



PRIVATE SECTOR CONTRIBUTION TO PROTECTED AREAS: STUDIES IN COLOMBIA AND PERU

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Abbreviations and Acronyms

(* Acronym has been kept in original Spanish form)

ANLA	National Environmental Licensing Authority *
NPA	Natural Protected Areas
APECO	Peruvian Association for Conservation *
CARSUCRE	Autonomous Corporation of Sucre *
CCBA	Climate, Community and Biodiversity Alliance
CBD	Convention on Biological Diversity
CI	Conservation International
CIMA Cordillera Azul	Cordillera Azul Center for Conservation, Research and Management of Protected Areas *
CONPES	National Council for Economic and Social Policy *
CREA-Colombia	Creative Associates International Inc. Colombia
EICE	Government Industrial and Commercial Companies *
E.S.P.	Public Utility *
FONAM	National Environmental Fund *
GDA	Global Development Agreement
GEF	Global Environmental Fund
ICC	Index of Conservation Compatibility
INRENA	National Institute of Natural Resources *
MADS	Ministry of Environment and Sustainable Development (Colombia) *
MINAM	Ministry of Environment (Peru) *
OAP	Advisory Planning Office on National Parks in Colombia *
UN	United Nations
PIP	Public Investment Project
PNCAZ	Cordillera Azul National Park *
UNDP	United Nations Development Programme
PROFONANPE	Promotion Fund for Protected Areas in Peru *
PES	Payment for Environmental Services
DCR	Directly Collected Resources
REDD+	Reducing Emissions from Deforestation and Forest Degradation
PFR	Protective Forest Reserves
CSR	Corporate Social Responsibility
SRB	Sustainable Responsibility Business
SSC	Simplified Stock Corporation
SEIA	System of Environmental Impact Assessment
SENA	National Apprenticeship Service *
SERNANP	National Service of Protected Areas *
SIDAP	Departamental System of Protected Areas *
SIG	Geographic Information Systems *
SILAP	Local System of Protected Areas *
SIMAP	Municipal System of Protected Areas *
SINAP	National System of Protected Areas in Colombia *
SIRAP	Regional System of Protected Areas *
SISAP	Sub-regional System of Protected Areas *
SINANPE	National System of State's Protected Areas *
SPNN	National Parks System
SUNAT	National Customs Superintendence and Tax Administration
TNC	The Nature Conservancy
USAID	United States Agency for International Development

1. Background and acknowledgments

This "Private Sector Contribution to Protected Areas: Case Studies in Colombia and Peru" publication is undertaken in the framework of the project "Implementation of the Canada-Peru Environment Agreement and Canada-Colombia Environment Agreement," executed by the International Union for the Conservation of Nature Office for South America (IUCN-Sur), with the financial support of Environment Canada (federal Department of the Environment of Canada).

With this binational initiative, an improvement is expected in the understanding of the links between the private sector in both countries with the objectives of promoting an exchange of experiences between Colombia and Peru; supporting the National Park Authorities and other stakeholders in the implementation of different mechanisms, and disseminating the progress in this regard in other countries of the South American region.

The initiative also considers the importance of the contributions of the private sector to Target 20 of the Aichi Biodiversity Convention on Biological Diversity (CBD), which refers to the need to mobilize financial resources for the implementation of the Global Biodiversity Strategy 2011-2020 and the National Action Plan for Biodiversity in the two countries.

During the short period of the initiative, the different mechanisms promoted by the private sector to support the conservation of protected areas have been evidenced, as well as the need to promote effective and practical coordination mechanisms between them and the National Environmental Authorities and Local National Parks. In this sense, the initiative hopes to have contributed to the proposed objective with the two National Workshops and the Binational Technical Meeting held in the months of February and March 2014.

At the beginning of this publication we would like to thank the following for their cooperation and involvement:

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2. Introduction

Colombia and Peru are countries that harbor endemic species, a high biodiversity and ecosystems that provide important environmental services to the local and global population. The appropriate protection of these services depends largely on the adoption of a strategy for the consolidation of public systems of protected areas combined with private conservation initiatives. Furthermore, funding strategies that go beyond those of the State and innovative tools or instruments that link the private sector and civil society in this regard are required.

Meanwhile, the private sector is aware of the importance of strategic ecosystems and protected areas for their production processes and have mobilized resources and established partnerships to promote the design and implementation of strategies for the conservation of these protected areas. This is precisely what motivates this research and it is the reason for this publication entitled "Private Sector Contribution to Protected Areas: Case Studies in Colombia and Peru". The publication demonstrates the instruments provided by the legal and regulatory frameworks to facilitate private sector involvement with direct contributions aimed at financing some of the activities which imply an appropriate management of public and private protected areas. A case of practical application of these tools is presented.

In this binational scenario, with protected areas as the main protagonists, this experience has been documented from the collection and analysis of secondary data, as well as from several interviews with key actors in the public sector who are responsible for protected areas in each country. In addition, other relevant partners from the private sector and NGOs have been included, validating the results at national meetings and at a bi-national workshop.

The identified instruments indicate that the two countries are moving clearly towards their purpose, but there are still difficulties of a political or regulatory nature that impose new targets. The greatest challenge is to generate innovative mechanisms in a quick, transparent and effective manner with the objective of making the contribution of the private sector to protected areas possible; helping to reduce the financial gap and contributing to their conservation, management and sustainable use.

3. Private Sector Contribution to Colombia's Protected Areas

3.1 Description of the National System of Protected Areas

The Convention on Biological Diversity of the United Nations (UN), ratified by Act 165 of 1994, established Protected Areas as those geographically defined as designed or regulated and managed in order to achieve specific conservation goals. For this reason, a clear and precise delimitation of the area is required, as well as the existence of an administrative act of the authority to do so, declaring the protected area; establishing regulatory measures, specific administration and determination of a category, or simply designation; and defining the specific conservation goals to which its declaration aims.

The National System of Protected Areas in Colombia (SINAP), was created by Decree N° 2372 of 2010, which established the objectives, criteria, guidelines and procedures for the selection, establishment and management of protected areas, defining some mechanisms that allow some SINAP coordination and making it the main element for biodiversity conservation in the country. The different protected areas are subject to some special actions to be directed towards their conservation goals. This ensures a smooth operation and the integrity of the nation's natural heritage. The performance of functions related with SINAP by environmental authorities and territorial entities, is part of the principles of regional harmony, grading rules and subsidiary rigor, among others.

Through the National Council for Economic and Social Policy (CONPES) N° 3680 of 2010, the guidelines for the "creation of a complete National System of Protected Areas, ecologically representative and effectively managed" to "meet national goals for *in situ* conservation of biodiversity" were established. These two instruments suggest that the System must be understood from a comprehensive perspective, including the following:

- i. The importance of being considered as a set of protected areas, social and institutional actors, and management strategies and instruments that connects them.
- ii. The possibility to contribute as a whole to the fulfillment of the country's conservation goals.
- iii. The inclusion of all protected areas of public and private governance and the need to include community governance and local scope.

At the same time, the System consists of management categories of public governance such as:

- i. National Parks System (SPNN).
- ii. Protective Forest Reserves (PFR).
- iii. Regional Natural Parks.
- iv. Integrated Management Districts.
- v. Districts of Soil Conservation and Recreation Areas and those of private governance such as the Nature Reserves of Civil Society.

Currently, Colombia has 58 SINAP's protected areas, occupying 11.27% of land surface and 1,48% of sea surface, reaching a total of 14'244.144 hectares of land surface and representing 86% of the country's total territory. SINAP counts with other strategies of conservation and management of biodiversity and with management subsystems, such as:

- i. regional subsystems of protected areas, i.e., the "set of existing national, regional and local, public or private protected areas in the area, social and institutional actors and management strategies and instruments that connects them".
- ii. Thematic subsystems, i.e., those who "meet, under particular operating logics, certain national, regional and local, public or private protected areas, social and institutional actors and management strategies and instruments that connects them". In addition, the country has

other management categories of community and local governance that are not included within the SINAP.

Within the Private Protected Areas, we find the Natural Reserves of Civil Society, which are those parts or all of the area of a property that preserves a sample of a natural ecosystem and it is managed under the principles of sustainability in the use of natural resources, and by will of its owner is intended for sustainable use, preservation or restoration with long term vocation. While they are the property owner's initiative, freely, voluntarily and independently, the registry belongs to the Parks Unit, since this category is part of the systems for private protected areas.

CONPES poses the need to structure and implement a Financial Sustainability Strategy regarding SINAP's effective management, to secure resources for their effective management and administration, designing a "participatory manner, pointing out a priority in the specific destination for protected areas of existing SINAP's funding sources, without discarding the identification of new sources, and including the definition of recurrent costs required for financing the management of each protected area". In this sense, sustainability is a condition of institutional and intersectoral management where the process should be determined by:

- i. Institutional strength of organizations and bodies involved in managing relevant issues.
- ii. Technical consistency in structuring the connection between projects, programs and policies.
- iii. Financial and economic strength that supports the effective development of the System.

In this context, from a comprehensive perspective, Sustainability "implies not only economic sufficiency to manage the area but also to allow communities linked to the area, to develop productive alternatives that do not affect the nature and maximize their well-being". Thus, establishing the need to estimate the existing financial gaps for a basic and optimal setting of effective management of Protected Areas, i.e., the quantification of financial needs of an individual, Area or a System of Areas after comparing "current available resources with their needs, both in a basic scenario (essential management programs that focus on preventing deterioration of biodiversity) and an optimal scenario (management programs aiming to optimize conservation initiatives)".

Revenues from the National Parks Unit come from national budget allocations and resources generated when collecting: fess for water use; ecotourism concessions; entrance fees; charges for photography and film, and the leasing of a space to locate telecommunication antennas. These revenues have increased significantly in recent years but are not sufficient to cover the expenses that a proper management of protected areas involve; identifying a deficit financing gap of \$ 591.343,5 million Colombian pesos on 2014 (US\$ 290,62 million) (Table 1), which needs to be complemented with innovative tools.

Table 1. Cost estimations for the proper management of the National System of Protected Areas in Colombia.

Concept	Value in Colombian pesos as of 2012	Value in US\$ as of 2014
Estimated revenue of the System	56.787'200.000	27'908.500
Need for an optimal scenario for the System	648.130'495.686	318'529.000
Need for a basic scenario for the System	500.774'516.867	246'110.000
Financing gap of the basic scenario for the System	443.987'316.867	218'201.000
Financing gap of the optimal scenario for the System	591.343'295.686	290'621.000

Source: Financial Sustainability Strategies in Protected Areas (Parks Unit 2013a).

Exchange rate: rate as of March 18th, 2014, based on monetary data from the site www.oanda.com.

3.2 Instruments for private investment in protected areas

3.2.1 Environmental compensations

Environmental compensations according to Decree N° 2820 of 2010, are defined as “actions directed to compensate and repay to the communities, regions, localities and natural environment for the impacts or negative effects generated by a project, work or activity, that cannot be avoided, corrected, mitigated or replaced”. As such, measures are responsible for projects, works or activities subject to environmental licensing process or the establishment of a management plan, and are established in administrative decisions that grant environmental licenses or establish environmental management plans.

To establish and allocate a compensation for an impact that cannot be mitigated, the Ministry of Environment and Sustainable Development (MADS), by Resolution N° 1517 of 2012, adopted the Manual for the Allocation of Compensations for Biodiversity loss, whose compliance is mandatory. Thus, all applications for environmental licenses must be processed by MADS because it establishes the procedure for the identification and quantification of compensatory measures for biodiversity loss; and it is also responsible for defining how to compensate in terms of area, where to do the compensation and how or what kind of action to develop. While compensations are mandatory, the manual provides that voluntarily the owner of the Project be the one to choose the area for compensation, outlining that is possible to apply it in SINAP's areas.

Among the ways of compensation, conservation actions are proposed because they relate to ecosystems and natural habitats, and to the maintenance and recovery of viable populations of species in their natural environments, by:

- i. Establishment, expansion or sanitation of public protected areas that are part of SINAP, agreeing with provisions in Decree N° 2372 of 2010.
- ii. Establishment and expansion of private protected areas that are part of SINAP or Natural Reserves of Civil Society duly registered under Decree N° 2372 of 2010.
- iii. Establishment of voluntary conservation agreements, incentives for the maintenance and conservation areas, ecological rights or others, among the project owner and the owners, possessors or holders of land.

In this context, actions for ecological restoration are included because they restore partially or fully the composition, structure and function of biodiversity, especially the one that was altered or degraded and requires the development of rehabilitation activities. For these reasons, in order to promote the will of the projects' owners towards the compensation of SINAP's protected areas, the

Parks Unit designs a strategy to approach productive sectors compelled to compensate, promoting the establishment of public-private partnerships to fulfill this obligation. Once the partnership is established, a communication to the National Environment Licensing Authority (ANLA) is signed jointly, to inform the decision; this entity must issue an administrative decision accepting the way in which the fulfillment of this obligation to compensate will be carried out. While this is a great opportunity to attract private investment because many companies do not comply with their obligation to compensate, the answer from ANLA needs to be fast enough not to discourage the private sector.

3.2.2 Investment of 1% of municipal revenues in acquiring strategic areas for water Resource or payment for environmental services

Article N° 111 of Act 99 of 1993 establishes the obligation for municipalities to allocate no less than 1% of their income to acquire areas that supply municipal aqueducts, which in the same article were declared of public interest and special ecological importance. Such provisions are modified by Article N° 210 of Act 1450 of 2011, adopting a National Development Plan “Prosperity for All” to extend the obligation not only for the acquisition of land but also for financing “Payment for Environmental Services” (PES) schemes.

Article regulated by Decree N° 953 of 2013 establishes rules for investment of resources in order to promote the conservation and recovery of areas of strategic importance for the conservation of water resources that supply water to municipal, district and regional aqueducts. The action takes place through the acquisition and maintenance of the areas and the funding of PES schemes, since the Decree provides the possibility to finance them temporarily.

Currently, as relevant areas for the conservation of water resources can be acquired, and given the PNN’s connotation of imprescriptible, not sizeable, and inalienable, the PSA scheme in protected areas becomes a permanent investment instrument of resources of municipalities and companies that provide public services either directly or creating water funds which finance PSA schemes.

Another PES strategy is the BanCO2 Program of Cornare, which was designed as a strategy that enables companies, institutions and citizens through its web site to calculate and compensate for its carbon mark. Thus, promoting conservation of natural forest in the jurisdiction of this regional environmental authority located at the southeast of Antioquia’s Department, and improving the quality of life of its farmers.

3.2.3 Tax exemptions for donations

The instrument set out in Article N° 125 of the Tax Code allows: “income tax payers who are required to file tax returns and complementary within the country, are entitled to deduct the value of donations from the income during the taxable year or period”, and applies to entities other than income tax payers such as the Special Administrative Units like National Parks.

The value cannot exceed “thirty per cent (30%) of the taxpayer’s net income and is determined by subtracting the value of the donation” and it could be in cash, check, or credit card, and even through a financial intermediary (Parks Unit 2013b: 1). The person interested in making the donation should fill out a “Donor Awareness Form”, considering among other things the assets and liabilities as well as monthly income and expenses, so that the origin of resources is clear.

3.2.4 Tax benefit Gloria Valencia de Castaño

By Act N°1536 of 2012, Article 6° created the tax benefit “Gloria Valencia de Castaño for funding parks and conservation of natural forests”, modifying the Tax Code so that the “Deduction for donations made to sponsor natural parks and natural forests conservation”, would work and taxpayers give donations to the SPNN Special Administrative Unit. All this is intended to finance Colombian natural parks and preserve natural forests, acting under the benefit of funding; since they are entitled to deduct 30% the value of donations from the income tax during the taxable year or period.

To enjoy benefits of donations it should be clear that “donations referred to in this article in no case will generate any rights over natural parks or protected areas”; since taxpayers must prove compliance with all conditions and requirements established, thus resulting in the Parks Unit obligation to:

- i. Allocate donations to finance the natural park that the donor indicates.
- ii. Report annually on the use of donations and effectively manage the system of protected areas to effectively use the provision.

In this context, the Parks Unit sought an effective instrument designing two programs:

- i. The Program for International Cooperation was brought up as an instance of international cooperation of Protected Areas in order to articulate and to coordinate existing international cooperation and channel resources to develop the actions proposed. (CONPES 2011: 62).
- ii. The Donation Program Alliance for Park Cooperation created to strength institutional capacities of administration and management of SPNN Protected Areas, through donations in cash or in kind from natural person or legal entities.

The main purpose of the donation program is to enable the private sector to collaborate in funding SINAP, since they receive a certificate for tax exemptions when donating, as well as some public recognition when formalized and announced. In addition, an effective allocation of funds to the conservation of the country confirmed by annual reports of results issued by the Parks Unit is displayed.

Collected funds are allocated to an account of the National Environmental Fund (FONAM), and the Parks Unit subsequently allocates them to certain specific aspects if agreed by the donor or they are otherwise routed to different areas; such as: staff for administration tasks and management of protected areas; payment of transportation; office equipment; uniforms, and necessary equipment for monitoring natural resources; construction, maintenance or suitable administrative infrastructure, control and surveillance; provision of ecotourism services with permitted activities; implementation of a Use, Occupancy and Tenure Policy for property restructuring, delimitation and demarcation or purchasing improvements in private property in protected areas; implementation of ecological restoration program; implementation of research and monitoring programs in protected areas applying the corresponding plan; contributions to the Research Fund Mono Hernández, and/or declaration or expansion of new protected areas and conservation of reserved areas, among others.

To donate, the interested person is required to fill out a “Donor Awareness Form”, which considers, among other things, the assets and liabilities as well as monthly income and expenses; all this must be done in order to clarify the origin of resources. So, as part of the donation program the Parks Unit implements a procedure consisting of:

- i. Assessment by the Unofficial Cooperation Committee of National Parks of required documentation such as a certificate for funds origin after which a corresponding guarantee is issued.
- ii. Signing the contract with the approval of the person or agency responsible and benefited instance.
- iii. Payment.
- iv. Issuance of a donation certificate by the Financial and Administrative Branch, filed with the Colombian Tax and Customs Directorate - DIAN for tax discount.

The difficulty of the mechanism is mainly based on the current administrative organization because it implies that donated resources first have to go through the Ministry of Finance, then MADS and subsequently to the Parks Unit. Thereby, the whole procedure finally allows the use of the resources, which means that they are planned for the budget line of the year after they are managed; in fact if they have not been donated or total donation resources are greater than anticipated, it would generate some sort of penalty to the institution by deficiency or excess for next

term. Therefore, it longs to simplify the process implemented by the Group of Cooperation Management and above all by the Natural Heritage Fund management.

3.2.5 Exemptions for ecotourism activities

By Decree N° 2755 of 2003 a tax exemption for ecotourism services was regulated as an incentive applicable for 20 years since January 1st, 2003, accessing it through a certification issued by the relevant environmental authority, and in accordance with the compliance of technical, general and specific criteria set forth in Resolution N° 0118 of 2005. For this reason, it applies to companies providing ecotourism services that show the adoption of practices oriented to preserve natural resources and generate benefits to local communities, encouraging the connection of tourism in the development of ecotourism in Colombia.

3.2.6 Property tax exemption for conservation

Property tax is a tax payable by property owners to municipalities and they have the power to grant exemptions on all or a percentage of the tax, for reasons such as maintenance or forests hedge.

An example of this is the Municipality of Medellin which by Agreement N° 67 of 2012 established a property tax exemption for six years, applicable to planted, reforested, or covered in natural vegetation areas of properties located in soils of protective forest protection; as well as planted, reforested, or covered in natural vegetation areas of properties located in soils of productive forest protection. Precisely, this is one of the few direct incentives and funding sources that the natural reserve of civil society has; therefore, the establishment of an exemption should be promoted with each municipal authority.

3.2.7 Ecotourism in National Parks

The National Development Plan adopted by Act N° 1450 of 2011, establishes tourism as an engine for regional development (Chapter VII). One of the strategic lines of the National Tourism Plan is to strengthen the development of specialized tourism products, with the exploration of nature as the sector with greater opportunities. Thus, the National Parks Unit and MADS are working in collaboration with the Ministry of Commerce, Industry and Tourism on a project that connects the private participation to different partnership projects among concessions and communities allowing the development of nature tourism in the SPNN protected areas. In this sense, the Parks Unit established the guidelines for the development of ecotourism in its areas by Resolution N° 0539 of 2013, considering that there are 23 SPNN areas with ecotourism potential.

Ecotourism in SPNN areas is developed through the linking of local communities who are trained and organized to provide service for what is called “community-based ecotourism”, that allows the definition of a plan of activities to be developed in a period of 10 years through the signing of a contract. The process is complemented by the establishment of partnerships with: Ministry of Commerce, Industry and Tourism; the Tourism Promotion Fund; National Apprenticeship Service (SENA); Crafts of Colombia, and renowned hotel chains such as GHL, among others.

Within this scenario, ecotourism is promoted by the Ecotourism Service Concession Program which gives a professional and specialized operator the management and operation of existing ecotourism services in the selected protected areas, providing a better service for visitors and directing their work to missionary activities. It is worth mentioning that the grant is given only to ecotourism services so that exercising authority belongs exclusively to National Parks, the entity that carries out control, surveillance and environmental management activities of all areas and environmental resources, including protected areas that have a concession area for ecotourism services.

In each of the concession contracts obligations are set for: construction and adjustments of infrastructure services and ecotourism activities; staffing required for the provision of these services; environmental sanitation projects that include construction of treatment systems for drinking water and wastewater and solid waste management; promotion and dissemination

program; promotion and power generation from clean sources, efficient water use and savings, and technological facilities for the collection of revenues, among others.

Monitoring and control of contractual obligations is done by the appointment of a supervisor who usually serves as Chief of the Protected Area and has the technical, environmental, financial and administrative responsibility to monitor, supervise and control compliance with these obligations. Implementation of these activities is done according to the Supervision Manual for Ecotourism Services Concessions adopted by Resolution N° 0147 de 2006, which created the Steering Committee of Concessions and the Parks Unit Committee and Concessionaries.

It is worth mentioning that all infrastructure improvements and assets acquired revert to National Parks once the concession contract ends. The program allows: increasing the quality of service and the number of visitors to Colombian National Parks; an increase in economic resources for local communities; greater ownership of these areas by Colombians, and a better understanding form tourists and foreigners.

Currently, three concession contracts of ecotourism services are running Tayrona, Gorgona and Vía Parques Isla de Salamanca National Parks. There are also two contracts in liquidation in Amacayacu and Nevados National Parks. Investments and improvements made by different concessionaries are directed to: accommodation bookings; box office income; accommodation, food and beverages; eco-shop; horse rental; rental of various equipment; camping; diving stations; transportation; tours on trails; parking; nursing; visitors centers, and swimming pools, among others.

Investments from early 2005 to 2013 were of \$ 12.059'612.798 million Colombian pesos (US\$ 5'926.800) to the Parks Unit. Money was used to “improve the Parks infrastructure through the concession of ecotourism services, providing greater safety and comfort to visitors and residents”, as well as investments done in each Park (Parks Unit 2013c: 8).

3.2.8 Environmental Funds

Environmental funds are recognized as financial and strategic support mechanisms because they facilitate the implementation of conservation policies and actions; in addition, they complement government actions and encourage participation of civil society and productive sectors in the conservation of natural resources and protected areas.

In this context, as private, public or mixed organizations, the Environmental Funds have a number of attributes that enable them to attract financial resources from different domestic and foreign sources since they are managed properly and have the collaboration of technical experts and public and private agencies to develop flexible and effective management approaches. Some examples in Colombia are the Fund for Environmental Action and Childhood and the Natural Heritage Fund.

3.2.9 Fund for Environmental Action and Childhood

The Fund for Environmental Action and Childhood is a non-profit legal entity of public utility under a private system, with full capacity to exercise rights and obligations to develop its corporate purposes. The organization was created in 2000 to develop a bilateral agreement between the Colombian government and the United States of America under the Initiative for the Americas; thus promoting the debt reduction and concluding exchange contracts by nature, channeling resources from exchanges through a special account known as Account of the Americas.

This Fund is a legal entity that represents the interests of the Initiative for the Americas in Colombia, acting as the Administrator of the resources of the Account of the Americas in the country. Between 2000 and 2013, the Fund financed more than 1000 projects in two priority areas. The first is the conservation and sustainable use of natural resources and biodiversity, and the second the protection and development of children in Colombia with emphasis on early childhood. The Fund manages assets of 42 million dollars (US\$), providing sustainability to the organization and funding new programs in its two priority areas.

The Fund also manages another 19 million dollars (US\$), consisting of contributions from clients and donors such as the Global Environmental Fund (GEF), the United States Agency for International Development (USAID), the United Nations Development Programme (UNDP), the Walton Foundation, Conservation International (CI), The Nature Conservancy (TNC) and the MacArthur Foundation, among others. The Fund channels their contributions through:

- i. Direct calls of suppliers of goods and services made by the Fund to respond to the need of goods and services internally requested.
- ii. Calls on the Alliance Framework that could be carried out by the Fund or its partner to select projects-executors around their investment lines of common interest.
- iii. Direct Calls for implementing projects carried out by the Fund to select projects-executors around their priority investment lines.

3.2.10 Conserva Colombia

Conserva Colombia is an Incentive Program for Conservation co-financed and implemented within the framework of a strategic Alliance between the Environmental and Childhood Action Fund and TNC. The Program has been operating since 2009 with funding from partners of one million dollars (US\$) and leverages resources from international cooperation such as USAID, and the private sector in Colombia such as Philip Morris Coltabaco, Carbones del Cerrejón and the Mario Santo Domingo Foundation.

The Program co-finances the processes required to declare new local public protected areas and register private property as Natural Reserves of Civil Society in SINAP, increasing the representativeness of its strategic ecosystems that are poorly or not represented. The program also prioritizes dry ecosystems focusing on the 93% of the portfolio of the first four calls, helping to strengthen the SINAP in two key aspects which are:

- i. Ecosystem representativeness of landscapes with dry Andean and Caribbean ecosystems, Orinoco flooded savannas and wetlands from the Magdalena Basin.
- ii. Support the consolidation of sub-systems of municipal, regional, departmental and local protected areas.

The Fund's investment, TNC and other donors allow previous studies to the declaration of more than 75.000 hectares of new protected areas, having declared four and ten pending. In itself the strategy contributes to: create the Departmental System of Protected Areas (SIDAP) of the Atlantic; implement strategic projects in the Regional System of Protected Areas (SIRAP) of the Caribbean, the Sub-regional System of Protected Areas (SISAP) of the Autonomous Corporation of Sucre (CARSUCRE) and SIDAP of Huilla's Department; strengthen SIDAP in La Guajira's Department; create the Municipal System of Protected Areas (SIMAP) of Toro's Municipality (Valle del Cauca); strengthen in the Valle del Cauca the regional node of protected areas around the sub-xerophytic enclave of the Dagua river, basin that contributes with sedimentation to Puerto de Buenaventura, linking three municipalities; provide viability to core connectivity in Montes de María in the national protected area Los Colorados Flora and Fauna Sanctuary, and strengthen the Local System of Protected Areas (SILAP) of San Jacinto and San Juan Nepomuceno municipalities. Currently, the Program is in its fifth edition, expanding the portfolio of the Orinoco and the great Magdalena Basin with its Andean forests and wetlands, and registering groups of properties as Natural Reserves of Civil Society.

Nowadays, the Program focuses its investment in tropical dry forests, flooded savannas, mangroves and xerophytic shrubbery in the Andean valleys, the Caribbean and the Orinoco, 48 profiles were received, and the selection and approval of six projects were conducted. The TNC Alliance, the Fund and the executors' counterparts, who together invested a total of 1'319 million Colombian pesos (US\$ 648.234).

3.2.11 Don Acción

The first platform of social 'crowdfunding' in Colombia is Don Acción, a place where individuals and companies can donate from \$20.000 Colombian pesos (US\$ 9,82) to social causes in the country. Since they are initiatives from local organizations that generate positive impacts on their communities, their achievements are shown in short-term because the causes are carried out in stages as resources are required to complete each one. Thus, plausible examples are several projects funded in the Iguaque Flora and fauna Sanctuary, PNN Cocuy, among others.

3.2.12 Natural Heritage Fund for Protected Areas and Biodiversity

The Natural Heritage Fund channels funding since 2006 in partnership with many institutions, especially the National Parks, developing 124 projects in the amount of 223.386 million Colombian pesos (US\$ 109'785.000). Financial resources come from international and national institutions but are not yet fully committed to the different agreements concluded.

The private sector participated in the 2006-2013 period funding different projects, highlighting companies like ISAGEN which helped with the implementation of the management plan of the Serranía de los Yariguíes National Park. The operation consists in property restructuring and ecological restoration in the Park's north and west center areas, as the International Gas Transportation Company in fulfilling its commitments under the Forest Compensation Plan for pipeline Cusiana-La Belleza-Vasconia construction, contributes to the acquisition of 1465 hectares of private property inside the park and passive restoration of at least 3000 hectares. Same thing happened with National Parks and Ecopetrol, which initiated the development of three agreements to implement restoration actions in the Cocuy, Pisba and the Unique Natural Area of Los Estoraques National Parks, becoming the three examples of cooperation from private sector.

The list of donors from the private sector could be divided into those involved with voluntary contributions and others collaborating with mandatory contributions associated with the environmental licensing process. Voluntary contributions come from: the first Colombian radio Caracol S.A.; Contreebute SAS; Creative Associates International Inc. Colombia (CREA-Colombia); Bavaria Foundation; International Resources Group; LG; Office National des Forêts; Proeduco Ltda.; Tetra Tech Inc., and Empresa de Transformación Agraria S.A. Contributions by fulfillment of obligation for compensations come from ISAGEN S.A. E.S.P. and the International gas Transportation Company.

In addition to the aforementioned, mixed companies such as Public Household Utility Companies or others generate a contribution of \$ 9.166'396.776 Colombian pesos (US\$ 4'504.900), corresponding to 4% of the total contributions and are: Central Hidroeléctrica de Caldas S.A. E.S.P.; Water and Sewerage Company of Bogota; ECOPETROL S.A.; Cali Municipal Enterprises; Industrial and Commercial State Companies (EICE) E.S.P.; Power generator and distributor Company (EMGESA S.A.); National federation of Coffee Growers of Colombia, and URRÁ S.A. E.S.P.

A clear example of the positive impact of contributions is the PNN Serranía de los Yariguíes, where there is an Alliance with the Eastern Andes territorial Directorate and Natural Heritage to support and facilitate the management and investment of public and/or private resources invested in the administration and implementation of seven agreements and projects with ISAGEN and TGI. The investment amounts to over \$ 16.000 million Colombian pesos (US\$ 7'863.340), used to solve the problems of occupation and possession of about 32% of the land in private property within the Park and contributing to the restoration of the two most affected areas in the Park with an intervention of 4000 hectares representing 6.7% of its territory.

Finally, Natural Heritage since 2012 supports other mechanisms for private sector involvement in conservation investments through the Pioneers in Conservation Program which promote the connection between guests and hotels in the care of flora and fauna and with environmental services in natural areas of the country. Donation mechanisms consist of individual voluntary contributions of guests of partner hotels of the Program and additional donations ("match") from hotels to increase collection, benefiting protected areas and civil society

organizations who implement conservation projects. Currently, the Program partners are Zuana Beach Resort, BH and GHL chain, and more than 20 hotels involved in the program. There is also the Bioguarda Program which works as a collecting mechanism of voluntary donations from private companies, investing in restoration actions in priority protected areas, starting in late 2013 and it is currently in collection stage.

3.2.13 Environmental surcharge on toll

The Environmental Surcharge is created due to the importance of Wetlands with the objective of generating resources so environmental authorities can mitigate the impact caused by roads and invest in conservation and recovery of some sites. Thus, financial resources allow to compensate for the impairment and deterioration that national road construction causes to conservation areas, since for the specific cases in which standards foresee its implementation, this construction interrupted the water flow between the sea and marshes causing an increase in soil salinity and inland water bodies, degrading, deteriorating and decreasing mangrove.

Funds are generated by the traffic of any vehicle compelled to pay a toll in national routes, especially those built or under construction and which affect or are located in Conservation Areas and Municipal Protection, Wetlands or Ramsar sites of international relevance as defined in Act N° 357 of 1997, Biosphere Reserves and Buffer Zones. The surcharge is linked to a toll on the highways and its rate is 5% over the value of the cost (tax basis). Currently, the inclusion of the Parks Unit as active subject and an extension of the surcharge in national roads are proposed, provided the compliance of provisions under Act N° 981 of 2005, and provided it is used to increase the territory of protected areas nationwide.

3.2.14 Corporate Social Responsibility Programs

Corporate Social Responsibility (CSR) also known as Sustainable Responsibility Business (SRB), is defined as the active and voluntary contribution to social, economic and environmental improvement by enterprises; usually with the aim of improving its competitive, evaluative situation and its added value. Corporate social responsibility goes beyond compliance with laws and regulations, assuming their respect and strict compliance. In this sense it is assumed that private sector companies that rely on renewable natural resources for their development or generate impacts on these have corporate social responsibility programs that cover beyond environmental obligations.

In this context, the National Parks Unit has a Conservation Alliance Program of Corporate Social Responsibility in the framework of Unofficial Cooperation with this sector, allowing the identification of eight sub-programs of the Institutional Action Plan and responding to actions undertaken by companies within the CSR framework. Consequently, the establishment of strategic public-private alliances for the achievement of economic resources and the development of activities are managed as follows:

- i. Participatory Ecological Restoration
- ii. Sustainable Conservation Systems
- iii. Wildlife
- iv. Environmental Education
- v. Voluntary Park Rangers

3.2.15 Naturally Colombia Initiative

In a public-private partnership that aims to promote conservation and protection of more than two million hectares in three prioritized ecosystems in the country such as seas and coast, dry forests and Orinoco savannas investing a budget of 300 million (US\$) in 10 years supporting the consolidation of SINAP.

During the design stage naturally Colombia received the support of the Walton Family Foundation, the USAID Office in Colombia, Gordon and Betty Moore Foundation and the Government of Germany which joined the alliance with 35 million Euros.

Partners in the Alliance are: Ministry of Foreign Affairs; National Planning Department; National Parks Unit of Colombia; Association of Regional Autonomous Corporations and Sustainable Development; Environmental Action and Childhood Fund; Natural Heritage Fund; Natura Foundation; TNC; CI, and World Wildlife Fund for Nature (WWF).

4. Private Sector Contribution to Peru's Protected Areas

This contributions aims to identify the private sector's contribution in Peru's Protected Areas considering that this is one of the conservation strategies developed in the country (Capella, Cerdan and Solano 2007). An example of this is found in the forest and wildlife legislation which presents modalities of forest ecosystem management in public lands through non-timber forest concessions such as conservation and ecotourism for periods that can last up to 40 years and are renewable.

While the modalities mentioned above contribute to nature conservation, ecotourism concessions do it through the development of economic activities linked to recreation and nature tourism; therefore, they are subject to payment for the right to use. Also, in the specific case of conservation concessions the goal is "to contribute directly to the conservation of flora and fauna through effective protection and compatible uses such as research and education and ecological restoration", so its grant extension has no limit and it is not subject to any payment to the State but to an investment commitment.

To date, 51 conservation concessions have been granted, representing a total area greater than 967,000 hectares comprising a 0,75% of the national territory; almost all are financed with funds from private sources. It is important to mention that the private sector contribution to conservation in Peru goes beyond the protected areas without being related only to financial disbursement but it also materializes through technical support or biological information provided by companies or non-profit organizations.

4.1 Description of the National System of Protected Areas by the State

In Peru, the establishment of protected areas refers back to 1960 and the creation of the first area recognized as National Park Cutervo and established by Act N° 13694 promulgated on September 8th, 1961, modified by Act N° 28860 of August 3rd, 2006. It should also be noted that in the Master Plan for the Tingo María National Park established by Act N° 15574 promulgated on May 14th, 1965, there is a reference to a Supreme Decree N° 061 of October 16th, 1950, which declared the National Reserve la Cueva de Las Lechuzas as one of its areas. In 1997, Act N° 26834 on Protected Areas consolidates the concept for a National System of State's Protected Areas (SINANPE).

The Law for Protected Areas in Peru defines them as "continental and marine areas of the country expressly recognized and declared as such, in order to preserve biodiversity and other values related to cultural, landscape and scientific interest, as for its contribution to the country's sustainable development"; noting that they constitute the Nations Heritage and its natural condition must be maintained in perpetuity. Also, according to the nature and objectives of each area the use of natural resources may be allowed (areas of direct use) or restrict such activity (areas of indirect use).

In areas of direct use, exploitation or extraction of resources is allowed, mainly by local populations in demarcated areas and places within the area's management plan. The categories of areas of the system for direct use are: national reserves; landscape reserves; wildlife shelters; community reserves; protected forests; hunting grounds and regional conservation areas. In areas of indirect use scientific research non-manipulative, recreation and tourism are allowed in areas properly designated and managed; however, extraction of natural resources is not allowed. Categories for the system of indirect use are: national parks, national sanctuaries and historic sanctuaries.

In Peru Protected Natural Areas (PNA) are traditionally associated as conservation spaces of biodiversity when their conception gives them equal relevance to their contribution to the country's development. PNA play a key role in all national, regional and local development strategies for the goods and services they offer. Setting as an example the water resource, it is estimated that 61% of the hydroelectric produced in the country benefits from water coming from SINANPE's area, as

well as 16 water and sanitation companies nationwide that benefit more than 2,7 million people (León 2007). Same analyses deserve the PNA in non-timber forest products and fauna matters, supporting: quality of life and food safety of local populations; watershed protection (erosion and sedimentation control); carbon capture and fixation; nature tourism opportunity, and biological exploration among others.

While the Natural Protected Areas Act states that these may have national, regional or private administrations, the law clearly stated that only the ones of national administration are part of SINANPE, classified in nine categories: i) national parks; ii) national sanctuaries; iii) historic sanctuaries; iv) landscape reserves; v) wildlife shelters; vi) national reserves; vii) community reserves; viii) protection forests, and ix) hunting grounds. In addition, the law gives power to the national authority, incorporating areas of regional administration to SINANPE with national significance or importance.

Regional Conservation and Private Conservation Areas even without being part of SINANPE complement it, because in absence of a formal Peruvian System of protected Areas SINANPE must develop inclusive comprehensive management approaches. An example of the above action is found in the Master Plan for Protected Natural Areas which defines the policy guidelines and its applicable strategic planning, the first approved by Supreme Decree N° 016-2009-MINAM of 1999, and modified in 2009 after an extensive participatory process. The document presents a comprehensive approach of guiding components for management and planning areas of SINANPE, and its complementary areas (Regional Conservation Areas and Private Conservation Areas), visualizing SINANPE as an integrated system of physical components (PNA), social and cultural (different actors), which interact with policies; standards; procedures; spaces and coordination mechanisms; tools and information allowing its efficient management.

The continued strengthening of SINANPE allows it to represent 15,19% of the Peruvian territory, with a total of 77 protected natural areas established in nine categories; and 13 Regional Conservation Areas and 70 Private Conservation Areas representing altogether 2,08% of the country's territory. The protected natural areas in Peru represent 22,15 million hectares nationwide, covering 17,27% of the country's territory and the fifth part of the country's territory. The National Service of Protected Areas (SERNANP) has an important challenge in the efficient management, requiring protection under the Law of Protected Areas where 26834 of 1997, promotes private participation in its management and Article 17° states that to this effect it is subscribed or granted either by the national authority in protected areas or by national, regional, and local authorities, as appropriate: i) management contracts; ii) concessions for the provision of financial services within the area; iii) contracts for the exploitation of resources in that area; iv) agreements for the execution of projects or conservation or research programs; v) licenses and permits to develop minor activities, and vi) other modalities established in the legislation.

Within this delicate scenario, different reflection processes arise (PROFONANPE 2005) and the guidelines of the Master Plan 2009 allow for a guiding document and the approval of SINANPE's financial plan by Presidential Resolution N° 123-2009-SERNANP. Regarding the financing of ACR and ACP, it lies on public and private sources respectively and is discounted of the annual budgets in each case. SINANPE's financial plan is based on a process implemented in 2004 which identified 41,8 million dollars as its optimal budget and 21 million as the minimum budget, calculating the financial gap between available income and necessities in 32 and 14.5 million dollars whether it was optimal or minimum scenario. It is important to consider that when the financial analysis of 2004 was carried out, the National Fund for State's Protected Areas (PROFONANPE) was contributing in equal parts with the Peruvian State SINANPE's budget, as a product of contributions of multilateral and bilateral sources. This situation remained until 2009 when the Financial Plan was approved.

Regarding the projects budgets required it is worth mentioning that the Financial Plan of 2009 reached minimum and maximum results regarding the needs of SINANPE, very similar to the analysis of 2004, but with projections to the year 2019 and exploring four possible scenarios and not two like the first analysis. The document identifies the causes for the lack of sustainability of the

system in: i) a limited level of public funds intended to support SINANPE; ii) low revenue from the sale of rights, goods or services by PNA; iii) limited, null or unknown benefits for local populations arising from the existence of PNA; iv) weak management to run expenses, especially of investments (absorption capacity); v) excessive dependence on irregular external sources; vi) mismatch between no ordinary resources of projects and the financing of recurrent costs. As such, the analysis motivates the Financial Plan to consider that solutions must involve a variety of public and private, national, regional and local actors who will contribute to the system of the areas as a whole in the same way they will to protected areas in an individual way.

Since the aim is to reverse the causes of SINANPE's unsustainability, the Financial Plan of 2009 identified twelve funding sources grouped into four groups, subsequently proposed that they be implemented once some previous conditions are met, specific responsibilities assigned and results monitored. Groups and sources proposed are as follows:

- i. Contributions to the system as a whole: a) SERNANP's ordinary public budget and b) trust funds or endowments in perpetuity managed by PROFONANPE.
- ii. Contributions to specific Natural Areas: a) endowments (trust or in perpetuity) of national or foreign donors assigned to foundations and non-governmental organizations (NGO's) to sustain any specific ANP, b) public budgets of sub-national governments to co-finance or finance completely the recurrent costs of ANP from its scope, and c) systems for adopting specific interest areas through trusteeship with membership dues or charged to companies.
- iii. Revenues collected directly: a) payments for royalties (concessions to third parties, direct management) and b) payments for environmental services.
- iv. Investment projects: a) grants from bilateral or multilateral cooperation; b) projects in public funding competition; c) projects in local/regional participatory budgets; d) debt exchange, and e) soft loans from bilateral or multilateral banks.

Nowadays, after five years, it can be said that practically all options presented by the Financial Plan have been explored, and different results have been reached in each case; however, there are specific responsibilities and activities mentioned in this document to be achieved that are not programed or monitored in order to assess the results in each case. Clearly, efforts from the competent authority since 2009 are focused on tackling unsustainability identified in the 2009 Financial Plan, raising first and significantly the public's funds involvement in funding the system. Thus, a larger allocation of funds by the State SERNANP and hence to SINANPE could be seen, being 2009-2010 a key period for change. The budget allocated by the Treasury to the SERNANP was of 6,33 million soles (US\$ 2'216.800) in 2009, increasing to 30,14 million soles (US\$ 10'605.500) in 2010 and reaching 39,80 million soles (US\$ 14'004.600) in 2013. Adding funds to the amounts corresponding of resources collected directly by the areas and donations assigned to the system, it seems that they do not necessarily have the same growth, they went from a budget of 17,47 million soles (US\$ 6'147.230) in 2009 to 38,81 million soles (US\$ 13'656.200) in 2010 and 51,03 million soles (US\$ 17'956.100) in 2013.

Parallel to the growth of the public contribution to SINANPE, PROFONANPE's contribution decreased significantly in the same period going from 18,20 million soles (USD 6'404.100) in 2009 to 3,22 million soles (USD 1'133.030) in 2013. Once the efforts to increase the State's commitment in the funding process of SINANPE were achieved successfully, there is still a gap regarding optimal scenarios identified in the Financial Plan, SINANPE's financial strategy focuses on: i) reducing requirements based on a greater efficiency in achieving the objectives and an expenditure restructuring, and ii) increasing resources availability by improving the efficiency of resource training mechanisms and exploring access to new sources and mechanisms that provide funding opportunities.

In this scenario, it becomes essential to be clear about the opportunities and limitations of public and private contributions. In addition, in the public scope, funds allocated by the State directly to SINANPE through the Treasury and annual budgets have different ways of accessing resources for investment in Peru, some identified in the Financial Plan of 2009 such as obtaining

funding from regional or local governments through their budget, participation in participatory budget processes or participation in public procurement convened by different government public institutions nationwide. However, there are other mechanisms not identified in the 2009 document that today mean an opportunity such as the so called Public Investment Projects.

The Ministry of Economy and Finance in order to improve efficiency in the expenditure opens up to Peruvian public national, regional or local institutions giving them the opportunity to present Public Investment Projects (PIP) which after going through a rigorous evaluation system could be implemented to benefit the population. Traditionally, PIP were used to cover the service infrastructure gap that the country requires but the concept is changing and it is giving the opportunity to support SINANPE implementing infrastructure for control, education and tourism purposes in protected natural areas; as well as to invest in natural infrastructure who will increase or maintain ecosystem services for biodiversity benefiting local populations.

Regarding private contributions made by several mechanisms identified at the time in the Financial Plan, limitations for having a greater support from this sector relate to: i) a significant number of companies do not identify ANP as an investment opportunity; ii) the ANP does not introduce itself to possible partners in private companies; iii) mistrust prevails in long-term stability of rules applied by the State in investment, and iv) the State has limitations to diversify private investment options in ANP. The previous analyzed scenario is shown not only in private investment opportunities in protected areas presented by the Financial Plan in place but also in its efficient implementation since its approval and the new opportunities that SINANPE has.

4.2 SINANPE's 2009 Financial Plan: Private investment and Protected Areas

4.2.1 Perpetual Trust Funds or Endowments

The Financial Plan of 2009 considered perpetual trust funds or endowments as an alternative of sustainability for both SINANPE and ANP, but stated that SINANPE's funds would be managed by PROFONANPE and those of ANP would be managed by foundations or NGO's.

4.2.2 Trust Funds or Endowments managed by PROFONANPE

PROFONANPE was created in 1991 by Decree N° 26154, as a private non-profit, public interest and legal personality. Private institutions created by Law in the country are few since they must rely on the strength that the government offers and the flexibility that its autonomy in celebrating acts and contracts allows when interacting with donors. The Fund's Board had the presence of the public sector since the beginning with authorities of protected areas and the private sector with representatives of civil society organizations involved in conservation and management of ANP, as well as business associations.

PROFONANPE is par excellence the fund that receives and channels the financial support of SINANPE, whose main funding sources are of public nature, and funding mainly comes from multilateral and bilateral agencies. Thus, after more than 20 years of existence PROFONANPE has channeled some 60 million dollars (US\$) in favor of SINANPE, benefiting 46 protected areas of the system and its zones of influence, and supporting areas in the nine categories of SINANPE's classification, and even Reserved Areas that are still in the categorization process.

The Financial Plan of 2009 recognizes in PROFONANPE a less important role than the one given by statutes, because this mechanism was thought to support SINANPE and not any ANP in particular through endowments. Furthermore, its role in channeling funds to specific projects did not work out because by the time of formulating the plan activities were already being performed in that sense. In 2003, PLUSPETROL was the National Authority of Protected Areas and signed an agreement to create the "Fund for the management and recovery of the Paracas National Reserve", establishing that through a progressive contribution, by 2018, it must have an Endowment of six million dollars (US\$); it should also provide support to additional specific activities for up to one

million dollars US\$). The agreement has PROFONANPE as the fund manager; the first perpetual endowment established by a private company in favor of ANP in Peru.

PROFONANPE is capable of receiving contributions, legacy and donations from natural persons and legal entities from the country or abroad, and to manage financial resources from international cooperation; therefore, it could manage both endowment and donations from companies for the implementation of programs or activities as the aforementioned ones. Funds provided by companies can be managed for different protected areas implementing specific projects. Burlington company supports financially the effective control and strengthening of local capacities in the Pucacuro Reserve; Hunt Oil implements the Master Plan in the Amarakaeri Communal Reserve and Pluspetrol strengthens the management; protection; and monitoring of natural resources of the Pacaya Samiria National Reserve. All these contributions become effective through PROFONANPE in coordination with SERNANP, representing only 2,8% of the money channeled by PROFONANPE to the system between 2009 and 2013.

4.2.3 Endowments from national or international donors allocated to non-profit organizations to finance a specific Protected Area

The mechanism is not implemented despite being considered in the Financial Plan since the only trust fund established for ANP had PROFONANPE as the money administrator. Thinking this over, the legal certainty that PROFONANPE has, in addition to its experience of more than 20 years managing environmental funds, can be a determining factor, because it makes it a much more attractive institution to become the money administrator of a trust fund; especially regarding a foundation or NGO since donors require institutional permanence, continuity and commitment with the area to be benefited. In Peru there is a legal mechanism in the Act for Protected Areas which provides legal certainty to donors, requiring a long-term commitment from an organization with an ANP; for this reason, management contracts referred to in Article 17 of the Act for Protected Areas are disregarded by the Financial Plan.

4.2.4 Adoption systems for specific protected areas through trusteeship with membership dues or charged to companies

In September 2009, the Presidential Resolution N° 157-2009-SERNANP approves a guide for the creation of trusteeships in protected areas based on the interest shown by the private sector in creating them. The trusteeship of protected areas is defined as “a non-profit organization regulated by the Civil Code that encourages support and sustainability to a specific action, in this case, to support the management of a protected area”. It also mentions that the trusteeship contributes to the sustainable management of a protected area through the contribution of financial and management resources from partners who will directly fund the activities prioritized by the trusteeship under the Master Plan of the area but will also enable the leverage of new public and private, national and international resources, in order to provide different and sustainable funding sources, avoiding duplication of efforts and achieving a more efficient and concerted support of stakeholders involved.

In Peru, trusteeships as any other non-profit association must be formally constituted and registered in the Public Registry to be officially recognized by the signing of an institutional cooperation agreement with SERNANP. In this agreement between the Trusteeship and SERNANP the scopes of participation, commitments from each party, mechanisms for accountability and its validity and duration are set; and the State facilitates the necessary technical assistance for the development of activities within the ANP and its Buffer Zones. While the creation of trusteeships of natural areas or the participation in them carries an interest in the sustainable management of these spaces and their financial contribution to different ecosystem services; contribution to these may generate tax benefits to donors and it is described as possible in the guide under the provisions for any non-profit organization in Peru.

Once the trusteeships are registered in the National Customs Superintendence and Tax Administration (SUNAT) and the Ministry of Finance as non-profit organizations who receive

donations, a condition that must be renewed every three years, whoever donates to the trusteeships either natural persons or legal entities may justify it as a deductible expense of their income tax, and a receipt of donation will be issued and delivered for this purpose. Currently there is a developer framework and clear regulation from the authorities for the creation of the trusteeships, but there are only two processes in different stages of implementation, the Nor Yauyos Cochas Landscape Reserve Trusteeship and the Tabaconas Namballe National Sanctuary Trusteeship. Also, in the case of the Tabaconas Namballe Sanctuary the interest in the Trusteeship is reflected but a specific support is not yet planned.

In the Nor Yauyos Cochas Landscape Reserve there is an interest since 2008 to establish a trusteeship in order to promote and develop activities that contribute to the conservation and sustainable development of the area under the Master Plan's framework and several meetings were held with representatives of interested companies based in the area. In 2013 the process was established with three companies showing their commitment to participate represented by CELEPSA, I.L.R Mining Company and Azulcochamining Mining Company, in order to support the following:

- i. Capacity building in tourism implementing standards.
- ii. Strengthening partnerships of vicuña breeders through an internship.
- iii. Monitoring the conservation targets of ANP with a monitoring protocol in lagoons.
- iv. Updated Master Plan with a tool of open standards.

4.2.5 Royalties: concessions to third parties and direct management

One of the sources identified are royalties in ANP paid by the private sector, that although for the state's accounting purposes they are considered revenues directly collected, these are revenues associated with the individual's interest in: i) use of resources in the area; ii) authorization for research and permission to extract and export scientific samples; iii) photography, filming and commercial use permits; iv) entrance fee (tourism); v) commercial use of the different emblems of the area; vi) marketing of distinctive signs and others in the area; vii) installation of other third party facilities for visitors (guides, accommodation, restaurants and walks), and viii) voluntary donations to fund the management of ANP of SINANPE; there are others related.

From all of the above opportunities, SINANPE's authority focuses on prioritizing two, payments for the use of natural resources inside the areas that are allowed and payments related to tourism activities. Regarding the use of resources inside the ANP in Peru, it is important to clarify who uses the areas and which areas are allowed. Regarding who uses them: i) the rights acquired by native and peasant communities prior to the establishment of ANP are respected, and ii) harvesting activities by communities are not subject to any payment because they are related to commercial activities. Regarding the ANP where usage is allowed: i) ANP's of indirect use do not allow the extraction of natural resources or modifications or transformations in the natural environment, except for those related to ancient use activities prior to the establishment of the area, and ii) ANP's of direct use allow the development of activities using natural resources under the zoning to prevent the use in places declared as protected areas.

In this context, between 2012-2013 formalization processes for royalties inside the ANP are carried out which resulted in an increase of 340% of SINANPE's revenues from one year to another, for royalties of resources for commercial purposes as "taricaya" and "castaña" (chestnut). It becomes an important contribution to the income earned by SERNANP and the legal certainty provided to local populations (peasants, indigenous or settlers) regarding economic activities developed to support their families; because it generates direct benefits that allow in the case of extraction of "taricayas" for the population involved in this activity to double their sales in 2013 compared to 2012. SERNANP also carries out activities to formalize the rights within the areas working on behalf of the people who perform activities related to renewable natural resources who

do not generate income to the area but whose sustainability has to be verified, such is the case of hydro-biological resources of sustainable extraction of some Amazonian species such as “paiche”.

Regarding tourism activities two courses of action are prioritized: i) positioning of the ANP as a tourist destination which allows a steady increase of people’s influx from 7,16 million in 2009 to 9,53 million in 2013, and ii) ordering on the granting of rights to develop tourism activities inside the ANP and allowing an increase of the revenues for this matter of 88% between 2012 and 2013 in favor of SINANPE. It also becomes a priority to keep visible the information that shows Directly Collected Resources (DCR) in 2013, reflecting similar amounts to those of 2009 due to a significant drop in revenues between 2010 and 2012. Efforts should be maintained and revenues should increase if they are to be considered relevant for the SINANPE’s financial structure for which a complementary tourist investment in basic infrastructure services within the ANP is required.

4.2.6 Payments for environmental services

The 2009 Financial Plan envisioned the provision of hydric resources and the capture of carbon services through programs for Reducing Emissions from Deforestation and Forest Degradation (REDD+), as the main environmental services from which benefits can be obtained without excluding others in the future. As mentioned before, the hydropower potential and drinking water provision by SINANPE is undisputed; however, there is no real encouragement to the PES instrument or retribution for ecosystem services.

In the first case, power generation companies benefited from water coming from the ANP require an insight regarding its role in providing services even when in areas such Nor Yauyos Cochas Landscape Reserve support is channeled by a power generation company through a trusteeship. In the second case, national legislation does not allow water and sanitation companies to invest in conservation activities and protection of areas that supply the hydric service as they are municipal, except for the one that provides the service to Lima which is part of the central government. Currently the situation is reversed with the enactment of the Modernization Act for water and sanitation companies regulated in late 2013 and in force since 2014 and by which companies can invest in natural infrastructure provided by hydric services opening a funding opportunity for ANP.

In terms of carbon fixation under the REDD+ projects, significant progress was achieved in SINANPE since there are three ANP to date that have REDD+ projects validating altogether 8,7 million of carbon credits and having negotiated one million between 2012 and 2013. This situation not only positions Peru at the forefront of this mechanism but SINANPE as well because these projects can show more scaled results in the country. For this reason, SERNANP is encouraged to issue guidelines for the development of REDD+ projects in ANP according to Directive N° 001-2014-SERNANP and by Presidential Resolution N° 26-2014-SERNANP approved, considering: i) SERNANP is the owner of any right that may be generated by the maintenance or restoration of natural ecosystems including any kind of carbon certification from the implementation of REDD+ projects, ii) only such Project may be developed in ANP with a management contract signed, and iii) use and implementation of funding obtained by the merchandising of rights generated by the projects must be directed in the following order to cover the expenses of the Annual Operating Plan of the Administration Contract: five years expenditures of implementation of the Administration Contract, financial sustainability of the ANP’s management and SINANPE’s contribution.

4.2.7 Opportunities for private investment in additional protected areas others than the ones listed in SINANPE’s Financial Plan of 2009

Although these mechanisms were not considered in the Financial Plan of 2009 as a source because they offered opportunities to those deprived of SINANPE’s contributions, some that were consolidated over time are detailed as follows:

i. Management Contracts

The legal definition of a management contract contained in paragraph a) of Article 17° of the Protected Natural Areas Act was widely developed in the Regulation of the Protected Natural Areas Act approved by Supreme Decree N° 038-2001-AG, establishing that ex officio or by request, the Peruvian State “instructs a non-profit legal entity of private law, called Executor, total or partial execution of management operations and content management in the Master Plan of ANP for a period of 20 years; excluding sites of world cultural and natural heritage”. Thus, it is understood that the signing of a management agreement does not involve the loss of supervision and regulation powers inherent to the national authority of protected areas representing the State.

Management contracts are not only a new legal concept but also particularly powerful for the efficient management of ANP. Under this arrangement, the Peruvian State has signed nine management contracts regarding the 10 ANP, representing more than 10% of the SINANPE's areas under this modality. Having a specific institutional structure and totally dedicated to the management of ANP, beyond the obvious coordination with the national authority, is beneficial for SINANPE and ANP that have these contracts. Management is performed by executors who are committed to financially support the area, the pursuit of financial sustainability of ANP is key for the technical support of SERNANP who additionally manages the constant fundraising even in the design and implementation of innovative financing such as REDD+ mechanisms, that due to financial and technical aspects the SERNANP can accompany but not lead.

The nine management contracts signed by the Peruvian State for nine ANP mean a specific support for the management of areas such as technical support and channeling mostly private funding. Contracts signed by the State listed below commit to invest altogether 19,5 million dollars (US\$) in their first five years: i) el Angolo Hunting Ground, Sauce Grande Sector (2005); ii) Salinas and Aguada Blanca National Reserve (2006); iii) Los Manglares de Tumbes National Sanctuary (2008); iv) Tambopata National Reserve - Bahuaja Sonene National Park (2008); v) Cordillera Azul National Park (2008); vi) Yanachaga Chemillen National Park 2010); vii) el Angolo Hunting Ground, North Sector (2011); viii) San Matías San Carlos Protection Forest (2011), and ix) Alto Mayo Protection Forest (2012).

Having a specialized technical team supporting these management contracts enables the leverage of public and private funds for the ANP involved, carrying out continuous and specific steps by the executors of the contracts who are in constant search of funding opportunities for the areas they manage. Currently, the three REDD+ projects developed in the field of SINANPE correspond to three management contracts signed: i) Tambopata National Reserve- Bahuaja Sonene National Park, ii) Cordillera Azul National Park, and iii) Alto Mayo Protection Forest.

ii. Contributions from the private sector: corporate social responsibility programs

SERNANP receives an average of three to four thousand documents annually related to the evaluation of investments or financial activities to be developed by the ANP or their buffer zones, running under the National System of Environmental Impact Assessment. Thus, it should be clarified that only seven companies expressed their support to the areas through specific initiatives: i) a trust fund managed by PROFONANPE for the Paracas National Reserve, ii) three specific funds managed by PROFONANPE for the implementation of activities in the Pucacuro Reserve ; Amarakaeri Communal Reserve and the Pacaya Samiria National Reserve, and iii) three funds designed and managed by companies for the Salinas and Aguada Blanca National Reserve (Xtrata mining company), the Machiguenga Communal Reserve and the Megantoni National Sanctuary (Gas Transportation Company in Peru) and Allpahuayo Mishana National Reserve (Burlington company) for the implementation of activities.

The role of protected areas in the Peruvian environmental certification procedure can become an opportunity for private support, provided that the goods and services they provide are properly understood by the companies. An additional issue is the interest that companies may have on investment in nature and rural social development in the scope of ANP, as part of their environmental corporate social responsibility processes.

iii. Contributions for environmental compensation

In the search of new investment opportunities in conservation by private companies, in those cases in which the impacts of their business activities cannot be avoided or minimized, the Ministry of Environment (MINAM) in Peru is designing the “guidelines for the development of an environmental compensation plan under the System of Environmental Impact Assessment (SEIA)”. The strategy aims to maintain the “stock” of natural heritage for the availability and use of future generations and suggests that the damage caused on biodiversity and ecological functions of ecosystems be compensated in spaces equivalent to the affected areas.

5. Comparative analysis of instruments identified in Colombia and Peru

To facilitate the comparative analysis of the instruments identified between Colombia and Peru, these are classified in four categories (Table 2) and represented by:

- i. Economic instruments defined as those that promote a change in the behavior of those engaged in industrial, commercial and service activities, while intended to provide incentives to those who take actions in the protection, preservation or restoration of ecological balance (Carmona Lara 2003).
- ii. Financial instruments are tools whose objective is to meet the financing or investment needs of agents of a society making money flow obtained from some sectors move to others in need, while generating wealth (www.educaciónbancaria.wordpress.com).
- iii. Tax instruments that are focused on revenue or tax collection.
- iv. Others that do not fit entirely in the instruments described above.

Table 2. Comparative analysis of the instruments identified between Colombia and Peru

Category	Peru	Colombia
Economic	Environmental compensations PES programs Royalties Ecotourism concessions	Environmental compensations Investment of 1% of current revenues of local authorities PES programs Environmental surcharge on toll Ecotourism concessions
Tax		Tax exemptions for donations, tourism activities and land conservation
Financial	Trust funds or endowments in perpetuity	Environmental Funds
Others	Environmental corporate social responsibility programs Public-private partnerships Trusteeships Management contracts	Environmental corporate social responsibility programs Public-private partnerships

Reviewing the above instruments, we can conclude the following:

- i. Colombia has made a significant and regulated progress on environmental compensations and its level in implementation continues to improve. Meanwhile Peru does not have a regulatory framework on this matter and is waiting for the MINAM to validate a series of guidelines that will enable the development of an environmental compensation plan under the System of Environmental Impact Assessment.
- ii. The two countries have environmental funds directed to support the system of protected areas in the country but they have developed different strategies regarding the approach to the private sector. Colombia has achieved that a 15% of the money channeled to protected areas come from the private sector while Peru has only obtained 2,8% of the money channeled to the system in the last five years from the private sector.
- iii. In the development of PES schemes, progress in Colombia is focused on the water sector obtaining specific results in support of this mechanism. Meanwhile in Peru progress is focused on the mechanisms to reduce emissions from avoided deforestation, where projects are being developed, a validation of carbon credits and their merchandising.

- iv. In both countries the private sector shows an interest in contributing to the development of programs of corporate social responsibility that focus either on social or environmental fields. The opportunity must be seized by those who run endowments, intend to establish trusteeships or by authorities of protected areas, channeling the interest of private sectors to projects, activities or specific results in benefit protected areas; as well as to organizations that must adequately communicate opportunities for channeling resources to generate tax benefits to the private sector such as tax exemptions.
- v. Both countries have a regulatory framework that allows the development of ecotourism concessions but Colombia has more experience in this area compared to Peru; however, there are tools of exclusive application in one country that could be adopted in another such as the environmental surcharge on toll in Colombia or the management contract in Peru.

Currently, whether by the improvement on the implementation of the mechanisms used or by the application of new instruments, Colombia and Peru have an opportunity of bi-national cooperation whose goal is a mutual learning from their experiences in the implementation of alternative mechanism to improve effectiveness in attracting private sector's investment to the management of protected areas.

6. Case studies in Protected Areas in Colombia and Peru: involvement of the private sector in environmental conservation

Selecting a pilot or demonstration of how private sector contributions are materialized in the management of protected areas is not an easy task, as there are different ways of involvement of the private sector and different levels of impact of such funding. For this reason, five criteria that allow the choice of a single case are defined.

- i. Count on at least one of the identified instrument or tools.
- ii. The application of the tool in a period of no less than three years.
- iii. Expect documents and successful results.
- iv. Link different types of actors and sectors.
- v. Have different funding sources.

In this context and even if many of the areas meet some of these criteria, two cases that meet the above criteria were chosen and are the Agua Somos Fund in Colombia and PNN Cordillera Azul in Peru.

6.1 Colombia: Agua Somos Fund

The Agua Somos mechanism is a private-public partnership that provides a financial tool for the conservation of moors, forests and rivers that generate water resources in the capital region, ensuring not only water supply to more than 10 million people but also the wellbeing of the communities located in the area of influence of these sources. The mechanism allows users of the water resource to compensate the efforts of both private owners and protected areas to preserve vegetable plantations, forests, and soil that protect watersheds that supply the city, ensuring its quality, quantity and regulation.

The initiative came up as a response to the need to preserve forests and moors that protect the watersheds that supply the city of Bogota which are being reduced at a high speed since the property owners with strategic ecosystems lack the necessary resources to maintain them using the land for other activities to generate income. Additionally, national protected areas located in the region have budget limitations to fulfill their protection task efficiently. Owners and protected areas do not have adequate resources to preserve forests and moors that produce the water for Bogota, but they do have restrictions on land use.

The Agua Somos mechanism is an interesting alternative as it can provide the necessary funds in order to develop the conservation activities required. Within the area of influence of this mechanism there are 30 municipalities, four environmental authorities and two Departments (Figure 1), as well as national protected areas represented by: Natural Chingaza National Park; Natural Sumapaz National Park; Páramo Grande Protective Forest Reserve; RFPN White River and Black River; Cerros Orientales de Bogotá Protective Forest Reserve; regional (declared by the Regional Autonomous Corporations), and local (district protected areas).

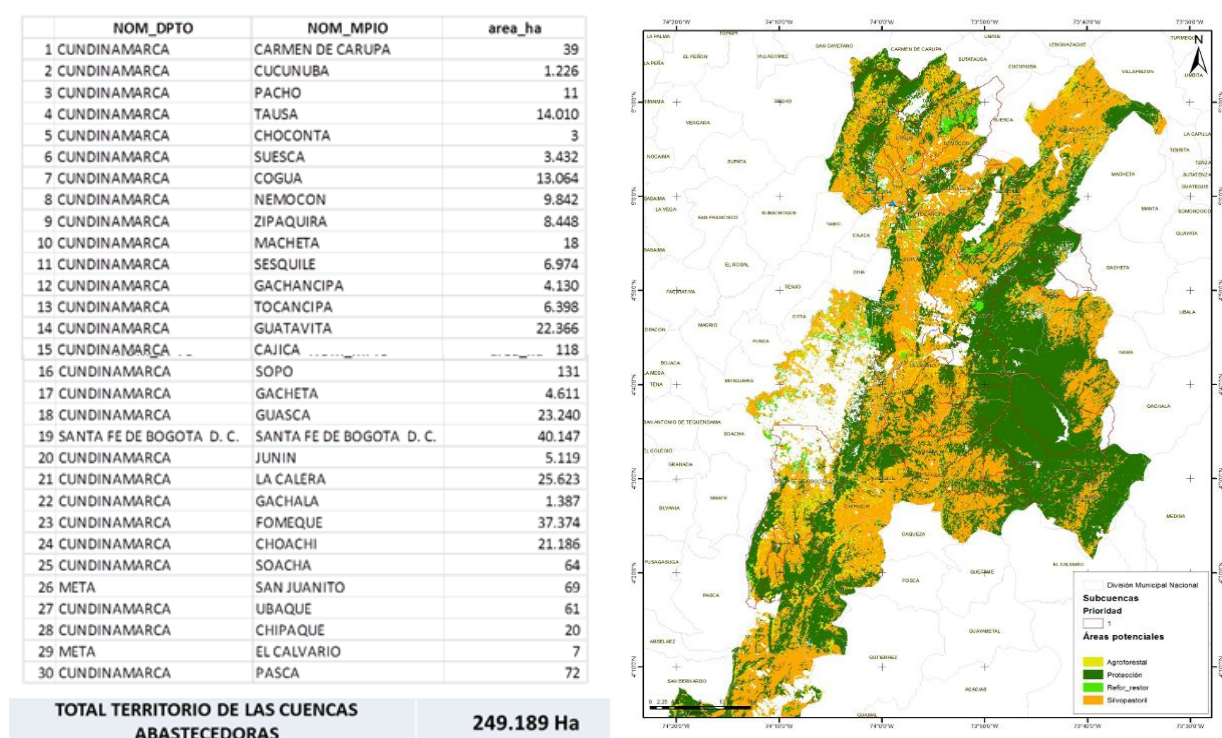


Figure 1. Area of Influence “Agua Somos” Mechanism.

Source: Agua Somos Technical Secretariat.

As background to this initiative there are cooperation agreements signed since 2007 between the Water and Sewerage Company of Bogota, the National Parks Unit, TNC and the Natural Heritage Fund which allowed the design of a financial mechanism and the structuring of an operating model. In 2009, and with the participation of the Bavaria Company, a pilot Project was developed with the National University for the “Participatory ecological restoration in the upper basin of the Tunjuelo river- Chisacá river micro-basin” and the design of a communication and marketing strategy for the mechanism. In 2013 these entities carried out the rehabilitation of the Riverside corridors in the micro-basin of the Chisacá river-implementation phase and the propagation of native plant material - implementation phase.

The main objective of Aguas Somos is: “To save the watersheds that supply water to Bogota and neighboring municipalities ensuring the functionality and structure of moors and sub-moors ecosystems and the Andean forest that produce water for the city reducing the costs of the treatment plant through the sediment control and innovating the institutional environmental management in the city-region with a long-term vision”.

Among the specific objectives pursued by the mechanism are:

- Help and maintain adequate water supply conditions.
- Support and coordinate actions for the conservation and sustainable management in areas of strategic ecosystem such as protected areas, moors and forests ecosystems because they provide supplying services for the capital region.
- Add public-private efforts through partnerships that build a social and environmental net.
- Link the industrial sector to the conservation of ecosystem services.
- Empower the community in conservation processes.

Based on these studies, the Agua Somos mechanism’s main goal is the reduction of two million tons of sediments per year, for which an intervention in 79,000 hectares is required as follows: 1,8 thousand in the implementation of agroforestry systems; 67,1 thousand in the

implementation of protection schemes; 3,7 thousand in reforestation, and 5,7 thousand in silvopastoral systems. Currently, Agua Somos is a financial solution that involves the private and public sector with the participation of Bogota Aqueduct, Bavaria, National Parks, Natural Heritage and TNC, in the conservation of ecosystems responsible for the production and regulation of water for consumption of millions of Colombians in Bogota and the capital region. It becomes competitive to attract, manage and invest public resources and voluntary contributions from citizens and the private sector in areas of the Chingaza and Sumapaz National Parks and the upper basin of the Bogota River, supplying water sources for the region's consumption. It also has a Technical Secretariat and a Steering Committee in charge of defining and maintaining the guidelines and investment areas.

The Agua Somos initiative benefits in first place more than eight million people in Bogota and its zone of influence who substantially improve the long-term water supplying in quantity and quality for the conservation of moors and forests that supply it. Also the communities living in the areas surrounding the basin will benefit through productive projects as well as the Chingaza and Sumapaz National Parks, including private areas in their buffer zones that affect water sources as well as other public areas.

Investments will focus in the conservation of Andean mountain cloud forests of the high basins and on the moors than are home to more than 2000 plant species. Thus, the Water Conservation Mechanism of Bogota will not only guarantee water production but it will also give an important contribution to the conservation of high mountain biodiversity, one of the most affected by deforestation in the country.

The figure of the Water Conservation Mechanism of Bogota intends to attract more than 100 billion pesos in 10 years. Since this is a non-extinguishing financial tool, investments in conservation will be derived from the interests received that amount some seven billion pesos per year. At the same time, the figure allows the Mechanism self-reliance and the investment in long-term conservation thanks to the returns generated in the financial market. Bogota and its influence area consume today about 1'290.000 cubic meters of water daily and the capital region is expected to increase from eight million people in 2010 to more than 13 million in 2038.

6.2 Peru: Cordillera Azul National Park

In Peru, the opportunities to link the private sector with protected areas are several but the one that is generating specific long-term results in benefit of SINANPE is management contracts. The figure that allows an ANP in particular to have a technical team available for the proper implementation of its Master Plan; in addition it cares about the medium and long-term financial sustainability of the area channeling public and private funds in its favor or by exploring a subsequent implementation of new financial opportunities.

The Cordillera Azul National Park case is emblematic since the stage prior to its establishment as National Park had the support and interest of several Peruvian and foreign institutions that identified the biological richness, uniqueness and almost untouched condition of the area as a potential for conservation. Also, it was conceived as an opportunity to implement a successful management model in which the area protection and the recognition by various actors of environmental services provided at local, regional, national and global levels converge, as well as an improvement in the quality of life of neighboring populations in the area thanks to their closeness; however, none of this would be possible without a sustained funding.

The collective determination allows the declaration of Biabo-Cordillera Azul as a Reserved Zone in 2000, after a Rapid Biological Inventory of three weeks in the basins of Pisqui and Pauya rivers and getting the information that helped justify and support the arguments in favor of the creation of a National Park in the area, one of the highest categories of protection in the SINANPE. On May 21 of 2001 a Supreme Decree N° 031-AG-2001 is signed to create the Cordillera Azul National Park (PNCAZ), covering 1'353.190.85 hectares among the basins of the Huallaga and Ucayali rivers and being distributed in four different regions of the country (Loreto, Ucayali, San Martín and Huánuco); thus, this area became a protected area with the highest number of different

landscapes and geological formations in Peru. There are no human settlements within the PNCAZ, even when there is evidence of indigenous people in voluntary isolation. Meanwhile, the park's buffer zone covers more than 2,3 million hectares distributed in four regions that have approximately 225 towns with at least 250 thousand people.

The area of the Cordillera Azul National Park represents 1% of the Peruvian territory, and managing an area of this kind has become a challenge, considering all its western flank is crossed from north to south in a short distance by the Fernando Belaunde Terry highway which signifies a migration path for the population of the northern departments that move to new areas in search of land to settle down. Furthermore, the largest population of this buffer zone is settled in this western flank, posing a threat of migratory move to the protected area.

The Peruvian State since the establishment process of the reserved zone and subsequent categorization has the support and interest of the civil society participating in the joint management of the area while this legal mechanism is allowed in the legislation of protected areas in Peru. The Peruvian Association for Conservation (APECO) supported the settlement process of the area and subsequently an organization was specifically established in July, 2002, to support the implementation process and effective management of the area called "Center for Conservation, Research and Management of Protected Areas Cordillera Azul" (CIMA Cordillera Azul).

Regulatory standards require that non-profit private organizations that apply for a Management Contract in a natural protected area are established for five years, so CIMA Cordillera Azul supported the Peruvian State in PNCAZ's management through annual and biannual agreements, extending the term until it was able to apply for a total management contract of PNCAZ in 2008. Initially, CIMA Cordillera Azul focused on co-leading the process of elaboration of the Master Plan, supporting the management of the area and improving the quality of life of the population settled in the buffer zone in subjects like protection of the area. At the same time, it focused on environmental education, micro zoning and community work in the buffer zone. This met one of the requirements "unwritten" expected of those who apply for a management contract: knowledge and previous work in the area of interest, with a prior identification in the area with local authorities and population.

The work for the National Park and its Buffer Zone during 2003-2008, by CIMA Cordillera Azul, would not have been possible without the financial support of USAID, Gordon & Betty Moore Foundation and MacArthur Foundation, as their funds were channeled through The Field Museum, a private non-profit organization involved in supporting the creation of PNCAZ from the beginning. The four organizations contributed with an average of 1.5 million dollars (US\$) to PNCAZ for five years, relying on proper management and supervising it through specific results year by year.

In August 2008, CIMA Cordillera Azul signed a total management agreement for the Cordillera Azul National Park for 20 years with the Peruvian government, represented at that time by the National Institute of National Resources (INRENA) as the authority for the management of the areas and it was ratified in 2009 by the newly formed National Service of Protected Areas (SERNANP). The trust provided for years by cooperating entities was reflected in the subscription of the Global Development Agreement (GDA) conducted by USAID, Moore Foundation, MacArthur Foundation, The Field Museum and CIMA, which made it possible to continue having a specific financial support during 2008-2013. Up to that time the investment in the area was of 10,6 million dollars (US\$), with 9,1 provided by organizations from the GDA.

The support of CIMA since 2003 in the formulation and implementation of a Master Plan and the financial support by donors for this to happen, accompanied the need to explore several alternatives that will allow a long-term financial sustainability. Thus, the potential of environmental services provided to the area and which have a higher positioning and opportunity are analyzed since 2006. While PNCAZ has many headwaters whose waters flow into the Huallaga and Ucayali rivers, the absence of intermediate cities or extractive industries demanding water resources in the buffer zone make the design of a compensation for water ecosystem services unimportant.

In the above analysis it was found that the area has the potential to develop a new mechanism related to ecosystem services of carbon fixation as the implementation of REDD+ projects. Thus, the preliminary assessment encountered that ANP has:

- i. An intact forest with wide biodiversity and a management committed to improve the quality of life of the communities settled in the buffer zone.
- ii. A proven process of historical deforestation in the regions over which PNCAZ is located, especially in the buffer zone having backup satellite data analyzed.
- iii. Abundant systematized environmental, social and geographical information.
- iv. Implemented Master Plan (2003-2008) with activities focused on deforestation control in the area and its buffer zone, knowing the budgets required; in addition to implementing an update process of the Plan 2009-2014.
- v. A Management Committee of the area since 2004, recognized and composed of representatives from regional and local governments; NGO's; research or education institutions; native and local communities, and associations of agricultural producers from the four regions where PNCAZ is located.
- vi. A monitoring system implemented called Index of Conservation Compatibility (ICC), whose information provided by rangers and field staff is collected and analyzed by several levels and allows the decision making on the planning and management that the PNCAZ requires. It also has a specific monitoring system of deforestation in the area and its buffer zone using Geographic Information Systems (SIG) and using satellite images that are analyzed by a team of experts.
- vii. A signed management contract for 20 years with the Peruvian government showing CIMA's commitment to the park.
- viii. Market institutions, "brokers" and several companies interested in promoting the REDD+ project with an ANP and particularly in the PNCAZ.

By analyzing all the opportunities ahead, a process of research and preparation is established before 2008 and has PNCAZ and CIMA Cordillera Azul as a reference in the REDD+ topic in Peru, from a conceptual and specific implementation point of view and walking hand in hand with the national authority of protected areas in this apprenticeship. More than six years of work have elapsed, required for the generation of specific technical capacities within CIMA's Cordillera Azul staff, as to systematize information and improve processes of social intervention in the buffer area's zone. At the same time, a document was established to support the proper management of PNCAZ and proves how the emission of more than 1,6 million tons of CO₂ average per year for deforestation is avoided, preventing emissions of 5,7 million tons of CO₂ during 2008-2012. Thus, REDD+ projects pass all validation processes of the "Voluntary Carbon Standard" (VCS) and the "Climate, Community and Biodiversity Alliance" (CCBA), obtaining a registration in Markit and enabling the marketing of carbon certificates in the voluntary market.

The effort required for the constant leverage of funds during 11 consecutive years for an amount of 1,5 million dollars (US\$) per year, as well as the development of highly specialized projects as REDD+, implementing at the same time a Master Plan of PNCAZ, is possible thanks to the joint work of private non-profit organizations, international cooperation and the State through the SERNANP. The role that management contracts have as a strengthening tool of management of protected areas and generating opportunities to channel funding, whether through innovative or traditional tools, show its efficiency in the PNCAZ case and other areas of the system that have similar processes.

7. Lessons learned in Colombia and Peru

Considering that several instruments analyzed emerged to support the creation of protected areas of regional and local levels, it becomes urgent to quantify the contributions not only in the ecosystem representativeness but also in the ecosystem sustainability. Thus, strategies developed such as qualifying the local actors with their participation in the management and implementation of the Management Plans must be considered, as the reduction of deforestation and impact on biodiversity is only possible with a recognition of the benefits that the forests and other ecosystem provide to the community; articulate inter-institutions in the different levels and promote a public-private relationship to strengthen conservation strategies.

Within this context, innovative programs are launched to enable the funding of actions such as the ones performed in the development of REDD+ strategies, where the following are recognized as strategic: i) clarity in recognizing that carbon credits belong to the State but in turn there is a need to identify and provide benefits to those who generated the actions that led to its consolidation; ii) the possibility of implementing the initiative as a pilot in Protected Areas due to its size and one authority jurisdiction; iii) the importance of verifying the compliance of agreed targets by third parties and that credits be offered only to those who have met their environmental obligations, and iv) recognition of human capital in some protected areas where Management Contracts are granted and facilitate the implementation of actions.

Meanwhile Endowments obtain more resources from donations of actors who are seen as strategic allies for conservation and who support the creation of local and regional protected areas. The Peruvian case is an example that due to the participation of different sectors, trust links were generated enabling a greater impact on policies developed by SERNANP. In Colombia, programs designed and implemented strategies by the Fund for Environmental Action and Childhood and the Natural Heritage Fund are successful, seen in the amount of resources raised and the number of projects implemented.

In Colombia donations made as part of tax exemptions for donation or conservation are reflected in the importance of new actors from the private sector issuing valid certifications as the ones issued by the Parks Unit that could be considered by the authorities in tax issues and that become real incentives to attract a greater private sector contribution for protected areas.

In summary, the different instruments work in two ways. On the one hand, they allow the private sector to participate in the conservation of biodiversity through corporate responsibility programs and corporate image positioning. On the other, these are true contributions which complement the systems of protected areas, while facilitating: the articulation of the different management levels and categories; ecological representativeness; the conservation of priority ecosystems such as dry forests; the conduction of researched specialized in the ecosystems in order to build a baseline; and effective management. Thus, environmental authorities are given support in their mission of conservation, implementation of policies and development of programs.

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