean environments of the departments of Antofagasta de la Sierra, Tinogasta, Belén and Santa María, a range representing some 4,500,000 ha. (45.000 km²) to the north and west of the province.

AREA OF VICUÑA DISTRIBUTION IN THE
REPUBLIC OF ARGENTINA



The '*puna* habitat', which is mainly open, shrubby steppes, occupies approximately two million hectares at an altitude of 3,000 to 3,800 m while the 'high Andean habitat', which is essentially an open herbaceous steppe, occupies some 2,500,000 hectares, between approximately 3,800 and 5,000 m. The *puna* habitat or steppe is dominated by small bushes of different species according to the characteristics of each location (the most common of which include *Acantholippia salsoloide*, *A. hastulatta*, *Fabiana densa*, *Baccharis boliviensis*, *Adesmia horridiuscula* and *Ephedra* spp.), while the high Andean habitat or steppe is characterized by grasses, such as *Stipa frigida*, *Festuca ortophylla* and *F. crisophylla* (Cabrera, 1976; Morlans, 1995). Both sectors, associated with lake and stream wetlands, have low-lying meadows or marshes, dominated by grasses and sedges that completely cover the ground, which constitute one of the preferred habitats of the vicuña.

Not all of the two phyto-geographical provinces mentioned (the *puna* and high Andean) can be considered a suitable habitat for the species since there are vast areas devoid of vegetation which, at altitudes above 4,800-5,000 m, constitute true mountain deserts. Therefore, the range cited is reduced by 30 to 40 per cent, leaving approximately 3,300,000 to 3,500,000 ha as habitat available for wild vicuña populations.

The preservation of wetlands, their associated bird-life, marshes, meadows and steppes, and in general the preservation of the good overall condition that characterizes this vast region, which coincides to a large extent with the vicuña's range, has given birth to a project to create the 'La Parinas' Protected Area, covering approximately 2,000,000 ha. This project will add to the existing Protected Area of the Laguna Blanca Provincial Wildlife Reserve, which has existed since 1979 and which, in turn, has also been a Biosphere Reserve since 1983, occupying the northern part of the department of Belén.

2.3 Population status

Although there is no complete count of vicuñas throughout the species' range, in 1999, the provincial Government conducted a vicuña census in the province of Catamarca within sectors of the departments of Belén and Antofagasta de la Sierra, the area with the highest concentration of the species. Within a total census area of 375,432 ha (3,754.32 km²), a total of 13,435 vicuñas was estimated. This area was divided into six census zones, with Zone I corresponding to the so-called 'management area' and Zones II to VI to 'conservation areas' (Canedi, Virgili, 2000).

The census was conducted during April, May and August using the methodology approved in the Vicuña Convention, with initial and secondary censuses taken, which did not produce significantly different results, in spite of several differences in methodology. The areas containing the densest populations of vicuñas were covered in April. Together Zones I and II, which correspond to the central and southern sector of the modern Laguna Blanca Provincial Wildlife Reserve, were the areas having the highest density of vicuñas (10.04 specimens/km² and 8.21 specimens/km², respectively), with a population of 8,135 animals. The remaining areas included in the census (III to VI), in which 5,300 vicuñas were counted, correspond to the northern area of the Reserve and other broad sectors to the west thereof, where the vicuña population was not as dense (1.80 specimens/km²).

It is important to note that the areas having the highest density of vicuñas are also those having the greatest primary production, which ultimately have a better load capacity. It is in these sectors that the vicuña population conflicts with the interests of local inhabitants due to the apparent competition for pastures between vicuñas and domestic livestock (sheep, goats, llamas and donkeys and, to a lesser extent, cows, horses and mules). Therefore, these inhabitants need to view the vicuña as a real resource and not as something that competes with their production activities.

Outside the census area there are also populations competing for pasturage, as in the case of the upper river basin of the Santa María River, where it has been possible to confirm an increase in the area occupied by vicuñas as well as in the size of the vicuña population. Another sector not included in the census is the department of Tinogasta, within the Paso San Francisco area. Here, the vicuña shares its habitat with another wild camelid – the guanaco – apparently without competing. Finally, small sectors remain uncounted in the departments of Belén and Antofagasta de la Sierra where the vicuña population is generally sparse.

There are no studies on the existence of populations of the different subspecies within the species' range. In this regard, Argentina only has one subspecies, *Vicugna vicugna vicugna*; therefore, there is no problem of identifying subspecies.

Without question, the great mountain chains having altitudes above 5,000 m are barriers that the vicuñas cannot overcome and are probably keeping groups apart without significant genetic exchange. This happens, for example, at the southern border between the province of Catamarca and the province of La Rioja since, due to the tall mountain chain there, whose peak is Mt. Pisis (over 6,000 m), two different populations have developed with no genetic exchange between them. A similar situation occurs at the province's western border which is, in turn, the international border with Chile, where the great heights prevent vicuñas from travelling from one country to another.

The other provincial territorial border where vicuñas live is to the north and north-east, between the provinces of Catamarca and Salta. Here, although there are no significant mountainous barriers, meaning that vicuñas would not be prevented from traversing most of the area, this is an extremely arid region that has no vicuñas over vast sectors due to the lack of grazing land.

Within the province of Catamarca, the San Buenaventura mountain range acts as a dividing line between one population in the north and another in the south. But this division is not as drastic as the one described above since vicuñas can be found on the mountain chain itself, which leads one to think that they could cross it. However, due to the arid conditions and sparse vegetation of the northern sector, there are few vicuñas in this area. There are other partial mountain barriers (generally running north-south) that do not separate subpopulations of vicuña; however, they apparently lessen exchanges between populations. Finally, the area not included in the census, while large, is thought to contain far less dense vicuña populations.

With respect to the population in captivity, it is important to note that there are currently only two experimental farms under the Government of Catamarca at the experimental stations of Laguna Blanca (department of Belén), with 19 specimens, and at the town of Antofagasta de la Sierra (department of the same name), with six specimens, which came from the first and second experimental catches of wild vicuñas from this province conducted at Laguna Blanca in 1998 and 1999, respectively.

2.4 Populations trends

The vicuña population covered by this proposal is in clear recovery, as reflected in the different censuses taken, essentially those referring to the sector of the Laguna Blanca Reserve, which covers an area of 651,033 ha.

In 1980, 1,100 specimens were counted in the Laguna Blanca Reserve (Cajal, 1980). Subsequently, a larger-scale census was taken in 1982/83, which showed 1,702 specimens, of which 1,300 related to the Laguna Blanca Reserve, with approximately 500,000 ha surveyed, and 402 individuals related to around 2,000,000 ha in the departments of Antofagasta de la Sierra and Tinogasta (Hofmann and Otte, 1983). In 1993, a census was conducted in the Laguna Blanca Reserve, showing 3,477 specimens in an area of approximately 200,000 ha.

The 1993 census area is comparable to Zones I, II and III of the 1999 census, in which 9,379 vicuñas were counted in an area of 164,220 ha. It is notable that this last census was exhaustively conducted by census-takers working on foot or out of vehicles while the previous census was conducted on mule-back; therefore, they are not entirely comparable. However, they unquestionably provide an idea of the upward trend in the population.

In addition, in 1996, Muspratt and Vaysse took a census of sectors of the department of Antofagasta de la Sierra, where a total of 2,386 vicuñas were counted, although the size of the area is unknown. In the 1999 census for this same area, within a 462,200 ha sector, Canedi counted a population of 1,163 vicuñas using a different methodology from that used for the rest of the area of the province in which the census was taken on that occasion. Also in 1996, a census was taken in a 14,737 ha area of the department of Tinogasta, where vicuña and guanacos shared the habitat, with 222 vicuñas and 196 guanacos counted, for a total of 418 wild camelids (Fra, 1999). This area had only been surveyed in the 1982/83 census, showing low population levels since, in no less than 2,000,000 km², including the small sector counted in 1996, 401 specimens were counted on that occasion.

In general, the population growth trend is noted throughout the vicuña's range, both in comparing the different censuses (which, however, are difficult to compare statistically) and from observations made by local inhabitants and technicians from the provincial organizations responsible for wildlife. It is also important to indicate that the species' range has increased, as discussed below.

No significant loss of life has been recorded for the vicuña during years of drought when forage is scarce. Surely during these years, the deaths of the very young and old are the factors that cause the population to adjust to the environment's load capacity. In the last three years, throughout the *puna* area, precipitation higher than historic averages has been recorded, with an increase in primary production that has favoured vicuña populations.

2.5 Geographic trends

The vicuña population in the province of Catamarca has increased over the last ten years. Currently, the species covers a total surface area of some 4,500,000 ha, somewhat more than prior decades, since today it is found in locations in which it did not previously live or it has retaken areas from which it had disappeared.

The growth of the vicuña population in recent times has been significant. It has been most evident in the areas where they already existed, which correspond to the most favourable habitats for them. The increased range, as is to be expected, has resulted in marginal areas of the vicuña's habitat, representing a significant increase in area. Currently, it is possible to observe vicuñas within their areas of historic distribution, from which they had disappeared for various reasons: poaching and competition with livestock. This also means that vicuñas now occupy sectors very close to urban sites, such as the town of Antofagasta de la Sierra or the village of Laguna Blanca, as well as on the plains of the upper basin of the Santa María River, near several small settlements of livestock breeders where, for many years, they were practically non-existent.

Vicuñas can also be observed along the length of Route 60 of the San Francisco International Pass, a highway connecting Argentina and Chile, which crosses the Andes. Here, the vicuña populations were seriously affected by years of poaching.

2.6 Role of the species in its ecosystem

Within the *puna* and high Andean environments, the vicuña is the largest wild herbivore, except where it shares its habitat with the guanaco (*Lama guanicoe*), a situation relating to approximately one fifth of its range. In these areas, the guanaco is the largest wild herbivore. However, it is presumed that there is not competition between them in terms of the load capacity that primary production creates within the shared environments. The vicuña also shares its habitat with domestic livestock in large sectors of the departments of Belén, Antofagasta de la Sierra and Santa María.

The vicuña acts as a primary consumer on the steppes of the *puna* and high Andes, being adapted to the harsh weather conditions of these environments. For the most part, soil conditions have no effect since the vicuña grazes on pastures that other herbivores cannot use to advantage. Within the food chains of the *puna* and high Andean ecosystems, the vicuña falls prey to the puma (*Puma concolor*) and the coloured fox (*Pseudalopex culpaeus*). The latter especially attacks the young vicuñas.

Shearing the vicuñas will not affect the relationship with the other components of the ecosystem since shearing involves live specimens and will not entail removing animals from the wild environment, except in those few cases in which individuals are caught for farms to control in-breeding; this will involve an insignificant number of specimens.

2.7 Threats

Vicuña populations in the province of Catamarca face various threats:

- a) Poaching: without a doubt, poaching is the principal threat impacting the populations directly and decreasing their numbers. This activity, which was significant in the recent past,

has decreased drastically today due to control programmes and the implementation of protected areas.

- b) Habitat modification: a large part of the *puna* and high Andean environments in the province of Catamarca is currently in good condition. However, centuries of breeding of livestock introduced into the area have changed forage conditions in some sectors. This change has not been appropriately evaluated, and the degree of decline in the plant community is not currently known. However, as livestock is not efficiently managed, domesticated and undomesticated herbivores become collectively adapted to the load capacity, with more individuals being recorded in rainy years than in dry ones.

In those areas where domestic livestock coexists with the vicuña, programmes to regulate forage resources must be implemented, with coordination of the actions of livestock producers and provincial authorities. Furthermore, there is a plan for a large area of the *puna* and high Andean environment to be controlled as protected areas in which it will be possible to regulate the use of natural grazing land, with preference being given to wild species. It is to be hoped that inhabitants of the *puna* will rapidly realize that the utilization of the vicuña supplements livestock production in economic terms, thereby encouraging a gradual integration of these activities.

The presence of numerous donkeys merits a special paragraph. For the most part, they have become wild, thereby causing the natural grazing land to decline greatly. To end this negative impact, a regional control campaign is being organized throughout the *puna* area.

- c) Mining activity: Mining is another activity that causes changes in the vicuña's habitat and, in general, in all of the flora and fauna of the *puna*. To control the impact of mining, Argentina has introduced reforms to the Mining Code, which impose strong environmental controls on this activity, with compulsory procedures to evaluate environmental impact.

The creation of protected areas, such as those already mentioned, essentially entails conservation of wetlands with their associated meadows or marshes, this being an important habitat for the vicuña and other wild species. They are thereby excluded from any possibility of being used by the mining sector.

- d) Health: the vicuña is susceptible to disease. This species is particularly prone to mange, which is produced by *Sarcoptes scabiei* var. *auchenidae* and, in some areas, to distomatosis produced by *Fasciola hepatica*. Therefore, special attention will be given to these issues. However, wild vicuña populations will not be treated so as not to interfere with the normal process of natural selection, except in the case of wild vicuña populations that are caught, sheared and released which, depending on circumstances, may be treated to protect them from some diseases. Regular and adequate medical attention will be required for vicuñas on farms.

In any case, diseases are not considered to be a significant factor affecting wild vicuña populations, as evidenced by their continuous growth.

3. Utilization and trade

3.1 Domestic use

The current situation for Argentina is that the vicuña populations in the province of Jujuy and those in semi-captivity in the provinces coinciding with the species' range are listed in Appendix II of CITES, as approved at the 10th meeting of the Conference of the Parties in Harare, Zimbabwe. These captive populations are entirely derived from the breeding stock from the Abra Pampa

Experimental Station of the National Institute of Agricultural and Livestock Technology (INTA), in the Province of Jujuy.

This proposal asks that the wild populations of the province of Catamarca and the captive-breeding operations based on specimens coming from these wild populations be transferred from Appendix I to Appendix II.

It should be noted that there is no history of utilizing wild populations in the province of Jujuy, which is why, in Argentina, trade has only involved farms of the provinces of Jujuy and Salta, which are entirely based on animals from Abra Pampa.

With respect to the authorized farms in Argentina, there are 15 in the province of Jujuy and five in the province of Salta, which produce wool sheared from live animals. The large majority of these market wool (primarily for export), while only one processes manufactured garments, which are sold primarily within Argentina. There is a total of approximately 1,500 vicuñas currently on farms within these two provinces.

Experiments in the use and management of vicuñas in the province of Catamarca are limited to two trial captures in the wild in the Laguna Blanca Reserve, carried out in 1998 and 1999. Both trials were held at the Experimental Wild Vicuña Capture and Shearing Module built for this purpose, which comprises 40 ha and works according to the watering-hole enclosure model (Hofmann *et al.*, 1983), in which vicuñas enter the module of their own accord and are then herded using a capture chute to a small handling corral. Both times, the experiment was conducted in November, at the end of the dry season, when Laguna Blanca is the only source of water for a large area.

The first time, 102 specimens entered the capture module, of which 89 were driven using the chute to the handling corral, where the animals were identified and various measurements were taken. During the second capture, six vicuñas entered the module and corral, a significantly lower number than the previous year. On both occasions, the vicuña captured were not sheared. From the first capture, 19 specimens were obtained for an experimental farm that was established at the Laguna Blanca High-Altitude Experimental Station, while the next year the six specimens were used to establish another experimental farm at the Antofagasta de la Sierra High-Altitude Experimental Station.

Both farms are near the end of the experimental phase and will then go into the production phase, transferring control to local associations of inhabitants. The latter will comply with the regulatory provisions established for wildlife farms and will receive technical advice from competent provincial organizations. During the experimental phase, work has concentrated essentially on aspects dealing with the management of vicuña reproduction in semi-captivity, attaining results applicable to this small scale of farming.

With respect to the future management of wild populations, vicuñas were not sheared in either of the two capture experiments, as mentioned. This aspect will be addressed in the year 2002, with the responsibility for capturing and shearing vicuñas being transferred to the *puna* communities through their becoming associations of local inhabitants.

3.2 Legal international trade

The total raw wool exported by Argentina since the amending proposal was approved in 1997 has been 807.16 kg, of which 352.75 kg was for 1999, 121.08 kg for 2000 and 333.33 kg was for 2001, while domestic trade has been of little importance and primarily concerns hand-woven garments.

Changing the Appendix In which the wild and farmed populations in the province of Catamarca are listed may increase the supply of wool available for trade in Argentina by a significant proportion.

This wool will have two uses – export and domestic trade – with a focus on garments made by artisans, with a large major potential market. Exporting will have no negative affect on activities conducted by other authorized countries; rather, it will be a supplement to cover part of the international demand.

3.3 Illegal trade

Vicuña poaching (a long-time practice) eventually threatened this species with extinction, not only in Argentina but also in the other range States. For this reason, Argentina began to take measures, particularly in the 1970s, such as creating protected areas in *puna* environments, to salvage the decimated vicuña populations. Meanwhile, an effective awareness-raising campaign was undertaken in the provinces of Argentina, and greater control was exercised over poaching and artisans working with wool from illegal hunting.

It is important to stress that in Argentina, in addition to wildlife organizations, monitoring and control are also provided by security forces, such as the provincial police and, particularly, by the National Gendarmerie, an institution that has taken up the environmental issue as one of its principal activities, carrying out important operations to combat poachers or illegal dealers in vicuña hides.

In the last 30 years, numerous operations have been conducted against poachers as well as craftsmen and intermediaries dealing in illegal goods throughout all of the provinces that have vicuñas (Jujuy, Salta, Catamarca, La Rioja and San Juan), resulting in a significant decrease in these illegal activities. Meanwhile, decreased demand for wool has been recorded, which is not due to a lack of interest in the product; rather, it is due to public awareness of the ban on marketing illegal vicuña products. Poaching as a source for handicrafts is being controlled on an ongoing basis in all provinces and can currently be considered minimal.

Legal trade will entail a significant change for artisans, who represent a truly important segment of production within the province of Catamarca, both due to the quality of garments woven (nationally renowned) and the number of persons trained in this craft. Supplying wool to artisans from legal sources will be of considerable social value. Currently, most artisans have understood the need to work within the framework of the law, taking their work supplies from farms authorized in Argentina.

In any case, the current supply of vicuña wool is scarce and does not meet the needs of all artisans. Consequently, authorization to use vicuña wool within the province of Catamarca will benefit this sector, thereby helping to decrease the pressure to poach and circulate illegal wool. Artisans will be able to market their woven goods publicly and at a better price as these will be of legal origin, thereby opening the possibility of developing the fine, handcrafted fabric sector, which has ancestral knowledge of spinning and making such goods.

3.4 Actual or potential trade impacts

The authorized trade in vicuña products will not be detrimental to the vicuña populations or to their habitat since, once *puna* inhabitants appreciate this species of native fauna, they will consider it to be another element that produces income rather than one that competes with their livestock for grazing land; in fact, the income generated from vicuñas could be greater than that from breeding livestock. Thus, an awareness will be gained that the vicuña is truly a natural resource that must be protected, not only because of the current legal stipulations but also because, by protecting the vicuña, a genuine contribution to the economy of these communities will be assured – communities that have historically been backward, with few opportunities for development because of the inhospitable environment and no other real production alternatives.

Exploiting the vicuña may cause the inhabitants to replace the livestock introduced since the lack of management thereof has been a factor in the deterioration and degradation of the land; therefore, exploiting the vicuña will also benefit the *puna* environment.

Approval of the proposed amendment will result in a greater commitment on the part of the region's inhabitants to protect the vicuña, which may translate into better control of poaching and illegal activities of artisans and dealers by these very inhabitants.

For all of the above reasons, this proposed amendment will decidedly benefit vicuña populations and their habitat as well as a human population that is currently experiencing heavy economic restrictions, a situation that in many cases forces people to emigrate from the *puna* due to the lack of jobs and income that would assure them a minimum chance to survive.

3.5 Captive breeding for commercial purposes (outside the country of origin)

The exportation of live vicuñas of breeding age as well as their semen or other reproductive material has been prohibited for many years by the Convention for the Conservation and Management of the Vicuña; therefore, there are presumably no large-scale captive breeding operations in other countries. Although some European zoos are known to have small groups of vicuñas, there is no relevant information on vicuña breeding outside the countries of origin.

4. Conservation and management

4.1 Legal status

4.1.1 National

The Republic of Argentina has a federal government system, consisting of a national government and several provincial governments, whose powers and jurisdictions have boundaries. The national constitution of Argentina, amended in 1994, maintains the provinces' jurisdiction over the natural resources within their respective territories. Moreover, Article 41 establishes the principle of the conservation of biological diversity and the sustainable use of natural resources, to wit: "...All inhabitants are entitled to a healthy, balanced environment suitable for human development and for productive activities to meet current needs without compromising the needs of future generations.... Authorities shall provide for the protection of this right, the rational use of natural resources, the preservation of the cultural heritage and natural wealth and biological diversity...". Elsewhere, the national constitution acknowledges the rights of the indigenous people to use natural resources according to their traditional practices and elevates the issue to constitutional status.

On the national level, this issue is governed by Law No. 22,421 on Wildlife Conservation and Implementing Decree No. 666/97. Observance of these laws is prescribed throughout the country, on the basis of certain articles of substance and powers expressly delegated to the Nation, such as inter-provincial traffic, exports and imports. The authority implementing this law is the Ministry of Sustainable Development and the Environment which, through its technical branch, the Office of Wild Flora and Fauna, regulates international trade and coordinates activities.

In addition, the provinces have their own laws governing wildlife in general and specific aspects of wildlife conservation and management. The province of Catamarca has Provincial Wildlife Act No. 4855 and Implementing Decree No. 1,064/99. Within this context, the vicuña is classified in the province of Catamarca as a protected species (hunting banned) within the group of non-endangered species. This hunting ban refers to killing specimens and does not preclude taking live specimens for farms, with the situation being appropriately monitored in each case.

A broad protected area exists to preserve the vicuña's habitat, this being the Laguna Blanca Provincial Wildlife Reserve, which was created in 1979 and comprises 490,442 ha. The reserve was expanded in 1983 by 160,591 ha to a total of 651,033 ha. Furthermore, in 1983, it was declared a Biosphere Reserve by the UN MAB Committee.

4.1.2 International

Internationally, there is the Convention for the Conservation and Management of the Vicuña, covering the five countries that are range States of the species: Ecuador, Peru, Bolivia, Chile and Argentina. This convention, which provides a framework for its member countries to agree upon common vicuña policies, was ratified by Argentina pursuant to Law No. 23,582.

Argentina also ratified the Convention on International Trade in Endangered Species in Wild Fauna and Flora (CITES) pursuant to Law No. 22,344 of 1982 and has issued Implementing Decree No. 522/97.

4.2 Species management

4.2.1 Population monitoring

In Argentina, the first national vicuña census for the entire area in which the species is distributed in the country is scheduled from March to May and its methodology and logistics have already been determined.

Also, censuses have been taken on an ongoing basis in the different provinces, particularly in the province of Jujuy, whose vicuña populations have been entirely transferred to Appendix II and where censuses are taken periodically, especially in the protected areas.

Vicuña censuses for the province of Catamarca are to be taken every year in the harvest areas and every two years in the potential usage areas and the vicuña's entire range is to be surveyed within the environments of the *puna* and the high Andes every three years. Based on census results, the suitability of designing sites either for the usage or for the strict protection of vicuñas will be assessed. More details on this point are presented in Annex 1, entitled *Management and monitoring plan for the province of Catamarca, Republic of Argentina*.

4.2.2 Habitat conservation

Argentina has protected areas primarily within the jurisdiction of the five provinces that have vicuñas. These protect large stretches of the species' habitat, and there is also a national park in the province of Jujuy (the Laguna de Pozuelos National Park).

Since 1970, the province of Catamarca has had the Laguna Blanca Provincial Wildlife Reserve, which was further declared a Biosphere Reserve in 1983. According to all censuses taken, this protected area, comprising approximately 651,033 ha, contains the largest vicuña population in the province, making it possible to promote their sustainable use by the small communities within its area of influence.

The province of Catamarca and the National Parks Administration plan to create and jointly manage a large, new protected area of approximately 2,000,000 ha, which will be an integrated area having various categories of protection, completely located within the *puna* and high Andean environments, which will ensure that the vicuña habitat is protected over a significant area, within which actions can also be taken to use this resource in a sustainable manner (see Annex 1).

4.2.3 Management measures

The range States of the vicuña have adopted different methods of harvesting this resource, such as catching and shearing wild populations as well as breeding them in semi-captivity, with different forms of distributing the benefits, both through community and through private organizations, depending on the socio-economic and cultural characteristics of each entity. In all instances, the benefit obtained from the vicuña is its wool, gathered by shearing live animals, which reflects a great advance over the old methods of obtaining the wool from the hides of vicuñas killed through poaching or legal hunting.

This system for shearing live animals constitutes an effective model for sustainable use involving the gathering or harvesting of its primary product (wool), while guaranteeing the animal's survival.

In Argentina, pursuant to the submission and approval of the proposal for amendment in 1997 by the Conference of the Parties of CITES, the shearing of wild vicuñas was authorized in the province of Jujuy. However, no experiments of this type have yet been conducted in that province. The other request approved involved breeding vicuñas in semi-captivity in farms established within the Argentine provinces in which the species is distributed. These farms are based on specimens taken from the Abra Pampa farm of the National Institute of Agricultural and Livestock Technology (INTA) in the province of Jujuy. Experiments of this type are conducted in the provinces of Salta and Jujuy, where this institute provides specimens to small producers, by and large individuals and, to a lesser extent, cooperatives. In some cases, the INTA also provides technical advice. These farms produce a small amount of wool that is mostly sold in bulk to warehousemen and exporters. An association of artisan producers works with the sheared wool, making handcrafted garments sold primarily within the country.

In the two experiments conducted within the province of Catamarca to capture wild vicuña populations at the Laguna Blanca Reserve (1998 and 1999), the animals were not sheared as priority was given to acquiring experience in capturing techniques. The infrastructure of capturing vicuña has been established and is now available for additional captures. The 19 animals taken during the 1998 capture plus the six from the 1999 capture were used to establish the two experimental farms belonging to the province of Catamarca at Laguna Blanca and Antofagasta de la Sierra. The plan is to move the animals and infrastructures to the cooperatives or communities of the inhabitants of Laguna Blanca and Antofagasta de la Sierra.

It is requested that the specimens relating to the existing farms in the province of Catamarca be transferred to Appendix II.

Measures to manage the population in the province of Catamarca, the subject of this proposal, are described in detail in Annex 1.

4.3 Control measures

4.3.1 International trade

The control of illegal trade and poaching of vicuñas has been discussed on several occasions at the meetings of the Convention for the Conservation and Management of the Vicuña, where agreements on joint actions have been reached.

In the case of Argentina, the security force working in the border areas is the National Gendarmerie, an institution whose objectives include natural resources and environmental matters and that collaborates with national and provincial authorities in controlling poaching

and illegal trade in wildlife. This security force has signed agreements with the competent National Authority on natural resources, with the organizations responsible for natural resources in all of the provinces having vicuñas and with the majority of the provinces in the country.

Additionally, plans are to intensify controls at international airports through concerted efforts with the National Aviation Police, while implementing an information and public awareness campaign.

The measures agreed upon within the framework of the Vicuña Convention in addition to those already approved by CITES, such as the adoption of the mark 'VICUÑA-COUNTRY OF ORIGIN' to identify fabrics and items made from Appendix II vicuña wool, contribute towards the clarification of international trade, thereby promoting a climate more favourable to its control.

Plans also exist to place tighter controls on all phases of the marketing process and to rigorously apply requirements on internationally-recognized marks and logotypes. In this regard, Argentina has adopted the logotype approved by the Vicuña Convention through Resolution No. 406/99 of the erstwhile Ministry of Natural Resources and Sustainable Development, which must be affixed to the back of fabrics made from wool sheared from living vicuñas, including handicrafts.

4.3.2 Domestic measures

In Argentina, in addition to the control exercised by the National Gendarmerie, the provinces are the entities responsible for monitoring poaching and the illegal trade in wildlife within each provincial territory. In this respect, within the five Argentine provinces that have vicuñas, the species is covered in provincial wildlife legislation under the category of protected species and species the hunting of which is banned. Provincial wildlife organizations have monitoring agents authorized to seize and confiscate specimens, products and by-products of wildlife from illegal sources. In these control activities, they receive support from the provincial police, support that is extremely relevant given the wide distribution of personnel that these forces have within each jurisdiction.

Thus, the existing national and provincial fauna organizations, in addition to the National Gendarmerie and provincial police, ensure control within each provincial territory as well as control over inter-provincial and international traffic, considering the fact that the five provinces in which the vicuña is distributed have, in turn, international borders. The same collaboration will be provided by the National Aviation Police at the country's airports in those cases in which domestic travel is by air.

The competent national authority is the Office of Wild Fauna and Flora, which is under the National Ministry of Sustainable Development and the Environment while the provincial authority, in the case of Catamarca, is the Office of the Under-Secretary of Natural Resources and Environmental Management, which is under the Ministry of the Environment. These entities are competent, pursuant to national and provincial wildlife legislation, to authorize and monitor the use of fauna at every stage and are charged with sanctioning those parties who infringe applicable provisions. Monitoring and control measures established for the province of Catamarca are set forth in detail in Annex 1.

Over the last thirty years, the province of Catamarca has conducted a broad media campaign on the need to protect the vicuña. Therefore, no one living in the province can claim ignorance of the ban on hunting this species nor of the importance of conserving it and its habitat. In fact, people there are sufficiently informed of the matter and have a high level of awareness.

5. Information on similar species

The only wild native species that bears similarity to the vicuña is the guanaco (*Lama guanicoe*) while, of the domestic species inhabiting the area, the vicuña resembles the llama (*Lama glama*). Both guanacos and llamas are easily distinguishable from the vicuña by their outward appearances.

However, although it is possible to identify the sheared wool, thread and fabric of the vicuña, this may be difficult for untrained persons. Therefore, the training of animal inspectors, police, gendarmes and other monitoring agents is essential in obtaining adequate control of the trade in vicuña products and by-products. Furthermore, vicuña wool must be identified from the time of shearing and initial gathering in order to monitor its progress through the entire commercial route (see Annex 1).

6. Other comments

The proposal to move the vicuña populations in the province of Catamarca from Appendix I to Appendix II was endorsed by the signatory countries of the Convention for the Conservation and Management of the Vicuña at the 21st Ordinary Meeting of its Technical-Administrative Commission held in Oruro, Republic of Bolivia, on 26-28 March 2002 (Resolution No. 249/02, see Annex 2). These countries are, in turn, the range States of the species.

Furthermore, the inhabitants of the *puna* of the province of Catamarca have become aware of the issue and are committed to vicuña conservation, but they have wished for a long time to take advantage of this resource as a way to achieve sustainable development. Moreover, this province has an important sector of artisans with highly developed skills and traditions in the textile trade who are currently unable to work because of insufficient supplies of wool. These people, who live in the *puna*, primarily in the valleys of Belén, Tinogasta, Santa María and the central valley of Catamarca, are anxious to enter the legal trade in vicuña products in order to improve their economic conditions. For this artisan sector, the change in Appendix will no doubt revive the local economy, this being of obvious benefit to the inhabitants and, ultimately, to the species itself.

7. Additional remarks

If this proposal is accepted, the parts of annotations –106 and +211 pertaining to Argentina, should read as follows:

Argentina: the populations of Jujuy and Catamarca and the semi-captive populations of the provinces of Jujuy, Salta, Catamarca, San Juan and La Rioja.

Argentina also wishes to declare that it has 90 kg of confiscated vicuña wool, held by authorities of the province of Catamarca which, if the proposal is approved, will be considered to be in Appendix II.

8. References

Cabrera, A.L. 1976. Regiones Fitogeográficas de la República Argentina. Revista Argentina de Agricultura y Jardinería. Buenos Aires, Argentina

Canedi, A.A., R.P. Virgili. 2000. Censo de vicuñas – Informe final. Consejo Federal de Inversiones – Provincia de Catamarca. Argentina.

Dirección de Fauna y Flora Silvestre de la Nación. 2001. Informe de exportaciones de productos de vicuña de la República Argentina. Buenos Aires, Argentina.

Dirección de Ganadería y Fauna de Catamarca. 1993. Informe del censo de vicuñas año 1.993, Reserva Laguna Blanca. Catamarca, Argentina.

Fra, E.A. – Subsecretaría de Recursos Naturales y Gestión Ambiental. 1999. Tamaño, estructura y utilización compartida de hábitat de poblaciones de vicuña y guanaco en la cuenca superior del Río

- Chaschuil, Departamento Tinogasta, Provincia de Catamarca, República Argentina. Informe preliminar (sin publicar). Catamarca, Argentina.
- Hofmann, R.K, K. Otte, C. Ponce y M. Ríos. 1983. El manejo de la vicuña silvestre – Tomos I y II. G.T.Z. Eschborn, Alemania.
- Morlans, M.C. 1995. Regiones naturales de Catamarca. Provincias geológicas y provincias fitogeográficas. Revista de Ciencia y Técnica – Volúmen II. Universidad Nacional de Catamarca. Pág. 1 a 36.
- Muspratt, J, D. Vaysse y R. Vera. 1996. Informe definitivo del censo de vicuñas 1996 en la Reserva Laguna Diamante y Sierra Calalaste. Gobierno de Catamarca, Servicio de Ganadería y Fauna; Argentina.
- Rebuffi, G. 1998. Informe sobre manejo de vicuñas en semicautiverio en la República Argentina. Instituto Nacional de Tecnología Agropecuaria. – Informe presentado a la XVIII Reunión Ordinaria de la Comisión Técnico Administradora del Convenio de la Vicuña; Huancayo, Perú. INTA, Argentina.
- República Argentina; 1997. Propuesta de enmienda de Apéndice I a II. COP CITES. Harare, Zimbawe.
- Servicio Agrícola Ganadero de Chile, Pontificia Universidad Católica de Chile y Fundación para la Innovación Agraria. 1998. Manejo sustentable de la vicuña y el guanaco - Actas de Seminario. Santiago, Chile.
- Vilá, B.L., V.G. Roig. 1992. Diurnal movements, family groups and alertness of vicuña (*Vicugna vicugna*) during the late dry season in the Laguna Blanca Reserve (Catamarca, Argentina). Small Ruminant Research, 7 (1.992) 289 – 297. Elsevier Science Publishers. Amsterdam, Holanda.
- Rebuffi, G. 1999. Caracterización de la Producción de Fibra de Vicuña en el Altiplano Argentino. Tesis de Doctorado, Facultad de Veterinaria – Universidad de Cordoba, España. 365 páginas.
- Duba, M. 1999. Comercialización de Fibra de Vicuña en Argentina. Tesis de Maestría, Facultad de Economía – Universidad Católica de Salta - Universidad de Belgrano, Buenos Aires. 178 páginas.
- Amendolara, D. 2001. Captura de Vicuña en Semicautiverio. Tesis de Maestría, Facultad de Veterinaria – Universidad de Cordoba, España. 215 páginas.

Management and monitoring plan for the province of Catamarca, Republic of Argentina

1. Habitat conservation and protected areas:

- The management of the Laguna Blanca Provincial Wildlife Reserve, which is also a Biosphere Reserve, as well as of all provincial Protected Areas that may be created in the future, shall be in accordance with the provisions of the Provincial System of Protected Areas.
- The province is working on the creation of the 'Las Parinas' Protected Area, which includes areas under the categories of National Park, National Reserve, National Natural Monument and Multi-Use Provincial Reserve, covering a total area of 2,000,000 ha.
- Once the 'Las Parinas' Protected Area is created, a unified Management Plan will be implemented for this area and the adjacent Laguna Blanca Reserve. The Management Plan will ensure controls by federal and provincial park rangers in a significantly large area of almost 2,500,000, in both reserves. In addition, this will ensure a unified and coordinated management of the natural resources of both areas, including the vicuña as a key species.
- Management plans will be carried out on the basis of agreements with the landowners and local inhabitants of the areas involved.
- A conservation programme for vicuña habitat will be developed, based on actions aimed at minimizing extraction of brushwood from small Puna shrubs, as well as at encouraging the use of alternative energy and fuel sources.
- Habitat conservation plans based on control of overgrazing, control of exotic domestic species and monitoring of carrying capacity of native grasslands will be implemented.

2. Management Programmes for wild populations:

- Vicuña surveys will be carried out every year in areas where populations are being managed, and every two years in areas of potential use. The whole of the Puna and Altoandina regions will be surveyed every three years. On the basis of results obtained from these surveys, the need for the establishment of sites where vicuñas will be either under strict protection or under management programmes shall be assessed.
- The methodology for vicuña surveys shall be unified following the guidelines agreed by the Vicuña Convention and internally for the National Census.
- The province of Catamarca shall discuss and agree an action plan with the National Secretariat for the Environment and Sustainable Development, the National Parks Administration and the local Governments (municipalities) involved. Such actions will be aimed at controlling poaching, processing of vicuña hair by local artisans, industrial processing, as well as at implementing management plans for vicuña populations and Protected Areas for the species. In order to carry out these tasks, the staff involved will receive adequate training.
- Information and education campaigns on the conservation and sustainable use of vicuñas shall be promoted, in a coordinated effort with the above-mentioned stakeholders.
- Shearing of live animals, both from wild populations and from captive-breeding operations, will be carried out as established in the adopted Management Plans, in compliance with provincial and

federal laws and regulations. With this aim, efforts will be made to concentrate shearing activities in the most appropriate time of the year, with regard to climate conditions, so that the effect of shearing on survival of vicuñas is minimal. Each animal will be sheared every two years; specimens will be individually identified and recorded, so that production of fibre and post-shearing mortality can be adequately assessed.

- Research on behaviour of vicuñas in the wild and in captivity will be carried out or encouraged, with the aim of assessing optimal methodologies for management, while at the same time ensuring minimal stress and enhancing animal welfare.
- Sanitary treatment of vicuñas on a regular basis will only be carried out in captive-breeding facilities, while wild specimens that may be eventually sheared and set free shall receive no veterinary assistance, except in extraordinary circumstances.
- Before granting authorization for the installation of devices for capturing vicuñas, or for the establishment of captive-breeding operations, as well as for actions related with capture and shearing, the provincial authority shall check that the necessary elements (such as corrals, shearing devices, etc.), are available. The authorities shall also verify that the personnel involved have been sufficiently trained to carry out these tasks, so as to ensure minimum impact on animals.

3. Use based on capture and shearing of live vicuñas from wild populations:

- Sustainable use of vicuñas from wild populations through capture and shearing of live animals can be undertaken on the initiative of the Government of the province of Catamarca, by private landowners or enterprises, or by cooperative associations or other type of associations of Puna inhabitants, with the prior authorization and approval of competent provincial authorities.
- Requests for authorization of capture and shearing of live vicuñas from wild populations must include data on those responsible for capture and shearing, on the property where these will be carried out, status of land ownership, occupation or use of the land by those responsible, submission of a management plan containing detailed information on methods for capture, prepared by a competent professional, as well as an estimate of products to be obtained.
- Although each request for capture and shearing may be particular, generally speaking, the methodology developed by Hofmann and Otte in Peru shall be applied, concentrating capture and shearing efforts mainly on groups of single males. In the event of capture and shearing by initiative of the Government of Catamarca, these activities shall be carried out with active participation of the local communities.
- The income derived from shearing captured animals shall be sold to local craftsmen, or to authorized and registered storers of vicuña fibre; a fixed price will be established. Of the total income obtained from sales under this system, 80 per cent shall be distributed among community members of the area where the animals were captured, and of the remaining 20 per cent, 15 per cent shall go to a special fund for management, research and protection of the vicuña, its habitat and that of other species sharing the same environment, while the remaining 5 per cent shall go to a Provincial Fund for Craftsmanship, to be used to as an incentive for the activities of artisans, capacity-building and improvement of commercialization practices and access to markets.
- For capture and shearing organised by cooperative associations or associations of local inhabitants of the Puna, or by private landowners or enterprises, income derived from sales of vicuña fibre from live animals shall be negotiated directly between these and the buyers, with no intervention from the provincial Government in establishment of prices, or retention of any kind of fees, except those perceived from the authorization to carry out captures.

4. Use based on captive breeding:

- The use of vicuñas based on captive-breeding operations shall be authorized by the competent authorities. Captive-breeding operations can be implemented by provincial or national governmental organisations, or by cooperative associations or associations of local Puna inhabitants, or by private landowners or land-owning enterprises.
- Private initiatives related to this activity shall be strongly encouraged, taking into account the different types of land ownership of the Puna in the province of Catamarca (individual private property, communal lands, rented lands, occupation of fiscal lands, etc.). Experimental, government-owned captive-breeding facilities that have been implemented in the past shall be transferred to cooperative associations or associations of local inhabitants.
- Captive-breeding operations shall only be authorized in the Puna and Altoandina Regions, in the departments of Belén, Antofagasta de la Sierra, Tinogasta and Santa María.
- For the establishment of captive-breeding operations, captures of vicuñas from wild populations shall be authorized in areas of use or potential use, that shall be identified on the basis of surveys, as described above. An annual quota of vicuñas to be captured shall be established for breeding stocks, which shall not exceed 5 per cent of the vicuña population in that given area, in a given period of time. This initial percentage may be corrected in the light of information that will become available from studies and surveys.
- Requirements for the establishment of captive-breeding operations include the following data: persons responsible for the captive-breeding operation, data of the property where it will be established, status of land ownership, number of specimens that will compose the initial breeding stock, management plan (including zootechnical and sanitary plans, signed by a competent professional, as well as an estimate of expected produce to be obtained). The activities shall be strictly controlled, in order to verify the implementation of the approved plan, and to check that there are no negative effects on the wild population from which the vicuñas are being obtained.
- Those responsible for a captive-breeding operation are obliged to present an annual report on the implementation of the management plan, which shall require approval by the competent provincial authority. This approval shall be a requirement for authorizing the continuation of the activity.
- Exchange of live vicuñas among captive-breeding facilities (whether it takes place between two existing facilities or between an existing facility and a newly created one), shall only be allowed if these are located within the range of the species in the province of Catamarca, so that these facilities will be located solely in Puna or Altoandino environments.
- The liberation of captive-bred specimens into the wild without prior authorization from the competent authority, that shall assess the pertinence of such liberation, is forbidden. In the case of vicuñas from other provinces, liberation of specimens in the wild is strictly forbidden.
- Commercialization of vicuña products from captive-breeding operations shall be the responsibility of their owners, who shall negotiate the produce directly with the buyers, in compliance with laws and regulations in force.

5. Commercialization systems:

- Commercialization, transport and storing of vicuña products shall be accompanied by the pertinent legal documents: Certificate of Origin and Legal Holding (within the province of Catamarca), Transport Document (*Guía de Tránsito* – for transport outside the province of Catamarca) and Certificates of Origin and Legal Holding in the provinces of destination. In the case of exports, the CITES Management Authority shall issue the pertinent Export Permits and CITES Export Permits.

- All changes in ownership resulting from a sale or exchange between producers of fibres, artisans, industries, storers, etc., must be registered by the issuance of the documents mentioned above. The fee applicable to vicuña products by the province of Catamarca shall only be charged to the last buyer of the product within the province. The CITES Management Authority (Dirección de Fauna y Flora Silvestres de la Secretaría de Ambiente y Desarrollo Sustentable), shall retain the pertinent fees for export of vicuña parts and derivatives.
- All the stakeholders involved in production and commercialization of vicuña products shall be registered by the provincial and national competent authorities. The Federal and Provincial Governments shall in agreement establish the identification methods of vicuña products that may be eventually traded.

RESOLUCIÓN No. 249/02

CONSIDERANDO:

Que la República de Argentina ha presentado a esta Comisión la propuesta de transferencia del Apéndice I al Apéndice II de la Convención de CITES, de todas las poblaciones de vicuñas de la Provincia de Catamarca, para conocimiento y consideración de la XXI Reunión Ordinaria del Convenio de la Vicuña, que se llevará a cabo en Santiago de Chile en noviembre del año 2002.

LA COMISION

RESUELVE:

1. Avalar la propuesta de la República de Argentina de transferencia del Apéndice I al Apéndice II de la CITES, de las poblaciones de vicuña de la Provincia de Catamarca y que se encuentran incluidas en el Apéndice I de dicha Convención, para su consideración en la Duodécima Reunión de la Conferencia de las Partes de la CITES, a realizarse en Santiago de Chile, del 3 al 15 de noviembre de 2002.
2. Solicitar a la Secretaría Pro-Tempore del Convenio de la vicuña, que comunique esta decisión a la Secretaría de la Convención CITES.