MUSTO DESARTAMENTAL DE Parque Rol. Purcel CIENCIAS NATURALES FEDERICO CARLOS LEHMANN V. CALI - COL. No. 1203/1974 6/11/21

IUCN/WWF Full Project

- Title: Puracé National Park, Colombia Provision of equipment and 1. establishment of guard posts.
- 2. Instituto de Desarrollo de los Recursos Naturales Renovables Originator: INDERENA, Bogota, Colombia.
- Amount of grant requested: 1975 U**5** \$ 20'000 = Sw.fr. 52'000

1976 US \$ 10'000 Sw.fr. 26'000 =

1977 US \$ 9'500 Sw.fr. 24'700

1978 US \$ 5'500 Sw.fr. 14'300

Project description:

Scope - Elaboration of a Master Plan, provision of transport and communication facilities, construction of quard posts.

Objectives - To improve the management and the control of the National Park and to provent intrusion of poachers and settlers along the Park boundaries and particularly along a new road which is under construction through the Park.

<u>Justification</u> - The area was declared a National Park by Decreto Departamental No. 119 in 1961. Since 1969 it has been under the administration and management of INDERENA (Decreto No. 2420), which has built up a small guard system . However, despite all efforts, pressure upon the Park area from settlers living along the perimetre continues. Significant changes of the Park's natural ecosystem, and depletion of the fauna, including several rare and endangered animal species, will take place if no effective measures are taken now to improve the supervision and the management of the Park. The large surface, and the distance of some sectors require the establishment of guard posts at strategic points and good transport and communication equipment for the guards. The Colombian Government is prepared to employ additional personnel and INDERENA has the experts available for elaborating a proper Master Plan, but lack of funds for basic equipment and field expenses has made the realization of these plans impossible.

Background - The Puracé National Park is situated in the Andes of Southern Colombia where the eastern and the central cordilleras branch off (Departments of Cauca, San Augustin and Huila . It is to a large extent surrounded by natural limits and covers about 87'000 has. INDERENA is at present negotiating to extend the park in the south-east - this would double its present size. The Park is accessible by road from Popayan via the village of Puracé (about 2 hours). The road passes the north section of the Park and leads to Neiva. A second road leads from Popayan along the Rio Cauca to the park, but terminates at its boundaries. Plans have been elaborated and are about to be realized to continue this road through the park to connect it with Isnos south east of the Park. A network of dirt roads and mulestracks exists inside the park for guards and visitors.

The Park extends from 2'500 to 4'700 metres altitude and covers the water catchment areas of Colombia's largest rivers the Cauca, Magdalena, Caqueta and Putumayo. It includes 7 volcanoes, the best known are the Puracé and the Pan de Azucar, some of which are still active. Volcanic activities have left typical marks in the area. Hot springs, magnificent canyons and snow-capped mountain peaks add to the Park's scenic attraction.

The Park vegetation zones include paramo communities and various kinds of mountain rain-forest. The Paramo which extends above the forest limit (around 3'800 m) is covered by a continuous and often evergreen vegetation. The plants include bushes, dwarf trees, grasses (some in bunches), and herbs, some of which form cushions, carpets and meadows. The most peculiar formation is so-called "Frailejonales" which are dominated by members of the genus Espeletia (Compositae). These plants form large rosettes which grow either on the ground or on erect unbranched trunks which may reach heights of 10 metres in mature undisturbed areas. Espeletia hartwegiana is the dominant species of the paramo landscape inside the park. Along the slopes of the volcanoes Frailejonales are replaced by grass and herb communities, until the mountain rain forests starts at about 3'800 m.

The park is particularly rich in birds, up to now 200 species have been recorded, the most spectacular are the condor (<u>Vultur gryptus</u>), the Black and Chestnut Eagle(<u>Oroaetus isidori</u>), the Golden headed and the Crested Quetzal (<u>Pharomachrus auriceps</u> and <u>P. antisianus</u>). Various guan species (<u>Penelope mantaqni</u>? <u>Chamaepetes goudotii</u> and <u>Aburria aburri</u>) the Cock of the rock (<u>Rupicola peruviana</u>) and an oilbird (<u>Steatornis caripensis</u>) which form large colonies in some <u>caves</u>.

The most interesting mammal species of the Park are Spectacled bear (Tremarctos ornatus), the mountain tapir (Tapirus pinchaque), pudu (Pudu mephistophiles), otter (Lutra annoctene Colombiane) and the Puma (Felis concolor). At present the Purace is the only National Park in which the endangered mountain tapir is protected.

Some investigations have been carried out and inventories have been established on the parks vegetation. The park attracts continuously local and foreign scientists, mainly biologists who have various study programmes under way.

The facilities of the park include 5 huts for rangers, guides and visiting scientists. At present there is one chief of the park, 10 park guards, 6 game scouts and 10 labourers. There is also a small recreation area near the Park's entrance (12 km from the city of Puracé). Nature trails and observatories, which are used by 15'000 - 20'000 tourists (mainly local) each year.

Unfortunately, some parts of the park are occupied by settlers or owned by private persons, who obtained legal rights over this land before the establishment of the Park. Due to lack of financial means, it has been impossible for INDERENA to purchase their rights back or provide alternative land outside the Park.

Project details:

INDERENA's prime objective during the coming years is the elaboration of a Master Plan and to improve the supervision and control over the Parks' territory. To achieve these aims it is necessary to establish 4 new ranger stations for additional park guards who will be employed and paid by the Colombian Government, and to provide them with the necessary equipment (Radio telephores, generators, horses, vehicle, camping equipment, etc.). The guards will be able to extend their patrols and supervise most of the park area. They will contribute to the knowledge of the area and assist in the collection of data on fauna and flora.

The project period is 4 years. During the first 6 months, the management plan will be elaborated. During the first 2 years, the 4 guard posts should be constructed to provide accommodation for the new personnel. Equipment should be provided early each year.

INDERENA guarantees the continuation of the project after this period and the proper maintenance of the equipment provided.

INTERNAL INFORMATION

Estimated costs:

<u>Item</u>	<u>No</u> .		er 1975	1976	<u>1977</u>	1978	Total
Elaboration of Master Plan, supervision		<u>unit</u>	3'000				3'000
Vehicles, Radios,						:: 3:00	oji .
Jeep, Nissan Petrol	1	5'000			5'000	10 and 10 and	5'000
Generators, Lister 3.5 kw	4	500	1'000	1,000			2'000
Radios Motorola	5	1'000	2'000			3'000	5'000
Spare parts		e e	500	500	, 500	500	2'000
Guard posts	4	4'500	10,000	6'000	2'000		18'000
Horses, saddles etc.	5	300	600	900			1'500
Equipment for Guards	_					n ^{glit}	
Tents	5	200	1'000				1,000
sleeping bags	10	50	400	100			500
miscellaneous			1'500	1'500	2'000	2'000	7'000
TOTAL	====	======	20'000	10'000	9 ' 500	5 '500	45'000

6. References and responsibilities:

References: Universidad Nacional de Colombia - Dr. Alvaro Fernandez,
Director Instituto de Ciencias Naturales.

<u>Technical Responsibility</u>: Instituto de Desarrollo de los Recursos Naturales Renovables - INDERENA - Division de Parques Nacionales y Vida Silvestre.

Administrative responsibility: to be determined

7. Timing of financial requirements:

Period: January 1975 - December 1978

Timing of financial disbursements:

June 1975	US \$ 15'000	Sw.fr. 39'000	
October 1975	5,000	13'000	
March 1976	10,000	26,000	
March 1977	9 500	24'700	
March 1978	5'500	14'300	
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TOTAL	US \$ 45'000	Sw.Fr.117'000	

Bank Account for payment: WWF International Bank Account, Union de Banques Suisses. Acct. 492 165 01 R, Morges, Switzerland.

- 8. Other funds available: NONE
- 9. Remarks: For the period of the project, INDERENA will employ additional staff and pay their salaries. INDERENA will also provide maintenance of the equipment and provide additional outfits to existing guard posts. There may be a revision of the requested items for 1977-1978, in the light of the Master Plan which will be produced in 1975.
- 10. Project Officer: Dr. Hartmut Jungius.

Date of original application: August, 1974.

Date of IUCN/WWF Project: November, 1974.

CHECA