

The Effort Of The Private Sector In The Protection Of Transboundary Areas: The “*El Corbalán-Cañada El Carmen*” Private Transboundary Conservation Area Between Bolivia And Paraguay

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1. INTRODUCTION

The Private Transboundary Conservation Area (APCT by its Spanish acronym), initially known as “*El Corbalán-Cañada El Carmen*” that covers 8,500 hectares of the Dry Chaco ecosystem adapts itself to what is indicated by Zbicz and Green (1997): “The boundaries of protected natural areas that have been designed politically rarely coincide with ecological boundaries and the ecosystems are often cut by international boundaries. Transboundary protected areas offer integral possibilities for the promotion of the conservation of the nature of these divided ecosystems, as well as for transboundary cooperation and peace”.

International boundaries frequently traverse watersheds, mountain ranges, rivers or natural features. In these cases, the protected areas that are located on both sides of the boundary can be useful in many ways for the government as well as for conservation (Marchetti, sf en Barzetti, 1993).

“*El Corbalán - Cañada El Carmen*” is located between the Paraguayan-Bolivian boundary, between the 21° 39' 41” and 21° 34' 44” southern latitude and the 62° 27' 29” and 62° 25' 41” northern longitude. Geopolitically, 4,500 hectares correspond to the department (district) of Tarija in Bolivia and 4,000 hectares to the department of Boquerón in Paraguay.

This initiative is headed by two South American non-governmental organizations: the “*Protección del Medio Ambiente de Tarija* [Protection of the Tarija Environment] – PROMETA –

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IYA” NGO, created in 1990 with the mission of contributing to the conservation of the environment for improving the quality of life of the Bolivian population through the management of protected areas, and the *Instituto de Derecho y Economía Ambiental* [Law and Environmental Economics Institute] – IDEA, created in 1996 with the mission of contributing to sustainable development in Paraguay through the practice of environmental law and environmental economics.

This paper contains a review of the background, with special consideration to the fact that “*El Corbalán-Cañada El Carmen*” will in South America become one of the first absolutely private Transboundary Conservation Areas due to the fact that both sectors of the conservation area would be privately owned and managed.

This paper contains an analysis of the context and of the prevailing legal systems in each country regarding the management of protected wild areas, suggestions for achieving the effective implementation of the area and its official recognition before relevant international authorities and an analysis and systemization of the phases that both NGO’s have gone through in establishing the area, as lessons learned up to the present date with the objective of contributing to a better understanding of the factors for achieving the effective establishment of a Private Transboundary Protected Area.

2. TRANSBOUNDARY PROTECTED AREAS: GENERAL CONTEXT AND CONCEPTS

2.1 DEFINITIONS

The definitions adopted for the purposes of this initiative are henceforth transcribed following what Sandwith *et al.* (2001) and other sources indicate.

Protected Area (IUCN, 1994)

An area of land and/or ocean specially devoted to the protection and maintenance of the biodiversity, as well as related natural and cultural resources, which are managed by juridical means or other effective methods.

Transboundary Protected Area (TPA)

An area of land and/or ocean that crosses one or more boundaries between states, sub-national units such as provinces and regions, autonomous areas and/or areas beyond the limits of national or jurisdictional sovereignty, which established as parts, are especially devoted to the protection and maintenance of the biodiversity, as well as related natural and cultural resources, which are managed by juridical means or other effective methods.

Parks for Peace

Parks for Peace are transboundary protected areas that are formally devoted to the protection and maintenance of biodiversity, related natural and cultural resources, and to the promotion of peace and cooperation.

Sandwith *et al.* (2001) indicate that a lot of confusion exists regarding the terminology used on the subject matter of transboundary protected areas. However, these authors indicate that the

starting point is the definition of “protected area”. A “transboundary protected area” is a special type of protected area and a “park for peace” is a special type of transboundary protected area.

Benefits of Transboundary Protected Areas

The establishment of Transboundary Protected Areas between two or more countries or other jurisdictions creates opportunities for highlighting transboundary cooperation regarding management. It also helps in strengthening cooperation and reduces possible tensions in boundary regions. The principle benefits identified by the UICN “Parks for Peace” initiative are the following (Sandwith et al. 2001):

- Promote international cooperation at different levels and in different forums;
- Strengthen environmental protection in shared ecosystems;
- Facilitate more efficient research activity;
- Grant benefits to local and national economies; and
- Insure better boundary control of problems such as fires, plagues, hunting, sea pollution and smuggling.

2.2 WORLD CONTEXT OF TRANSBOUNDARY PROTECTED AREAS. RELATIONSHIP OF TPA's WITH PRIVATE PROTECTED AREAS

The number and modalities of Transboundary Protected Wild Areas in the global environment has been growing at an accelerated rate. The number has multiplied nine-fold just in the ten-year period between 1990-2000.

Marchetti sf quoted by Barzetti (1993) indicated the existence of some 70 protected areas in 65 countries, protected on both sides of a boundary at the beginning of the 90's. It is important to point out that 21 areas of this type are located in Latin America and the Caribbean.

Zbicz (2001 quoted by Sandwith et al., 2001) indicated the existence of some 666 protected areas in 113 countries during that year. This number represented the existence of at least 169 “complexes” of two or more adjacent protected areas divided by international boundaries. That year, the number of transboundary protected areas in Latin America and the Caribbean had increased to 123 conservation units located in 29 transboundary protected area “complexes”.

The inventory of Transboundary Protected Areas carried out by Zbicz (2001) for Central and South America includes the 123 protected areas; their corresponding 29 “transboundary complexes” (some areas are located in two or more countries); the code used by the World Conservation Monitoring Centre (WCMC) to recognize each area and the Management Categories for each one them.

The 29 transboundary protected area “complexes” located in Central and South America have the following characteristics:

- Five protected area complexes are tri-national
- 24 protected area complexes are bi-national
- They extend across 123 individual protected areas
- They involve 18 of 21 countries that make up Central and South America

Regarding the quantity and the type of management categories, the types and percentage of UICN management categories involved in Central and South American transboundary

complexes can be observed in Table 1 (ANNEX I). The types of management category combinations that occur in transboundary protected areas and the percentage of emergence of the combination appear in Table 2 (ANNEX I).

Regarding management modalities of these Transboundary Protected Areas, they adopt different cooperation ways for their management. The generality of the management examples of these areas are given via government-to-government cooperation and government-to-private sector cooperation in some cases.

Mesquita et. al (2000) indicate that private reserves are complementary tools of public sector efforts for establishing protected natural spaces and that sometimes, when governments do not have the resources to acquire these areas, civil society organization efforts are relied upon to raise the funds necessary allowing for the purchase of this land and for allocating them to conservation. However, these authors also indicate that these groups during the last decades have increasingly decided to assume the ownership and management of the acquired areas themselves, thus establishing these as private protected areas.

According to Table 1 in ANNEX I, in 2001 the Categories II “National Parks” and VI “Area Protected with Managed Resources” made up 57.8% of the protected areas that integrate the transboundary complexes. The areas known as “private” only make up 1.6% of these transboundary complexes.

An interesting aspect to highlight is that the management category assigned to the protected area does not necessarily reflect the “property type” on which the protected area (state or private) is located; or the “management type” under which it is being managed (governmental, private, or mixed). Several authors indicate the existence of real or possible determining factors in the development of a transboundary protected area when the processes of an institution that manages a portion of a transboundary complex do not correspond or are comparable with the processes of the institution that manages the remaining portion. This is the “matching capacity” concept indicated by Sandwith et al. (2001).

According to Table 2 (ANNEX I), 18 possible combinations of management categories existed in 2001, among which the “Category II National Park + Category IV Habitat/Species Management Area” combination stands out that occurred in 24% of the 29 transboundary protected area complexes, followed by the “Category II National Park + Category VI Area Protected with Managed Resources + Biosphere Reserve” that occurred in 10% of the identified complexes.

Significantly, the combination that involved at least one private protected area (one case) represents a minimum percentage among the transboundary protected areas.

3. THE “EL CORBALÁN – CAÑADA EL CARMEN” PRIVATE CONSERVATION AREA

The area is going through a consolidation process, and is going through different phases on both sides of the conservation units that will make up the total area.

The Bolivian portion of the “*El Corbalán – Cañada El Carmen*” Transboundary Protected Private Area, known as the “*El Corbalán*” Natural Patrimony Reserve, created in 1996 through an initiative by PROMETA, is one of the first private protected areas in Bolivia that is being

managed. The area was recognized by Resolution N° 011/2001 issued by the *Intendencia Técnica de la Superintendencia Forestal de Bolivia* [Technical Intendency of the Forestry Superintendence of Bolivia], on August 22, 2001. Located in the arid and semi-arid Chaco ecosystem, it is made up of low forests, high forests, grasslands and naturally formed lagoons and other bodies of water known as “*cañadas*”. The objective of its creation is to conserve and preserve the biodiversity within a representative sample of the mentioned ecosystem.

The area has an operations center with a capacity for housing 10 persons, as well as an interpretation path. In the research area, preliminary studies have been carried out on the area's flora and fauna. Because it is a private protected area, the business and administration for its conservation are executed by PROMETA – IYA.⁹

IDEA is carrying out an advanced process of acquisition and consolidation in the Paraguayan sector of the Transboundary Private Protected Area (the “*El Carmen*” Natural Reserve will be established once the legal and administrative procedures are concluded). The *Instituto de Bienestar Rural* [Rural Welfare Institute] is the owner of the 4,000 hectares and is the governmental agency responsible for land distribution in Paraguay. After the acquisition, transfer and title in favor of IDEA, compliance with the requirements established by Law 351/94 regarding Protected Wild Areas will then be carried out for the establishment of Protected Wild Areas under private ownership.

3.1 THE BOLIVIAN-PARAGUAYAN FRAMEWORK REGARDING TRANSBOUNDARY PROTECTED AREAS

Paraguay and Bolivia have a history of several bilateral relationships in the South American Chaco. The following are the most important:

3.1.1 Historical Context, The Chaco War

The Chaco territory was the stage for the largest and most bloody military confrontation fought in the southern cone of the Western Hemisphere during the XX century: The Chaco War. During three years, 1932-1935, Bolivia and Paraguay fought a bloody war, with approximately 100,000 casualties.

Some historians indicate that the cause of the war was due to the fact that Bolivia lost its seacoast and access to the Pacific Ocean during the wars with Chile at the end of the 19th century. However, other authors indicate the presence of oilfields and powerful transnational interests as the reasons behind the conflict. The Paraguay River, which borders with the Chaco in the east, is a deep river that is accessible to transatlantic ships, and whose ownership has been indicated as one of the reasons for the conflict.

One of the bloodiest battles took place in November 1934 in the area corresponding to the “*El Corbalán – Cañada El Carmen*” Transboundary Private Protected Area: the *El Carmen* Battle, when Paraguayans attacked the Bolivian Reserve Corp that had occupied the location.

⁹ <http://www.prometabolivia.org/prometa%20spanish/spanish%20files/body/donde%20trabajamos/corbalan.htm>
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An armistice was signed on June 14, 1935 ending the war. Subsequent negotiations recognized Paraguay's claim on a large part of the disputed Chaco territory. Since then, relations between the governments and people of both countries have been of mutual respect and collaboration, without any incidents or situations occurring that could affect these relations.

3.1.2 Bilateral agreements

- **Agreement between Paraguay and Bolivia regarding Natural Resources and the Environment**

The Republic of Paraguay and the Republic of Bolivia signed an agreement on March 15, 1994 regarding natural resources and the environment. A *Consejo Binacional paraguayo-boliviano de Recursos Naturales y Medio Ambiente* [Paraguayan-Bolivian Binational Council on Natural Resources and the Environment] was established to the *amparo* [a brief and fast judicial process that guarantees constitutional rights] of this agreement.

- **Memorandum of Understanding for the Elaboration of an Action Plan for the Transboundary Management of Paraguayan and Bolivian Protected Areas**

The representatives of the Bolivian and Paraguayan Ministries of Foreign Affairs signed a Memorandum of Understanding on March 12, 2002 for the elaboration of an action plan for the transboundary management of protected areas in both countries.

The *amparo* of this Memorandum was established by a technical committee, coordinated in the Republic of Paraguay by the Secretariat of the Environment (SEAM by its Spanish acronym) and in the Republic of Bolivia by the Ministry of Sustainable Development and Planning, through the National Service of Protected Areas (SNAP by its Spanish acronym). The mentioned technical committee has the following attributed and functions:

- Elaborate an action plan for the transboundary management of Paraguayan and Bolivian protected areas;
- Select, as stipulated by internal directives and legislation of each country, the protected areas that are indicated in the text a) to develop a Transboundary Management Bi-national Plan as a pilot experience; and
- Provide the basic mechanisms for the processing and exchange of fluid information between the parties on the physical-natural, socioeconomic and cultural determinants and other relevant aspects that would allow for the achievement of the proposed objective. Also promote the participation of experts on topics related to methodologies, concepts, and criteria, as well as in the elaboration of diagnosis and implementation of activities.

3.2 THE LEGAL FRAMEWORK OF BOLIVIA AND PARAGUAY REGARDING TRANSBOUNDARY AND/OR PRIVATE PROTECTED AREAS

In both countries, the legal instruments related to protected areas present differences regarding the depth of treatment that private and/or transboundary protected areas receive. Table I contains a summary of the legal context of both countries.

LEGAL INSTITUTION	LEGAL BODY	
	Bolivia	Paraguay
National Competent Authority	<ol style="list-style-type: none"> 1. National Service of Protected Areas (Art. 9, Law 1788/97) 2. Forest Superintendence (Art. 22, Forest Law 1700) 	Secretariat of the Environment (Art. 14, subparagraph k in Law 1561/2000)
Legal institution that contemplates the creation of Private Protected Areas	<ol style="list-style-type: none"> 1. Protected Areas of a private nature (Art. 18, Decree No. 24781/97 General Regulations of Protected Areas) 2. Natural Patrimony Private Reserve (RPPN by its Spanish acronym) established in Art. 13 of Forest Law 1700 and in Art. 41 of its Regulations 	Private Protected Wild Areas (Art. 26, Law 352/94)
Procedure for the establishment of Private Protected Areas	<ol style="list-style-type: none"> 1. The procedure for the nomination of a protected area of a private nature shall be established by specific regulations. (Art. 18, Decree No. 24781/97). However, up to the year 2003 this procedure has not yet been established. 2. The procedure and requirements for the creation of a RPPN are established in article 41 of the Forest Law Regulations and its 08/98 ITE technical directive. 	DPNVS/MAG Resolution No. 79/2000 "By which the procedures are established for the legal creation of protected wild areas under private ownership in Paraguay"
Legal Institution that allows for the existence of Transboundary Protected Areas	Has not been identified. However, "when protected areas are located in boundary areas, their protection will be coordinated by the National Armed Forces based on agreements" (Art. 11, Decree No. 24871/97)	Not contemplated
Procedure for the establishment of Transboundary Protected Areas	Not contemplated	Not contemplated
Management Categories assigned to private protected areas	1. General regulations of protected areas recognize the legal institution of the private protected area but does not define the management categories, the same ones that should be established in the regulations that have not yet been created. The definition of protected area categories as well as the norms for their creation, management, and conservation will be established in special legislation	SEAM Resolution N° 200/2001 "By which management categories, division into zones, and usage and activities are assigned and regulated". "Special Natural Reserve Category" is assigned to protected areas under private ownership that do not directly match with any of the UICN management categories.

	(Art. 65, Law 1333/92). 2. No information is available on the matching of the so-called Natural Patrimony Private Reserve with the UICN management category system. Its form of management is established in the Predial Organization Plan, in accordance with Art. 1 from Forest Law 1700.	
Management Types	<ol style="list-style-type: none"> 1. Protected Areas managed by Non-profit Private Entities (Art. 62, Law 1333/92) 2. Protected Areas with shared management between the national authority and NGO's or non-profit private institutions. (Art. 72, Decree N° 24781/97). 3. Natural Patrimony Private Reserves are managed by the owner and are subject to monitoring and to the forest authority. 	Management by third parties in the different categories anticipated for in the legislation is allowed. Protected Wild Areas under private ownership are the exclusive responsibility of the private sector under the directives of the management plan approved and supervised by the National Competent Authority. (Law 352/94)
Number of Private Protected Areas	<ol style="list-style-type: none"> 1.- There are no examples of areas with the specific name of "Private Protected Area". 2.- 41 areas exist as of 2003 that have been designated as "Natural Patrimony Private Reserves". 	One is currently operating and three are in the process of being established. The National Competent Authority sent the approved technical justification report in 2000 to the Executive Branch for its promulgation for the creation of three natural reserves: Morombí, Arroyo Blanco and Yacyretá.

(¹) Elaborated by the authors based on DPNVS/MAG: National Parks Directorate / Ministry of Agriculture and Livestock and http://www.areasprotegidas.org/bolivia_presentacion_y_diagnostico_del_sistema_de_aps.php on March 7, 2003 16:15. SEAM: Secretariat of the Environment

A deduction may be made from the analysis of the body of laws of both countries that both Bolivia and Paraguay have the legal foundations for establishing private protected areas, and they have already used these legal institutions in the past.

Regarding the “transboundary” status, legal dispositions contrary to the creation and establishment of this type of protected area have not been found according to the legislation examined.

A summary of the most important aspects covered by the Bolivian legislation on the subject is subsequently presented (a detailed transcription of articles regarding protected areas are presented in ANNEX II).

3.2.1 Bolivia

Bolivia has three legal tools regarding the topic of protected areas. In addition to giving a general treatment, declaring, and establishing the importance of protected areas (articles 60 and 61 from Law 1333/92 “Regarding the Environment”), Bolivian legislation covers technical and operational aspects on the topic and also defines guidelines for establishing private reserves as well as transboundary areas (articles 62 and 65 from Law 1333; 18 and 72 from Supreme Decree 24781/97, “that ratifies the General Regulations of Protected Areas” and 9 from Law 1788/97 “regarding the Organization of the Executive Branch”).

The legal institution used for the creation of the “*El Corbalán*” Private Protected Area is the Natural Patrimony Private Reserve established in the Forest Law. This legal instrument allows for managing the area via a Predial Organization Plan. The legal recognition of the area has been granted by Resolution 011/2001 of the Forest Superintendence after having complied with all the technical and legal requirements demanded by Law for its creation.

The legal institution of the Natural Patrimony Private Reserve recognizes the rural property tax exemption for the owners that establish them. One of the achievements of PROMETA – IYA in this sense has been that of obtaining this tax exemption after having carried out the procedural steps before the competent authority; making it the first national reserve that effectively takes advantage of this incentive.

3.2.2 Paraguay

Law 353/94 “regarding Protected Wild Areas”, is a legal tool with a specific nature regarding protected areas. Practically all of the aspects related to private protected areas receive treatment in the following articles: 4, 14, 26, 27, 28, 29, 30, and 31. Conceptual, technical and managerial foundations are established in these articles for the creation and operation of private reserves, including the procedural aspects for their declaration and revocation, specific incentives and management, among others.

Other legal norms of less hierarchy, particularly the resolutions of the National Parks and Wildlife Directorate, the institution in charge of this area until the year 2000, and from this year forward the Resolutions of the Secretariat of the Environment, refer to specific technical and administrative aspects related to the implementation and management of private reserves (see ANNEX II). The analysis of these norms allow for the conclusion to made that Paraguayan

legislation in principle is vast and complete, covering aspects related to private protected areas relatively well. However, transboundary areas are not contemplated by these norms.

3.3 TECHNICAL ASPECTS OF TRANSBOUNDARY AND PRIVATE PROTECTED AREAS BETWEEN PARAGUAY AND BOLIVIA: THE NATIONAL SYSTEMS OF PROTECTED AREAS

Upon visiting the *El Corbalán – El Carmen* area, one of the four types of governability indicated by several authors, it can be indicated that *El Corbalán – El Carmen* is a Private Protected Area with characteristics of a UICN Management Category II (National Park). This is due to the fact that it has as objectives to protect ecosystems and their attributes, as well as to protect other cultural and historical values. Within this classification, the area is under the management of non-profit organizations.

3.3.1 Bolivia ¹⁰

The National System of Protected Areas (SNAP by its Spanish acronym) of Bolivia is one of the newest in Latin America. It was created in 1992 by Environmental Law N° 1333/92 and is made up by a group of areas that due to their national ecological importance, operate under a special and concerted management type under the national government with the principle objective of conserving representative samples of Bolivia's primary ecosystems. The governing entity is the National Service of Protected Areas (SERNAP by its Spanish acronym), which has as a mission to coordinate the operation of the National System of Protected Areas, guaranteeing the complete management of the national protected areas, managing them directly or co-managing them with civil society organizations.

The period from 1993-1997 has been one of great advances on the perspective of consolidating the management of the country's group of protected areas. The progress in the management of the areas regarding planning, the structuring of an information and monitoring system, the establishment of an operational protection system, the development of a training program for protection and direction personnel, the elaboration of guidelines for the public use of the protected areas, and the participation of the different local authorities in their management are among the most significant achievements.

Currently, the system has 70 conservation units with a legal foundation for their establishment, comprising more than 20,000,000 hectares (18% of the national territory). These are grouped into National Parks, National Reserves, Biosphere Reserves, Integrally Managed Natural Areas (Forest Reserves are not included), Watershed Protection Areas, and Regional and Municipal Parks. 21 protected areas are currently located within the National System of Protected Areas with administrative management, financing, a Director and a Park Ranger Corp.

The "Removing obstacles for the direct participation of the private sector for the on site conservation of the biodiversity" project is currently being implemented in the *El Corbalán* area. This project receives financing from the Global Environmental Facilities - GEF. Protection and

¹⁰ http://www.areasprotegidas.org/bolivia_presentacion_y_diagnostico_del_sistema_de_aps.php 7 de marzo del 2003 16:15

surveillance activities and technical assistance to the inhabitants of the area are being carried out.

It is anticipated that the management plan for the area will be completed by the end of 2003, with the goal of beginning its implementation in 2004 and 2005. In addition, different studies have been carried out, for example: "Plant research with the IFRI methodology" conducted by the PROMETA Research Department (Justiniano, 1997); "Medicinal Plant Study", also conducted by the PROMETA Research Department (Justiniano, 1997); "Avifauna Study" (Dupret, 1997) and the Predial Organization Plan: "*El Corbalán*" Natural Patrimony Private Reserve (Mendoza, 2001).

Activities are currently (2003) being conducted under the methodology of the Nature Conservancy for both portions of the Transboundary Private Conservation Area, known as the Planning Conservation Site (PCS). Five critical conservation objectives in the area have been identified with this methodology, with their corresponding critical route of causes that affect their permanence, as well as possible actions that could be taken to confront the problems identified in the area.

3.3.2 Paraguay (DPNVS, 1994)

Law 352 regarding Protected Wild Areas established the National System of Protected Wild Areas (SINASIP by its Spanish acronym) of Paraguay in 1994. A strategic plan was designed and proposed that same year that would cover a ten-year period for its appropriate management and operation.

Three subsystems were designed to manage SINASIP:

- The Protected Wild Area Subsystem managed by the National Competent Authority: contains those areas whose ecological characteristics are of a unique and important nature. Management categories are focused on stricter conservation objectives: National Parks, Scientific Reserves and Ecological Reserves.
- The Protected Wild Area Subsystem under the structure of private management: taking into account the high percentage of the national territory under a private property regimen, as well as the interest of some land owners of allocating a portion of their land to the perpetual conservation of natural resources, this subsystem fulfills the objective of supplementing and improving the coverage of the State's Protected Wild Areas.
- The Protected Wild Area Subsystem managed by other entities, which is a subsystem that contains protected wild areas whose management does not fall into the other two subsystems, such as autonomous institutions and entities related to the generation of hydro-energy.

SINASIP currently covers a little less than 10% of the Paraguayan territory, with an approximate total of 45 conservation units.

A Quick Ecological Assessment was carried out for the Paraguayan portion of the Transboundary Conservation Private Area in 2003. Its results are in the process of being drafted and have identified at least four types of natural communities and approximately 50 species of birds in the area, as well as the presence of large-bodied mammals such as the jaguar or *yagareté* (*panthera onca*), the anteater (*tamandua tetradactyla*) and the giant armadillo or *tatú carreta* (*priodontes maximus*).

As described previously, the Paraguayan portion of the area is the object of a plan via the methodology of the Nature Conservancy, called the Planning Conservation Site.

3.4 RELATIONSHIP BETWEEN IDEA AND PROMETA-IYA FOR THE “EL CORBALÁN – CAÑADA EL CARMEN” TRANSBOUNDARY PRIVATE CONSERVATION AREA

A dialogue between IDEA of Paraguay and PROMETA-IYA of Bolivia was initiated at the end of 2000 for the establishment of a transboundary conservation area, taking into consideration PROMETA-IYA's experience in the management of the “*El Corbalán*” Natural Patrimony Reserve created in 1996.

A meeting was held in March 2001 between representatives from both non-governmental organizations on the Paraguayan-Bolivian border at a location known as *Infante Rivarola*. An agreement between both NGO's was signed during this meeting to look for mechanisms that would work towards the establishment of a transboundary conservation area. After the signing of this agreement, a work plan was elaborated in the city of Tarija for the establishment of a transboundary private conservation area.

The formal presentation of the IBR project was made in April 2001, requesting the concession for the sale of this land. IDEA finally received the approval from IBR for the sale of this land at a symbolic price and in installments in July 2002. Steps were immediately taken for finalizing the transaction and today this land is in the process of being registered in the Public Registry in favor of IDEA.

Joint strategic planning for the area was carried out in November 2002 in the locality of Villa Montes, Bolivia. Short, medium, and long-term actions to be developed were established.

Taking into consideration the five principles of “Good Governability” (Legitimacy, Voice, Accountability, Performance and Fairness) indicated by some authors, among which Graham, Amos, and Plumtree (2003) and Abrams, Borrini-Feyerabend and Gardner (2003) stand out, and correlating them with the actions that up to now have been conducted by both NGO's in the area, it can be stated that all of the principles are being put into practice. It can also be surely stated that several lessons will be learned as more actions are developed. These will allow knowing how and will contribute information as to how these “Good Governability” principles work in a geographical space in which the stakeholders have two principle characteristics: i) they are local migrants or have a temporary presence in the area; and ii) they consider the area as a production / resource extraction zone and therefore as a permanent “non-settlement” area.

4. SOME LESSONS LEARNED, PROGRESS AND FUTURE ACTIONS

The principle achievements up to now in the “*El Corbalán – Cañada El Carmen*” Transboundary Private Conservation Area allow for assuring that, even when different levels of development and implementation of the Bolivian and Paraguayan sectors exist, the fulfillment of the conservation objectives will be possible under an integral management model.

This approach towards joint and cooperative management will necessarily suppose creative ways for allocating resources and priorities based on objectives and programs agreed to by both parties.

More specific progress towards greater integration between the sectors on both sides of the border is also foreseen, including a unique management plan for the entire area and actions for its equally joint and integrated implementation: patrols, protection of resources, firefighting, special operations, etc.

The impact of an experience similar to this initiative will only have long-term effects when the protected natural resources are considered to have a unique relevance or importance (because of their ecological value), especially in a context of a landscape characterized by the degradation and fragmentation of its habitats, a reality that the region where the protected area is located cannot escape.

Under this perspective, the management of shared ecosystems acquires a prioritized nature, taking into account the managerial and technical capacity of the organizations involved in the protection of the “*El Corbalán-Cañada El Carmen*” area.

In addition, the double symbolic nature of the area in light of its historical history must be highlighted:

- A site that in the past had been a stage for a belligerent confrontation between military forces of two neighboring countries is converted into a protected area where actions are jointly proposed for protecting the ecosystem under a plan of mutual cooperation and synergetic collaboration.
- Also from the historical point of view, the event that took place at the site has had an important say in the decisions made by both governments. The current transboundary protected area, although within the framework of official guidelines and directives, is a totally private initiative and whose responsibility, in terms of management and feasibility, falls on two known non-governmental institutions.

Finally, an adequate assessment of the impact of the creation of the “*El Corbalán – Cañada El Carmen*” Private Transboundary Conservation Area will be necessary taking into consideration that the procurement of financial resources for the establishment of this area will be necessary for the short and medium term. For this goal, it becomes necessary to have access to and analyze, or if this is not possible, to produce and analyze among other information, information regarding the following points:

- The biological diversity shared by both portions of the area and the migratory flows, if any, or moved by some type of behavior: reproductive, food, among others.
- Shared physical resources,
- Principle historical-cultural characteristics,
- The social groups that use the area or live close to it,
- The economically valuable resources in the area as potential threats (gas, water, oil, minerals, timber, others), and
- The socio-economical situation of the environment.

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ANNEX I

Table 1: Proportion of the Management Categories, and other international designations in the 123 Protected Areas that make up part of the 29 transboundary protected area “complexes” in Central and South America ⁽¹⁾

Management Category (UICN)	Category Name and description	%	Comments on the ownership and management of the UICN management category and/or on the definition of the management category
II	<u>National Park</u> . Protected Area primarily managed for the conservation of ecosystems that has recreation objectives	36.8	Normally, <u>ownership and management</u> in this category is in the hands of the national authority with jurisdiction over the area.
VI	<u>Protected Area with Managed Resources</u> . A protected area primarily managed for the sustainable use of natural ecosystems.	20.8	<u>Ownership</u> can be in the hands of the national or regional government, the community, individuals or a combination of these. <u>Management</u> must be controlled by public entities with a precise mandate in favor of conservation and this must be carried out in association with the local community; or can be done complying to local customs, with the support and advice of governmental and non-governmental organizations.
IV	<u>Habitat/Species Management Area</u> . A protected area primarily managed for conservation with active intervention.	15	<u>Ownership</u> and <u>management</u> are in the hands of the national government or, with adequate safeguards and controls, in the hands of other governmental levels, an indigenous population council, a non-profit foundation, a corporation, a private group or individuals.
I	<u>Strict Natural Reserve/Wild Natural Area</u> . A protected area primarily managed with scientific goals or with goals of protecting nature.	5	<u>Ownership</u> and <u>management</u> must be in the hands of the government.
III	<u>Natural Monument</u> . Protected area primarily managed for the conservation of specific natural characteristics.	2.3	<u>Ownership</u> and <u>management</u> must be in the hands of the government.
Private ⁽³⁾	---	1.6	This corresponds to the management of specific categories in some countries.
Proposals	---	4.8	Although protected areas qualify for some of the management categories that exist on the international level, they have not officially been designated for this purpose by the Competent National Authorities.
Undetermined	---	5.6	Protected areas do not qualify for any of the Management Categories that exist on an international level.

ANNEX 1 (continued)

Table 2: Combinations of management categories identified in Transboundary Protected Area complexes in Central and South America ⁽¹⁾

Combination Type	Number of complexes that use the combination	Names of the Protected Areas	Countries Involved
Category II National Park + Category IV Habitat/Species Management Area	7	<ul style="list-style-type: none"> • Refugio de Vida Silvestre Gandoca Manzanillo + Parque Nacional Marino Isla Bastimentos • Reserva Biológica Río Negro + Reserva Natural Estero Real • Parque Nacional Baritú + Reserva Nacional Tariquía • Parque Provincial Copahue-Caviahue + Reserva Nacional Ñuble • Reserva Nacional Eduardo Avaroa + Reserva Nacional Los Flamencos + Parque Nacional Licancabur • Parque Nacional Sajama + Reserva de Vicuñas Altamchi + Parque Nacional Lauca + Reserva Nacional Las Vicuñas • Parque Nacional Madidi + Reserva Nacional Ulla Ulla + Parque Nacional Bahuaña-Sonene 	<ul style="list-style-type: none"> • Costa Rica +Panama • El Salvador + Honduras + Nicaragua • Argentina + Bolivia • Argentina + Chile • Argentina + Chile • Bolivia + Chile • Bolivia + Peru
Category II National Park + Category VI Protected Area with Managed Resources (+ Biosphere Reserve)	3	<ul style="list-style-type: none"> • Parque Nacional y Reserva Forestal Chiquibul + Reserva Forestal Río Columbia + Reserva Forestal Vaca + Reserva Forestal Montaña Maya + Reserva de la Biósfera Maya • Parque Provincial Moconá + Reserva Forestal Guaraní + Reserva de la Biósfera Yabotí + Parque Estatal Do Turvo + Reserva de la Biófera Mata Atlántica • Parque Nacional La Paya + Reserva de Producción de Fauna Cuyabeño + Bosque Protegido Panacoha + Reserva de la Biósfera Yasuni + Zona de Reserva Gueppí 	<ul style="list-style-type: none"> • Belize + Guatemala • Argentina + Brazil • Colombia + Ecuador + Peru
Category II National Park + Category VI	2	<ul style="list-style-type: none"> • Parque Nacional Nahuel Huapí + Reserva Nacional Nahuel Huapí + 	<ul style="list-style-type: none"> • Argentina + Chile

Protected Area with Managed Resources		<p>Parque Nacional Puyehue + Parque Nacional Vicente Pérez Rosales</p> <ul style="list-style-type: none"> Parque Nacional Los Glaciares + Reserva Nacional Los Glaciares + Parque Nacional Bernardo O'Higgins + Parque Nacional Torres del Paine 	<ul style="list-style-type: none"> Argentina + Chile
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Combination Type	Number of complexes that use the combination	Names of the Protected Areas	Countries Involved
Category II National Park + Category IV Habitat/Species Managed Area + Category VI Protected Area with Managed Resources (+ Biosphere Reserve + Global Patrimony Site)	2	<ul style="list-style-type: none"> Parque Nacional Barbilla + Parque Nacional Chirripó + Parque Nacional Tapantí + Reserva Biológica Hitoy Cerere + Reserva Forestal Río Macho + Zona Protegida Las Tablas + Parque Nacional la Amistad + Bosque Protegido Palo Seco 	<ul style="list-style-type: none"> Costa Rica + Panama
Category II National Park + Category II National Park	1	<ul style="list-style-type: none"> Parque Nacional Pico da Neblina + Parque Nacional Serranía de la Neblina 	<ul style="list-style-type: none"> Brazil + Venezuela
Category I Strict Natural Reserve + Category II National Park + Category IV Habitat/Species Managed Area + Category VI Protected Area with Managed Resources (+ Biosphere Reserve)	1	<ul style="list-style-type: none"> Area de Conservación Privada Reserva Río Bravo + Parque Nacional Aguas Turbias + Reserva Natural Society Hall + Reserva de la Biósfera Maya + Biotopo Protegido Naachtún-Dos Lagunas + Reserva Biológica Calakmul 	<ul style="list-style-type: none"> Mexico + Belize + Guatemala
Category II National Park + Private Natural Reserve	1	<ul style="list-style-type: none"> Parque Nacional Los Katios + Corredor Biológico Serranía de Bagre + Parque Nacional Darién + Reserva Natural Punta Patiño 	<ul style="list-style-type: none"> Colombia + Panama
Category IV Habitat/Species Managed Area + Ramsar Site	1	<ul style="list-style-type: none"> Sitio Ramsar Si-a-Paz + Refugio de Vida Silvestre Caño Negro + Refugio de Vida Silvestre Las Camillias + Refugio de Vida Silvestre Los Guatusos 	<ul style="list-style-type: none"> Costa Rica + Nicaragua
Category I Strict Natural Reserve + Category II National Park + Category IV Habitat/Species Managed Area + Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> Parque Nacional Tortuguero + Zona Protegida Tortuguero + Refugio Nacional de Vida Silvestre Barra del Colorado + Reserva Biológica Río Indio-Maíz + Reserva Biológica Delta del San Juan 	<ul style="list-style-type: none"> Costa Rica + Nicaragua

Category II National Park + Category IV Habitat/Species Managed Area+ Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> Parque Nacional Montecristo + Reserva Nacional de la Biósfera Fraternidad + Parque Nacional Montecristo Trifinio 	<ul style="list-style-type: none"> El Salvador + Honduras + Nicaragua
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Combination Type	Number of complexes that use the combination	Names of the Protected Areas	Countries Involved
Category I Strict Natural Reserve + Category III Natural Monument + Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> Parque Nacional Sierra de Lacandón + Reserva Nacional de la Biósfera Montes Azules + Monumento Nacional Bonampak 	<ul style="list-style-type: none"> Guatemala + Mexico
Category III Natural Monument + Category IV Habitat/Species Managed Area + Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> Reserva Nacional de la Biósfera Laguna de los Pozuelos + Monumento Natural Laguna de los Pozuelos + Reserva de Vicuñas Altamachi 	<ul style="list-style-type: none"> Argentina y Bolivia
Category I Strict Natural Reserve + Category II National Park + Category III Natural Monument + Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> Parque Nacional Iguazú + Reserva Nacional Iguazú + Reserva Natural Estricta Iguazú + Parque Nacional Iguazú + Monumento Natural Moisés Bertoni 	<ul style="list-style-type: none"> Argentina + Brazil + Paraguay
Category IV Habitat/Species Managed Area + Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> Reserva Indígena de Tucumaque + Reserva Natural Sipaliwini 	<ul style="list-style-type: none"> Brazil + Suriname
Category II National Park + Category V Protected Sea-Land Scenery + Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> Parque Nacional Tamá + Cerro Machado – El Silencio + Zona Protegida San Antonio-Ureña 	<ul style="list-style-type: none"> Colombia + Venezuela
Category II National Park + Category V Protected Sea-Land Scenery	1	<ul style="list-style-type: none"> Parque Nacional Natural Catatumbo-Barii + Parque Nacional Perijá + Zona Protegida Región Lago Maracaibo-Sierra de Perijá 	<ul style="list-style-type: none"> Colombia + Venezuela
Category II National Park + Undetermined	1	<ul style="list-style-type: none"> Parque Nacional Podocarpus + Zona de Reserva Santiago-Comaina (areas protegidas) 	<ul style="list-style-type: none"> Ecuador + Peru

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		cercanas, no adyacentes)	
Category II National Park + Category IV Habitat/Species Managed Area + Category VI Protected Area with Managed Resources	1	<ul style="list-style-type: none"> • Parque Nacional Lanín + Reserva Nacional Lanín + Complejo Islote Lobos + Reserva Forestal Chañy + Parque Nacional Villarrica + Reserva Nacional Villarrica + Parque Nacional Huerquehue 	<ul style="list-style-type: none"> • Argentina + Chile

Source: Self-elaborated based on Zbicz (2001) and UICN (1994)

ANNEX II

LEGISLATION REGARDING PROTECTED AREAS IN BOTH COUNTRIES

Bolivia

- **Law No. 1333 dated March 23, 1992 “Environment Law”**

Law N° 1333 dated March 23, 1992, known as the “Environment Law”, specifically deals with the topic of Protected Areas in Chapter VII “Regarding Protected Areas”. The articles and their texts indicate the following:

60th ARTICLE - Protected areas are natural areas with or without human intervention, declared under State protection through legal dispositions, with the purpose of protecting and conserving wild flora and fauna, genetic resources, natural ecosystems, hydrographical watersheds and values of scientific, esthetic, historical, economic, and social interest, with the purpose of conserving and preserving the country’s natural and cultural patrimony.

61st ARTICLE - Protected areas are the State’s patrimony and of public and social interest, and must be managed according to their categories, division into zones and regulations based on management plans, with objectives of conserving and protecting their natural resources and scientific research, as well as for recreation, education, and for the promotion of ecological tourism.

62nd ARTICLE - The National Environmental Secretariat and the Departmental Environmental Secretariats are the entities responsible for standardizing and supervising the integral management of the protected areas. Public and private non-profit organizations, social entities, established traditional communities and indigenous communities can participate in the management of these protected areas.

63rd ARTICLE - The National Environmental Secretariat and the Departmental Environmental Secretariats are in charge of the organization of the National System of Protected Areas.

The National System of Protected Areas (SNAP by its Spanish acronym) includes the protected areas existing in the national territory, as a group of areas of different categories that related among themselves in an organized manner, and by their protection and management, contribute to the achievement of conservation objectives.

64th ARTICLE - The declaration of protected areas is compatible with the existence of traditional communities and indigenous people, considering conservation objectives and their management plans.

65th ARTICLE – The definition of protected area categories as well as the standards for their creation, management and conservation, shall be established in special legislation.

- **Supreme Decree N° 24781 dated July 31, 1997 that ratifies the “General Regulations of Protected Areas”**

Supreme Decree N° 24781 was promulgated on July 31, 1997 that ratified the General Regulations of Protected Areas. The following are the articles and texts regarding the topic of this paper:

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Article 11 - No authority, body, sector or administrative authority may assume, ignore, or exceed the special jurisdiction of Protected Areas. When PAs are located in boundary areas, their protection shall be coordinated with the National Armed Forces based on agreements.

If PAs include archeological, paleontological, speleological sites and others, their protection shall be coordinated with the pertinent authority.

Article 16 - Protected areas are classified as national and departmental protected areas, as a function of the relevance of their natural value and not of their geographical location, according to the technical report approved by the national authority.

Article 17 - The National System of Protected Areas (SNAP) shall be made up of:

- a) National Protected Areas, which possess national or internationally important natural characteristics, by which they are included in the National Map.
- b) Departmental Protected Areas, which possess departmentally important natural characteristics.

Article 18 – Private Protected Areas are those managed and financed voluntarily by individuals that not being a part of the SNAP, shall develop their activities within the framework of the system and the set of standards that regulate the subject. The procedure for their nomination to the National System of Protected Areas shall be established by specific regulations to be approved by the national authority.

Article 19 – For the purposes stated in the 62nd and 63rd articles from law N° 1333, the following management categories are established:

- Park;
- Sanctuary;
- Natural Monument;
- Wildlife Reserve;
- Mixed Management Natural Area;
- Immobilization Natural Reserve

Article 27 - The declaration of national protected areas shall be executed at the request of the Ministry of Sustainable Development and the Environment, approved by a Supreme Decree and supported by a technical-scientific record justifying the assigned category.

The declaration of the departmental PA shall be executed at the request of the Departmental Prefecture, supported by a technical-scientific record and approved by a Supreme Decree.

Article 37 - The Ministry of Sustainable Development and the Environment (MDSMA by its Spanish acronym) is the highest standardizing and supervising body on natural resources and protected areas. The National Natural Resource and Environmental Secretariat is in charge of planning, administrating, supervising and managing the protected areas through the Conservation of Biodiversity National Directorate (DCNB by its Spanish acronym), as the operative authority of the SNAP.

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Article 72 - Shared administration is defined as the authority bestowed by the National Authority or by the Departmental Authority to the original communities, local organized populations, non-governmental organizations, non-profit public, private, or academic institutions or consortiums, for jointly managing a protected area.

Article 73 - Any participation agreement in the management of a protected area has an implicit clause to safeguard in favor of the State's interests with the authority to modify, rescind, or resolve it due to public interest, in accordance with a well-founded ministerial resolution.

Management participation agreements subscribed by the National Authority or by the Departmental Authority of protected areas does not imply a loss of management, normative and supervision duties on these areas that cannot be delegated by the State, nor does it exempt the State from its responsibility of applying the pertinent legal norm.

- **Law No. 1788 dated September 16, 1997 "Organization of the Executive Branch Law"**

Law N° 1788 dated September 16, 1997, known as the "Organization of the Executive Branch Law", created the National Service of Protected Areas, according to what is gathered by the following article and its text:

Article 9 - National Services are operative structures of the Ministries, in charge of managing specific regimens with attributes, areas of competence and a structure of national scope.

The description of attributes and functions shall be determined, in each case, by a Supreme Decree. A Supreme Resolution shall designate the Directors of National Services.

Besides the National Services expressly created by Law, whose nature and objective are different than those referred to in this article, the following National Services are created, based on the reconversion of the agencies that currently manage the corresponding topics and regimens:

- National Migration Service
- National Civil Defense Service
- National Protected Areas Service
- National Customs Service
- National Internal Taxation Service
- National Personnel Administration Service
- National Commercial Registry Service
- National Mining Technical Service
- National Rural Telecommunications Service
- National State Patrimony Service
- National Executive Branch Administrative Organization Service

The National Services responsible for these regimens shall have a decentralized nature in the corresponding departments.

- **Law No. 1700 dated July 12, 1996 "Forest Law"**

This law has as its objective to standardize the sustainable use of the protection of forest woodlands and land for the benefit of current and future generations, harmonizing the country's

social, economic, and ecological interest. Within the chapter on the types of land and their legal protection, article 13 refers to protected land as land defined as follows:

Article 13 - Protected land is land with or without plant coverage, which by its degree of vulnerability to degradation or because of ecological services rendered to a hydrographic watershed or for specific purposes, or because of social interests or because of a private initiative, is not susceptible to farming or forest exploitation, but limited to hydro-electrical exploitation, recreational purposes, research, education and any other non-consumptive use. . . by private initiative may establish itself as a natural patrimony private reserve, which has all the legal assurances of protected land.

- **Forest Law Regulation. D.S. No. 24453 dated December 21, 1996**

Article 41 - The following regulatory dispositions govern for the purposes of paragraph I of article 13 of the Law:

I. Natural patrimony private reserves make up a voluntary ecological easement established by the owner for conserving the ecological values or outstanding scenic beauty of his/her property.

Private reserves cannot have an area greater than 5,000 hectares and the term may not be less than 10 years in any case.

II. Natural Patrimony Private Reserves are established by a unilateral act of the owner, peasant farmer communities and indigenous peoples, by public deed, with a clear delimitation of their extension and limits and their corresponding cartographic gratification, specifying the values that they wish to protect, the limitation of their use, and the exploitation and term that are voluntarily imposed, as well as management and safeguard standards that they propose to use.

Private reserves also comprise the nursery plants that are marked off and are conserved as germ plasm sources.

Special legislation on wildlife and genetic resources must be observed in natural patrimony private reserves.

The reserves shall be registered as ecological easements in the property registry entries and cannot be lifted until after the expiration of the established term.

III. The titleholder of the reserve shall communicate its establishment as such to the Forest Superintendence accompanied by a testimony of a public deed and a copy of the corresponding plans.

A non-consumptive use management plan may be formulated when justified by the extension or when the owner considers it convenient. This must be communicated to the Forest Superintendence.

IV. Natural Patrimony Private Reserves have the same legal protection as that of protected land.

V. . . . Natural patrimony private reserves. . . are not subject to the tax that taxes agrarian estate property . .

Paraguay

Paraguay has four legal tools that are related to the topic of protected areas, which directly deal with private protected areas, although do not mainly refer to transboundary areas.

- **Law No. 352 dated May 24, 1994 “Protected Wild Areas Law”**

Law No. 352 dated May 24, 1994 known as the “Protected Wild Areas Law”, is a specific legal tool that deals with the topic of protected areas. The aspect of private protected areas is dealt with in the articles and texts that indicate the following:

Article 4. A Protected Wild Area is understood to mean any portion of the national territory included within well- defined limits, of natural or semi-natural characteristics, which is subjected to having its resources managed in order to achieve objectives that guarantee the conservation, defense and improvement of the involved environment and natural resources. Protected Wildlife Areas can be under national, departmental, municipal, or private ownership, where the uses to which they may be destined and the activities that could take place must be in agreement with the dispositions of this Law and its regulations regardless of the property rights exercised upon them.

Article 14. The application authorities shall have the following rights and authority:

- e) Encourage, evaluate and sanction the creation of Protected Wild Areas under private ownership, which must have a Management Plan;
- g) Assign management categories, which would be technically considered relevant, to the Protected Wild Areas under public and private ownership. The Application Authority shall be the sole and absolute authority of the assignment.

Article 26. The declaration of Protected Wild Areas under private ownership shall be done by a Decree from the Executive Branch or by a Law, having as a prerequisite the rationalization in a technical justification that contains the general diagnosis of the specific characteristics of the biological and physical resources, the ecosystems, the ecological processes and the natural resources.

Article 27. The declaration of a Protected Wild Area under private ownership must be registered at the Public Registries General Directorate with the objective that the general public know the restrictions regarding its use and control.

Article 28. The revocation of the declaration of a Protected Wild Area under private ownership shall be carried out by a Decree or Law and may be done as of the fifth year after the date of the declaratory Decree or Law.

The Application Authority shall regulate the declaration and revocation procedures of a Protected Wild Area under private ownership.

Article 29. The declaratory Decree or Law of a Protected Wild Area under private ownership must determine the limits of the declared area with the greatest possible accuracy. The physical persons or legal entities responsible for its management must demarcate the declared area on the land under supervision of the application authority. The elaboration of the respective management plan shall also be ordered. This shall establish the guidelines, directives and policies for the management of the area, as well as the guidelines for allowed use and activities.

Article 30. The benefits anticipated for in the Protected Wild Areas Laws shall not be granted before the promulgation of the legal norms that declare them as such and their registration in the respective Registry.

Article 31. The application authority shall assign and regulate the management categories of the Protected Wild Areas under public and private ownership for the purpose of its legal declaration. The purpose of this law shall be observed and the recommendations of international agreements approved and ratified by the State shall be complied with.

Article 32. The application authority shall have exclusive use of the management categories assigned to the Protected Wild Areas under public ownership, which cannot be used by other public or private institutions.

Article 37. All Protected Wild Areas under public or private ownership that comprise the system must have a management plan approved by a resolution of the application authority, as a standard technical document for the implementation and development of the area and absorption zone.

Article 39. All Protected Wild Areas under public or private ownership must be registered at the National Registry of Protected Wild Areas with the objective of coordinating their activities with the application authority.

Article 41. All Protected Wild Areas under public or private ownership must have a professional in charge of their management and direction and the necessary forest rangers for the development and fulfillment of the area's management plan. These must be professionals in fields similar to the management of Protected Wild Areas.

Article 56. Reserve Areas declared up to the present date and the Protected Wild Areas under private ownership declared, according to what is stipulated in Article 26, shall be exempt from the payment of real estate taxes and from the payment of any substitute or additional tax created on rural estate property. The previous shall be conditioned by its respective regulation. They also cannot be expropriated during the valid term of the declaration.

Article 58. Violations of what is stipulated by this Law shall be considered attacks on social property and shall be considered public penal action crimes. In addition to a violation of what is expressly established in this Law or its regulations, the following shall also be infractions:

- a) The violation of the regulations of use of the Protected Wild Areas under public or private ownership;
- d) All acts or omissions that, not yet having been stipulated in this Law, have as a predictable consequence to alter the ecological balance or destroy the natural conditions of the Protected Wild Areas under public or private ownership.

• **National Parks and Wildlife Directorate Resolution No. 49 dated March 17, 2000**

“By which the methodology is ratified for the elaboration of Management Plans for Protected Wild Areas of SINASIP”

This Complies with articles 13, 14, and 37 from Law 352/94 regarding Protected Wild Areas, and approves a methodology that is described in the document “Concepts and Methodology for the elaboration of Management Plans of the Protected Wild Areas that comprise the National System

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of Protected Wild Areas in Paraguay” as a standard for the elaboration of management plans of Protected Wild Areas in Paraguay.

- **National Parks and Wildlife Directorate Resolution No. 73 dated April 2000**

“By which the National Registry of Protected Wild Areas in Paraguay is created”

The National Registry of Protected Wild Areas in Paraguay is created by this Resolution with the purpose of registering all of the protected wild areas, legally established, whether under public or private ownership, with the goal of coordinating their activities with the application authority from Law 352/94.

- **National Parks and Wildlife Directorate Resolution No. 79 dated May 9, 2000**

“By which the procedures for the legal creation of protected wild areas under private ownership in Paraguay are established”

The management category known as “Natural Reserve” is assigned to protected wild areas under private ownership by this resolution. Their assignment of the category is under the authority of the application authority of Law 352/64 and the sector has its exclusive use.

- **Secretariat of the Environment Resolution No. 200 dated August 24, 2001**

“By which the management categories, division into zones and the use and activities are assigned and regulated”.

This resolution describes and characterizes a total of nine types of management categories. It also stipulates the division of protected wild areas into zones. The nine management categories described in this resolution are the following:

1. Category I Scientific Reserve
2. Category II National Park
3. Category III Natural Monument
4. Category IV Wildlife Refuge
5. Category V Protected Landscape
6. Category VI Managed Resources Reserve
7. Biosphere Reserve Category
8. Ecological Special Reserve Category
9. Natural Reserve Special Category

- **National Parks and Wildlife Directorate Resolutions Numbers 96, 97 and 98 dated June 21, 2000**

The technical justifications for the creation of the first three protected wild areas under private ownership: Morombí, Arroyo Blanco and Yacyretá are approved by these resolutions. The three protected wild areas were designated under the “Natural Reserve” category, and their historical records were given to the Executive Branch for their definitive creation via a Paraguayan Executive Branch Decree.