

Protected Area Profile – Peru

Asháninka



Communal Reserve



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Location: Satipo Province, Department of Junín

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Area: 184,468 hectares

Ecoregion: Tropical Forest of Apurímac, Tambo and Ene Rivers, Peruvian Yungas

Habitats: Dry tropical forest, humid tropical forest, very humid tropical forest - premontane tropical/ subtropical, rainforest - premontane tropical/subtropical, low montane tropical rainforest, and low montane subtropical rainforest



Summary

Description

Asháninka Communal Reserve is one of the most pristine places on Earth. Numerous tributaries of the Ene River, flowing east to west from the Vilcabamba Mountain summits, create an intricate topography in the central part of the mountain range's western slope. The communal reserve conserves the system that feeds the Tambo and Ene Rivers. It borders Otishi National Park and thereby maintains these rivers' sources and protects their sub-watersheds, almost in their entirety.

Biodiversity

The mountainous area is covered by tropical vegetation that differs in each of its altitudinal levels, overall encompassing a large amount of biodiversity. It contains sufficiently large ecosystems to protect adequate populations of uncommon species. Habitat diversity is extraordinary. The area has not been well studied; however there have been new species discoveries by scientists, which demonstrate the importance and priority of conducting research in this region. The predominant species are typical of tropical rainforests, with the presence of large mammals such as jaguars, tapirs, deer, wild pigs, and monkeys. Cedar and mahogany trees are among the reserve's great floral diversity.

Threats

Up to this point, its geographic isolation and lack of access has guaranteed conservation of Asháninka Communal Reserve, which is currently **not threatened**, except for slight impacts in its extreme northwestern sector, near the confluence of the Perene and Ene Rivers. However, natural resource use tendencies and activities carried out in its surrounding areas threaten the future of the protected area. The principal threats are the migration and constant arrivals of colonists, timber extraction, road and timber road construction, presence of drug trafficking and terrorism, unsustainable natural resource use, the effects of a growing population, and lack of management implementation.



Photo © Asociación para la Conservación del Patrimonio de Cutivireni

Description

Physical Description

The Asháninka Reserve is located in the central portion of the western slope of the Vilcabamba Mountain Range, in the Tambo River district of the Satipo province in the department of Junin. It covers 184,468.38 hectares. It's latitude is 11°10 – 12 °35 South and longitude is 73°25 - 74°10 West.¹

Climate

Precipitation varies considerably according to the region and time of year. In the lowland areas near forested slopes, which are drier areas, precipitation is approximately 2,000 mm per year. In the high, moist tropical rainforest regions, annual precipitation is approximately 3,000 mm. Temperatures in the lower altitudes (below 1,000 m) is around 25° C. Between 1,000 and 2,000 m, the temperature drops to 22° C, and above 2,000 m, temperatures can drop to below 20° C.²

Hydrology

The protected area is one of the most pristine places on the planet. The main basins forming its hydrology are those of the Tambo, Ene, and Apurimac Rivers.³ Numerous tributaries of the Ene River flow down from the peaks from east to west, penetrating the ground and creating an intricate topography.⁴ A series of creeks that flow down from Otishi National Park (the high regions of the Vilcabamba Mountain range) form the hydrology. These parallel creeks cross the reserve and flow into the Tambo and Ene Rivers.

Geology

The area is made up of a mix of igneous and sedimentary rocks, with a small amount of

metamorphic rock. The sedimentary rock makes up the largest proportion of the region's geological structure and consists primarily of limestone, sandstone, quartz, and clayish material.⁵

Geomorphology and Relief

High Terraces: Generally located near second order rivers and streams. In some areas they are found in the highest parts forming something similar to a plateau. They have flat to slightly undulating topography, and their slopes are from 0% to 8%. They have no drainage problems, and consist of ancient alluvial materials.⁶

Lowland Hills I: These are areas of small hills that are tectonic in origin, sloping up to 30%. These hills can reach a relative height of 40 m.⁷ **Low Hills II:** These are areas of tectonic origin, but have also been shaped by hydraulic erosion, accentuating their dramatic topography, presenting slopes with gradients of up to 70%. These hills can reach a relative height of 80 m.

High Hills I: These hills reach 120 m in relative height. Their slopes are very pronounced and can reach gradients of 100%. **High Hills II:** These hills are mostly distributed along the base of the Sub-Andean strip, forming a surface severely eroded by the abundant streams that effortlessly dissect the surface's smooth lithography.⁸

Mountain I: Topography in these areas varies between mildly rugged to rugged. They reach 800 m above the local base (relative height). **Mountains II:** These topographic zones are severely to extremely rugged. They also reach 800 m in relative height.⁹ Overall, the communal reserve primarily consists of uneven terrain of tectonic origin. These physiographic landscapes are appropriate for protection.

Biodiversity

The communal reserve conserves half of the stream channels that flow into the Tambo and Ene rivers, which along with Otishi National Park, include intact headwaters and almost complete micro-basins. These micro-basins comprise ecological systems—with natural disturbances, pollinators, and seed distributors—in a sufficiently large matrix to protect adequate populations of uncommon species. Habitat diversity is extraordinary.

The communal reserve, along with Otishi National Park, protects all the biological communities found in the high parts of the Vilcabamba Range, from dwarf forests, to mountain peak shrubs, to montane and premontane forests. The high slopes and forested crests deserve special attention. These isolated habitats are critical to maintaining diversity of montane animals, and to protect against the occurrence of natural processes like landslides and frequent cave-ins. Highly vulnerable habitats at high elevations are particularly important for wildlife; this is especially true for the herpetofauna whose species inhabit high elevation streams.

Asháninka Communal Reserve covers the western flank of the Vilcabamba Range where there is a significant lack of information on biodiversity; the area has not been well studied. The only research conducted in the zone has been floral and fauna collections and biological inventories.

New species discoveries by scientists show the importance and merit of conducting research in this region.¹⁰

According to Conservation International's Rapid Biological Evaluation Program (RAP), most of the reserve is covered by cloud forest, on the moderately sloped mountainsides. As their results suggest, there is little species superposition in the different zones, which is an indicator of high biodiversity.¹¹ There are four life regions in the reserve: Dry Tropical Forest; Very Humid, Premontane Tropical/Subtropical Forest; Premontane Tropical/Subtropical Rainforest; and Low Montane Tropical Rainforest and Low Montane Subtropical Rainforest.¹²

Flora

According to physiognomic criteria, the following types of vegetation have been identified:

- High Forest: This forest has clearly distinct strata, in which emergent, wide canopied individuals stand out and appear with other co-dominant tree species. This characteristic makes the surface appear to have rough terrain. This is characteristic of a healthy forest.
- Forest with Bamboo: Presence of bamboo (*Guadua* sp.) and trees of small height, which is typical of nutrient-poor sites.
- Dry Forest: Located in the area surrounding the confluence of the Ene and Perene Rivers.
- Grassy Brush: Generally found in high mountainous regions.
- Vegetation in areas with agricultural interference: Areas where agricultural activities have been introduced, combining different types of vegetation such as cultivated pastures, secondary forest in different stages of development, and newly invaded primary forest. All of these form a mosaic difficult to separate and classify.
- Areas without vegetation: These contain rocky outcroppings and eroded areas.¹³

According to the structural analysis of the types of forest found in the communal reserve, the most commonly found species in the reserve are: *Pseudolmedia laevigata*, *Nectandra* sp., *Inga ruiziana*, *Pouteria* sp., *Guarea* sp., *Quaribea bicolor*, *Virola peruviana*. The next most common are: *Guatteria* sp., *Clarisia racemosa*, *Pouteria* sp., *Spondias monbin*, *Macrobim* sp., *Trichilia* sp., *Ficus* sp., *Zanthoxylum risianum*, *Osandra* sp., *Brosimum allicastrum*, *Aspidosperma macrocarpon*.¹⁴

Fauna

Asháninka Communal Reserve has fauna representative of hill and low mountain ecosystems of the Peruvian Amazon. Native communities engage in subsistence hunting of many of the fauna species.

According to studies completed by Dr. Terborgh, by the Field Museum of Chicago and by Conservation International's RAP team in 1997, it is estimated that there are 115 species of birds within the Reserve. There were 13 species of herpetofauna present. A relatively low abundance of aquatic macro invertebrates (96 individuals / m) was found. They found 19 species of

butterflies. On the whole, they collected 60 species of spiders distributed among 16 families and 22 species of crickets from four families. The team also registered 166 species of beetles from 21 families. Also, they encountered 102 species of bees and wasps (not including ants) belonging to ten families.¹⁵

According to Conservation International's RAP in 1997, there are an estimated 115 species of birds belonging to 28 families in Asháninka Communal Reservation. The most numerous family was Emberezidae with 27 species (23.9 %), followed by Tyrannidae with 17 species (15.0 %), Formicariidae with 12 species (10.6 %) and Thochilidae with 9 species (8.0 %). Several species such as *Otus alboguralis* and *Basileuterus luteoviridis* are typically found in much higher elevations in other parts of Peru. *Grallaria erytholeuca* was found with relative frequency during the expedition. This species has a very restricted distribution, and it is only found in the mountainous chains of Vilcabamba and Vilcanota. Although detailed comparisons have not been done, the population of the Vilcabamba Range might represent a new species.

Bamboo rats (*Dactylomys peruanus*) dominate the dense bamboo groves. This location could represent an extension of this species' distribution since previously it had only been documented on rare occasions. The study registered at least three primate species, including spider and nocturnal monkeys, as well as capuchins. Since primate populations have been severely reduced by hunting in the lowlands, the communal reserve's highlands represent an important local refuge. Thirteen species made up the herpetofauna. The frog fauna in this location was basically similar to what was found in similar elevations inside of Manú National Park, but it was unusual not to have found specimens of *Hyla* or *Phrynops*, which normally are present in similar altitudes. It is possible that the absence of *Hyla* could be attributed to lack of suitable habitat. Up to two thirds of the frog species identified could be entirely new to science.¹⁶

Management

Background

Interest in protecting and managing the area began over 40 years ago when Eduardo Jensen's studies (1962) drove the Ministry of Agriculture's Forestry and Hunting Service to propose declaring 1,464,250 hectares as a forestry reserve. Subsequently, on October 9, 1963, Supreme Resolution 442-63-AG created the Apurimac National Forest with an extension of 2,071,700 hectares. After 25 years as a national forest, in which the primary goal was forestry activities, the area was included as part of the National System of State Protected Areas as a Reserved Zone, a temporary, transition category. In 1988, Supreme Resolution 0186-88-AG created the Apurimac Reserved Zone, which covered 1,699, 2000 hectares in the departments of Junín (province of Satipo) and Cusco (province of La Convención) in order to protect the region's forests.

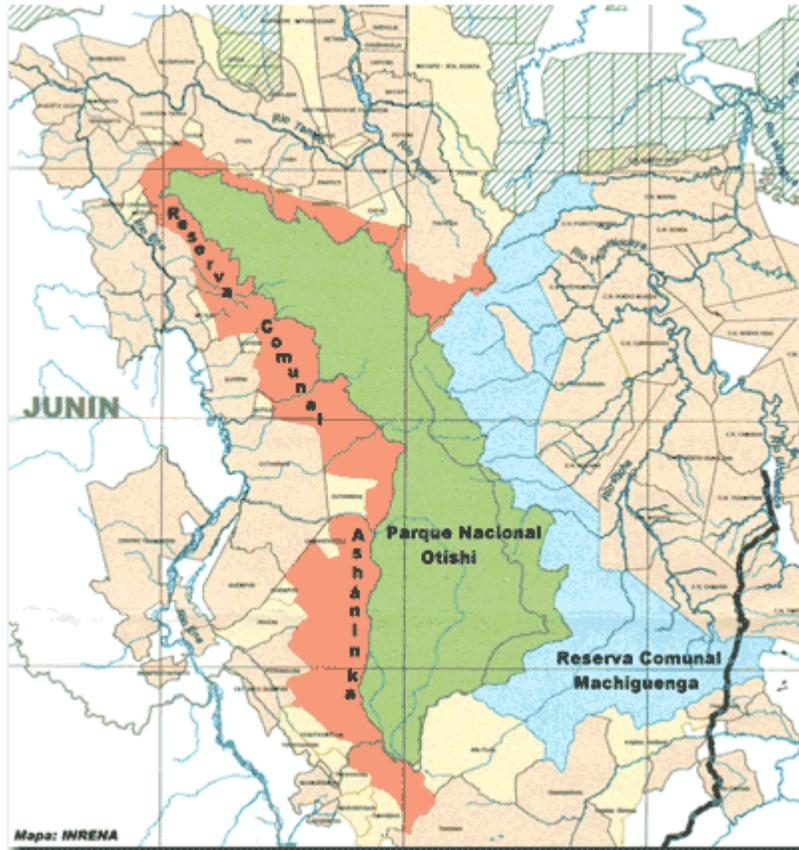
Fifteen years later, on January 14, 2003, Supreme Decree 003-2003-AG declared Apurimac Reserved Zone's final categorization and the next day they published the official establishment of two communal reserves and one national park: 1) Asháninka Communal Reserve (RCA) covers 184,468.38 hectares and is located on the western slope of the Vilcabamba Range in the province of Satipo, department of Junín. 2) Machiguenga Communal Reserve (RCM) covers 218,905.63 hectares and is located on the eastern slope of the Vilcabamba Range in the province

of Echarate, department of Cusco. 3) Otishi National Park (PNO) covers 305,973.05 hectares and is located between Asháninka and Machiguenga communal reserves in the province of Satipo, department of Junín and the province of Echarate, department of Cusco.

Of the original Apurimac Reserved Zone, which covered 1,699,200 hectares, 709,347.06 hectares were recategorized into these three new protected areas. The other 989,852.94 hectares were not included because they were already titled community properties or were included as additional community properties and are now part of the buffer zone. The buffer zone borders are currently provisional and they will be determined during the participatory process used to create the master plan and will be included in the plan itself.

Asháninka and Machiguenga Communal Reserves were established in order to guarantee biological diversity conservation for the benefit of neighboring native communities. Within these communal reserves, new settlements are prohibited as are expansion of agricultural or livestock activities, and timber extraction. Communal reserve establishment does not grant property rights to the communities. Instead, the state recognizes and protects the right of traditional access to natural resources for subsistence-based activities. In this case, the state recognizes the rights of the native communities of the Asháninkas and Machiguengas, and the Yines of the Urubamba; they should exercise their user rights in harmony with the objectives of the natural protected areas as established by law.

Many institutions were involved in the process creating the three protected areas. The Asociación para la Conservación del Patrimonio de Cutivireni (ACPC, Association for Conservation of Cutivireni Heritage) was heavily involved and they were most interested in the Ene River Basin; the Centro para el Desarrollo del Indígena Amazónico (CEDIA, Center for Amazonian Indigenous Development) whose interest was focused on territorial planning in the Urubamba River Basin; the Instituto del Bien Común (IBC, Common Good Institute) who works in defining territorial borders; Conservation International (CI) contributed mostly to the biological evaluation of the area; the National Institute of Natural Resources (INRENA) is the governmental agency responsible for National System of State Protected Areas; grassroots federations and organizations such as Asociación Regional de Pueblos Indígenas (ARPI, Regional Association of Indigenous Towns); la Central Asháninka del Río Tambo (CART, Asháninka Center of Tambo River); la Confederación de Nacionalidades Amazónicas del Perú (CONAP, Confederation of Amazonian Nationals of Peru); and the Asociación Interétnica de Desarrollo de la Selva Peruana (AIDSESP, Interethnic Association of Peruvian Jungle Development) also participated. Many years ago, additional institutions were involved such as the General Fauna and Forestry Office (DGFF), which was at one point responsible for the protected areas; and the National Office of Natural Resource Evaluation (ONREN), the Amazonian Center of Anthropology and Practical Application (CAAAP), and the Research and Amazonian Promotion Center (CIPA), which were involved providing information. The Missionaries (Misioneros Dominicanos) of the Urubamba River also participated in the process. Initially, financing for the categorization of the reserved zone came from the World Bank's Global Environmental Facility in coordination with Conservation International's Critical Ecosystem Partnership Fund.



Source: INRENA

The Association for the Conservation of the Cutivireni Patrimony (ACPC) is a group whose mission is to protect and preserve the cultural and natural heritage of the native population of Asháninka living in the Vilcabamba Mountains. As the executive director of the institution Iván Brehaut recounts, from the beginning of ACPC's activities during the 80s, the Ene Valley was being invaded by colonists. The regional authorities earmarked public investment to support the colonists' occupation of these territories. Up until then, the indigenous population was under great risk, the communal territories were not guaranteed and there was no way of fully protecting them against the colonists' invasion. There were intense social problems in the area. Drug trafficking and terrorism had found their way into the area. In the 1990s, the central forest was destroyed by Sendero Luminoso, a group who was bitter enemies with, and genocidal killers of, the Asháninkas. ACPC had to desert their conservation efforts in order to provide assistance to the people, "we could not let the people we were working with die from famine, illnesses, and violence. "



ACPC Workshop regarding land titling. Photo © Diego Shoobridge, ParksWatch – Peru.

When the technical documents were presented, as part of the process to create the

protected areas, there was disagreement between involved institutions that resulted in delays and uneasiness. According to Iván Brehaut, CI (which was in charge of the GEF – Vilcabamba program) presented out of date information, distorted the land use tendencies in the zone because their maps were poorly made, irresponsibly disseminated information, and basically spoiled the work. This caused enormous confusion. CEDIA and ACPC had developed the official land register and collected the field information. Unfortunately, the staff for GEF - Vilcabamba either misinterpreted or completely ignored this information and created an erroneous database. These technical documents were rejected by CEDIA and ACPC, “not because Conservation International did the work on their own, and not because they did it behind our backs even though we were supposedly associates, but because it was terrible work.” They used a technical method that neither the governmental Special Land Titling Project (PETT), which is responsible for legalizing land uses, nor INRENA, nor the German development agency that was helping the process could understand. The technical documents had serious problems, there were 40,000 hectares-worth of errors and they were not totally recognized by the indigenous communities since they were not consulted. While INRENA, the organizations, and the communities were in the process of defining new titled areas, in the middle of the consultation process, CI presented their report to INRENA that included an incorrect map. An entire year of work was lost; ACPC, CEDIA, IBC, INRENA and other indigenous organizations were using funds they did not have. All of the technical documents had to be redone.

The most important contribution from Conservation International to the formalization of the areas in question is the scientific investigation that they completed with the team from The Smithsonian Institute, the Chicago Field Museum, and the expeditions of the RAP team in Vilcabamba, which are the biological basis for the formalization of the protected areas. Then, in coordination with the Instituto del Bien Común they were able to complete the local survey. Today, 100 % of the communal territories adjacent to the communal reserves are indemnified, with the exception of the native community of Taini that is in process of being titled, if it was already not titled.¹⁷

The Instituto del Bien Común (IBC) has a project called the Native Communities Information System. The project’s goal is to create georeferenced land cadastres of the titled properties that the Ministry of Agriculture granted to the communities and create maps that clearly indicate which lands are titled. Communal maps created by the state between the 1970 and 1980 are not georeferenced and because of this, it was impossible to determine the protected areas’ limits. According to IBC members interviewed for this report, the Apurímac Reserved Zone was categorized in the most appropriate way. First, the community borders were defined, then, a consultation process was conducted with the communities to see which areas they wanted in order to increase their territories. Next, the protected areas’ borders were formally determined and georeferenced. In this way, the protected areas were created harmoniously with the neighboring communities. Categorizing this reserved area was exemplary because the communities were consulted often, indigenous communities and organizations had significant participation, and technical support and advice by the consulting groups (ACPC in the west, CEDIA in the east, and IBC who created the maps and cartographically delineated the protected areas) was important.

IBC's philosophy is that in order to create official protected areas, the neighboring communities' limits must be defined. In order to ensure that a protected area that will be managed for long-term protection, it must be created in harmony with the neighboring communities so that the people will be willing to get involved in its management and survival. If it is created any other way, the process will turn conflictive.¹⁸

Erick Meneses, CI's Vilcabamba Regional Director, confirms that his institution conducts studies in Vilcabamba to determine the area's biological characteristics. He explained that they solicited along with CEDIA and ACPC, a medium-sized World Bank GEF grant. The project's objective was to categorize Apurímac Reserved Zone into formal protected areas. With complementary funding, they set out to create a land use plan that coincided with the legal ordering of the area using a participatory process. At the same time, they completed biological, social, and economic diagnostics that allowed them to complete the information needed to justify the categorization of the protected area. This took three years. In addition, the GEF allowed them to start to introduce the idea of sustainable development. They did so by implementing model activities for communities to see and be convinced that they can survive and prosper by implementing activities such as forest management, crafts, and fauna management.

According to Mr. Meneses, ACPC and CEDIA separated from CI at the end of the process. He said that those organizations took advantage of CI's low profile, fieldwork and community relations to reach their objective, which was to increase the communities' territories. The first proposal for the area's categorization included the Cutiverini Zone, with a natural bridge (a geologic formation in the zone) and other zones of biological and cultural importance, but the communities claimed these places to increase their territorial limits even though they did not live there. This created a conflict between the project (which was backed by the entire consortium) and the communities. Because of this, ACPC and CEDIA said that they were not involved in the first proposal. It was a favorable opportunity for these organizations to reach their goals. IBC entered at this juncture because they already had experience with rapid titling in cases of territorial increases. Once the territories were increased, the communities were satisfied and then the new consortium presented another protected area proposal to INRENA.¹⁹ INRENA, with ACPC and CEDIA, was able to increase the proposed national park area (which was 280,000 hectares in CI's proposal) to 305,000 hectares. They were also able to delineate clear borders based on geographic relief (watersheds and watercourses) rather than points and straight lines possible to draw on maps but not in the field.

Conservation International has promoted for several years creating a Vilcabamba Amboró Conservation Corridor, of which Asháninka and Machiguenga Communal Reserves and Otishi National Park are a part. The corridor is a strategy to conserve one of the most biologically diverse places on earth within the tropical Andes region. In total, the corridor is 30 million hectares and expands from the Vilcabamba Mountain Range in Peru to the Amboró National Park in Bolivia and includes a chain of 16 protected areas that contribute to the survival of thousands of species.²⁰

Administration

The Natural Protected Areas Agency of the National Institute of Natural Resources (INRENA) within the Ministry of Agriculture is responsible for Peru's natural protected areas. Law Number 26834, Natural Protected Areas Law passed June 30, 1997, and its corresponding Supreme Decree 038-2001-AG regulate their administration.

Asháninka Communal Reserve's primary objective is to protect areas that serve as a source of biological resources and water for the Asháninka populations located on the right banks of the Tambo, Ene, and Apurímac Rivers, protecting the scenic beauty and intrinsic cultural values.²¹ These are zones defined as priority areas for conservation of the country's biological diversity in the Master Plan of the National System of State Protected Areas (SINANPE).²²

Article No. 17 of the Law of Natural Protected Areas establishes that the State recognizes and promotes private participation in the management of the Natural Protected Areas, for which it is possible to sign or grant contracts for administration of the area. These contracts or administration agreements are intersectorial management and administration mechanisms granted to not-for-profit, legally recognized organizations. These third party contracts neither end nor diminish INRENA's competence or responsibilities. Nor does it reduce INRENA's responsibility of regulation and inspection.²³

According to the legislation, the beneficiaries conduct management of a communal reserve in their way using their organizations over the long-term, in which the beneficiaries strengthen their conservation and sustainable resource use knowledge and exercise their rights and obligations with the State to administrate national heritage. In terms of managing a protected area, coordination and general supervision of a communal reserve is the responsibility of a protected area director under mandate of the Natural Protected Areas Agency of INRENA. In addition, an executor from the administrative contract is required that would coordinate the area's management. Also, a management committee is required that would help keep the area functioning and would represent involved stakeholders and beneficiaries. This process is in its beginning stages and there is much to do to complete it.

INRENA has created a commission that includes the Interethnic Development Association of the Peruvian Jungle (AIDSESEP) and other non-governmental organizations to discuss a proposal for a special communal reserve regime. According to staff from IBC, El Sira Communal Reserve began the process for forming the co-management style administration described above, but the results were less than satisfactory because the underlying law on this protected area category is not clear. Since the process ended in ruins, INRENA created a new special regime proposal. AIDSESEP also has a proposal, so they are in discussions in order to bring the two proposals together in one.

Indigenous people have always seen the communal reserves as a way to extend certain control over their traditional territories, but as it turns out since the forestry law was created in 1975, the government did not promote communal reserve creation. It wasn't until more than 10 years later that Yanasha Communal Reserve was declared in 1988; and it was declared only because of a serious internal conflict. The second communal reserve declared in Peru was El Sira in 2001,

thirteen years after the first. In the time between Yanesha's creation and El Sira's creation, the System of National Protected Areas' Master Plan incorporated communal reserves into the national protected areas system. As a result, the Natural Protected Areas Law determines the communal reserves' management regime and this creates a lot of confusion. The indigenous communities thought that the communal reserves were part of their territory and that they could treat them in their way. Finally in 2001, dialog with the Multisectoral Commission of Native Communities, which coincided with the natural protected areas regulations, began to clarify the situation.

During this dialog, the idea for a special regime for communal reserve management was included in the natural protected areas regulations. In other words, the regulations recognized that communal reserves should not be treated like a national park or a national reserve. However, how to actually manage the communal reserves in practice remains undetermined. The greatest challenge today is to clarify legal loopholes and reach a consensus on the communal reserves' special management regime.²⁴

The special administration regime proposal presented by AIDSESEP along with the Confederación de Nacionalidades Amazónicas del Peru CONAP, and other NGOs included creating various administrative entities for a communal reserve, since they are enormous territories with various indigenous organizations involved, each with several towns and even distinct ethnicities. It is very complicated. Because of this, IBC and AIDSESEP and CONAP recommended creating an administration for each part of the communal reserve. However, INRENA rejected the idea and insisted that the communal reserves have only one administration. Now INRENA has realized that it is impossible, they recognize that the Asháninka and Machiguenga reserves are immense and this makes their administration extremely challenging.

The State maintains the responsibility of control; the communities implement the reserve's management. The communities along with INRENA should elaborate the protected area's master plan. In order to do so, surrounding communities should directly and actively participate. Developing participative management models and local organization are currently underway. The native communities will establish which areas are special use areas, which ones are strict protection areas, which are use areas, etc. and they will be written into the communal reserve's master plan.

Budget

World Bank's Global Environmental Facility GEF has provided approximately \$700,000 for Apurimac Reserved Zone's categorization process.

The Interamerican Development Bank (IDB) has provided Peru with \$5 million credit to finance their institutional strengthening program, Institutional Coordinating Technical Group (GTCI), in order to accompany implementation of the Camisea Natural Gas Project. Of these funds, approximately \$300,000 has been designated to INRENA, which they use to implement Otishi National Park. For example, they have designated a park director, hired two professionals and four park guards, purchased two motorcycles, two 60 HP outboard motors, and office furniture,

in addition to other actions. While these activities are focused on Otishi National Park, they do benefit the communal reserves in the meantime.

Human influence

There are approximately 36 native communities, of the Arahua linguistic family, Asháninka ethnicity, living in the Tambo and Ene River Basins. Total population is approximately 10,000. Communities adjacent to the reserve have the most access to it. In Tambo's Valley, adjacent communities include Tsoroja, Anapate, Otica, Coriteni Tarso, Oviri, and Cheni. Tambo River's population is approximately 3,000 people, with a tendency to increase since population growth in the zone continues. Poyeni is the most populated native community in the Tambo Basin with 1,200 people (200 families). They are distributed in the main town of Poyeni and its annexes: Savareni, Selva Verde and Corinti. None of the other native communities in Tambo Valley have developed annex communities.²⁵



Meteni Native Community, photo © Diego Shoobridge, ParksWatch – Peru

The next most populated community is Cheni, with 300 inhabitants from 70 families. The least populated communities include Coriteni Tarso and Otica. Coriteni has 85 inhabitants (16 families). There are new residents in the communities of Anapate, Oviri, and Otica; they originate from Satipo and Pangoa. In general, most people live in centralized towns, except from Anapate and Oviri where inhabitants are dispersed in their small farms along the Tambo River.

In the Ene Valley, communities bordering the communal reserve are: Samaniato, Caparucia, Meteni, Quiteni, Cutivireni, Camantavishi, Quempiri, Quimaropitari, Pitirinquine, Comitamincari, Tsegontini, Timpiñari, Tipashari, and Alto Picha. San José de Cutivireni is the most populated community in the Ene Valley, with approximately 1,000 people (280 families) living in 6 annexes. The main community of Cutivireni has 69 familias, Tinkareni annex has 64 familias, Selva Verde (also known as Seboroshiari) annex has 52 familias, Shipipo has 23 familias, Cobeja has 15 familias, Tiboreni has 18 familias, Shibokiroato has 20 familias, Mario Zumaeta has 11 familias and Alto Pamoreni has 10 familias.²⁶ The next most populated town is Quempiri, which has 500 inhabitants living in 6 annexes. The other communities have between 100 and 200 inhabitants; Quimaropitari is the least populated community in the Ene Valley with 110 inhabitants. Pichiquía annexes include Meteni, Pichiquería and Chiquireni. Quiteni has two annexes: Sarita Colonia and Sor María, these two are inhabited exclusively by colonists who live just meters away from the native Asháninkas. In general, people live in the main towns and annexes, although it is common to see homes dispersed all along the river.

In the Apurímac River Valley, the communities bordering the reserve include: Gran Shinongari, Otari, Onkirensti, Ankirosi and Catongo Quempiri. Gran Shinongari is the most populated with 900 inhabitants and 12 annexes. There are 181 heads of families. The other communities have

much less populations, no more than 100 in any single town. Otari, which is a small town in area, only has 82 inhabitants (12 families). Like in the other two valleys, most people live in centralized communities or villages or they are dispersed along the river.²⁷

The arrival of Andean colonists and terrorists from the Sendero Luminoso group generated structural changes in both density and distribution of the Asháninka living in the Ene River Valley. There used to be more than 20,000 Asháninkas spread throughout the region. Many of them left their traditional homes and retreated further into the forest to escape the Quechua colonists' invasion; they were moving in from the north, west and south. A census revealed that the area around the Cutivireni Mission used to be the Asháninka population center.²⁸



Deforestation due to human presence, photo © Asociación para la Conservación del Patrimonio de Cutivireni

ACPC has evidence that there are indigenous communities in initial contact and groups of semi nomadic indigenous people that move throughout the upper part, within the communal reserve.²⁹ It is assumed that these are natives who sought refuge in the forest during the Sendero Luminoso period and that they live traditionally, away from outside civilization's influence.

However, aside from the possibility of the above-mentioned groups, there are no permanently settled communities living within Asháninka Communal Reserve. Members of nearby communities constantly travel into the reserve, to obtain forest products and also because of religious/magical beliefs, which means that the reserve has important cultural value as well. The reserve is extremely important for the Asháninka culture because it includes the mountains that are part of their ancestors' traditional territories.³⁰ It is also socially-economically important for them since they traditionally use the zone to obtain flora and fauna products for their nutrition, health, and home.³¹

When it comes to the communal reserve, there are basically two types of grassroots organizations. In the Tambo River, the directors of the grassroots organizations, such as the presidents or the representatives belonging to CART (Central Asháninka del Río Tambo), know about Asháninka Communal Reserve and they know about the benefits and interests. In the Ene River, on the other hand, leaders of the organizations also know about the reserve and they seem to understand its importance, but the general population associates the reserve more with territorial defense. This is noted in a comment made by Cutivireni President Jaime Velásquez Salas. He said, "Talking with my people, they think that we are going to have our animals and that there will not be any invasions. This is the guarantee, that there won't be invasions and that there will be animals."

IBC mentioned that when they conducted the most recent consultation, in which INRENA, indigenous institutions, and NGOs participated; there was a good level of understanding when it came to the communal reserve. CEDIA and ACPC worked hard in that respect. There has been a lot of consulting and participation in the communities. However, the general population still does not fully understand the concept and more information is needed at the community level, but the leaders definitely understand.³²

Access

Traditional trails used by communities for hunting and collecting purposes provide access to Asháninka Communal Reserve. There are several different ways to access the region and then continue onto the reserve on foot.

Terrestrial infrastructure: There is no terrestrial infrastructure immediately surrounding the reserve. There is a dirt road that goes from Satipo to Puerto Ocopa. There is another road from Quimбири to the native community of Quimaropitari.

Fluvial: River travel is much more important and widespread for transport of passengers and cargo. The Ene, Tambo and Apurímac Rivers are navigable year-round. The main fluvial routes are: Puerto Ocopa – Atalaya, Puerto Ocopa – Valle Esmeralda and San Francisco – Valle Esmeralda. Using river travel is somewhat dangerous and costly because there are some difficult passes along the Ene and Tambo Rivers.



Aerial: There are two airports and six landing strips in the zone. The airports are in Atalaya and Mazamari and the landing strips are located in Satipo, San Francisco, Puerto Ocopa, Cutivireni, Cheni and Betania. The landing strips' infrastructure is precarious at best. They lack minimum equipment (like radio communication) or any installations. The landing strip itself is clay soil and grass, which means that landing during the rainy season is difficult, if not impossible. The community residents provide occasional maintenance and attention to the strips.³³

Foot trails: In addition to air and river travel, there are several important intra and intercommunity foot trails.³⁴ The intracommunity foot trails are the most important ways for people to reach other people from their same community and to reach their farming plots, hunting and collecting zones. Permanent users are native people. Transit along these paths depends on physical-geographic conditions, time of year, and also maintenance.³⁵

Tourism

There are no tourists or visitors to Asháninka Communal Reserve because it is extremely far away and access is difficult and expensive. One must walk for hours to reach the protected area; in reality, an expedition is needed to reach it. There are some occasional visitors along the Ene

River, but not in any organized fashion. There are not tourism operators offering services in the zone.

Asháninka Communal Reserve is a prime site for tourism and recreation development within the Cutivireni River Basin, a tributary of the Ene. Close to Cutivireni Basin, there are at least 55 waterfalls; notable ones include Tres Saltos at 80 m, Tsiriapo at 60 m, Hectariato that reaches more than 300 m, Parijaro at 273 m and Tres Hermanas at 130 m in Cubeja River Basin. Rapid moving waters form awesome veils and waterfalls that can reach 300 m.³⁶

In addition to Cutivireni Basin's importance, the entire reserve is an adventure tourism and recreation attraction because of its esthetic beauty and variety of ecosystems found at close proximity, from dry forest to very moist rainforest, as well as grasslands and salt licks, which mean a great diversity of plants and animals. The protected area also has potential as an aerial tourism destination, since many of its waterfalls and landscapes can be observed by air, and as an ecotourism destination.

Conservation and Investigation

In 1961, Dr. Wolfram Drewes and Eng. Jose Lizarraga located the zone during a detour from their scouting flights to investigate areas of potential colonization. They observed two waterfalls on the western flank of the Vilcabamba mountain range. In 1963 National Geographic magazine reported on the zone's natural qualities and beauty and that it was of international interest for conservation, and possibly for the creation of a national park. In 1964, the Eng. Alfonso Rizo Patron presented the government with a photographic analysis of the area, taken by Hunting Co., where they discovered the existence of Pavirontsi Natural Bridge.³⁷

In 1964, the members of the Inter-American Development Bank (IADB) observed 12 waterfalls in the area with hydroelectric potential to develop colonization zones nearby. They stated that all of the waterfalls were tributaries of the Cutivireni River.³⁸

In 1965, the Organization of American States (OAS) proposed the creation of Cutivireni National Park. In 1974 the Franciscan Missionaries from the Vicarage of San Ramon proposed the creation of protected areas to the then militant government. In 1984, French scientist Jaques Cousteau visited the zone on his route from the Amazonian headwaters to the snow covered Andes.

In 1987, the Association for the Conservation of the Cutivireni Heritage (ACPC) completed the entire terrestrial route and arrived at Pavirontsi. They confirmed that this natural bridge was the largest in the world. Upon their return, they held a press conference where they emphasized the necessity protecting the area, and they sent a proposal to the authorities. In response to the proposal, in June 1988 the Forestry and Fauna General Directorate (DGFF) carried out a helicopter trip to survey the area. On June 22 of that same year, the Center for Rural Development of Satipo, pertaining to the Junin XVI Branch of the Department of Agriculture and the Ministry of Agriculture, sent a report regarding land tenure to the DGFF.

In October 1998 a workshop was held to discuss the Apurimac National Forest-Reality and Perspectives, where a majority of the governmental organizations, native communities, non-governmental organizations, and representatives of the colonists working in the Apurimac Reserve and adjacent areas participated to agree upon a series of common working strategies. The results were given to the Minister of Agriculture.

In November of 1989 the DGFF signed an agreement with ACPC for the study and investigation of the ecology of the flora and fauna in the Cutivireni zone. In June 1997 and 1998 Conservation International, through its Rapid Assessment Program (RAP), sent two expeditions into the Vilcambamba mountain range, confirming the area's high level of endemism. In 1999, the Conservation International implemented GEF Project began. One of its listed objectives was to recategorize the Apurimac Reserved Zone into official protected areas.³⁹

Threats

The threats to Ashaninka Communal Reserve include:

- Migration
- Illegal logging
- Highways
- Drug trafficking
- Natural resource use
- Lack of implementation of management mechanisms

Migration

No established settlements exist in the interior of the protected area. However, human migration to the outer portions of the protected area represents a serious threat. The principal problem the zone faces is migration of farmers from the Andes who arrive in search of land for agriculture. They are constantly exerting more pressure and starting conflicts with the native communities. While they have been able to mitigate this problem in part by providing titles and ownership of these territories to the native communities in the region, colonization of “free” areas belonging to the State, which includes all the median altitude portions of the communal reserve on the left bank of the Ene river, continues at an alarming rate.

Andean migration has been occurring for many years. When the Obenteni Mission was founded, the Gran Pajonal (Great Grassland) was the center of the Ashaninka culture; however the missionaries implanted a radical change. The plateau was rich in natural grasses, and the good Fathers decided that it would be better for raising cattle. Thinking that the Ashaninka's practices were not worth anything, the missionaries supported the migration of quechua colonists, “good Catholics,” who not only brought cattle, but they also claimed the land. Some Ashninkas were forced to work practically for free, so the majority moved away bit by bit, following the course of the Ene River, into very distant regions.⁴⁰

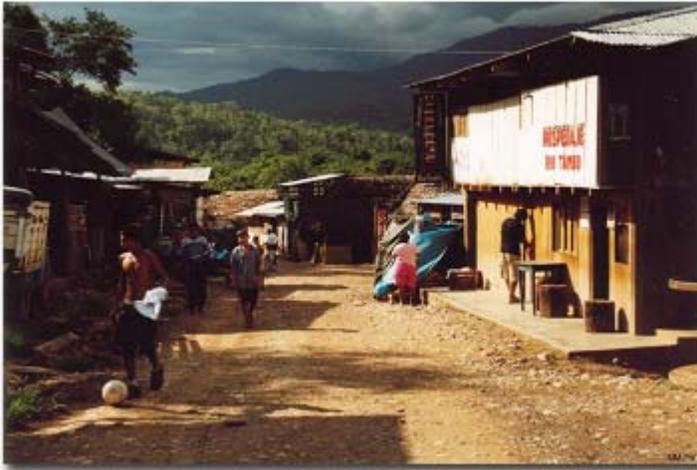
The first Quechua colonists arrived to the Cuitivireni zone on the Ene River at the end of the 1970's. Coming down from the Andes, they found fertile lands to settle. At first there were only

a few, but they were just the precursors of something to come.⁴¹ The jungle began to react to the poor treatment that it suffered at the hands of the colonists. Trees there did not have deep roots, and when the colonists cut and burned them, they found only a thin layer of topsoil with a clay base. The rain was hard enough that the topsoil was washed away, and only the hard and sterile clay was left behind. Many of the colonists saw their lands disappearing and chose to go further into the interior of the jungle, increasing the forest's destruction. It was a vicious circle: and if left unchecked, it would have ended up expelling the native people from their ancestral lands.⁴²

The problem became even more serious when the Sendero Luminoso (Illuminated Path) movement had power in the country. Andean farmers were forced into the jungles because they were victims of violence on their own lands. On the Ene River, there was a large invasion of colonists during the 80's and with them came cocaine and terrorism. These colonists displaced the Ashaninka from their territories near the rivers by invading and taking the land for themselves. It was on the Ene where the colonists received more land, since colonization there began earlier when the native communities did not have titles to their lands. As the violence diminished, communities displaced by terrorism attempted to return to their lands, only to find them occupied by colonists. The natives did not want to live with the colonists, so they were forced to look for land higher up and even closer to the reserve. For this reason CEDIA and ACPA felt that it was important to increase the number of land titles granted to the native communities in these territories. Moreover, the extensions into the Ene Valley are much more sustainable, due to the more traditional use by the isolated groups and the settling patterns of the groups higher on the mountain range.

In many cases the colonists are settled on communal property within the territories. The colonies attracted families who saw their future in the jungle and sought land to establish themselves. Colonists then began to establish friendships with the closest native communities, marry native women and raise families. This is another manner in which the colonists entered into the communities and acquired the rights and benefits of forest and resource use, based on their new status as members of a family. With time, social interactions between colonists and natives began to be problematic. According to reports from the area, confrontations between natives and colonists produce at least three deaths a year.

Jesus Melendez Perez of PETT interviewed for this report claims that the official land registries are being carried out in the native communities, and at the same time, physical and legal corrections are being made to the register of both the native communities and colonists settled around or in communal territories. The most common problem has been the territorial overlapping. There are large portions of territorial/property overlaps due to poor surveying. This has led to the unintentional placement of the colonies within native communities. What is needed is a guarantee that the surveys are accurate, with data and precise information that delineates the native communities from point a to point b. That is, identify the borders of the native communities, then using those borders, mark the boundaries of the adjacent colonists' communities.



colonists, photo © Diego Snoodriage, ParksWatch – Peru

ACPC is involved in a thorny process because they are trying to stop waves of new colonists from colonizing the area. This has presented some negative repercussions for ACPC, especially in their work in Satipo, a city dominated by colonists, where they have had problems with their image and where the public perceives them negatively. In spite of that, ACPC has embraced the task of defending the indigenous territories. Lamentably, the presence of so many colonists is one of the biggest threats not only to the indigenous population, but

also to the protected area itself. ACPC is the principal NGO working on territorial defense, conflict management, and management and conservation of forest resources in Asháninka Communal Reserve's area of influence.

These invasions do not occur within the reserve itself, but they are occurring in the native territories adjacent to the reserve. One example is Paveni, a small community that had immense colonist pressure, because colonists are advancing the agricultural border to plant more cocaine (*Eryroxilon coca*). These agriculturists are daring to invade here because they see that DEVIDA, the agency in charge of the fight against drugs in the zone, is constructing a new access road. Presumably, it will favor development and therefore work against drugs, but instead the cocaine growers use it to transport their product: basic paste used in cocaine production.⁴³

Immediately after construction for the Camiesa Gas Project began on the Urubamba River, there was a large increase in both land-based and water-based traffic along the Puerto Ocopa-Atalaya route. Due to its transitory character, the population did not feel strong negative impacts, but this experience provides a good idea of how strong of an influence a road from Satipo to Atalaya could have on the region. An increase in commercial activities along this roadway, either because of the Camiesa project or for some other reason entirely, will attract new colonists.

Logging

Logging from the interior of the reserve is very restricted, mostly because the area's geography makes access difficult. However, there are logging groups operating in the interior of the native communities' lands adjacent to the reserve. Some are even building timber extraction roads that open the doors to the reserve.

We learned through informal conversations with personnel from the Gloriabamba Forestry Control Post, on the Satipo-Puerto Ocopa highway, that logging activity in the region surrounding the reserve is extremely high and is occurring in an unorganized manner. They also have constant problems with illegal loggers cutting mahogany from the Ene River Basin, which has become a very difficult place to control.

On one side are the illegal loggers, who invade the area or make contact with the local poor people to extract wood without permission or authorization. On the other hand are the loggers that have some type of permission to log, but become illegal the moment they take wood from outside of their assigned area or exceed the allowed volumes and continue with the logging activity.

In many cases it is not possible to enter the countryside and intervene with the illegal logging because the loggers are armed. They often carry side arms and have previous criminal records or have had problems with the law. On a recent timber seizure, two people were encountered who were wanted by the Police's Terrorism Division. The Anti-Terrorism Directive Police (DIRCOTE) participated in this operation. The loggers had crossed the line to the point where they are considered to be involved with drug trafficking and terrorist activities.

Loggers are taking wood primarily from native communities. They make agreements that are often fraudulent or disadvantageous for the local community. The community puts up the title to their land to obtain permission to log it; meanwhile the loggers receive the benefit without risking anything. According to an interview with a civil employee, for every mobilization, or cutting event, the natives receive about \$3 U.S. dollars, while the loggers are becoming millionaires. The natives are being swindled without ever realizing it.



Timber systematically extracted in the area is transported along the Puerto Ocopa – Satipo road, photo © ParksWatch – Peru

Recently a commission from the Forestry Service came to speak with the heads of each community, but nearly all of them are involved in these illegal activities and therefore are not willing to collaborate on prevention or control. A seizure was made in Pichiqua, in the Ene Valley, and the president of the community did not collaborate, making things easier for the illegal loggers. They give the head of the community a rather minimal amount of money so that he will use the communal property documents to obtain permission to log the land. This happens in almost all of the Ene's tributaries' valleys where there is wood, like in Boca Sanibeni and Valle Esmeralda. The natural resources are taken from communities who have forestry permissions, but it doesn't result in local development or even produce greater community benefits because only a few people benefit, usually the heads of the community who made the deal.

Personnel of the forestry control post constantly receive threats from loggers. During the night, loggers may block the exit of the control room so that it is impossible for the people inside to stop the loggers' trucks from passing, and generally prevents any enforcement from occurring. These are people to fear, according to the poor people in the area. They come from Tocache and Uchiza, centers of drug production, and are contracted killers that often complete their task. According to sources, the personnel of the control post do not fear these people and are receiving more than enough support from DIRCOTE.



INRENA's forestry control post along the Puerto Ocopa – Satipo road, photo © Miguel Morán, ParksWatch – Peru

The Forestry Service in Satipo responds to information about possible seizures in a very slow manner. For example, there have already been seizures of illegally logged timber but the case must be formally judged (by the Forestry Service) to see whether it proceeds down the river or not. The control post on the Puerto Ocopa-Satipo highway is a very strategic one, meaning that they are able to seize huge amounts of wood, more than 10,000 board feet in seizures.

The natives also work as emissaries for the loggers, warning the loggers when there is an operation with DIRCOTE, so the loggers can retain their cargo and pass through the checkpoint after DIRCOTE has already left. There have been five operations in the last month, of which two have failed and three have been successful. This demonstrates that if they coordinate well, the result is effective control. Before there was a change of personnel at the control post, the loggers used to freely transport their illegal goods during that day. Then, after two of the operatives, the loggers adjusted their schedules and apparently now they pass through at dawn.

The system of concessions outlined by the Forest Law (Law No. 27308) is not in effect in the central forest region, only logging requests that are presented with corresponding management plans. However, management plans are not fully complied with to their maximum capacity mostly because the INRENA office in Satipo lacks personnel to cover the size of the territory it oversees, but they do everything possible to maintain control.⁴⁴

According to ACPC references, even when the area was the Apurímac Reserve, it had been suffering from logging impacts. From this institution's perspective, it was a totally illegal extraction, however for the State it was simply an irregular extraction. There was a forest contract within the protected area, validated basically by civil employees of the Regional Agrarian Office in Huancayo, administrative capital of the department of Junín, where civil employees are still not interested in conservation, indigenous rights, or the sustainable natural resource management. Here, they basically live on bribery and the peddling of influence.

There was a forest contract within the protected area. This contract had existed previous to the area's recategorization. However, it had been erroneously granted, because the forest concession

overlapped reserved zone territory. This allowed the ALCERSA company to log in the native communities and the reserved zone. To make this possible, the company constructed a highway that crosses the Pangoa and Ene Rivers going towards the communal reserve and Otishi Naitonal Park. Seeing the possibility of a suspended contract, ALSERSA went to court against the State and INRENA, but ended up losing the judgment because they did not present a good defense. Finally, under pressure of a possible scandal, the company decided to leave, but did not rule out the possibility of returning to the area.

At this time, a highway in the extreme northwest of the Asháninka Communal Reserve is being constructed. It begins near the confluence of the Ene and Tambo Rivers and runs parallel to the Tambo. The forest company MADECSA, owned by Congressman Jaime Velasquez, is continuing with the construction of this highway. Basically, it will be used to extract wood from the native communities that it crosses, in spite of the existence of strong local opposition. The community of Otica has not allowed the highway through its communal lands, basically because they have a logging contract with some small companies and they do not want a large company to come into their area. Therefore, the highway makes a deflection around their zone and continues towards Obenteni. It is known that there are colonists who have close ties with Congressman Velasquez; they want the construction of this highway to continue so they are able to continue invading territories, encouraging illegal logging, and establishing new colonies all within the titled territories of the native communities.



Timber road, photo © ACPC

The State exonerates itself, claiming that it cannot interfere with the companies and the communities because they have a private contract. This way the State avoids responsibility and the logging company does whatever it wants, meaning that the natives end up paying the consequences. In effect, the private relationships between loggers and communities are a legal matter. The community, with supports of these loggers, makes a deal to give its logging rights within its communal territory to the loggers, all the while the loggers are in charge of the entire process. The forest legislation is tacitly allowing for competition between native communities and the forest concessions established by law for supposed sustainable management of the resource. This weakness of the law actually harms the natives and greatly benefits the lumber companies that have been working in this particular area.

The indigenous population is at a disadvantage when it comes to handling the forest resources. At the present time, the communities are not in a position to properly handle forest management due to their lack of technical and operative capacity and due to the lack of money that would allow them to finance trips and procedures.

The concession system, that guarantees forest plots for 40 years, requires payments of user and rights fees and a series of other requirements that most small companies cannot cover, meaning that the larger companies or organized consortiums have more access to this system. If the rights

cost around \$1 US per hectare, it is very hard for small and medium extractors to pay between US\$ 40,000 and US\$ 50,000 dollars per year to receive a legal logging concession. Instead, they go to the native communities where they do not pay for the rights or run the risks.



Photo © ParksWatch – Peru

The head of the Samaniato community says that loggers are no longer allowed to enter his communal territory because they owe so much money to them (nearly \$80,000 US dollars). The lumber companies of Satipo deceived the people and the president of the community for over six years. The wood was taken for free. The community no longer wants more companies in its territory. They threw them out with the help of a lawyer from Satipo and the support of ACPC.⁴⁵

ACPC has established a process of forest contract negotiation between companies and communities, advising to the communities. Initially the wood bought in a community by any company was less than 10 cents Nueva Sol (\$ 0.03 U.S.) per board foot, which is robbery considering that the national price was 8 Nueva Sol per board foot. They pay much less to the community that produces the timber, even though the community should be receiving a significant part of the profits from the wood. Logging on a small scale and in accordance with good management practices can be a profitable business for the communities. This type of extraction contributes to the conservation of the resource, in contrast to the present manner of extraction, which involves practices that destroy the forest while benefiting the forest companies.

Because of the deceit of the loggers, enormous volumes and non-technically extracted timber had to be extracted so that the community could obtain an actual benefit. Yet, one single tree sold at fair market price provides sufficient benefits to the community—enough to cover its basic necessities over a certain period and the added benefit of producing minimum impact on the forest. According to ACPC's calculations, about four mahogany trees sold every year by a community would cover the price of a school and a first aid post, which are the most valued necessities in many communities. That is what ACPC is trying to promote. Through trainings, they are trying to teach the communities legal and technical tools they need to be able to establish a more balanced relationship with the lumber companies.

One of the ACPC objectives is to sell timber from the communal territories in a legal and scientific manner, with low impact and profitable benefits that are not just handed over to the president of the community (a vice that, lamentably, is wide spread in the native communities)

but that reaches all, conserving the greater amount of the forest. What used to occur was each community had to sell hundreds of hectares of forests to obtain ridiculously little benefits. Today, communities demand better prices for the wood they extract. Before, they sold wood at 10-20 cents Nueva Sol per board foot, now they sell at 2 Nuevos Soles per board foot. Contracts are no longer open, but instead are determined by precise amounts of wood. The natives understand how to measure the amount of wood and know how to ensure that the wood that is leaving is indeed the species indicated in the contract. ACPC thinks that a process has begun in which the communities are retaking control on their forest resources little by little, learning the commercial value of the wood and recovering the process of redistribution of benefits to the interior of the community.⁴⁶

It is very well known that on the left margin of the Ene River, in the district of Pangoa, active centers of terrorism exist and the zone is influenced by cocaine production. Nevertheless, the loggers enter and leave the zone with timber without issue, as it pertains to logging contracts greater than 1,000 hectares. Many of them overlap onto titled communal estates, illegally granted by the Satipo Agrarian Agency and the Agrarian Region of Junín. It is presumed that the loggers pay the terrorists and that lumber activity is simultaneously a facade for other illegal activities, such as drug trafficking. This fact is rumored within the region; nevertheless the authorities do not actually investigate any of these situations. This can be taken to demonstrate a synergy between the narcotics detectives, terrorists and loggers.

In general, the logging activity, the lobby for local highways, and the assignment of free land within the region, enjoys the influence of political power, economic and influence peddling exerted from the Congress of the Republic through lumber Congressman Jaime Velasquez Rodriguez and contemporaries. Ex-forestry civil employees function as advisers to the loggers and are interlocutors with the leaders (some corrupt) of the native communities. Some facilitate the proceedings and plans to obtain the authorizations for extraction in communities and to remove their timber resource by means of individual private contracts. These contracts are loaded with vices and tricks, and the authorities cannot intervene to safeguard those who have been swindled.⁴⁷

Highways

No exist highways cross the protected area, nevertheless there are several projects on its outskirts that constitute a serious threat for the conservation of the communal reserve. The highways attract greater colonization, facilitate access for resource extractors, drug traffickers, and terrorists. Highway construction in the region is directly linked to the timber industry, which builds access roads to the forest for wood extraction and transportation. These roads then remain behind; later, colonists rehabilitate and expand them the timber roads in coordination with local municipalities.

One unpaved highway that arrives in Port Ocopa, and originates in Satipo, is the axis on which the economic dynamics of the entire region move, connecting it with the rest of the country. This highway is being extended toward the locality of Atalaya, but very slowly and only with the contributions of the provincial municipalities of Satipo and Atalaya and in smaller measure by

the Special Project Pichis Palcazú. It is intended to unite the locality of Atalaya on Ucayali River with the Port Ocopa – Satipo Road.



According to the manifest of Iván Brehaut of ACPC, a forest highway north of the protected area exists that is being enlarged by a lumber company owned by a politician linked to the current political party of the government. There are other roads that are being built and will cause large environmental damages to the region. A highway from Satipo is being built toward Pangoa and is directed toward the heart of the activity of Sendero Luminoso, and will arrive near the population center of Puerto Porvenir on the Ene River. That highway is being built slowly and without heavy machinery, with support in part from the municipality of Pangoa and in large part from the forest businesses, in a zone where not even the army can enter. Loggers are the only ones who go in to this area. It is a planned highway and has the political support of USAID and of DEVIDA.

Another highway is the one that comes from San Francisco - Kimbiri on the Apurímac River. It runs to the north towards the Valley Esmeralda, a colonist settlement on the Upper Ene that abuts with the valley of the Apurímac. This highway is being built for the South Central Sierra Project

(Proyecto Sierra-Centro Sur) in the section that corresponds to Cusco and that now is being studied by the Regional Government of Junín and that apparently would be supported by USAID and DEVIDA. This highway, like all the others in the region, has had no environmental impact study performed or any processes of consultation. From this highway, the construction of a highway along the left margin of the Ene River is proposed, which has generated controversy. On the one hand, there is a total opposition on the part of the native communities, while the colonists are declaring their demand and expectation for its construction. This highway would come from the Apurímac River, flanking the Ene River, toward the zone of Cutivireni and unite with the highway from Port Ocopa to close the circuit from Ayacucho-Port Ocopa. This highway would have additional access to areas where there is a lot of wood, constituting a new lumber emporium.

An extension from Kimbiri on the Apurimac River to Kiteni on the Urubamba River is also being considered. That is to say that a route will be created between Kiteni and Kimbiri, which will bring about the general occupation of that zone. Already there is drug trafficking there, as well as loggers and colonists. A center of very strong pressure will be generated and neither the

communal reserve nor the native communities are adequately fortified to integrally manage the territory and to be able to defend that border.⁴⁸

The same things are occurring in regards to the extraction of wood from the territories of the native communities. Many native leaders support the construction of access and forestry roads, in complicity with businesses and lumber extractors, for whom they are signing documents behind the backs of the communities. As the president of Cutivireni declared, there is a lack of knowledge in general on the part of the native communities with respect to the danger of the highways; they only know their larger characteristics. Unfortunately the president of the Central Asháninka of the River Ene (CARE) has signed agreements without his community knowing. On the one hand these are a favor to the lumber industry, on the other they are motivated perhaps with a political end in mind; as election campaigns approach he will be seeking more prominence and support from colonists.



Highways facilitate colonists' arrivals and they generate a vicious deforestation cycle, photos © ACPC.

Drug trafficking

This region has had a drug trafficking presence for a number of years. One problem is the planting of cocoa leaves, which causes the deforestation of thousands of hectares of tropical forest, cutting vegetation on slopes that are then degraded by erosion and soil loss. The enlargement of the agricultural frontier for planting cocoa is a very serious threat to the area's natural environment. Another problem is cocaine production, which utilizes chemicals, plastics and synthetic materials that are then dumped into the rivers and surrounding environments, causing high levels of contamination that affect both the flora and fauna and the overall quality of the environment. Cocaine production centers are generally located in areas that are difficult to access, often pristine and virgin places in the interior of the forest that end up being spoiled by these activities. Drug traffickers searching for new operation areas have looked towards the interior of the communal reserve, constituting a serious threat for the protected area.

Drug trafficking creates corruption, involving public officials, authorities, agents of the law and local settlers. It attracts bad people to live in the region generating insecurity and discomfort. Terrorists finance their activities through the drug trade and in many cases work with the lumber companies both in production and transportation.

The native community of Cutivireni, and all those communities that possess a landing strip, are under the constant threat of the presence of the drug-traffickers, who pay large sums of money to use the landing strips, involving them in the corruption. As the president of Cutivireni declared, drug trafficking is a problem here in the months of January and February because of requests from the landing drug-traffickers.

The implementation of programs against drug production and the replacement of drug plantations with other crops has not been successful. Before a hectare was planted with 5 to 8 thousand cocoa plants, now between 15 and 30 thousand plants are planted in the same area. The drug growers apply technology at the growing point (high consumption of agrochemicals with leaves covering the crops) that results in an apparent reduction of cultivated surface, but the volume of production is maintained. No alternative cultivation is as profitable, because of low demand and low prices in comparison with cocoa.

If the programs to ban and control drugs increase their pressure on the drug-traffickers from the Ene Valley, it will be very possible that they will enter into community territories and the interior of the communal reserve.

Natural Resource Use

Hunting and fishing are very important components of native families' economic structure, since they provide for their own consumption needs as well as small-scale commerce, which provides the necessary money to cover other needs. Many species have been severely affected around the communities due to the human presence and hunting pressure. Sometimes residents will be in the forest for hours, taking advantage of the night or the early hours of the morning, in order to capture prey for subsistence consumption. Other times residents go in the forest, in some cases to the interior of the communal reserve, for days or weeks, especially if the prey is scarce in the outskirts of the populated areas. When they go for several days, it is generally done to provide food for some festivity or to market the excess, carrying salt and smoking the meat to preserve it.

Hunting activities are carried out year round, with greater intensity in the summer, from July to November. The majority of the natives hunt with bow and arrow. Some possess 16 caliber shotguns, which cause considerably greater impacts on the fauna of the area. Nevertheless as the availability of cartridges is restricted in the zone, many continue hunting with bow and arrow. The colonists also hunt, exclusively with firearms, but not as frequent as the natives. There exist certain firearm controls in the zone, enforced by the army, due to security issues with terrorism. The military presence in the region also impacts the fauna. According to information from local inhabitants, the soldiers also hunt and fish. In general, colonists purchase their bush meat from the natives. This generates incentives for the natives to be more and more dedicated to commercial hunting.

Locals also harvest some non-timber forest products to satisfy some of their health and dietary needs. Palm fronds are highly sought after since they use the fronds for their thatched roofs and to make utensils. This demand creates pressure on the resource and makes it increasingly scarcer.

Immigration into adjacent areas, with the consequences of deforestation and environmental degradation, means that many species of fauna flee from the pressure, seeking refuge in less accessible areas within the reserve. Hunting, fishing, and harvest activities do not currently threaten Asháninka Communal Reserve. Nevertheless, an increase in the number of settlers in the region because of colonization will increase the demand for forest products, resulting in more pressure on the same, which will affect the communal reserve.



Snails complement the native people's diet.

Medicinal plants are used often.

Photos © Diego Shoobridge, ParksWatch – Peru

Lack of implementation of management mechanisms

The Asháninka Communal Reserve does not fall entirely under the control of one administrative entity. It does not have an area director, park rangers, a management committee, or a management plan. It does not have any vigilance or control infrastructure. It hasn't even begun the process to establish an administrative contract for the area. In these conditions, the protected area finds itself vulnerable to settlers and illegal loggers.

Future Threats

Potential incremental increase of present threats

An increase of the present timber extraction levels and subsequent shortage of commercially valuable trees will push lumber activity to continue entering further into the interior of the communal reserve. Additionally, an increased road network providing access to the reserve will facilitate entrance of additional lumber companies and other resource-based industries, as well as groups of migrants in search of lands to be develop and call their own. It is likely that if these tendencies do not change, the conflicts in the region will worsen and Asháninka Communal Reserve will be very vulnerable to any threat.

Recommended solutions

Migration

A program should be formed focusing on the prevention and control of migration to the region. Town and community authorities should restrict migrant arrival to their respective localities. Migrant colonists that arrive in search of lands should be rejected directly. The INRENA, NGOs and others involved with the protected area should coordinate with the corresponding authorities to identify mechanisms and allies to implement this program. The support of the regional administration should be sought as well as the Public Ministry so that they adopt the initiative and they promote it on a general level.

New farmers settlements in the region should be regulated; favor should be given to the farmers who agree to develop non-traditional activities such as apiculture, management of ornamental plants, tourism, implementation of agro-forestry systems, and other compatible activities with the area. Reducing the use of the lands within the region should be carried out according to the greater capacity of permissible use, that is to say, if lands are apt for protection or for forest management, to dedicate them to that corresponding use.



Migrant colonists deforest the area, photo © Diego Shoobridge, ParksWatch – Peru

Intensifying coordination between the local political authorities, the district attorney's office, Department of Education, and Department of Health, among others is recommended so these different offices do not deliver authorizations, or property titles, and so they do not recognize or offer services to new localities. It is important to impede the expansion of colonists to unoccupied areas around forest roads. Grassroots colonist organizations should be included in the process so that they can learn to respect the territories of the communities, the communal reserve and the environment, and so that they will eventually commit to a concrete, regional development plan.

Environmental education campaigns should be designed and implemented urgently among the local population, both at the level of populated rural areas and in the cities of Satipo, Huancayo,

Atalaya and San Francisco. In addition, environmental education campaigns should be directed at other protected area stakeholders, such as local institutions, regional governments, authorities, or public officials. The program should promote the general knowledge of the protected area, the benefits for the region and the country, its potential and opportunities, its problems, and alternative development ideas. The environmental education program should aim for the exchange of information among the diverse actors and to assure local commitments for the reserve's conservation and development.

It is recommended that the territorial code programs initiated by ACPC be fortified, clearing the way for the physical and legal resolution of territorial conflicts. Up until now, they have relied solely on the local recorder's office in the Ene and Tambo River Basins. The completion of two years of work, with the support of the German Service of Social-Technical Cooperation, has been finalized and the records for all Tambo River District are awaiting final approval. At the same time multi-communal trainings are being carried out to validate territorial boundaries. Thus, agreements on boundaries are made and the document is enriched with inventories of non timber-yielding and timber-yielding products and other information for the communities to incorporate into the plans and final information.

Timber

The effective long-term protection of Asháninka Communal Reserve's forest resources depends on 1) the control that the Technical Administration of Forest and Wildlife Control Office exercises on the management of the forest resources the reserve's surrounding area; and 2) quick implementation of a vigilance and control system of the communal reserve on the part of the Natural Protected Areas Agency.

A large quantity of wood is being extracted from the native communities adjacent to the reserve. It is necessary for INRENA and the communities to reinforce as much control as possible, with the participation and support of its respective organizations, to stop illegal logging.

Environmental awareness campaigns among the Asháninka populations are urgently needed so that they appreciate and better value their forest resources. The illegal loggers remove timber, but they do it with the consent of the natives. If the natives end their support of the illegal loggers, they will be greater success in the interventions. Tightened coordination should be established between the INRENA, grassroots organizations like CARE and ARPI, and the NGO ACPC to promote constant and systematic environmental education and extension campaigns.

ACPC has initiated a process by which the communities are again taking control of their own forest resources, learning the commercial value of the wood, recovering the benefits and redistributing them back into the community. It is necessary that ACPC continue with this work and that they can count on INRENA's direct support.

The same is true for other regions of the Peruvian forest. The communities adjacent to the reserve can form their own natural resources control and defense committees. Part of the committees' work is not only to detect the illegal logging and denounce it, but also to take care that the communities comply with the processes and requests that the law requires, determine the

worth of management plans, authorization of the communal assembly, etc. This experience should be replicated around all the communal reserve.

It is important to promote the coordinated work with other institutions that control the area, such as the National Police and the Army, and to involve them in the efforts of control against and stop illegal extraction. The Army has an important presence in the Ene River. Their contribution to the control of illegal logging can be significant, as much in their positions of control in the river as in coordinated patrolling in zones of illegal logging. High-level coordination among the Army and the INRENA should allow joint-implementation.

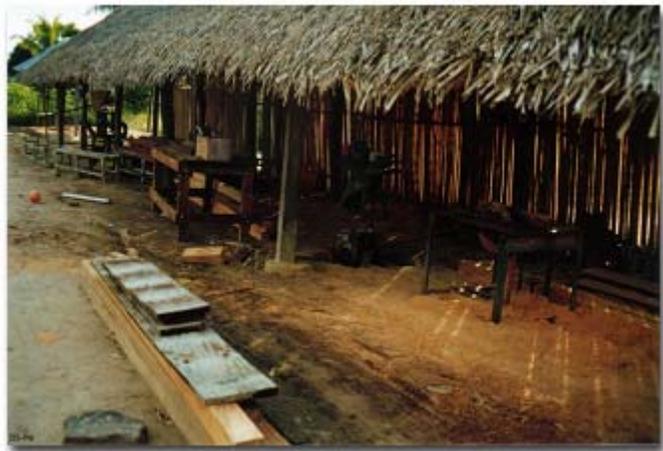
With regards to the entity charged with the control of the forest, in order to promote greater efficiency and commitment on the part of the personnel in the performance of their work and to eradicate corruption, public officials that do not comply with the roles and responsibilities of the agency should be removed or forced to withdraw, initiating the corresponding administrative procedures.

The number of the license plates of the trucks that travel with illegal wood via the highways should be recorded, so that the National Police are able to perform monitoring and sanction those responsible.

INRENA's forestry control post along Port Ocopa – Satipo highway should be fortified and better implemented. It is necessary to expand the number of personnel, from two to a minimum of four. The teams require the latest communication equipment, such as satellite telephones and computers. It is also necessary to have two motorcycles for the movement of personnel.

Owing to the presence of not only illegal logging, but also to the presence of drug trafficking and terrorist activity, the installation of a National Police control station together with INRENA on the Port Ocopa - Satipo highway is highly recommended. This will facilitate joint action and there will be greater interinstitutional control to avoid corruption.

The Peruvian State should offer facilities and preference to native communities so that they participate in low intensity forest management in their communal territories and to guarantee that the benefit from the sale of the wood is really used for the good of the community. It is necessary to promote reforestation with commercially valuable species and forest management with adequate planning and skill in the communal territories, to concentrate the future forest activity and to avoid following generations exercising pressure on the communal reserve.



*Carpentry in Cutivireni Native Community,
photo © Diego Shoobridge, ParksWatch – Peru*

The future protection of Asháninka Communal Reserve's forest resources will depend upon the use of appropriate forest management in the adjacent native communities' territories, including the correct implementation of the forest management plans offered to the lumber companies around the protected area and efficient work towards control and monitoring on the part of INRENA's Technical Administration for Forest and Wildlife Control.

Highways

It is imperative to work on the development of alternatives for optimum sustainable development in the zone and make the municipalities and regional governments more cognizant of the problems that are generated by the opening of highways, particularly those that do not result in sustainable development options. It is necessary to stop initiatives that include access roads and highways that may affect the protected area.

It is absolutely necessary to monitor the existing access roads and the routes under construction, those from Satipo toward Atalaya, Pangoa toward the Ene river, that come from Apurimac and the forest roads. Authorization of roads should be impeded. The immigration and migrant settlement via these routes should not be permitted. At the same time, an investigation of the real construction situation within the protected area should be carried out and its advance should be stopped. Strict supervision must be exercised on the lumber companies that operate toward the north of the protected area and they should be prevented from the continued opening of the area around this highway.



Forestry roads facilitate access for colonists who later deforest large expanses in the region, photos © ACPC.

Orientation of state officials should be required so that they will not take highway construction lightly. The NGOs and society in general should use efforts that lead to generating political will in the authorities to achieve greater national attention to the fear of highways in the forest. The participation of the press and of the media to create a public awareness and conscience and to exercise political pressure in favor of conservation is crucial.

It is necessary to create political mechanisms as well as legal pressure so that the municipalities do not build more highways and better focus their economic resources to promote more sustainable development. The Department of Transportations and Communications should be

involved so that they can be more involved in the planning of road development in this part of the country.

Drug trafficking

The institutions responsible for control and prevention of drug trafficking, the National Police and the Army, in coordination with the local authorities of each district, should increase their actions to intervene in order to try to eradicate this illicit activity.

It will be necessary to increase awareness amongst the local population so that they will support the fight against drug trafficking in the region. Appropriate channels of communication among the authorities and the local population should be established so that the presence of any indication of drug trafficking can be reported. Total reserve and personal security should be guaranteed for those persons that bring accusations and denounce drug-traffickers. Likewise, the presence of the Police and the Army in the zone should be constant and real, for the fight against drug trafficking and against common delinquency and terrorism.

DEVIDA, jointly with USAID, should redefine its strategies for the anti-drug fight in view of the increase in cocoa cultivation, a tendency that is currently dominant in the region. DEVIDA should cut every support to the construction of highways in the region that facilitate drug trafficking. DEVIDA should also base its objectives and actions in areas of sustainable development. As Ricardo Risco of CEDIA affirms, with the quantity of money that DEVIDA has spent up to now they had been able to buy all the cocoa and the drugs that are produced in the zone and burn them, making the people much more content.

Natural Resource Use

The communal reserve is not intensely used for hunting or harvesting, mostly because of the distance and difficulties accessing the reserve. The expectations of the local population should be centered in activities and business focused on the community territories and not so much on the communal reserve for now. Maintaining intact, well-conserved areas within the communal reserve in the long-term will be a very good achievement, since that will help guarantee a healthy environment with clean water—both quantity and quality—and will help establish a source of fauna and flora for neighboring hunting activities. The communities will also be able to participate in ecotourism and research inside the communal reserve. In the case of other activities, such as agriculture, logging or raising domesticated animals, the economic income generated for the local population should be focused more on the communal territory level.

Lack of implementation of management mechanisms

During the categorization process of the protected area, a working party was formed that carried out the actions and necessary coordination for the creation of the communal reserves and the national park. It is recommended that this working party continue coordinating for matters of management and administration of the area. ACPC, CEDIA, CI, IBC, INRENA, the community based organizations of ARPI and CARE, among others should continue acting in a joint form for the good of the area and not on an individual basis. Once they establish channels of coordination,

each institution can continue with their work agenda and fulfillment of their institutional objectives. If constructive coordination was possible and was shown effective, then this coordination should continue in a permanent way, even more so now with the challenge of managing the protected areas.

Incorporating local municipalities in the process of coordination and management is quite important, even though it would probably make some grassroots organizations uncomfortable. Considering that 100% of the territory of the Asháninka Communal Reserve and 75% of the territory of Otishi National Park are in the province of Satipo, municipal jurisdiction, it is absolutely fundamental to involve these entities, especially since they receive and handle funds and because they are, by law, supposed to support processes to manage protected areas, economic activities, and land use planning.

Training and forming leaders that can deal with a participatory management system is necessary. They need to be able to sit down and talk and negotiate with powerful groups and even transnational companies that will be arriving in the region in the future.

Research and monitoring in the communal reserve should have priority since they can better help guide and improve forestry and wildlife resource management measures that should be implemented in the productive zones of the communal territories, outside of the reserve.⁴⁹

It is urgent that the administration of the protected area be consolidated. The establishment of a management committee for the communal reserve, the appointment of a leader for the area, the implementation of a vigilance and control system with park rangers and infrastructure and the signing of an administrative contract with a competent entity are needed as soon as possible. The reserve's geographical isolation will not guarantee its protection for much more time.

Once the administration of the park has been consolidated, the following step is the design of a master management plan. The design of plans and management programs will facilitate harmonious implementation of development activities within the communal reserve.

Conclusions

Geographical isolation and difficult access have guaranteed thus far the conservation of the Asháninka Communal Reserve, which at present is not under direct, significant pressure. Nevertheless, activities exist that put the protected area in real danger.

The main problematic activity in the zone is migration of peasants from the Andes that arrive in search of lands for agriculture, increasingly exercising more pressure and originating conflicts with the native communities. With a larger population, there is a greater demand for food, goods and services, and land. When the natural resources are gone and the environment along the outskirts has deteriorated, moving in to the territories of the communal reserve could be the next objective for the colonists.

Logging in the interior of the reserve is very restricted; above all else due to geographical factors that complicate access into the zone. Nevertheless, there are lumber groups operating in the

interior of the native community territories adjacent to the communal reserve. They build roads that dangerously open the doors to the communal reserve. The extraction levels in the surrounding region of the reserve are very high and are occurring in an unsustainable and disorderly form. The loggers are taking the wood from the native communities. They create agreements, many of which are unfavorable or in some cases fraudulent, and the community puts forth their titles to the land to obtain permission for logging, from which only the lumber companies are the ones that benefit, and do so without incurring any type of obligation.

No highways exist that cross the protected area, nevertheless there is a series of highway projects on the outskirts that constitute a serious threat for the conservation of the communal reserve. The highways attract greater colonization and facilitate access for people who want to extract resources or for drug traffickers and terrorists. Highway construction in the region is directly linked to the lumber industry since it builds access roads into the forest for timber extraction and transportation, which then remain and become permanent as the colonists in coordination with local municipalities expand them.

This zone has had drug trafficking presence for numerous years. The expanding agricultural frontier to plant cocoa is a very serious threat to the zone's environment. Additionally, the production of cocaine utilizes chemicals that are poured in to the rivers and generate high levels of contamination that negatively affect the flora and fauna and the quality of the environment. As drug traffickers seek new areas of operation, they are likely to move further and further into the zone, constituting a serious threat for the protected area.

Asháninka Communal Reserve is not currently threatened by the hunting, fishing or harvesting activities. Nevertheless, an increase in the number of settlers in the region because of increased colonization will increase the demand for forest products, generating more pressure that will affect the communal reserve. Asháninka Communal Reserve does not fall under any single administrative entity. Due to these conditions, the protected area is vulnerable to colonists and illegal resource users.

To counteract these tendencies right now and to be able to avoid impacting the protected area in the near future, a series of actions is recommended. A program for migration prevention and control should be formed. The authorities of towns and communities should restrict migrant arrival to their respective localities. Migrant colonists that arrive in search of land should be rejected. There should be coordination with the corresponding authorities so that no authorizations are delivered, of property titles, and so no one recognizes or offers services to new localities.

The effective long-term protection of Asháninka Communal Reserve's forest resources depends on 1) the control that the Technical Administration of Forest and Wildlife Control Office exercises on the management of the forest resources the reserve's surrounding area; and 2) quick implementation of a vigilance and control system of the communal reserve on the part of the Natural Protected Areas Agency. It is important to promote coordinated work with other institutions that have to exercise some control over the area such as the National Police and the Army, and to involve them in efforts against illegal logging.

It is necessary to stop every initiative for opening access roads and highways that may affect the protected area. It is mandatory to monitor the existing access roads and the routes that are under construction. The continued authorization and building of roads and operation on those roads should be stopped. The institutions responsible for the control and prevention of drug trafficking, the National Police and the Army, in coordination with the local authorities of each district, should also increase their actions to ban and eradicate this illicit activity.

In relation to the use of natural resources, the expectations of the local population should be focused on activities and business centered in the community territories and less focus should be put on the reserve, at least in the short-term. It is important to consolidate the protected area's administration. The establishment of a management committee for the communal reserve, the appointment of a leader for the area, the implementation of a system of protection and control with park rangers and infrastructure, and the signing of an administrative contract with a competent entity are all needed immediately. Asháninka Communal Reserve's geographic isolation will not guarantee its protection for too much longer.

Bibliography

ACPC. <http://www.otishi.org>

2001. Conservation International /Smithsonian Institution/ACPC. RAP 12: Biological and social Assessments of de Cordillera Vilcabamba, Perú. Washington.

2001. CEDIA. Programa de Conservación Comunitaria y Desarrollo Sostenible con Comunidades Indígenas en Vilcabamba. Informe Final SubContrato CEDIA, Lima.

2001. ACPC “ Programa de Conservación Comunitaria y Desarrollo Sostenible con Comunidades Indígenas en Vilcabamba”. Subcontrato: Diagnóstico del Catastro de las Comunidades Nativas Asháninka de los Ríos Tambo, Ene y Apurímac. Informe Final. Lima.

2001.KOMETTER M. Evaluación de los Recursos forestales de la Zona Reservada Vilcabamba. CI- Peru. Lima.

1999 CI- Perú, ACPC y Cedia. Términos de Referencia para el establecimiento de dos Reservas Comunales y una parque Nacional en la Zona reservada del Apurímac. Lima.

1999. INRENA, Estrategia Nacional para las Áreas Naturales Protegidas. Lima.

1998 CTAR-Cuzco, IMA y Shell. Diagnóstico Integral y programa de Desarrollo Sostenible de la Cuenca del Bajo Urubamba . Cuzco.

1997. Gabaldon L., M,. Manual para la formación de planes de manejo en áreas protegidas de la Amazonía. Venezuela.

1997. Brack, A. Amazonía Peruana: Comunidades Indígenas, Conocimientos y Tierras Tituladas.

1993, ACPC, CEDIA, FPCN y SPDA. Propuesta para el Establecimiento de Áreas Naturales Protegidas en la Zona reservada del Apurímac. Lima.

1992 Young K.R y Valencia N.. Biogeografía, Ecología y Conservación del Bosque Montano en el Perú. Memorias del Museo de Historia Natural 21. UNMSM.

1990. ONERN. Estudio Semidetallado de Suelos y Forestales del Cursos Medio y Bajo Urubamba. Lima.

1988. ONERN. Inventario y evaluación de los Recursos Naturales de la Zona Inuya-Camisea. Lima.

1987. ONERN. Inventario y evaluación de los Recursos Naturales de la Zona Puyen Huitiricaya.

1976. ONERN. Mapa Ecológico del Perú. Lima.

1975. Malleux O.J. Mapa Forestal del Perú. Universidad Nacional Agraria La Molina.

1968. ONERN. Inventario, evaluación e integración de los Recursos Naturales de la Zona del Río Tambo- Gran Pajonal.

1964. ONERN. Reconocimiento de los Recursos Naturales del Curso Medio del Río Urubamba.

1977. Terborgh, J. Bird Species Diversity on an Andean Elevational Gradient. In Ecology Vol. 58, No. 5, 1007-1019. The Ecological Society of America.

NOTAS

¹ http://www.otishi.org/anps_esp_rca.htm

² http://www.otishi.org/anps_esp_rca.htm

³ http://www.otishi.org/anps_esp_rca.htm

⁴ Gagnon, M. Guerreros en el Paraíso. Jaime Campodónico, Editor. Primera edición. Lima, agosto del 2000. Pag. XV.

⁵ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 5. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.

⁶ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 6. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.

⁷ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 6. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1 .

- ⁸ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 15. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ⁹ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 16. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1 .
- ¹⁰ http://www.otishi.org/valornat_esp.htm
- ¹¹ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 9. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ¹² http://www.otishi.org/anps_esp_zonas.htm
- ¹³ KOMETTER, Roberto. Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 12. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ¹⁴ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 21. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ¹⁵ http://www.otishi.org/valornat_esp.htm
- ¹⁶ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 14. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ¹⁷ Interview with Iván Brehaut, Executive Director of the Asociación para la Conservación del Patrimonio de Cutivireni ACPC, conducted December 19, 2003.
- ¹⁸ Interview with Richard Smith, Margarita Benavides and Renzo Pianna, directors of the Instituto del Bien Común (Common Good Institute), on January 7, 2004.
- ¹⁹ Interview with Erick Meneses, Vilcabamba Regional Director with Conservation International, on January 13, 2004.
- ²⁰ Informative brochure on conservation of the Vilcabamba Amboró Corridor, Conservation International. Tesoros sin Fronteras, 2004.
- ²¹ http://www.otishi.org/anps_esp_rca.htm
- ²² KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág.21. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ²³ Protected Areas Law: Ley de Áreas Naturales Protegidas Ley No. 26834 (17/06/97). Regulations of the Protected Areas Law: Reglamento de la Ley de ANP Decreto Supremo No. 038-2001-AG (22/06/2001).
- ²⁴ Interview with Richard Smith, Margarita Benavides and Renzo Pianna, directors of the Instituto del Bien Común (Common Good Institute), on January 7, 2004.
- ²⁵ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 26. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1. Cifras de población proyectadas al 2003.
- ²⁶ Information provided by Cutivireni Community President, Sr. Jaime Velásquez.
- ²⁷ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 27. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ²⁸ Gagnon, M. Guerreros en el Paraíso. Jaime Campodónico, Editor. Primera edición. Lima, agosto del 2000. Pág. 10.
- ²⁹ Interview with Iván Brehaut, Executive Director of Asociación para la Conservación del Patrimonio de Cutivireni ACPC, on December 19, 2003.
- ³⁰ http://www.otishi.org/valorcult_esp.htm
- ³¹ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 24. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ³² Interview with Richard Smith, Margarita Benavides and Renzo Pianna, Directors of Instituto del Bien Común, on January 7, 2004.
- ³³ http://www.otishi.org/anps_esp_rca.htm
- ³⁴ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 49. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ³⁵ http://www.otishi.org/anps_esp_rca.htm
- ³⁶ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 29. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ³⁷ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 5. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.
- ³⁸ Rapid Biological Evaluation Program.

³⁹ KOMETTER, Roberto. Reserva Comunal Asháninka. Documento de trabajo, CI. Perú. Octubre 2001. Pág. 4-6. En Expedientes Técnicos para la recategorización de la ZRA. Parte 1 Vol 1.

⁴⁰ Gagnon, M. Guerreros en el Paraíso. Jaime Campodónico, Editor. Primera edición. Lima, agosto del 2000. Pág. 21.

⁴¹ Gagnon, M. Guerreros en el Paraíso. Jaime Campodónico, Editor. Primera edición. Lima, agosto del 2000. Pág. 37.

⁴² Gagnon, M. Guerreros en el Paraíso. Jaime Campodónico, Editor. Primera edición. Lima, agosto del 2000. Pág. 46.

⁴³ Interview with Iván Brehaut, Executive Director of Asociación para la Conservación del Patrimonio de Cutivireni ACPC, on December 19, 2003.

⁴⁴ Informal conversation with technician in charge of the forestry control post (of the Technical Administration of Forestry and Wildlife Control) on Puerto Ocopa – Satipo road on December 3, 2003.

⁴⁵ Interview with Sr. José Manuel Mariátegui Esperanza, Samaniato community leader on December 6, 2003.

⁴⁶ Interview with Iván Brehaut, Executive Director of Asociación para la Conservación del Patrimonio de Cutivireni ACPC, on December 19, 2003.

⁴⁷ Interview with Ministry of Agriculture agent, February 2004.

⁴⁸ Interview with Iván Brehaut, Executive Director Ejecutivo of Asociación para la Conservación del Patrimonio de Cutivireni ACPC, December 19 2003.

⁴⁹ http://www.otishi.org/valornat_esp.htm