

## Tropical Andes Biodiversity Hotspot Program for Consolidation

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### Background

Critical Ecosystem Partnership Fund (CEPF) investments from 2001 to 2006 in the Vilcabamba-Amboró biodiversity conservation corridor of the Tropical Andes biodiversity hotspot occurred at a time of unique opportunity and emerging challenges. Considered the “global center for biodiversity” and the highest ranking hotspot for terrestrial biodiversity, the Tropical Andes harbors vast stretches of intact forest that have come under increasing levels of threat in recent decades. Within the hotspot, the corridor covers 30 million hectares and contains 16 large protected areas, each with significant management shortcomings.

To respond to the opportunities of the Vilcabamba-Amboró Conservation Corridor, CEPF and its partners adopted an ambitious landscape-scale investment agenda that called for consolidating large clusters of intact habitat as detailed in the CEPF Ecosystem Profile for this region<sup>1</sup>. The blueprint for the investment strategy was based on two bi-national workshops, where government officials, nongovernmental organizations (NGOs), donors and scientists agreed on key threats to be tackled and articulated a common vision for a bi-national biological corridor. They developed a consensus on the need to create a mega-corridor for management as a cohesive and integrated unit, characterized by a mosaic of protected areas and reserves under sustainable management.

The approach relied on supporting six strategic directions that aimed to expand coverage of protected areas; strengthen management in existing areas; reduce threats, particularly from colonization, logging, agricultural encroachment, and mining; and achieve greater coordination between the various stakeholders.

### Achievements

CEPF took stock of its performance and achievements made possible by its previous investment in this region, including through a series of meetings with stakeholders culminating in April 2006 when 50 partners met in Santa Cruz, Bolivia to discuss the portfolio’s outcomes, lessons learned and future directions. At the meeting, consensus emerged that the \$6.13 million investment, which was channeled through 31 grants (including two sub-granting facilities and a debt swap), resulted in large and seminal achievements<sup>2</sup>. Perhaps most noteworthy, CEPF played a pivotal role in expanding formal protection to more than four million hectares in Manu National Park, and Alto Purus, Amarakaeri and Apurimac reserves. With this dramatic expansion, connectivity between large tracts of undisturbed forest was realized.

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<sup>1</sup> Ecosystem Profile, Vilcabamba-Amboró Forest Ecosystem of the Tropical Andes Biodiversity Hotspot, December 2000. [English](#) (PDF - 500 KB) / [Español](#) (PDF - 484 KB)

<sup>2</sup> Assessing Five Years of CEPF Investment in the Tropical Andes Biodiversity Hotspot, Vilcabamba-Amboró Corridor, October 2006. [English](#) (PDF - 748 KB)

In addition, 17 protected areas, covering more than 20 million hectares, benefited through a variety of management improvements. Several existing protected areas, including Bahuaja Sonene National Park, Madidi National Park and Tambopata-Candamo National Reserve, which together cover more than 3.5 million hectares, benefited from the development of management plans and establishment of co-management committees in which government officials, local communities and NGOs collaborate on management decisions. The conservation community also achieved a major victory in Pilon Lajas Biosphere Reserve when partners convinced the government of Bolivia to reverse the last timber concession inside the reserve.

An important objective was to demonstrate economic benefits of conservation for the people living in and around protected areas. CEPF supported a wide variety of sustainable enterprises as alternatives to destructive logging, mining and agriculture. Particularly important were grants to the national environmental trust funds in Bolivia and Peru, each of which provided a 1:1 match, to generate a total of \$2 million for such enterprises. CEPF's support to 130 small-scale Brazil nut concessionaries has been particularly noteworthy. These concessions have safeguarded 225,000 hectares and maintained connectivity in a vital link in the corridor, while also generating additional revenue for local people. Moreover, based on CEPF initial investment, the European Union provided a \$1.2 million grant to continue and expand the pilot effort.

While much of CEPF outcomes resulted in tangible improvements, the program's landscape vision of a fully integrated conservation corridor became increasingly institutionalized by local NGOs, governments and other donors. Prior to CEPF investment, conservation was tackled through isolated initiatives. Collaboration was weak, and the region lacked a common vision of integrating the various protected areas into a large corridor. Today, donors, NGOs and governments work together within the landscape vision as a guiding principle.

### **Justification for Consolidation**

Through CEPF, partners realized many important objectives that put the corridor on a stronger conservation trajectory. However, several key threats still remain and new ones are emerging, which together pose profound challenges for the future of biodiversity and people of the region. Under the South American Infrastructure Integration Initiative (IIRSA), the corridor is undergoing dramatic change as petroleum, gas, mining, hydroelectric, canalization, road and other infrastructure projects expand their operations significantly. The sheer scale of these development schemes is transforming the landscape in ways that pose new and major challenges to the integrity of the corridor ecosystem. They directly threatened the sustainability of the many hard-won achievements.

The most imminent threat is the construction of the Inter-Oceanic Highway in Peru and the Northern Corridor Highway in Bolivia. The Inter-Oceanic Highway will create the first paved roadway connecting the Atlantic and Pacific oceans in South America once it is completed in 2010. Both highways will be major transport routes for Brazilian exports to Asia. An expected 200,000 Brazilian tourists will visit Peru's tourist sites. While many economic opportunities will arise, the paving of thousands of miles of road through intact and inaccessible forest is expected to introduce and aggravate migration, deforestation, land invasion and speculation, hunting and mining.

Road designers expect that one 18-wheeler will cross through Puerto Maldonado every 13 seconds. Cattle ranching is already expanding along road segments that have been paved. Migrants are encroaching on land used by miners, creating new conflicts. In contemplating the potentially profound impacts, Peru's park service director even expects the highly remote Alto Purus Reserve Zone (which includes the zone of uncontacted indigenous tribes, who voluntarily

remain in isolation from the outside world) will be impacted as illegal logging is made easier.

At the same time, the corridor continues to face other pressures from migration and unsustainable resource extraction activities, such as gold mining, hydrocarbon extraction and illegal logging. One of the largest concentrations of natural gas in the world was recently discovered in the corridor. New initiatives aimed at mechanizing gold production in the core sector (Apolobamba-Madidi-Tambopata-Bahuaja Complex) of the corridor.

Unfortunately, current efforts in both countries to mitigate the environmental and social impacts are falling far short of what is required to ensure sustainable development and conservation. Civil society partners, government officials and other donors are deeply concerned over the situation. They agree on the importance of civil society working together to influence the course of these mega-projects to promote best practices in project design and implementation.

To date, most of the NGO engagement has concentrated in Peru, where a Civil Society Working Group has formed around the Inter-Oceanic Highway. Unfortunately, resources have been limited to undertake the full course of work required to influence the highway's construction, although donors such as the Moore Foundation and USAID are engaging and have committed as much as \$4 million for environmental mitigation. In addition, the road engineering and construction companies are in discussion with NGOs regarding on areas for collaboration. In Peru, approximately \$7 million has been generated for economic development projects along the road. In Bolivia, threats are mounting as well, although civil society has yet to join together to address the problem collaboratively.

In order to sustain the gains made by the CEPF investment and mitigate the threats described above, a consolidation program of targeted grants is planned to be implemented over a period of three years.

## Investment Priorities and Outcomes

**Investment Priority 1:** *Support civil society participation in development planning and implementation for the Vilcabamba-Amboró Conservation Corridor, focusing on the Inter-Oceanic and Northern Corridor highways*

CEPF will support a network of local NGOs in Peru and Bolivia to strengthen participatory environmental management and monitoring systems as needed to mitigate the threats emerging from the highways. In Peru, the Civil Society Working Group has representatives in Puerto Maldonado, Puno, Cuzco and Lima who work at the grassroots and political levels. They recently entered into discussions with Oderbrecht (the Brazilian construction company building the road) and provided observations on the company's environmental and social mitigation plan. In Bolivia, civil society is less well organized than in Peru.

Civil society participation is required in various areas:

- The Gordon and Betty Moore Foundation, USAID, Oderbrecht and potentially other donors have committed resources in the corridor on similar environmental mitigation efforts. To date, coordination among these donors has been weak. Civil society partners stand in a good position to work with donors to ensure that common goals are being pursued in complementary and efficient ways.
- Regional governments in Peru are preparing development plans that will lay out land-use and economic development strategies for the long term. Several NGO partners have

worked with regional governments, but a consistent effort is needed to ensure that conservation is well integrated into regional planning frameworks.

- At a regional level, the MAP process periodically brings NGOs together from Peru, Bolivia and Brazil to collaborate on mitigation needs arising from infrastructure. CEPF will support these regional-level planning efforts.

**Outcome 1:** Conservation and human welfare considerations are fully incorporated into infrastructure and development plans for the corridor, particularly in areas impacted by the two highways. Donor collaboration and coordination also achieved to meet conservation goals.

**Investment Priority 2:** *Support management improvements to mitigate the adverse impacts arising from improved road access in the eight most vulnerable protected areas*

CEPF investments in the creation of new protected areas and the improved management of existing areas are at risk. CEPF will support the consolidation of the eight most vulnerable protected areas – Alto Purus, Amarakaeri, Apolobamba, Bahuaha Sonene, Madidi, Manuripi, Pilon Lajas and Tambopata. Several measures are envisioned.

CEPF will strengthen civil society participation in protected areas management through the establishment and/or strengthening of local management committees. In addition, CEPF will support the development of action plans in the eight protected areas to mitigate the impacts of improved road access. These action plans will be prepared with protected areas staff, communities and NGOs based on existing management plans. CEPF will support implementation of these action plans, which will include park infrastructure improvements, development of community park guards and community development projects.

**Outcome 2:** Management effectiveness improved in the eight protected areas, covering more than 12.3 million hectares, most vulnerable to new threats introduced by improved road access: Alto Purus, Amarakaeri, Apolobamba, Bahuaha Sonene, Madidi, Manuripi, Pilon Lajas and Tambopata.

**Investment Priority 3:** *Support the establishment of sustainable financing mechanisms*

Despite their global importance, the protected areas of the corridor lack sufficient and stable funding resources to cover even their most basic management costs. Unreliable funding is a persistent problem that must now be addressed if the protected areas of the corridor are to have the wherewithal to deal with the long-term impacts of the roads. Thus, CEPF will work with other donors to examine how six protected areas – Alto Purus, Apolobamba, Bahuaja Sonene, Madidi, Pampas del Yacuma, Pilon Lajas and Tambopata – can establish mechanisms to cover their management costs in the long term.

CEPF will support the creation and consolidation of sustainable financing mechanisms, including payment for environmental services, support for the development of REDD projects, user fees from tourism and development of trust funds for protected areas management and sustainable development. CEPF funds will also involve exploring access to revenues from the collection of toll fees by motorists for environmental mitigation and social development projects.

**Outcome 3:** Stable funding mechanisms are operational in support of priority management needs in six protected areas: Alto Purus, Apolobamba, Bahuaja Sonene, Madidi, Pampas del Yacuma, Pilon Lajas and Tambopata.

**Investment Priority 4:** *Support productive projects that maintain forest cover in areas of strategic value for corridor-level connectivity*

Experience in the Amazon shows that areas located within a 25- to 50-kilometer radius of a new road are the most vulnerable to degradation. If no action is taken, the corridor risks being fragmented by multiple swaths of roads with 50- to 100-kilometer fringes of deforested land. In Peru, local civil society, private industry and government have identified three micro conservation corridors composed of a mosaic of protected areas and alternative land-use activities that mitigate the impacts of the roads: The Castaña Corridor (Brazil nut) from Las Piedras to Manuripi; Malinowsky Corridor from Manu to Tambopata; and the Yungas Corridor from Manu to Bahuaja Sonene. These corridors are designed to preserve biodiversity and ecosystem function within the entire Vilcabamba-Amboró Conservation Corridor.

CEPF funding will be allocated to support the consolidation of the Castaña and Malinowsky corridors in those locations and productive activities that received funding during the first phase of CEPF investment. CEPF also will continue to support Brazil nut cultivation and concessions and other productive activities to maintain forest cover.

**Outcome 4:** Forest cover is maintained in strategic locations in the Castaña and Malinowsky conservation corridors.